# THE GANADA YEAR BOOK 1916-17 <br>  

## THE CANADA

## YEAR BOOK 1916-17

Published by Authority of the Right Hon. Sir George E. Foster, K.C.M.G., M.P., Minister of Trade and Commerce.


OTTAWA
J. de L. Taché, Printer to

The King's Most Excellent Majesty


## CONTENTS

Page.
Statiatical Summary of the Progress of Canada ..... xii-dy
The Canada Year Bcol, 1915 ..... TV
ivi
 repested in the present issue ..... 706-708
I. NATURAL RESOURCES OF CANADA.
Natural Reeourcea of the Dominion of Canada. by Watbon Grffin, Department of Trade anci Commerce, Ottawa. ..... 1-61
Introduction 1; The Land of Waterways 4; Water Power 5; Climate and Farm Produota 12;Forest Wealth 28; Wild Animals 33 ; Fisheries of Canada 36; Mineral Resources 40.
II. PHYSICAL CHARACTERISTICS OF CANADA.
Geographical Features ..... 61-68
l. Drainage Basing of Canada. .....
62 .....
62
2. Lengths of Principal Rivera and Tributaries in Canads. ..... 64
3. Area and Elevition of the Great Lakes ..... $5-67$
4. Areas of Principal Cansdian Lakes by Provinces .....
$65-67$
$68-72$ .....
$65-67$
$68-72$
Economic Geology in Canada, 1916. By Wratt Malcolm, Department of Mines, Ottawa
Economic Geology in Canada, 1916. By Wratt Malcolm, Department of Mines, Ottawa
III. AREA AND POPULATION.

1. Land and Water Area of Canada by Provinces and Territories. ..... 73
2. Population of Cauada by Provinces and Territories in the years 1871-81-91-1901-11 ..... 74 ..... 74
3. Population of Cansda by Provinces and Tertitories in 1871 and 1911 and increase in ..... 75
75
4. Population of Canada by Provinces and Territories, 1901 and 1911
5. Area and Population of Canada in 1911 by Provinces and Districta and Population in 1901 ..... 75-90
6. Population of Cities and Towns having over 5,000 inhabjtants in 1911, compared with 1871-81-91-1901 ..... 81-82
7. Urban Population of Canada by Size Groups, 1001 and 1911 ..... 83 ..... 83
8. Rural and Urban Population of Canada in 1901 and 1911 by Provinces, and increase or decrease in the decade ..... 83
9. Rural and Urban Population of Canada by Provinces and Seres, 1911 ..... 84 ..... 84
10. Population of Canada by Sereg, 1901 and 1911. ..... 85
11. Ratio of Females to Males in Rural and Urban Divisions, 1911 ..... 88
12. Conjugal Condition of the people of Canada, classified as single, married, widowed, divorced, legally separated and not given, by Provinces, Census of 1911 ..... 86
13. Distribution of Foreign-born Population as between Hostile, Allied and Neutral Countries, 1911 ..... 87
14. Forejgn-born Males, 21 years of age and over, by Citizenghip and by Provinces, 1911 . ..... 38
15. Foreizn-born Male Population of Canada, 21 years of age and over, by Birthplace and Citizensbip, 1911 ..... 88
16. Foreigu-born Populstion of Canada, by Ser and Year of Arrival, 1911 ..... 89
17. Foreign-born Population of Canada by Provinces, 1911, with Year of Arrival ..... 8
18. Foreign-born Population of Canada by Country of Birth and by Provinces, 1911 ..... 90
19. Foreign-born Population in Cities of 15,000 and over, 1911 ..... 91 ..... 91
20. Male Population of Canada, 18 to 45 years of age, classified according to nativity, by single years and by Provinces, Census, 1911 ..... 92-94
21. Percentage Proportion by Provinces of the Male Popolation 18 to 45 years of age, which was Canadian-born, British-born, or Foreign-born on June 1, 1911 ..... 85
22. Percentage Distribution by Provinces of the Canadian-born, British-born and Foreiga- born Male Population, 18 to 45 years of age on June I, 1911 ..... 95
23. Popilation of the Prairie Provinces, 1991, 1906, 1911 and 1916. ..... 96-105
Vital Statistics.
24. Number of Eirths, Marriagee and Deaths, by Provinces, 1911-1915...... ..... 107 ..... 108-111
Immigration.
25. Number of Immigrant Arrivals in Canada, 1897-1917 ..... 112
26. Arrivals at Inland and Ocean Ports in Canads in fiscal years 1911-1917 ..... 113
27. Rejection of Immigrants upon arrival at Ocean Ports and Deportations after admis. sion, by principal causes, for the fizcal years 1903-1917 ..... 114
28. Number by Nationalities of Deportations after Admission, 1903-1917 ..... 114
29. Juvenile Immigrants and Applications for their Services, 1801-1917 ..... 114
30. Sex, Oecupation and Destination of Immigrants for the fiscal year ended Maroh 31,1917 . ..... 115
31. Destimation of Immigrants into Canada by Provinces, 1901-1917 ..... 116
32. Record of Chinese Immigration, 1886-1917
116
116
33. Record of Oriental Immigration, 1901-1917 ..... 117
34. Expenditure on Immigration in the fiscal years 1808-1017. ..... 117
General Features of Canadian Educstion SystemPage.
Provincial Powerg under the British North America Act.118-119
Religious Instruction and Exercises in the Public Schools. ..... 119-120
130-123Elementary and Secondary Education by Provinces
Higher Education in Canada ..... 123-143 ..... 143-148
35. Number of Scbools. Teachers and Pupils in Canada by Provinces, $1901-1916$
36. Normal and Model Schoole in Nova Scotia, New Brunswick, Quebee, Optatio andManjtoba, 1901-1916148-152
153-154
155
37. Number of Teachers and Pupits in Modisl Schools, Acsdemies and Roman Catholic Classsical Colleges in Quebec 1901-1915.
38. Number of Teachers and Pupils in Collegiste Institutes and High Sohools in Ontarto 1901-1916 ..... 156
39. Number or Teachers and Pupils io Continuation Schools in Ontario. igil-19i6 ..... 156
40. Number of Teacbers and Pupils in High Schools in Britisb Colambia, 1901-1918 ..... 156

- Receipts and Expenditure for Public Education in Canada by Provinces, 1901-1916 ..... 157-182

9. Univerrities of Canada: Foundation, Adfiliation, Faculties and Degrees164-165
10. Universities of Canada: Number of Teaching Staff and Students ..... 186
11. Universities of Canada: Financial Statistics, 1916
187
12. Colleges of Canada: Foundation, Affiliation, Faculties and Degrees ..... 168-170
13. Colleges of Canada: Number of Teaching Staff and Stadents ..... 171-172
14. Colleges of Canada: Financial Statistjes, 1916 ..... 173-175
V. CLIMATE AND METEOROLOGY.
The Weather of Canada during the year 1916. Information Iurnished by the Dominion Meteoro- logical Service, Toronto ..... 178-181
182
15. Teraperature of the year 1916 et Representative Stations, compared with Normal Annual Averages for the period 1888 to 1907
16. Precipitation of the year 1916 at Representative Stations, compared with Normal Annual Averages for the period 1888 to 1907 ..... 183
VI. PRODUCTION.
Agriculture.
17. Area, Yield, Quality and Value of principal Field Crops in Canada, 1915 and 1916 ..... 187-195
18. Areas and Yields of Wheat, Oats, Barley and Flarseed in the three Prairie Provinces, 1915 and 1916 ..... 125
19. Total Areas and Value of Field Crops in Canada, 1911-16 ..... 196
20. Numbers of Farm Live Stock by Provinces, 1911-1917 ..... 197-198
21. Average Values of Farm Animals and of Wool, as estimated by Correspondents, 1909, 1910, 1914. 1915 and 1916 ..... 199
22. Numbers in June and Values in December of Farm Live Stock in Canada, as estitnated by Correspondents, 1915 and 1916 ..... 200
23. Average Values per aere of Occupied Farm Lands in Canada, as estimated by Corres- pondents, 1908, 1909, 1910, 1914, 1918 and 1916 ..... 201
24. Average Wages of Farm Help in Canada, as estimated by Correspondents, 1909, 1910 , 1914, 1915 and 1916. ..... 202
25. Production of Creamery Butter and Factory Cheese, by Quantities and Values, 1915 and 1916 ..... 204
26. Production and Value of Creamery Butter and Factory Cheese, 1900-07-10-15-18 ..... 205
27. Estimated Yield of Milk and Distribution of Dairy Products, 1915 and 1916 ..... 206
28. Cold Storage Warehouses in Canada, 1917 ..... 208-212
29. Estimated Areas and Yields of Tobacco in Canada, 1914+1916 ..... 218
30. Alkocation of Payments to Provincial Governments under the Agricultural Instruction Act, 1914-15-1917-18. ..... 214
31. Stocks of Wheat in Canada on Marct $31+1916$ and 1917. ..... 215
32. Stocks of Wheat in Canada on February 8. 1915, and on Mareh 31, 1916 and 1917 ..... 215
33. Stocks of Oats, Barley and Flax in Canada on March 31, 1917. ..... 218
34. Weekly Fange of Prices of Wheat at Winnipeg and Fort William. 1916 ..... 217-218
Monthty Range of Average Prices of Wheat at Winnipeg and Fort Win
Monthty Range of Average Prices of Wheat at Winnipeg and Fort Win219
35. Weekly Range of Prices of Oats at Winnipeg and Fort William, 1918 21. Weekly Range of Prices of Bariey and Flax at Winnipeg and Fort Wiliiam, 1916220-221
36. Monthly Range of Average Prices of Barley, Oats and Flax at Winnipeg and FortWilliam, 1914-1916
37. Prices in British Markets of Canadian Wheat, Wheat Flour and Oats, 1916223
224-225
225-228
226-228
38. Prices in British Markets of Canadian Bacon and Ham 3, 1916 ..... 228-230
39. Prices in British Markets of Canadian Cheese, 1916 ..... 230
40. Average Montbly Prices of Canadian Cheese in Britieh Markets, 1913-1916 ..... 233-285
Agricultaral Experiment Stations in Canada.
Dominion Erperimental Farms and Stations$236-240$
41. Dominion Experimental Farms and Stations, 1916 ..... 236 ..... 240-249Provinoial Agricultural Experiments.

## Forestry.

Paer.
250
31. Estimated Values of Forest Products 1913-1916 ..... 250250
33. Total Consumption and Value of Pulpwood, 1908-16.
251
251
35. Kinds of Wood used in the manufacture of Pulp by quantities and values, 1914, 1915 and 1916 ..... 253
36. Quantities of Wood used and of Pulp manufactured, 1914-1918 ..... 253-254
37. Quantities and Values of Cross-ties and Poles purchased by Railway and Electric Companies, 1915 and 1916. ..... 254
38. Exports from Canada of Wood Pulp, by Countries, in the fiscal years 1911-1916. ..... 255
39. Quantity and Value of Wood, Blocks and other, for Pulp, exported to the United- States, 1004-1916 ..... 256
Fisheries.
40. Number and Vaiue of Fishing Vessels, Boats, Nets, Traps, etc., used in the Sea and Inland Fisheries of Canads, 1915-1916. ..... 257
41. Government Bounties to Fishermen in the fiscal years 1912 to 1915. ..... 258
42. Quantities and Values of all Fish marketed in Canada in 1914-15, and 1915-18 ..... 258-260
43. Quantities and Values of the catch of the Inland Fisheries of Canada, 1914-15 and 1915-16 ..... 260
44. Total Value of Fisberies by Provinces in the fiscal yeare 1912-1916. ..... 261 ..... 261
45. Total Value of the Fisheries of Canada in the fiscal yeara 1870-1916 ..... 261
46. Values of Exports and Imports of Fish, 1902-1916. ..... 262
47. Exports of the Fisheries, the Produce of Canada, by principal countries, in the fiscal years 1915-1916. ..... 262
Minerals.
48. Quantities sad Values of Minerals produced in Canada, 1915 and 1918 ..... 265
49. Increase or Decrease in Principal Mineral Products, 1916 ..... 26 t
50. Mineral Production of Canada in the Calendar Years, 1915 and 1916 ..... 266-267
51. Value of Mineral Production in Canada, 1886-1916 ..... 268
52. Value of Minerats produced in Canada by Provinces in the Calendar Years 1915 and 1916. ..... 268
53. Quantity of Gold produced in Canada by Provinces during the Calendar Years 1882- 1916. ..... 268-269
54. Value of Gold produced in Canada by Provinces during the Calendar Years 1862-1918.. ..... 270
55. Quantity and Value of Silver produced in Canada during the Calendar Years 1887- 1916. ..... 271
56. Quantity and Value of Silver produced in Canada by Provinces during the Calendar Years 1887-1916 ..... $27!$
37. Quantity and Yalue ol Copper produced in Canada by Provinces during the Calendar Years 1886-1916 ..... 272
58. Quantity and Value of Nickel produced in Canada during the Calendar Years 1889- 1916. ..... 273
59. Production of principal Minerals in Canada for the Calendar Years 1909-1916 ..... 273-274
60. Production of Cement in Canada for the Calendar Yeara 1902-1916. ..... 274 ..... 274
61. Character and Quantities of Ores treated in Canadian Smelters, 1911-1916
61. Character and Quantities of Ores treated in Canadian Smelters, 1911-1916
Iron Blast Furnaces in Canada in 1916 ..... 275 ..... 275-278
62. Production of Silver at the Cobalt Camp, Ontario, $1904-16$
63. Value of Total Mineral Production of British Columbia, 1852-1918 ..... 278
279
64. Quantity and Value of Mineral Products in British Columbia, for the Calendar Years 1914-1916. ..... 279
65. Quantity and Value of the World's Production of Gold and Silver for the Calendar Years 1914 and 1915. ..... 280
66. Imports into Canada of Portland Cement, 1898-1916. ..... 281
67. Imports into Canada of Anthradite and Bituminous Coal tor home consumption during the fiscal years 1901-1916 ..... 281
68. Experts of Coal the produce of Canada, 1003-1910. ..... 281
Manufactures.
69. Statisties of Manufactures of Cansds, 1905 and 1915 ..... 283
70. Statistics of Manufactures of Cauada, 1910 and 1915 ..... 283
71. Statistics of Mapufactured by Provinces, 1900, 1905, 1910 and 1915 ..... 284
72. Statistics of Manufactures, 1915
285-293
285-293
73. War Trade in Manulactures, 1915 ..... 294
VII. TRADE AND COMMERCE.

1. Asgregate External Trade of Canads, 1868-1917 ..... 297
Movement of Coin and Bullion, 1868-1917. ..... 298
2. Duties Collected on Exports, 186s-1892, and on Imports for Home Consumption, 1868- 1917. ..... 299
3. Ratio of Exports to Imports and Value per capits of Exports, Imports and Totaj Trade, 1868-1917 ..... 300
4. Exports to the United Kingdom, to the United States and to Otber Countries of Merchandise the produce of Canada, 1868-1917 ..... $30 t$
5. Imports from the United Kingdom, from the United States and Irom Other Countries of Merchandise entered for Home Consumption, 1868-1917 ..... 302

## Trade and Commerce-con.

7. Values of Exports from Canada to the United Kingdom, to the United States, to Pate.Otber Countries and to All Countries, by Classes ol Merchandise, in five year ave.rages and for the fiscal years 1911-1917.
303-3058. Value of Exports of Merchandise the Produce of Canad... With Percentage Ration of
Totats, to the United Kingdom, to the United States and to all Countries, by Clases,8. Value of Exports of Merchandise the Produce of Canada, with Percentage Ration of
Totals, to the United Kingdom, to the United States and to all Countries, by Claseg,1913-1916.
8. Value of Imports from the United Kingdom, from the United States and from ail ..... 306
Countries by elasses of Merchandise entered for Home Consumption, 1913-1916.
9. Exports of Canads to the United Kingdom, United States and All Countries in quan- ..... 307
tities and yalues, by classes of Home Produce in the iour fiscal years 1913 -1916.
10. Imports of Canada, Irom the United Kingdom, the United States and All Countries, in ..... 308-342quantities and values, by Classes entered for Home Consumption in the four figealyears 1913-1916.
11. Values of Exports which may be classed as icanufactures in the four fiscal years ig13- 1016
342-397398
12. Summary of Values of Exports to the United Kingdom, to the United States and to Otber Countries of Home Product, which may be classed as Manufactures in the four fiscal years 1913-1916. ..... 398
13. Values of Imports which may be classed as Manufactures in the four fiscal years 1913- 1916. ..... 400
14. Summary of Imports from the United Kingdom, from the United States and from Otber Countries, which may be classed as Manufacturea, in the four fiscal years 1913-1916
401
401
15. Values of Exports (domestic and foreign) to the British and Foreign West Indies, by Countries during the fiscal yeara 1914 -1916. ..... 402
16. Values of Total Imports (dutiable and free) trom the British and Foreign West Iodies, by Countries during the figcal years 1914-1916. ..... 402
17. Value of Imports and Exports from and to British and Foreign West Indies, 1901-1916.. ..... 403
18. Percentage Proportions of Importo from United Kingdom and United States, respect-
19. Percentage Proportions of Importo from United Kingdom and United States, respect- ively, to totsis of dutiable and free in the 49 fiscal years 1868-1916 ..... 403-404
20. Average ad valorem Rates of Duty collected on Imports from United Kingdom, United States and All Countries in the 49 figeal years 1888-1916 ..... 405
21. Value of Importa entered for consumption at certain Ports during the fiscal year ended March 31, 1916 ..... 406
22. Value of Exports of Cauadian Produce by principal ports, during the fiscal year ended March 31, 1916. ..... 406
23. Value of Total Exports and Imports, Imports entered for consumption and amount of duty collected, by Provinces, during the fiscal year ended March 31 , 1916. ..... 406
24. Imports of Certain Articles of Raw Material for Home Consumption, 1902-1911. ..... 407
25. Imports of Canada by values entered for consumption from Britsh Empine and Foreign Countries, ander General Preferential and Treaty Rate Tariffs in the four fiscal years 1913-1916 403-409
26. Trade of Canada, by Classes of Produce, compared as to Quantity and Value for 1915 and 1916 ..... 410
27. Aggregate Trade of Canda by Countries during the fiscal year ended March 31, 1916..28. Agerecate Trade of Canada by Countries during the fiscal yeare ended March 31. 1917...29. Values of Exports from Canada of Horme Produce to the British Empire and to ForeignCountries, in the five fiscal years 1913-1917412
28. Values of Jmports into Canada of Merchandise, entered for Consumption, from the British Empire and from Foreigo Countries, in the five fiscel yeary 1913-1917; also of Coin and Bullion. ..... 414-415
29. Value of Mercbandise imported into and exported from Canada through the United States duriog the fiecal years ended March 31, 1915-1916. ..... 416
Grain Statistics.
30. Number and Storage Capacity of Canadian Grain Elevators in the crop years 1901-
31. 33. Quantities of Grain inspected duting the fiscal years $1914-1916$ ..... 419-21
1. Quantities of Grain inspected during the fiscal years ended March 31, 1914, 1915 and ..... 42
2. 
3. 
4. Shipments of Grain by vessels from Fort William and Port Arthur, for the navigation seasons 1915 and 1916. ..... 423
5. Shipments of Grain. by vessels and all rail route, from Fort William and Port Arthur, for the crop years egded August 31, 1915 and 1916 ..... 423
Bounties.
6. Bounties paid in Canada on Lead. 1899-1916 ..... 424
7. Bounties paid in Canada on Crude Petroleum, 1803-1916 ..... 424
Patents, Copyright, Trade Marks, Etc.39. Number of Cauadian Patentees by Province of Pesidence for the fiscal years 1908-1916425
VIII. TRANSPORTATION AND COMMUNICATIONS.
Steam Railways.
8. Record of Steam Railway Mileage, $\mathbf{1 8 3 5 - 1 9 1 6}$ ..... 428
9. Steam Railway Miteage by Provinces, 1910-1916 ..... 429
10. Capital Liability of Steam Railways, 1876-1916. ..... 429
11. Areas of Land Subsidies granted to Steam Railways by the Dominion and Provincial Goveromente up to June 30, 1916 . ..... 430
Steam Railways-con.
Page.
430-433
12. Mileaze, Capital, Earnings and Operatisy Expenser of Steam Raitways, 1916.
434
434
13. Steam Railway Statistics, 1875-1916.
14. Steam Railway Statistics, 1875-1916. ..... 435
15. Earnipgs and Operating Expenses of Steam Railways per mile of libe, 1008-1916
435
435
16. Distribution of Operating Expenses of Steam Railways, 1914-1915
17. Distribution of Operating Expenses of Steam Railways, 1914-1915 ..... 435
18. Aid to Railways in the form of Guarantees of Bonds, Interest, etc., by the Dominion and Provincial Governments, 1916.
435
435
19. Analysis of the Total Financial Aid to Steam Railppays up to June 30, 1916
20. Analysis of the Total Financial Aid to Steam Railppays up to June 30, 1916 ..... 438
21. Total Amount oi Dominion Government Aid paid to Steam Railways up to June 30 of each year 1875-1916.
22. Cost of Construction, Working Expenses and Revenue of Government Railwsys, $\mathbf{1 8} 08$ - 1916, and before Confederation ..... 437
23. Capital Expenditure by Dominiou Government for construction of Governmant Steam Rsi]ways to March 31, 1916 ..... 438
24. Mileage and Rolling Stock of Steam Railways, 1911-1918 ..... 438
25. Freight hauled on Steam Railways, 1912-1916 ..... 438-440 ..... 438-440
26. Total Salaries and Wages, with Ratio of same to groes Earnings and Operating ex- penses on Steam Railways, 1907-1916 ..... 440
27. Distribution of Salaries and Wages and number of Employees on Steam Railways, 1915-1916 ..... 440
28. Number of Employees by Groups and Classes with Number of Days worked and Amount of Salaries snd Wages Paid on Steam Railways, 1916 ..... 441-442
29. Number of Passengera, Employees and Others Killed and Injured on Steam Railways, 1888-1916 ..... 443
30. Number of Persons Killed and Inured on Steam Railways, 1914-1916. ..... 44
Electric Railways.
31. Electric Railway Statistics, 1901-1916 ..... 445
32. Mileage and Equipment of Flectric Railways, 1914-1916 ..... 445
33. Capital Liability of Electric Railways, 1908-1916.
34. Capital Liability of Electric Railways, 1908-1916. ..... 446-447
35. Mileage, Capital, Earnings and Operating Expenses of Electric Railwaya, 1616.
36. Mileage, Capital, Earnings and Operating Expenses of Electric Railwaya, 1616. 25. Number of Passengers, Employees and others Killed and Injured on Electric Raii- ways, 1894-1916 ..... 447
Motor Vehicles.
37. Number of Motor Vehicles reqistered in Canada by Provinces, 1914-1916. ..... 451
38. Speed Limits in miles per hour, for Motor Vehicles, by Provinces ..... 451
Express Companies.
39. Operating Mileage of Express Companies in Canada, 1913, 1914, 1915 and 1816 ..... 452
40. Operating Expenses of Express Companies, 1913-1916 ..... 453
41. Business transacted by Express Companies in financial paper, 1913-1916. ..... 453
42. Earnings of Express Companies, 1913-1916 ..... 454
Canals.
43. Canal Traffic during the Navigation Season 1916. ..... 456-457
44. Distribution of Total Canal Traffe by Months, 1912-1916 ..... 457
45. Tonnage of Traffic by Canals and Classes of Products, 1915-1916. ..... 458
46. Principal Articles carried through Canadian Canals during the Nevigation Seasons, 1915 and 1916 458-450
1897-1916 ..... 456
47. Traffic through Canadian Canais during the Navigation Seasons of 1910-1916 ..... 460-46!
48. Capital Expenditure for Construction and Enlaryement of Canals, 1868-1916, and before Confederation ..... 463
49. Traffic through the Pauama Canal, August, 1914, to Februaxy, 1917. ..... 464-465
466
Shipping.
50. Sea-going Vessels (exclusive of Coasting Versels) Entered and Cleared at Canadian Ports during the fiscal year 1916 ..... 467
51. Sea-eoing Vessels Entered and Cleared at the Principal Ports of Canada, 1916 ..... 468
52. Sea-going Vessels Entered Inwards and Outwards by Comitries, 1916. ..... 469-470
53. Sea-going Vessels Entered and Cleared at Canadian Ports witb Cargo and in Batlast 1002-1916 ..... 470
54. Sea-going and Inland Vessols (exciusive of Coasting Vessels) arrived at and departed ..... 471
55. British and Foreign Vessels employed in the Coasting Trade of Cantada, 1912-1916. ..... 471-472
56. Canadian and American Vessels trading on Rivers and Lakes between Canada and United States, exclusive of ferriage, 1912-1916
57. Vessels built and registered in Canads and Vessels sold to otber Countries, $1901-1916$ ..... 473
58. Number and Net Tonnage of Vessels on the Registry of Shipping, Canada, 1912-1915. ..... 474
59. Steamboat Inspection during the fiscal year 1915-1016. ..... 474-475
60. Canadian Wrecks and Casazalties, for the years ended June 30, 1901-1916. ..... 475
475

## Shipping-con.

55. Comparative Statement of Marine Danger Siznals, 1906-1916 ..... Pags.
56. Revenue of the Department of Marine, 1912-1816 ..... 476 ..... 477-478 ..... 477-478
57. Total Revenue and Expenditure of the Depastment of Maribe, 186s-1918
58. Total Revenue and Expenditure of the Depastment of Maribe, 186s-1918
59. Shippiug in the United Kingdom and British Possessions, 1910-14, exclusive of Coasting ..... 478$479-480$
Telegraphs and Telephones.
60. Telegraph Statistics of Chartered Companies, 1910-1916 ..... 481-488
61. Coast Stations for Communication by Wireless Telegraphy with Ships at Sea, fiscal year 1916 ..... $483-484$
62. Canadian Government Steamers, equipped with the Radiotelegraph
484
484
63. Business and Cost of Maintenance of Radiotelegraph Stations for the Giscal years 1915 and 1916 ..... 485
64. Progress of Telephones in Canada, 1913-191b
485
485
65. Number of Telephone Companies reporting to the Department of Railwaya and Canals, by Provinces, June 30, 1916, with totals for 1913-14-15 ..... 485
66. Telephones in use and Mileage of Wite by Provinces, June 30, 1916, with totals for 1913-14-15.
486
486
67. Wire Mileage of Telephones by Clagses of Wire, June 30, 1915 and 1916 ..... 486
68. Capital Liability, Cost. Revenue and Operating Expenses of Telephones, June 30 , 1916, with totals for 1913, 1914 and 1915. ..... 486
Postal Statistics.
69. Revenue and Expenditure of the Post Office Department for quinquennial periods 1890-1910 and for the years 1911-16. ..... 487
70. Mail Subsidies and Steamebip Subventions, 1914-1916 ..... 487-489
71. Operation of the Money Order System in Canada, 1901-1918 ..... 489
72. Money Orders by Provinces, 1912-191B ..... 400-491
73. Number and Total Values of Postal Notes, 1911-1916 ..... 491
74. Issue of Postage \$tamps, etc., 1016 ..... 492
IX. LABOUR.
75. Time Losses by Industries in Working Days, 1901-1916 ..... 495
76. Number of Disputes, Establishments, Employees and Time Loeses, 1901-1916. ..... 497
77. Disputes classified by Industries, 1901-1916. ..... 497
78. Inder Numbers of all Commodities by Groups, $1880-1916$. ..... 501
79. Inder Numbers by Groups of Commodities from month to month, 1916. ..... 502
80. Weekly Cost of a Family Budget of Staple Foods, Fuel and Lighting and Rent in terms of the Average Prices in 60 Canadian Cities, $1900,1905,1915$ and 1916 ..... 503
81. Weekly Cost of a Family Budgei of Staple Foods, Fuel and Lighting and Rent in terms of the Average Prices of the cities in each province of Canada 1910-15, December 1914-18 ..... 504
X. FINANCE.
Public Accounts.
82. Receipts and Expenditures on Consolidated Fund Account, 1914-1917. ..... 506
83. Receipts on Consolidated Fund Account, 1868-1917 ..... 506-507
Details of Receipts on Consolidated Fund Account, 1901-1917 ..... 508-510
84. Details of Expenditure on Consolidated Fund Account, 1901-1917. ..... 510-514
85. Expenditure of Consolidsted Fund Account, 1868-1917 ..... 514-515
Total Expenditure of Canada, 1868-1917. ..... 518
86. Toted Receipts of Canada, 1868-1917 ..... 517-518 ..... 518
519
87. Population and Reverue and Expenditure per head, 1871-1917
88. Population and Reverue and Expenditure per head, 1871-1917
89. Public Debt of Canada, July 1, 1867, to March 31, 1917 .....
520 .....
520
90. Totai Liabilities of Canada, July 1, 1867, to March $31+1917$ ..... 521-522
91. Funded Dept payable in Londoa apd Canada, March 31, 1916 ..... 523
92. Subsidies and other Payments of Dominion to Provincial Govermments, 1911-1916. ..... 524
93. Totals of Subsidy Allowances from July 1, 1887, to March 31, 1916 ..... 524
525
94. Coinage at the Ottawa Branch of the Royal Mint in the Calendar Years 1913-1916.
Inland Revenue.
95. Excise and other Revenues for the figcal years 1911-1916 ..... 527
96. Statistice of Distillation for the fisoal years 1912-1916 ..... 527
97. Quantities of Spirits, Malt Liquor, Malt and Tobaces, taken out of Bond for Con- ..... 528
sumption, 1868-1916
sumption, 1868-1916 19. Consumption per head of Spirits, Wine, Beer and Tobacco and amount of Excize and ..... 529
Customs Duties per head, 1860-1016
Customs Duties per head, 1860-1016 ..... 530
 Inspection Act in the Fiscal Years 1910-16 ..... 530
98. Electrical Energy generated or produced for Export and for Comsamption in Canada Under authority of the Electricity and Fiuid Exportation Act during the Fiscal Years 1913. 1914, 1915 and 1916 ..... 531

## Provincial Public Accounts.

23. Annual Revenue and Expenditare of the Provincial Governments, 1911-12 to 1915-16.
24. Revenue and Expenditure of the Provincial Governments, 1915-191Page.25. Receipts and Expenditure of the Provincial Governments, 1915-16532-533
$533-540$
53
25. General Statistics of Cities and Towns, 1916 ..... 541-542
26. Assessment and Valuation of Property of Cities and Towns, 1916. ..... 543-545
27. Receipts, Expenditure, Assets and Liabilities of Cities and Towns, 1916 ..... 546-547
28. Financial Statistics of Electrical Installations of Municipalities served by the Ontario Hydro-Electric Power Commission, 1915 ..... 548-551
tatement of Assets and Liabilities of Municipolities, served by the Ontario Hydre- Electric Commisaion for the Calendar Years 1013-1915. ..... 552
29. Vaiues of Building Permits taken out in 35 Cities in 1915 and 1916 ..... 553-554
Banking.
30. Number of Branches of Banks, by Provinces, 1868, 1902, 1908, 1915 and 1916. ..... 554
31. Number of Branches of Chartered Banks, by Provinces, as at December 31st, 1916 ..... 535
32. Assets of Chartered Banks of Canads, December 31, 1915. ..... 556
33. Liabilities of Chartered Banks of Canada, December 31, 1916 ..... 557
34. Geperal Statement of Chartered Banks, 1868-1916 ..... 558
35. Deposits in Chartered Banks in Canada and eisewhere, 1001-1016. ..... 559
36. Discounts of Chartered Banks in Canada and elsewhere, 1901-1916 ..... 859
37. Assets of Chartered Banks for the Calendar Years 1913-1916 ..... 560
38. Liabilities of Chartered Banks for the Calendar Years 1913-1916. ..... 561
39. Average Monthly Circulation of Dominion Notee by Denominations, 1897-1916. ..... 562
40. Amount of Exchanges of the Clearing Houses of Chartered Banks, 1912-1916 ..... 562
41. Reat or Reserve Fund beld by Chartered Banks by months, 1907-1916. ..... 563
42. Average Circulation of Bank Notes and Government Notes by five-year and annual periods, 1874-1916 ..... 563
43. Total amount of Issue and Redemption of Dominion Notes from July 1, 1878, to March 31, 1818 ..... 564
44. Business of the Post office Savings Banks, 1868-1916 ..... 565
45. Business of the Dominion Government Savings Banks, 1868-1916 ..... 566
46. Total Business of Post Office and Dominion Government Savings Banks, 1868-1916 ..... 567
47. Value of Dominion Notes and of Bank Notes in Circulation, and atrount of Gold held by the Receiver General, 1882-1916. ..... 568
Loan and Trust Companies.
48. Liabilities and Assets of Loan Companies, 1914-1915. ..... 569
49. Liabilities and Assets of Trust Companies, 1914-1915 ..... 570
Commercial Failures.
50. Commercial Failures in Canada by Provinces, for the Calendar years 1915 and 1916. . ..... 570
51. Commercial Failures in Canada by Branches of Business, J914-1916. ..... 571
52. Commercial Failures in Canada by Provinces and Classes for 1916, with totals for 1907-1915 ..... 572
Government Annuities.
53. Number of Immediate Anzuities of each amount paid in full from September 1, 1908,to March 31, 1917573
54. Number of Deferred Annuities of each amount purchased by lump sums, lump sums add annual payments, and periodical payments from September 1, 1008, to Mareh 31,1917 ..... 574
55. Valuation on March 31, 1917, of Annuity Contracts issued pursuant to the Government Annuities Act, 1908. ..... 57
Insurance.
56. Fire Ineurance Business transacted in Canada, 1915578-580
57. Fire Insurance Business transacted in Canads, 1916 ..... 581-583584
58. Totals of Fire Insurance Premiums received and Losses paid, with percentage of Losses to Premiums by Nationality of Companjes, 1869-1916 ..... 584
59. Fire Insurance Premjums received and Losses paid by Canadian Companies doing business in Canada and other Countries, with percentage of Lossee paid to Premiums received, 1878-1916. ..... 585
60. Amount of Fire Insurance at risk in Canada, $1869-1916$ ..... 585
61. Assets of Cauadian Companies doing Fire Insurabce. or Fire Insurance and other classes of Insurance, and Assets in Canada of Companizs other than Canadian trang- acting business in Canada, 1912-16 ..... 586
62. Lisbilities cI Canadian Companies doing Fire Insurance, or Fire Insurance and other classes of Insurance, and Liabilities in Cansda of Companies other than Canadian transacting busimess in Canada, 1912-1916 ..... 587
63. Cask Income and Expenditure of Canadian Companies doing Fire Insurance. or Fire Insurance and other clssses of Insurance, and Cash Income and Expenditure in Can-ada of Companies other then Cansdian, transacting such business in Canads. 1912-1816.588-589
64. Amount of Net Premiums witten aud Net Losseds incurred by Provinces in Canada, byCanadian, British and Ameriean and other Companies transacting Fire Insurance,1916

## Insurance-con.

68. Life Insurance in Canada, 1912-1916.
69. Insuradie Death-rate in Canada, 19i2-19is
Pags.
590-591
592
70. Assets of Canadisn Life Companies snd Assets in Cansda of Life Companies other than Canadian Companies, 1912-1916.
592-593
71. Liabilities of Canadian Life Companjes and Liabilities in Canada of Life Companies other than Canadian Companies, 1912-1916. ..... 594
72. Cash Income and Empenditure of Canadian Life Companies and Cash Income and Expenditure in Canada of Life Companies other than Canadian Companies, 1912- 1916 ..... 595-596
73. Net Amount of Life Insurance in foree in Cazada, 1901-1916 ..... 596
74. Prersium Income of Jife Companjes, 1901-1916 ..... 597
75. Life Insurance on Assessment Plan, 1912-1916: ..... 597-598
76. Insurance other than Fire and Life, 1915 ..... 599
77. Insurance other than Fire and Liie, 1916. ..... 600
78. Income and Espenditure and Assets and Liabilities of Canadian Companies doing Insurance Business other than Fire and Lite, 1915 ..... 601
79. Income and Erpenditure and Assets and Liabilities of Canadian Companies doing Insurance Business other than Fire and Life, 1916. ..... 602
80. Income and Expenditure in Canada of Companies other than Canadian doing Businesa other than Fire and Iife, 1915 ..... 603
81. Income and Expenditure in Canada of Companies other than Canadian doing Busimesa other than Fire and Life, 1916. ..... 604
82. Dominion and Provincial Fire Insurance in Canada, 1916. ..... 605
83. Dominion and Provincial Insurance in Canada, other than Firesad Life, 1916 : ..... 605
84. Dominion and Provincial Insurance in Canada, other than Fire and Life, 1916. ..... 606
607
85. Fire Insursance effected on property in Canada, under Section 138 of the Insurance Act1910, by Companjes, Associations or Underwriters not licensed to transact buainessin Canada607-608
XI. ADMINISTRATION.
Parliamentary Representation.
86. Representation in the House of Commons, according to the Districts of the Representa- tjon Act, 1914 ..... 810-612
Governors-General of Canada, 1867-1917
Governors-General of Canada, 1867-1917 ..... 613 ..... 613
87. Dowinion Parliaments, 1867-1917 ..... 813-614
88. Dominion Ministries, 1896-1917. ..... 615-617
89. Lieutenant-Governors of Provinces, $1867-1917$ ..... 618-819
Honorary Advisory Council for Scientific and Industrial Research in Canada. ..... 619-623
Public Lands.
90. Land Sales by Railway Companies having Government Land Grants and by the
Hudson's Bay Company in the fiscal years 1914-1916. ..... 624
91. Homestead Entries in Manitoba, Saskatehewan, Alberta and Britisb Columbia, by Nationalitieg, made during the Fiseal Years 1911-1916 ..... 628
92. Receipts of Patents and Homestead Entries in the fiscal years 1912-1916 ..... 629
Department of the Secretary of State.
93. Number of Naturalizations in Canada by Principal Nationalities during the Calendar Years 1907-1915. ..... 630-631
Indian Affairs.
94. Indian Population in Canada by Provinces, 1911-1917 ..... 652
95. Distribution of Indian Population by Age, Sex and Province, with Births and Deaths by Provinces, 1916. ..... 832
96. Religion of Indian Population by Provinces as at March 31, 1916 ..... 633
97. Attendance of Pupils at Indian Schools, by Provinces, 1916 ..... 633
98. Literacy of Indian Population by Provinces, 1916. ..... 633
99. Acreage and Value of Indian Lands by Provinces, 1916 ..... 834
100. Numbers of Indian Population engaged in Agriculture, Stock-raising and other cocupa- tions, by Provirces, 1916 ..... 634
101. Area and Yield of Field Crops of Indians, by Provinces, 1916. ..... 634-635 ..... 635
935
102. Nurabers of Farm Live Stock of Indians with Total Values, by Provinces, 1916.
103. Nurabers of Farm Live Stock of Indians with Total Values, by Provinces, 1916.
104. Sources and Value of Income of Indians, 1916.
Public Works.
105. Dimensions of Graving Docks owned by the Dominion Government, ..... 637
106. Dimensions and Cost of Graving Docks subsidized under the Dry Dock Subsidies 2 ..... 637
Act, 1910.
Act, 1910.
107. Enpenditure and Revenue of the Public Worke Departmeat for the fiscal years 1012-1016 ..... 636
Harbour Commissions. ..... 638
Public Health and Quarantine ..... 639
Public Defence.Page.
108. Expenditure and Revenue of Militia for the Fiscal Years 1912-1916. ..... $640-641$
642-643
642-643
109. Scale of Annual Peasions granted to Dependents of Deceased Sailors and Soldiers of the Canadian Naval Forces and the Canadian Expeditionary Force, as amended to October 22, 1917 ..... 644
110. Scale of Annual Pensions to Disabled Sailors and Soldiers of the Canadian Naval Forces, and the Canadian Expeditionary Force, as amended to October 22, 1917. ..... B45-646
111. Strength and Distribution of the Royal Nortbwest Mounted Police on September30, 1916648
Criminal Statistics and Penitentiaries.
112. Charges, Convictions and Percentages of Acquittals for Indictable Offences by Prov- inces, 1914 and 1915 ..... 649
113. Indietable Offences by Classes, 1914 and 1915 ..... 650
114. Convictions and Sentences for all Offences by Provinces, 192み-1915. ..... 650-653 ..... 650-653
the total and yearly average for the period 1885-1915653
115. Charges, Acquittals, Convictious and Sentences in respect of Indictable Offences, 1910-1915. ..... 653
116. Classification of persons convicted of Indictable Offences, 1910-1915. ..... 654 ..... 654
117. Convictions by Classes of Offences and Proportion per cent. of each class to the total,
118. Convictions by Classes of Offences and Proportion per cent. of each class to the total, 1909-1915. ..... 655
119. Movement of Conricts, 1911-1916 ..... ${ }_{656}^{656}$
120. Number of Deatis, Escapes, Pardons and Paroies, 1911-1916. ..... 657
121. Age of Convicts. 1911-1918.
122. Age of Convicts. 1911-1918. ..... 657 ..... 657
123. Classification of Convicts, 1911-1916 ..... 657-658
Divorce.
124. Statistics of Divorce, 1868-1916 ..... 859
Acts of Parliament and Publications.
List of the Principal Acts of Parliament sdministered by Departmente of the Government of the Dominion of Canads, as compiled from information supplied by the respective Depart- ments.
Iiat of Principal Publications of Departments of the Government of the Dominion of Canadaas compiled from information supplied by the respective Departments
List of Principal Publications of the Provincial Governmente of Cadada, as compiled from in-formation supplied by the respective Governments687-674
XII. LEGISLATION AND PRINCIPAL EVENTS OF THE YEARS
Dominion Legisiation, 1916 ..... 674-677 ..... 777-679
Provincial Legislation, 1916 and $191 \%$ ..... 679-686
Principal Events of the Years 1916 and 1917686-699The Governor General, 686-7; Canada and the European War, 687; Canadian Contri-butions for Patriotic Purposes, 688 ; Military Hospitals Commission, 690 ; MilitaryOrganization, 601; Visits to Canads of Australian, French and British Statesmen, 692 ;Vigits to England of Canadian Cabinet Ministers, 602; Compuisory Military Service,693; War Loans. E93; Food Cobtrol, 693; Destruction of Houses of Parlíiment, 694;Jubilee of Confederation, 055 ; Quebec Bridge, 696; Bilingual Controversy in Ontario, 697;Census of the Prairie Provinces 1916, 697; Dominions Royal Commission, 697; Obituary,69S; General Thanksgiving, 69.
XIII. EXTRACTS FROM THE CANADA GAZETTE, 1916 AND 1917
Privy Councillors, Lieutemant-Governors, new Senators, Cabibet Ministers and other Members of the Government. ..... 890-701
Judicial Appointments and Commissions ..... 701-702
Imperial Honours and Decorations and Official Appointments ..... 702-706
LIST OF ILLUSTRATIONS.
Map of the Dominion of Canada and Newioundland. Facing Contents Natural Resonrces of the Dominion of Cangda. ..... 0-35
 Facing ..... 17
Fig. 4. Pickiog Peaches in Southern Ontario, 17. Fig. 5. Prairie Wheat Farm near Edmonton,Alberta, 22. Fig. 6. Young Apple Tree, Valley of the Skeena River, Northern B.C., 26. Fig. 7 .Starting a Farm on Lake Kathlyn, Northero B.C., 27. Fig. 8. Forest Scene in British Col-umbia: Douglas Fir 300 to 400 years old................................................................
31
Fig. 9. Stand of Douglas Fir (Psendo-lsuga plitala taxifolia) in British Colombia Focing ..... 33
Fig. 10. Priace Edward Island Black Fox, ..... 35
Montlaly Precipitation during the Year 1916 ..... 181
Average Monthly Prices per bushel of Cansdian Wheat, Barley, Oats and Flas, 1915 and 1918 Facing
Average Monthly Prices per bushel of Cansdian Wheat, Barley, Oats and Flas, 1915 and 1918 Facing
252
252
Strikes and Lockouts in Canada 190t-1906; Number of Strikes and Lockouts; Number of Em- ployees involved; Time Losses in Number of Working Days ..... 496
Courre of Wholesale Prices in Canads, 1890-1916.
499
499
Course of Wholesale Prices in Canada, 1916 ..... 500

## STATISTICAL SUMMARY OF THE PROGRESS OF CANADA.

Area of the Dominion of Canada in square miles:-Land, 3,603,910; Water, 125,755; Total, 3,729,665.


STATISTICAL SUMMARY OF THE PROGRESS OF CANADA-con.

| Items. | 1911. | 1912. | 1918. | 1814. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| Employees........... No. | 515,203 | - | - |  |  |  |
| Capital.................. | .247,583,609 | - |  |  |  | 1,958,705,230 |
| Salaries and wages...... | 241,008,418 |  |  |  |  | 283+311,505 |
| Products.......... | 165,975,638 |  |  |  |  | 1,381,547,225 |
| Trade- |  |  |  |  |  |  |
| Exports | 290,009,210 | 307,716,15] | 377,068,355 | 455.437.224 | 461.442,509 | 779,300,070 |
| Imports ${ }^{3}$ | 451,745,108 | 521,448,309. | 670,089,08e | 618,457,144 | 455,446,312 | 507.817,159 |
| Total | 741,745,318 | 829,164,460 | 1,047,157,421 | 1,073,894,368 | 916,888,821 | 1,287,117,229 |
| Coin and Bullion- |  |  |  |  |  |  |
| Import | 7,196,155 | $7,601,099$ $26,033,881$ | $18,163,702$ $5,427.979$ | 23,566,704 | 291,962,992 | $\begin{array}{r} 103,572,432 \\ 34,260,202 \end{array}$ |
| Tot | 17,402 | 38,634,980 | 21,591,681 | 38,796,009 | 161,359,360 | 187,832,634 |
| Exporta, domestio- |  |  |  |  |  |  |
| Wheat............. Busb. | 43,802,115 | 64,466.286 | 93,166,000 | 120,426,579 | 71,918,385 | 157,745,469 |
| Wheat flour......... bbl. | 3,049,048 | 3,738,836 | 4,478,043 | 4,832,183 | 4,952,337 | 8, 400,214 |
| Oats. . . . . . . . . . . . . Bush. | $5.431,862$ | 8,880,675 | 10,478.554 | 34,996.664 | 17,768,166 | 25,816,322 |
| Hay............... Tons | 326,132 | 784,864 | 394,208 | 191,515 | 131,875 | 255,407 |
| Bacon................ lt. | 56,068,607 | 58,079,963 | 36,212,180 | 23,859,754 | 76,801,419 | 144,918,867 |
| Butter............... * | 3,142,688 | 8,844,402 | 828,323 | 1,228,753 | 2,744,913 | 3.441.183 |
| Cheese | 181,895,724 | 163,450,684 | 155,216,392 | 144, 478,340 | 137,601,661 | 168.961,583 |
| Wheat | 45,521,134 | 62,500,563 | 88,608,780 | 117.719,217 | 74,293,548 | 172,896,445 |
| Wheat flour. ............ | 13,884,790 | 16,034,064 | 19,070,689 | 20,581,079 | $24,810,946$ | 35,767,044 |
| Oats. | 2,144,846 | 3,819,642 | 5,067,050 | 13,379,849 | 8,961,126 | 14,037,849 |
| Hay. | 2,723,291 | 6,373,590 | 3,950,058 | 1,787,050 | 2,232,558 | 5,849,428 |
| Bacon | 8,013,454 | 7,520,362 | 5,350,845 | 3,763,195 | 11,811,825 | 25,710,767 |
| Butter. | 744,288 | 2,077,916 | 223,578 | 309,048 | 639,625 | 1,018,769 |
| Cheese. | 20,739,507, | 20,888,818 | 20.697,144 | 18,868,785 | 19,213,50] | 26,690.500 |
| Fisheries................. 8 | 15,675,544 | 16,704,678 | 16,336,72] | 20,623,560 | 19,687,068 | 22,377,977 |
| Forest prod | 45,439,057 | 40,592,674 | 43,255,060 | 42,782,137 | 42,650,683 | 51,271,400 |
| Manufactures | 35,283,118 | 35,836,284 | 43,692,708 | 57,443,452 | 85,589,501 | 242,034,998 |
| Minerals................. \& | 42,787,561 | 41,344,516 | 57,442,546 | 59,039,054 | 51,740,989 | 66,589, 861 |
| Gol | 5,344,465 | 7,193,392 | 11,226,573 | 13,320,755 | 15,406,510 | 16,870,394 |
| Silver............... $\mathbf{0 z}$. | 33,731,010 | 30,882,716 | 35,204,018 | 36,758,276 | 25,365,305 | 27,794,566 |
| Copper............... 3 | 55,005,342 | 56.428,980 | 83,664,420 | 83,250,198 | 62, 699,718 | 151,046,300 |
| Nickel. . . . . . . . . . . ${ }^{\text {a }}$ | 34,767,523 | 33,230,708 | 48,168,090 | \$0,580,536 | 45,412,017 | 70,443,000 |
| Coal.................Tons | 2,315,171 | 1,494,756 | 2,053,993 | 1,498,820 | 1.512,487 | 1,971,124 |
| Silver | 17,269,168 | 15,808,409 | 20,202,559 | 20.971,538 | 13,516,390 | 14,298,351 |
| Coppe | 5,575,033 | 5,646,206 | 9,911,542 | 9,489,729 | 6,552,005 | 14,670,073 |
| Nicke | 3,842,332 | 3,748,920 | 5,045,197 | 5,374,738 | 5,063,656 | 7,714,769 |
| Coal. | 6,014,095 | 4,338,128 | 5,555,090 | 3,703,765 | 4,466,258 | 6,032,765 |
| Imports for consumption- |  |  |  |  |  |  |
| Agricuitural produce..... 8 | 47,061,788 | 51,869,087, | 55,391,008 | 53,544,539 | 52,449,384 | 54,618.369 |
| Animals and their produce ${ }^{\text {a }}$ | 23,258,864 | 29,499,117 | 41,088,978 | 29,880,211 | 27,873,973 | 37,555,794 |
| Fisheries...., , ........... 8 | 1,995,091 | 2,409,618 | 2,674,776 | 2,381,772 | 1,856,298 | 1,591,073 |
| Forest produce........... | 12,873,875 | 15,201,526 | 20,138,388 | 16,789,413 | 9,613,891 | 5,240,154 |
| Manufactures............ 8 | 298,757,039 | 340,573,248 | 456,463,594 | 417,555,537 | 286, 214,321 | 305,474,649 |
| Minerals | 44,020,074 | 54,935,717 | 65,820,233 | 71,694,173 | 54, 771,002 | 48.022,694 |
| Miscellameous ${ }^{\text {a }}$ | 33,985,087 | 52,993,823 | 33,940,068 | 41,896,804 | 155,260,437 | 90,174,628 |
| Steam Railmaye- |  |  |  |  |  |  |
| Miles in operation. . . . . . . | 25,400 | 26,727 | 29.304 | 30,795 | 35,578 | 37,434 |
| Capital................ ${ }^{8}$ | 1.528,689,201 | 588,937,526 | 1,531,830.692 1 | 1,808,820,761 | 1,875,810,888 | 893,125,774 |
| Passengers carried... ${ }^{\text {a }}$ No. | 37,097,718 | 41,124,18! | 46,230,765 | 46,702,280 | 46,322,035 | 49,627,671 |
| Freight. . . . . . . . . . . . . Tons | 79,884,232 | $80,444,331$ | 106,992,710 | 101,393,989 | 87,204,838 | 109,559,088 |
| Earnings. ................ | 188,733,494 | 219,403,753 | 256,702,703 | 243,083,539 | 199,843,072 | 261,888,654 |
| Expenses.................. | 131,033,785 | 150,726,540 | 182,011,690 | 178,975,259 | 147,731,099 | 180,542,259 |
| Electric Railwaya- |  |  |  |  |  |  |
| Capital................. | 111,582,347 | 122,841,946 | 141,235,63] | 147,595,342 | 150,344,002 | 154, 895,584 |
| Pansergers carried, ... No. | 426,296,792 | 488,865,682 | 597,863,801 | 614,709,819 | 562,302,373 | 580,094,167 |
| Freight............... Tons | 1,228.362 | 1,435,525 | $1,9577.930$ | 1,845,923 | 1,433,602 | 1,936,574 |
| Expenges................... ${ }_{\text {\% }}^{\text {\% }}$ | $20,356,952$ $12,096,134$ | 23,499,250 $14,266,675$ | 28,218, 11 t | $29.691,007$ | 26.922,900 | 20,402,761 |
| ........ |  |  | 17,765,372 | 19,107,818 | 18,131,842 | 18,099,908 |

[^0]
${ }^{1}$ Including amonnts deposited eisewhere than in Canada. 2 Fire insurance transacted under Dominion License. ${ }^{2}$ Fire insurabce transacted under Provincial License. 4Life insurance transacted under Dominion License. LLife insurance tranesoted under Provincial License.

## NOTES.

The statistics of manufactures in 1912 and 1915 are for works employing five bands and over, except in the case of butter and cheess factories, flour and grist mills, electric light plants, lumber, lath and ahingle mills, lime kilas, brick and tile works and fish preesrved.

In the foregoing Summary the statisties of immigration, fisheries, trade, shipping, the Post Office, the public debt, revenue and expenditure and the Post Offioe and Government Savings banks relate to the fiscal year ended March 31 in 1911-16. Mineral, banking, insurance and loan ootnpanies' statistics relate to the calendar years and railway statietics to the years ended Jone 30 . The statiatics of population, agriculture, dairying industries and manufactures are either those of the Census of 1911, or are estimates based thereon for 1912 to 1916. Canal statistics are those of the navigation seasons. The telegraph statistics relate to the fiscal years for Government lines and to the caleadar yeard for other lines.

## THE CANADA YEAR BOOK, 1916-17.

In order that the date of the Year Book may in future be that of the actual year of issue, the present edition appears as "The Canada Year Book, 1916-17," and it includes, as far as possible, data of the year 1917, as well as of the year 1916. In other respects the work follows the lines of previous issues, with the additional features indicated in the preface. The volume has been edited by Mr. Ernest H. Godfrey, F.S.S., and grateful acknowledgments of valuable co-operation are again tendered to officers of the Dominion and Provincial Governments and of Municipalities throughout Canada. The tables have been compiled as usual by Mr. James Skead and Mr. Josepe Wililins, and the diagrams have been drawn by Mr. R. E. Watts.

R. H. COATS,<br>Dominion Statistician and Controller of Census.

Census and Statistics Office, Ottawa, October 31, 1917

## PREFACE

The present edition of the Canada Year Book opens with anillustrated article on the Natural Resources of the Dominion of Canada, and includes also an article on the Economic Geology of Canada in 1916.

Following the rule previously adopted, articles and tables not requiring alteration or bringing up to date have been omitted. A selected list of articles and tables in previous issues is given on pages 706-708.

In Section III (Area and Population) are new tables showing the principal results of the Census of Manitoba, Saskatchewan and Alberta, as taken in 1916. Section IV (Education) has been revised and brought up to date with the assistance of the Provincial Deputy Ministers and Superintendents of Education. It includes a comprehensive description of the public educational system of Canada, from the elementary schools to the universities, and statistical tablesdating from the beginning of the century. In Section VI (Production) the statistics and estimates of the areas, yields and values of field crops, and of the numbers and values of farm live stock, have been revised to agree with the finally ascertained results of the Census of the Prairie Provinces for 1915 and 1916. Tables have been compiled from previous issues to compare the average monthly prices of agricultural produce for recent years. The description given last year of the Dominion and Provincial Agricultural Experiment Stations has been revised and brought up to date. Tables of the world's production of gold and silver have been added to the statistics of Canadian mineral production. In this Section are also included the principal results of the Census of Manufactures, taken in 1916 for the year 1915. Section VII (Trade and Commerce) has been re-arranged into three divisions consisting of (1) historical tables of imports and exports over a long series of years, mostily from Confederation; (2) main tables showing the current trend of trade with the United Kingdom, the United States and All Countries, so printed as to effect a considerable saving of space, combined with greater convenience of comparison; and (3), analytical tables showing the trade of Canada with particular countries and for particular articles. To Section VIII (Transportation and Communications) have been added a digest of the provincial laws relating to motor vehicles, with statistics. of their registration in recent years, and Tables of British Shipping. In Section X (Finance) the statistics of fire and life insurance have been expanded to include companies doing business under provincial license. A description of the new Honorary Advisory Council of Scientific and Industrial Research is given in Section XI (Administration).

In all sections is given the latest information available up to the time of printing, and all the tables include, wherever possible, the figures of 1917 as well as those of 1916.

## I.-NATURAL RESOURCES OF THE DOMINION OF CANADA.

By Watson Griffin, Department of Trade and Commerce, Ottawa.

## CONTENTS.

|  | Page |  | Page |
| :---: | :---: | :---: | :---: |
| Introduction | 1 | Mineral Resources-con. |  |
| The Liad of Waterways. | 4 | Iron Ores. | 49 |
| Water-Powers | 5 | Molybdenum and Tungsten. | 54 |
| Climate and Farm Products | 12 | Feldspar and Fluprspar. | 55 |
| Forest Wealth. | $2{ }^{\text {P }}$ | Kaolin or Cbina Clay. | 55 |
| Wild Animals. | 33 | Magnesite. | 55 |
| Fisheries of Canada. | 36 | Amber Mica.. | 55 |
| Mineral Resodrces. | 40 | Graphite. | 55 |
| Gold. | 40 | Chromite. | 56 |
| Sllver. | 41 | Maneanese... | 56 |
| Electro-plating with Cobalt | 42 | Mineral Pigments. | 56 |
| Silver-Lead Ores. | 42 | Tin. | 56 |
| Zinc and Lead Deposirs. | 43 | Gypsum. | 56 |
| Nickel Mines. | 43 | Salt... | 57 |
| Copper. | 4 | Natural Gas and Oil. | 57 |
| Asbestos. | 46 | Antimony | 59 |
| Coal Fields. | 47 | Other Minerals. | 59 |

## INTRODUCTION.

 HE natural resources of Canada may be said to include all those endowments of Nature which can be utilized by man for sustenance and the creation of wealth. In describing them we must take into consideration the climate and soil, the reservoirs of water, the waterfalls, waterways and harbours, the forests, wild animals, fisheries and minerals of a country fronting on the Atlantic, Pacific and Arctic oceans and having an area of over $3,729,000$ square miles, or about the same size as the continent of Europe.

As the agricultural, horticultural and forest products and even the animal life of a country depend as much upon the climate as upon the soil, it is necessary to know something about the physical characteristics, the latitudes and altitudes and other conditions affecting the climate in order to estimate the natural resources.

Prince Edward Island, the smallest province of the Dominion, lies at the south of the gulf of St. Lawrence and is separated from the mainland of New Brunswick and Nova Scotia by Northumberland strait. It is 150 miles in length, varies in width from 4 to 30 miles, and has an area of 2,184 square miles. As an illustration of the difference between natural resources undeveloped and natural resources developed, we may compare Prince Edward Island with the islands of Jersey and Guernsey in the English Channel, which have together almost exactly the same population as the smallest Canadian province, although their area is only $69 \frac{1}{2}$ square miles. Prince Edward Island, with over thirty-one times the area of Jersey and Guernsey. with nearly the whole of its area very fertile, with a climate most favourable to

NATURAL RESOURCES OF THE DOMINION OF CANADA.
human life and to all kinds of live stock, with fish in abundance in the surrounding sea and all the bays and river mouths, might have a population $o^{\circ}$ over $3,000,000$ and yet be less densely populated than the Channel Islands.

The province of Nova Scotia is 386 miles in length by from 50 to 100 miles in width, with a land area of 21,068 square miles, and extends from the 43rd to the 47th parallel of latitude. It consists of the peninsula of Nova Scotia, connected with New Brunswick by the isthmus of Chignecto and the island of Cape Breton, which is separated from the mainland of the province by the narrow strait of Canso. Cape Breton Island has an extreme length from north to south of 110 miles, its greatest breadth being 87 miles and its area 3,120 square miles. Cape Breton is not only surrounded by the sea, but has the sea inside of it, for the beautiful salt-water lakes of Bras d'Or may be regarded as merely arms of the sea, with which they are connected at the northeast by two natural channels, while at the south, St. Peter's ship canal connects them with St. Peter's bay. Nova Scotia is almost as large as Belgium and Holland combined, which together have over $12,000,000$ people. As regards climate, natural resources and accessibility Nova Scotia compares very favourably with Holland and Belgium.

The province of New Brunswick, with a land area of 27,911 square miles, may be compared with Scotland, which has a land area of 29,797 square miles. It is not a mountainous country, but is full of low hills and valleys, with a few high hills. New Brunswick does not come so near to being an island as Nova Scotia, but, with the bay of Chaleur at the north, the gulf of St. Lawrence and Northumberland strait at the east, the bay of Fundy at the south and Passamaquoddy bay at the southwest, it has a very extensive sea coast. Although larger than Nova Scotia the province of New Brunswick does not cover so many degrees of latitude. Its most southern point is a little south of $45^{\circ} \mathrm{N}$. latitude and its most northern point a little north of $48^{\circ} \mathrm{N}$. To the southwest of the mainland of New Brunswick is a group of small islands belonging to the province, the most important being Campobello with an area of 115,000 acres, Grand Manan with an area of 37,000 acres and the West Isles having an area of 8,000 acres. The soil of these islands is generally fertile, but only a smal proportion of it is under cultivation.

All three of the Maritime Provinces are well provided with fine harbours. The number of bays along their coasts is extraordinary, and the length of the coast line in proportion to the area is remarkable.

The province of Quebec might with accuracy be included among the Maritime Provinces, for the gulf of St. Lawrence is really a part of the Atlantic, and salt water washes the coasts of the province for many miles. Then the territory of Ungava, which has recently been added to Quebec province, has a very long coast line on Hudson bay, Hudson strait and Ungava bay. Before Ungava was placed under the jurisdiction of Quebec the total area of the province was 351,873 square miles. Now it is 706,834 square miles-almost double its former area. Its most southern point is in latitude N. $45^{\circ}$, and its most northern point is in latitude $\mathrm{N} 62^{\circ} 39^{\prime}$ Including Ungava, Quebee province is larger

## INTRODUGTION

than Belgium, Holland, Germany, Denmark, Sweden, Austria-Hungary and Bulgaria combined, which had a population of over $140,000,000$ before the great war began. Without Ungava, Quebec is as large as Germany, Holland, Belgium and Italy combined.

The province of Ontario is the section of the Dominion lying between the great international lakes and Hudson bay, its most southern point being in latitude N. $42^{\circ} 16^{\prime}$, and its most northern point in latitude N. $56^{\circ} 48^{\prime}$ It extends from the western boundary of Quebec to the eastern boundary of Manitoba and has an area of 365,880 square miles of land and 41,382 square miles of water, a total of 407,262 square miles. It is nearly as large as Germany and France combined. The part of the province south of the French river and Georgian bay, which is popularly called OId Ontario or Southern Ontario as distinguished from New Ontario or Northern Ontario, is almost exactly the same size as England.

The part of Canada extending from the western boundary of Ontario to the Rocky Mountains and from the United States boundary to the Arctic ocean may be appropriately called the Western Plain of Canada. Politically it has been subdivided into the three prairie provinces, Manitoba, Saskatchewan and Alberta, and the Northwest Territories. Each of the prairie provinces extends from the United States boundary to the 60 th parallel of latitude, while the Northwest Territories include the whole of the Western Plain north of the 60th parallel of latitude. Manitoba has a total area of 251,832 square miles, Saskatchewan 251,700 square miles and Alberta 255,285 square miles, a total of 758,817 square miles. Manitoba is larger than Germany, Belgium, Holland and Switzerland combined; an area as great as Austria-Hungary could be taken out of Saskatchewan and 10,400 square miles would remain; Alberta could give away 8,485 square miles and still have an area as large as Italy, Greece, Montenegro, Servia, Rumania and Bulgaria combined.

The province of British Columbia is the wonderland of Canada. Within its boundaries are reproduced all the varied climates of the Dominion, and almost every natural feature, while there are some local varieties of climate and landscape that cannot be found elsewhere. Its lofty snow-capped mountains, lovely valleys, pretty lakes and much indented coast combine to make it most attractive to tourists, and its natural resources offer great inducements to capitalists, while for ordinary settlers with little or no capital there are endless opportunities. Extending from the Western Plain of Canada to the Pacific ocean, and from the United States boundary to the 60th parallel of latitude, it is bounded on the north by the Yukon Territory of Canada. A narrow strip of northern coast extending as far south as latitude N. $54^{\circ} 57^{\prime}$ belongs to Alaska, and is known as the Alaskan.Panhandle. The area of British Columbia is 355,855 square miles. Thirty-seven thousand square miles might be taken away from it and it would still be larger than the three Pacific coast states of the American Union-California, Oregon and Washington. The Yukon Territory belongs to the same geographical division of Canada as British Columbia. Combined they have an area of 562,931 square miles, and are equal to the combined
area of the United Kingdom, Holland, Belgium, Switzerland, Germany, Denmark and Sweden, having together a population of over $135,000,000$. There are a great number of islands off the coast of British Columbia included in the province. The most important are Vancouver island and the Queen Charlotte islands. Vancouver island extends from latitude $\mathrm{N} .48^{\circ} 20^{\prime}$ to $51^{\circ} \mathrm{N}$. It is 285 miles long and from 40 to 80 miles wide, having an area of about 20,000 square miles. Queen Charlotte islands extend from latitude $\mathrm{N} .51^{\circ} 55^{\prime}$ to latitude N. $54^{\circ} 8^{\prime}$; having an area of 3,780 square miles. Texada, Princess Royal, Pitt, Banks, Porcher, Goschen, McCauley, Hunter, Aristazable and Hawkesbury islands are of respectable size, and there are many others. The combined area of all the British Columbia islands would be great enough to make an important province even if there were no mainland. Vancouver island alone is more than nine times as large as the province of Prince Edward Island, and more than sixteen times as large as the state of Rhode Island.

## THE LAND OF WATERWAYS.

Anyone looking at the map of Canada must be impressed with the extraordinary natural facilities for water communication. The Dominion might appropriately be called the land of waterways. The Maritime Provinces are almost surrounded by deep water and their coasts are indented with a great number of fine harbours. In New Brunswick great navigable rivers connect the interior with the sea. The St. Lawrence river and the Great Lakes give communication in summer between the sea and the central provinces, while the Weat can be reached by way of Hudson strait and the vast interior waters of Hudson bay, although navigation of the strait is obstructed by floating ice for the greater part of the year. There are great lakes and rivers in the West which afford means of internal communication in summer for a vast area of country, while British Columbia has also a number of navigable rivers, and its extensive coast abounds in great harbours. A great part of the Arctic coast is usually obstructed by ice, but there is reason to believe that communication could be maintained between the mouth of the Mackenzie river and the Pacific ocean by way of Behring strait for a considerable portion of the year. Navigation on the interior waterways is obstructed in many places by waterfalls, but short canals evercome the difficulty, and the waterfalls afford electric power for lighting, traction and manufacturing purposes. Canada already has an extensive system of canals, and others are projected. Nature did much in providing waterways and waterfalls, but left to the Canadian people the task of connecting the waterways and developing water powers.

In both Quebec and Ontario the land slopes up gradually from the north shore of the river St. Lawrence and the Great Lakes to the elevation known as the Height of Land, which forms the watershed between the rivers flowing into James bay and Hudson bay and those that empty into the St. Lawrence system. One of the most notable

## WATER-POWERS

features of Canada is its system of river reservoirs in the form of lakes, and this is strikingly exemplified in the Great Lakes, which form the southern boundary of the province of Ontario and have their outlet in the St. Lawrence river. Nearly all the rivers tributary to the St . Lawrence system repeat the same system of reservoirs on a smaller scale. North of the Height of Land also the rivers nearly all have their lake reservoirs, and the rivers of the Western Plain store their waters in this way. Some of the mountain rivers of British Columbia have the same characteristic, and illustrations can be found in the Maritime Provinces. Thus there are almost innumerable lakes scattered all over Canada. These bodies of water have a moderating influence upon the climate.

## WATER-POWERS.

A complete enumeration of the water-powers of Canada has never been made, but the Dominion Water-Power Branch of the Department of the Interior and the Dominion Conservation Commission have issued a number of valuable reports which, while not all-embracing, give an approximate estimate of the water-power resources. A great deal of valuable information is also obtainable from the annual reports of the Hydro-Electric Power Commission of the Province of Ontario, and from the reports of the International Joint Commission which represents the interests of Canada and the United States in the waterways and water-powers along the frontier.

In many cases the estimates are very exact, but in some cases they are only approximate. Care has been taken in estimating to take into consideration only the minimum flow of water. In many cases the minimum flow of water is for a very brief period of the year, and for nearly the whole year much greater power is available; so that a statement of the minimum power underestimates the real power possibilities; but it is considered best in this article to accept minimum calculations rather than risk exaggeration. In some cases the storage conditions may be greatly improved and the discharge controlled during the period of high water. For instance, the power possibilities of the slope between the Height of Land and James bay, in the province of Ontario, are estimated at 400,000 H.-P., but it is calculated that under discharge control over 2,000,000 H.-P could be developed on the James bay slope. In the statement of the power possibilities of the Winnipeg river system the minimum power available under natural conditions of water-flow is estimated to be $280,300 \mathrm{H} .-\mathrm{P}$ in Manitoba, and 203,838 H.-P in Ontario, a total of $484,138 \mathrm{H} .-\mathrm{P}$ at the lowest stage of the water-flow; but it is calculated that if the discharge of water were controlled by dams at Lake of the Woods, Rainy lake, lake Seul and other lakes along this river system this could be increased to nearly $1,000,000$ H.-P The power estimates for the Ottawa river are based on present conditions. If the Ottawa and Georgian Bay Canal project is carried out the power conditions will be completely changed, and many new water-powers will be created.

## NATURAL RESOURCES OF THE DOMINION OF CANADA.

Owing to the wonderful system of lake reservoirs the variations of water-flow on the Niagara river and the St. Lawrence river are remarkably small. They are believed to be less than on any other river system in the world. Referring to this natural regulation of waterflow, the International Waterways Commissioners in their report for the year 1910 said: " No work of man ever approached or ever will approach this perfection of regulation."

As might be expected. more exact information is obtainable regarding the large water-powers than about the small water-powers. In the older settled parts of the eastern prorinces most of the small waterpowers were utilized from the earliest days of settlement to run saw


Fig. 1. Chaudière Falls, Chatdière River, Province of Quebec.
mills, grist mills and woollen factories. The methods adopted for the utilization of the water-powers were primitive, and in many cases little or no alteration has been made. The est mates regarding most of these small water-powers are based on the development under such conditions. It is probable that, in the future, modern engineering skill will be employed in reconstruction work at some of these small waterpowers, and that the power developed will be considerably increased. On the other hand at some of these small water-powers the full power already developed is not available at lowest water, and in some cases no power at all is arailable at certain seasons of the year. But the little water-powers form a rery small proportion of the total.

In a statement issued by the Dominion Water-Power Branch, in 1915 , the developed power was stated to be 1,712,193 twenty-four hour H.-P., distributed as follows:

| Province. | H.-P. <br> Developed. | Province. | $\underset{\text { Developed. }}{\text { H.-P }}$ |
| :---: | :---: | :---: | :---: |
| Nova Scotia. | 21,412 | Saskatchewan.... | 45 |
| New Brunswick. | 13,390 | Alberta.... | 33,305 |
| Prince Edward Island. | 500 | British Columbia. | 265,345 |
| Quebec. | 520,000 | Yukon. | 12,000 |
| Ontario. | 789,466 $\mathbf{5 6 , 7 3 0}$ | Total. | 1,712,193 |
| Maniloba. | 56,30 | Total. | 1,712,193 |

The same statement estimated that, within areas that may reasonably be expected to be populated in the near future, there were water-power possibilities aggregating $17,764,000$ twenty -four hour H.-P.; that is, more than ten times as much as was developed in 1915. If 80 p.c. of this possible power were developed and used constantly twenty-four hours daily, it would be equivalent to $341,068,000$ H.-P daily. At certain hours of the night very little power is used, and there will occasionally be loss from stoppages during ordinary working hours; but there is reason to expect great developments in hydroelectric chemical and metallurgical industries that will use power all night. If, on the average, the power were used only twelve hours per day for 300 days in the year, it would be equivalent to over $51,000,000,000 \mathrm{H} .-\mathrm{P}$. It will be interesting to consider what amount of coal would be required to produce this amount of power with steam plants. The amount of bituminous coal required to produce one H.P for one hour depends upon the character of the plant and the efficiency of operation. Competent authorities have expressed the opinion that six pounds would be a fair average, although at large well-equipped and economically operated plants the average would not exceed four pounds, and in some cases the quantity is a great deal less than four pounds, while in other cases it is eight pounds and even higher. Accepting six pounds of coal as the average requirement it would take over $153,000,000$ tons of coal, or nearly six times the quantity of coal now consumed in Canada for all purposes, including coal produced in the country and imported coal.

In any review of the water-powers of Canada, the Niagara power demands first attention. The amount of water that can be diverted for power on the Canadian and American sides of the Niagara river above the falls has been settled by an international agreement which takes into consideration the fact that more water passes over the Canadian falls than over the American falls, and also makes allowance for the diversion of 10,000 cubic feet of water from the international lakes by the Chicago drainage canal. This agreement is intended to preserve the scenic beauty of the Niagara waterfall and protect navigation interests allowing reasonable use of the water for power purposes. It provides that 36,000 cubic feet of water per second above the fall may be diverted for power purposes on the Canadian side and 20,000 cubic

## NATURAL RESOURCES OF THE DOMINION OF CANADA.

feet on the American side. Investigations made by the United States Government at existing power plants at Niagara Falls show that it takes about 0.075 of a cubic foot of water per second actually to develop one H.-P per hour. On this basis 36,000 cubic feet of water per second would yield $480,000 \mathrm{H} .-\mathrm{P}$ A yield of $450,000 \mathrm{H} .-\mathrm{P}$ may be accepted as a minimum.

The International Waterways Commission has reported that 40,000 cubic feet of water per second can be diverted for power purposes at the rapids below the falls without injury to the scenic beauty of the rapids, and if this were divided equally between Canada and the United States it has been estimated that 215,000 H.-P could be produced on the Canadian side, but it might be somewhat less. The conditions regarding head of water below the falls being different from those above the falls, an estimate cannot be made on the same basis. However, a minimum of $150,000 \mathrm{H} .-\mathrm{P}$ below the falls is probably an inside estimate. We may therefore assume that 600,000 H.-P can be produced above and below the falls on the Canadian side. However, as the Canadian Government permits the exportation to the United States of a portion of the power generated on the Canadian side, the amount of power available for Canadian home consumption is somewhat less. On the other hand, part of the power produced on the United States side of the upper St. Lawrence river may be exported to Canada. Recently a proposal has been made in the United States that a great dam should be constructed across the Niagara river below the falls, creating a new waterfall. It is stated that in this way two million H.-P could be generated and that capital will be available for the enterprise if the Governments of Canada and the United States consent.

The available water-powers of Ontario and Quebec for which est:mates have been made are distributed as follows:

Niagara falls and rapids.
Approximate minimum
24-hour H.-P. available.

000,000
DeCew falls. 50,000
Welland river and canal developed. 8,830
St. Lawrence canals in Ontario developed.... $8, \mathbf{8 , 2 6 3}$
Rapids of St. Lawrence river in Ontario. $1,028,000$
Ontario tributaries of the St. Lawrence... ... . 1,565
Tributaries of lake Ontario, including Trent Valley powers. $\mathbf{1 0 2 , 0 6 2}$
Tributaries of lake Erie and Jake St. Clair. 7,873
Tributaries of lake Huron... .. . 8,112
Tributaries of Georgian bay on the south and west. . 43,828
Tributaries of north side Georgian bay and lake Huron. . 92,006
$\begin{array}{ll}\text { Sault Ste. Marie. .... . . . } & 98,200\end{array}$
$\begin{array}{ll}\text { Nipigon river and tributaries. . } & \mathbf{7 9 , 3 4 0}\end{array}$
Kaministikwia river... . 31,265
Other tributaries of lake Superior.
Winnipeg and English river system in Ontario... 203,838
James bay slope under natural fow.
800,000
Ontario tributaries of the Ottawa river.
Ottawa river from its mouth to lake Timiskaming.
87,920
422,162
Quebec tributaries of the Ottawa.
433,490

## WATER-POWERS

$\left.\begin{array}{llr} & \begin{array}{r}\text { Approximate } \\ \text { minimum } \\ \text { mhour H.-P. }\end{array} \\ \text { available. }\end{array}\right]$

Notr.-As doubt is expressed in the Conservation Commission Report regarding estimates for some of the water-powers of the Saguenay river basin and rivers below the Saguenay, especially the Hamilton river, only 60 p.c. of the estimates is allowed in the above tables.

Thus Ontario and Quebec have available approximately $8,400,000$ twenty-four-hour H.-P., and by controlling the discharge of waters on rivers where the difference between high and low water is great this could be enormously increased. Some allowance should be made for Niagara power exported to the United States, but it may be safely said that Ontario and Quebec have available for home consumption, when developed, a minimum of $8,200,000$ twenty-four hour H.-P

All parts of the Maritime Provinces are so near to the great coal fields of Nova Scotia that water-power is not a matter of such great importance to them as it is to some of the other provinces.

New Brunswick and Nova Scotia have been estimated to have 385,307 twenty-four hour H.-P available for eight months of the year. There is no estimate of the amount of power available for the remaining four months in those provinces. In some cases there would be very little power available for those months.

In Nova Scotia there are no large rivers or large lakes, but there are many small rivers with numerous small waterfalls, and there are a number of small lakes which serve as reservoirs. The natural storage facilities could be improved easily in many cases. The rainfall of this province is heavy. Thus, while there are no great water-powers, there are many small ones. The rivers of New Brunswick are larger and there are greater water-powers than in Nova Scotia, but there are not so many of them.

In view of the fact that some of the small water-powers can be utilized for only eight months of the year it should be noted that at such water-powers it is customary to bave a supplementary steam plant which can be utilized for the production of power when waterpower is not available.

The water-powers of Prince Edward Island are hardly worthy of mention, although there are a few small water-powers on the little rivers at which, during certain seasons of the year, from five to fifty H.-P is developed.

The water-powers of New Brunswick and Nova Scotia for which approximate estimates have been made are distributed as follows:

## Approximate

 minimum24-hour H.-P.
for 8 months.
Three water-powers on St. John river, in New Brunswick.. 162,000
Thirteen water-powers on St. Croix river, in New Brunswick. 35,380
Six water-powers on Nipisquit river, in New Brunswick. 13,795
One water-power on the Aroostook river in New Brunswick. 13,000
Three water-powers on Tobique river, in New Brunswick. 7,600
Two water-powers on southwest branch Miramichi river, in New Brunswick.
One hundred and thirteen water-powers on other New Brunswick rivers.

54,363
Twelve water-powers on Liverpool river, in Nova Scotia. 14,995
Eleven water-powers on the Lahave river, in Nova Scotia. $\quad 8,430$
Nine water-powers on Weymouth river, in Nova Scotia.... $\mathbf{6 , 1 6 0}$
$\begin{array}{ll}\text { Ten water-powers on Port Medway river, in Nova Scotia... in .. } & \mathbf{6 , 1 2 0}\end{array}$
One hundred and sixty-nine small water-powers on other Nova Scotia rivers. .

56,884
There are a number of small water-powers for which no estimate has been made.

In Manitoba the water-powers that have been most carefully estimated are those on the Winnipeg river, about 78 miles from the city of Winnipeg. Under natural flow, the minimum power available is 280,300 H.-P., of which $45,700 \mathrm{H} .-\mathrm{P}$ has already been developed by the city of Winnipeg and 26,500 H.-P by the Winnipeg Electric Railway. It is estimated that with control of the discharge of water the power available would be over 509,900 H.-P.

On the Pigeon river, Berens river, Poplar river and Big Black river, flowing into the southeast side of lake Winnipeg, probably within transmission distance of the city of Winnipeg, there are water-powers, aggregating $72,225 \mathrm{H} .-\mathrm{P}$ twenty-four hours daily, eight months of the year. No estimate has been made for the remaining four months.

Other water-powers within transmission distance of the city of Winnipeg are those on the Mossy, Dauphin, Waterken and Fairford rivers, which make connections between lake Dauphin, lake Manitoba, lake Winnipegosis and lake Winnipeg. Theoretically these rivers would furnish a minimum of $27,860 \mathrm{H} .-\mathrm{P}$ twenty-four hours daily throughout the year, and it may be assumed that a minimum of at least 65 p.c. of that could be developed. With control of the discharge of waters this could be considerably increased. The waterpower at the Grand falls of the Saskatchewan may also be regarded as within transmission distance of the city of Winnipeg. The estimate from May to November is a minimum of $45,000 \mathrm{H} .-\mathrm{P}$ for twenty-four hours daily, and, while no estimate for the whole year has been made, the power available throughout the year would probably not be much less.

There are small water-powers available on the Assiniboine, Little Saskatchewan and other small rivers for at least seven months of the year.

The water-powers of the Nelson and Hayes rivers are too far from the present settlements for transmission of electric energy, but the construction of the Hudson Bay Railway from Pas to Port Nelson will probably bring about the settlement of the Nelson river valley. Estimates have been made regarding twenty-five water-powers on the Nelson river aggregating a minimum of $2,930,800 \mathrm{H} .-\mathrm{P}$ for twentyfour hours daily and twenty water-powers on the Hayes river aggregating 28,460 H.-P While the estimates are only for seven months it is believed that the minimum for the year would be very little less than this for the Nelson river.

As Manitoba is even farther from the sources of coal supply than Ontario the abundance of water-power is of very great importance.

On the main Saskatchewan river in the province of Saskatchewan it is estimated that about $24,000 \mathrm{H} .-\mathrm{P}$ daily for twenty-four hours would be available for seven months of the year, on the South Saskatchewan 1,700 H.-P and on the North Saskatchewan 10,000 H.-P At the Rocky rapid of the North Saskatchewan in Alberta above Edmonton it is estimated that 28,000 H.-P could be developed by controlling the discharge of waters.

In southern Alberta it is estimated that 60,000 H.-P can be obtained from the Bow river, within fifty miles of Calgary, by controlling the discharge of waters. The Calgary Power Company has already developed 19,500 H.-P at the Horseshoe fall of the Bow river and $12,000 \mathrm{H} .-\mathrm{P}$. at the Kananaskis fall. There are also small water-powers available on the Elbow river, McLeod river, Belly river and other small rivers in southern Alberta.

The information regarding water-powers in Manitoba, Saskatchewan and Alberta north of the Nelson and Saskatchewan river systems is not complete, but there are known to be many important waterpowers, and the aggregate is immense.

British Columbia is splendidly endowed with water-powers, and, although the province has immense quantities of coal, rapid progress is being made in hydro-electric development. At many points to which the cost of transporting coal over mountain roads is excessive hydroelectric power can be cheaply transmitted, and even in districts close to coal mines the competition of hydro-electric power will regulate the price of coal.

Mr. G. R. G. Conway, Consulting Engineer of the British Columbia Electric Railway, says, in his monograph on the water-powers of British Columbia: "Within reasonable distance of the cities of Vancouver and Victoria there are possibilities of the economic development of waterpowers aggregating $750,000 \mathrm{H} .-\mathrm{P}$ These water-powers are all situated within an area of 20,000 square miles. Outside of this area a rough estimate of the water-power possibilities of the province would bring this figure up to $3,000,000 \mathrm{H}$.-P."

Natural resources of the dominion of canada.

## CLIMATE AND FARM PRODUCTS.

There is great diversity in the farm products of the different parts of Canada owing to variations in climatic conditions. There are districts of Ontario and British Columbia where delicate fruits such as peaches of the highest quality and the finer varieties of grapes grow to perfection, while there are extensive areas of fertile land in the Western Plain which, although producing the highest grades of hard wheat, will not grow even hardy apples. The wheat grown in the eastern provinces is of quite different character from that grown on the western prairies. Thus, while the hard wheat flour of the West makes bread of superior quality, it cannot be used for making biscuits, shredded wheat and some other breakfast foods. The biscuit manufacturers of Winnipeg have to send to Ontario or Quebec for flour made from soft wheat. The conditions affecting the production of food products can best be understood by describing the climate and farm productions of each of the great divisions of Canada separately.

The Maritime Provinces of Canada come under the influence of both the Gulf Stream and the Arctic current. Their latitude being about the same as the countries of southern Europe the climate is temperate, although somewhat colder in the winter and spring than the corresponding latitudes of Europe. A branch of the Arctic current comes through Belle Isle strait between Labrador and Newfoundland, lowering the temperature of the Gulf of St. Lawrence. In the spring icebergs come through Belle Isle strait and delay the summer. Eminent engineers have said that it would not be a difficult undertaking to close up Belle Isle strait at its narrowest point, completely shutting out the Arctic current from the Gulf of St. Lawrence, and that the work could be accomplished at less cost than the Panama canal. They argued that the climate of the western coast of Newfoundland, the Maritime Provinces, and the lower part of Quebec province would be transformed, that the St. Lawrence would be navigable throughout the year as far up as Quebec city, and that the tunnel between Prince Edward Island and the mainland, so long advocated by the islanders, would be unnecessary, as there would be no winter ice in Northumberland strait.

Nova Scotia, New Brunswick and Prince Edward Island all have hills and valleys. In Prince Edward Island the highest elevation is 311 feet. The highest elevations in Nova Scotia are in the highlands of Cape Breton island. At one point in the North Cape district of Cape Breton a height of 1,500 feet is reached, but the hills are not usually bigh. In New Brunswick there are eighteen hills reaching elevations of 2,000 feet and upwards; Mount Carleton in Northumberland county is 2,630 feet high. But these hills are not representative of the general elevation.

Owing to its almost insular position and perbaps to the influence of the Gulf Stream, which flows not far from its southern extremity, the climate of Nova Scotia is more moderate than that of the neighbouring state of Maine. In Halifax, according to records of the Dominion Meteorological Service for a period of seven years, the average of all temperatures in January and February, the coldest winter months, was twenty-two degrees (F.) above zero. Extreme cold is seldom ex-
perienced in any part of the province, but the northern counties are more exposed to the influence of the Arctic current flowing through Belle Isle than those of the south and along the bay of Fundy. Thus Annapolis township is seven or eight degrees warmer on the average than the counties in Cape Breton and along Northumberland strait, five or six degrees warmer than Halifax and Colchester counties, and three or four degrees warmer than the famed country of Evangeline along the Basin of Minas. Yarmouth, the most southern county, has much milder winters than any other portion of the province, but the summer temperatures are lower than those of the Annapolis valley. In St. John, N.B., the winter temperatures are a little lower than those of Halifax. There is a pronounced difference between the winter climate along the bay of Fundy coast of New Brunswick and that of the interior and northern counties, which are considerably colder. Prince Edward Island, lying in the Gulf of St. Lawrence almost entirely between $46^{\circ}$ and $47^{\circ} \mathrm{N}$. latitude, has much the same climate throughout its area, the temperatures being about the same as those of Cape Breton island.

The garden of Nova Scotia is in the Annapolis and Cornwallis valley, a district about eighty miles long and from four to twelve miles wide, protected from the summer fogs of Fundy and the chilling ocean winds by two ranges of hills known as the North and South mountains. The North mountains skirt the south shore of the bay of Fundy from Brier island to the Basin of Minas, terminating in a bold bluff called Cape Blomidon. On the other side of Minas channel the range is continued under the name of the Cobequid mountains, acting as a shield against the cold winds coming from the gulf of St. Lawrence in the spring. The Annapolis valley is famous for its apples, which command the highest prices in the London market. While the climate and soil seem particularly adapted to the production of apples they are also favourable to grapes, pears, plums, cherries, melons and tomatoes, and even peaches are successfully grown. King's county, the scene of Longfellow's "Evangeline," is also a great apple-producing district. Although not quite so warm as Annapolis township it is equally fertile, and the dyked lands are as productive now after centuries of tillage as when they were cultivated by the simple Acadians. At present most of the apples produced in Nova Scotia are grown in Annapolis and King"s counties, but the Government of the province is showing by means of model orchards in otber counties that apples can be successfully grown in any part of the province where the soil is suitable. Even in Annapolis county there is a large area of land suitable for growing apples not yet occupied by orchards.

All the counties bordering on the Basin of Minas and those lying along Cumberland strait and the gulf are good agricultural districts. Excepting Yarmouth none of the counties along the Atlantic coast are generally well adapted for agriculture, although they contain small tracts of excellent farming lands, and no doubt some of the land now considered unsuitab'e for cultivation could be made productive under a system of scientific farming. Very little wheat is now raised in Nova Scotia. The chief field crops are oats, hay, buckwheat, potatoes and other regetables. Wool of superior quality is produced in Nova Scotia,

## NATURAL RESOURCES OF THE DOMINION OF CANADA.

and the natural conditions of the province are very favourable, not only for sheep, but for all kinds of live stock and for dairying.

There are $17,863,266$ acres of land in New Brunswick, and it is estimated that about $10,718,000$ acres are suitable for agriculture. Large areas in the most fertile sections still belong to the Crown and can be obtained by settlers as free grants. While there is much good farm land in every county the counties having the largest areas of fertile lands are Carleton, Victoria, Madawaska, Restigouche, King's and Queen's. The rivers of New Brunswick run through tracts of low-lying alluvial land of remarkable fertility, sometimes extending for miles back from the river, but generally less than a mile wide. These low lands, which are called intervals, are partly covered with water in the spring. Without dyking and without manure they produce great crops of fine hay every year. When dyked and brought under cultivation they prove to be remarkably fertile. New Brunswick has so many great rivers that the area of intervals is extensive, but these lands are usually attached to upland farms.

Although New Brunswick is well suited to wheat production, the quantity of wheat grown is not large, as the farmers consider it more profitable to grow oats, hay, buckwheat, potatoes and other vegetables. A good deal of attention is now being paid to fruit growing, and very fine apples, pears and plums are produced, while the smaller fruits such as cherries, raspberries, blackberries and blueberries are raised in large quantities. There are no great orehard districts in New Brunswick such as are seen in the Annapolis valley of Nova Scotia, but many of the farmers have small orchards, and expert horticulturists have declared that nearly every part of the province is well suited for apple production. New Brunswick seems to be particularly adapted to dairying on account of the luxuriant pasturage, unfailing supplies of water and nearness to the markets of both Europe and the Eastern States. The report of the commissioners appointed by the Dominion Minister of Agriculture to investigate conditions affecting the sheep industry in Canada referred to New Brunswick as a "country with bigh, rolling hills and well-watered pastures growing various kinds of short, sweet, natural grass and white clover specially adapted for sheep."

The soil of Prince Edward Island is naturally very fertile, and of the total area of $1,397,991$ acres very little is unsuitable for cultivation, but only a little over half the area is actually under cultivation in field crops. Oats, wheat, potatoes and hay are the most important crops, but small quantities of barley, buckwheat, beans and peas are produced. Apples, plums and cherries, currants, gooseberries, raspberries and strawberries are successfully grown, but the majority of the farmers pay little attention to fruit growing.

There are many varieties of climate within the vast area of Quebee province. In Montreal the temperatures average between ten and eleven degrees lower than in Halifax during the coldest winter months, but in the spring and summer the Montreal temperatures are considerably higher than those of Halifax. In Quebec city the greatest degree of cold experienced during the months of December, January, February

## CLIMATE AND FARM PRODUCTS.

and March is between one and two degrees lower than in Montreal. The average of all temperatures during January and February is several degrees higher than in Montreal, but in all the other months the average temperature is several degrees lower than at Montreal, and the season without frost is nearly three weeks shorter. The lake St. John district affords a very good illustration of the fact that climate depends more upon local influences than upon latitude. Although about 100 miles north of Quebec city, its temperatures average several degrees higher and the summer is several weeks longer. There is a large area of good farm land in this district. In the vicinity of lake Timiskaming, on the boundary of Ontario, about 300 miles northwest of Montreal, the climate is about the same as at Quebec city. Explorers report that on the slope towards James bay the climate is better than immediately south of the watershed, and that a great deal of land is suitable for cultivation. As regards the climate, soil and natural resources of Ungava almost nothing is known.


Fig. 2. Farm in Prince Edward Island.
The section of Quebec province bordering on the lower St. Lawrence, partly owing to its mountainous character and partly to the influence of the Arctic current flowing through Belle Isle strait, has a rather severe climate and is not generally well suited to agriculture. The mainland, northeast of Anticosti island, is little better than Labrador. Anticosti itself is believed to possess considerable areas of good land. West of that the climate is better and there is a good deal of fertile land in the valleys. The islands in the river west of Anticosti are all fertile. The isle of Orleans, a little below Quebec city, has always been noted for its grapes. The best agricultural region of the province is the fertile valley extending on both sides of the St. Lawrence river from Montreal to Quebec city, and reaching as far east as Kamouraska on the south shore, with an area about the same as that of Holland.

NATURAL RESOURCES OF THE DOMINION OF CANADA.
The greater part of the present population of the province is concentrated in this valley. Throughout the St. Lawrence valley apples, pears, plums and cherries are grown, while grapes are produced in the open air as far west as L'Islet on the south shore of the St. Lawrence, seventy miles northeast of Quebec city. Large quantities of strawberries, currants, gooseberries and other small fruits are produced. It was once a great wheat region, but comparatively little wheat is grown now. Great quantities of oats, hay, clover and potatoes are produced, and a considerable acreage is devoted to barley, buckwheat, rye, Indian corn, peas and beans. A small quantity of flax is grown. Nearly every farmer in Quebec province grows a little tobacco, and there are a few large plantations. Large quantities of tobacco are grown annually in this province. Very small quantities of hops are grown. A large proportion of the farms have groves of sugar-maple trees, and considerable quantities of maple sugar are produced, the sap flowing freely in the early spring when there is frost at night and bright sunshine during the day.

The province of Quebec has achieved marked success in dairying, and there is room for great expansion of this industry. Good grazing land, watered by springs, streams and lakes, abounds almost everywhere from lake St. Francis to the extremity of Gaspé. It is not and never can be a ranch country-the snow lies too deep in winter; but nearness to the markets of Europe, as well as to those of industrial Canada, largely offsets the cost of winter feeding and housing. Dairy farming is now attracting special attention, and in the district between the St. Lawrence river and the United States boundary, commonly known as the Eastern Townships, there are already many fine herds of cattle with some of the best blood in America. Quebec ranks second among the provinces of the Dominion in the production of butter, cheese and condensed milk.

The climate of Ontario varies considerably, according to latitude, elevation and the character of the surrounding waters. That part of the province which is almost surrounded by lakes Ontario, Erie, Huron and Georgian bay, has a more moderate climate than the part of the United States immediately to the south. In Hamilton, at the head of lake Ontario, the average of all temperatures in the coldest winter months is about the same as in Halifax, but the summers are longer and much warmer. At Owen Sound, on Georgian bay, the winter temperatures are between three and four degrees lower than at Hamilton, and at Port Arthur, on lake Superior, over eighteen degrees lower. At Moose Factory, on James bay, the temperatures during the coldest winter months average a little less than three degrees lower than those of Port Arthur. The summer temperatures at Moose Factory from the beginning of May until the end of September correspond very closely with those of Edinburgh, Scotland, as shown by the record of fifteen years. Because Hudson strait is blocked with ice in summer it is commonly supposed that any district bordering on Hudson bay must be practically without summers, but when it is remembered that Hudson bay, including James bay, is about 800 miles long, while Hudson strait is about 500 miles long, it can be imagined


## CLIMATE AND FARM PRODUCTS

that the ice in the far north does not greatly affect the climate of the south shore of James bay. The southern end of James bay is as far from Hudson strait as the north shore of lake Ontario is from the gulf of Mexico. The thermometer never registers quite as low in winter at Moose Factory as it does in Winnipeg, Manitoba, or in the well-settled American states of Minnesota, Dakota and Montana. Owing to the altitude the coldest part of the province of Ontario is along the Height of Land. As the country slopes northward from the Height of Land to James bay, the difference in latitude is more than offset by the lower elevation. It is believed also that the many small lakes between the Height of Land and James bay tend to moderate the climate.


Fig. 4. Picking Peaches in Southern Ontario.
The greater part of Old Ontario is fertile, although in some of the southeastern counties, as well as in the counties of Muskoka, Parry Sound and Nipissing, there are considerable areas more suitable for forest reservations than for farm lands. Apples and certain varieties of grapes can be grown successfully in any part of Old Ontario, but the fruit garden of the province is the southwestern peninsula, lying between lake Erie and Georgian bay, and bounded on the west by the Detroit river, lake St. Clair and lake Huron. This district rivals the Annapolis valley of Nova Scotia in the production of apples, while peaches, pears, plums and the finest varieties of grapes grow to perfection in the southern counties. Peaches and grapes are most extensively grown in the

NATURAL RESOURCES OF THE DOMINION OF CANADA.
district between Hamilton and Niagara, where there are many thousands of acres of peach orchards. All the counties bordering on lake Erie are particularly adapted to the production of peaches and grapes. Tobacco of fine quality is grown in these counties. The fruit-growing areas are continually extending in the southern counties of Ontario, lands formerly devoted to grain growing and general farming being planted with orchards. Ontario farmers at one time devoted their lands almost entirely to grain growing, and large quantities of wheat, oats and barley are still produced, but grain growing has to a large extent given place to fruit growing and dairy farming. Ontario leads the world in the production of cheese.

The country stretching from lake Nipissing to the lake of the Woods, and extending from the northern shores of Georgian bay, lake Huron and lake Superior to the Height of Land, is known as the Algoma district, and has often been described by superficial observers as a worthless rocky region, which must always prove an insurmountable barrier between central Canada and the Western Plain. That it looks rocky, whether viewed from a steamship or a railway car, cannot be denied, but throughout this region are numerous little fertile valleys, sheltered from the rough winds by the much abused rocky hills, and watered by swift-flowing rivers and pretty lakes. It must be admitted that these valleys, being small, there is not much good land in any one spot, but altogether there are probably millions of acres available for cultivation between Nipissing and Port Arthur, although the greater part of this area will never be anything more than a lumbering and mining region. The fact that most of the rivers of the province have their sources on the slopes of the Height of Land makes it desirable that it should be maintained as a forest reservation, and if the forests are properly protected they may be made to yield a large revenue to the province. In the vicinity of Port Arthur and along the Rainy river, and about the lake of the Woods, there are large tracts of fertile land. But the wealth of the Algoma district is in the rocks rather than in the soil, for there is reason to believe that it is one of the richest minersl districts of the world.

The country north of the Height of Land is almost a complete wilderness. The Canadian Transcontinental railway and the Canadian Northern railway have recently been constructed through it, but the settlement of the country has hardly begun.

Exploring parties sent out by the Ontario Government have made favourable reports. A summary of these reports issued by the Provincial Government says:

[^1]
## CLIMATE AND FARM PRODUCTS.

In view of the fact that very low temperatures are reached in the northwestern states of the United States, an impression once prevailed that the Canadian provinces to the north of them must be too cold for successful farming; but the western states are very highly elevated, and this is the reason for the cold climate, as they are not far north The Canadian Western Plain slopes steadily from the international boundary to the Arctic ocean, and the decreasing altitudes offset the higher latitudes.

The vast Western Plain has three great natural subdivisions, the Prairies, the Forest region and the "Barren Lands." The Prairie region lies between the United States boundary and the 54 th parallel of latitude, sloping gradually eastward from an elevation of over 3,500 feet in the foothills of the Rocky mountains to an elevation of about 800 feet in the valley of the Red river. There is also a steady slope northward, but in the prairie country the eastward slope is a little more pronounced and directs the course of the rivers toward Hudson bay. Throughout the Prairie region there are trees in many spots along the banks of rivers and on the low bills that rise from the plains in some places, but the prairie country as a whole is almost treeless except in the northern part, where there is a park-like country having many groves of trees with wide, open spaces between them. This park country may be regarded as the borderland between the Prairie and the Forest region. The Forest region includes the districts lying within the basins of the Churchill and Mackenzie river and lake systems and the country extending east and northeast of lake Winnipeg to Hudson bay. Just as in the Prairie region there are small tree-covered areas, so in the Forest region there are small prairies. The district known as the "Barren Lands" lies east of the watershed of rivers flowing into the Mackenzie system of lakes and rivers and extends from about the 60 th parallel of latitude to the Arctic ocean.

Throughout the three Prairie Provinces the sky is usually bright and the atmosphere dry, clear and pure. The dryness of the atmosphere makes both heat and cold more endurable. The cold is often extreme in winter, but the degree of cold is not realized until one examines the thermometer. The temperatures do not vary as much in different sections of these provinces as might be expected in a territory covering an area of 758,817 square miles. While the elevation increases as one moves westward from the Red river toward the mountains, the western country is farther from the influence of cold winds blowing from the ice in the north of the Hudson bay and Hudson strait in the winter and spring, and this offsets the higher elevation. In Alberta the influence of the warm Chinook breezes coming through passes of the Rocky mountains is often felt. These warm winter winds melt the snow in a marvellously short time, so that it seldom lies long on the ground, and cattle are able to feed on the prairie all winter. Comparing Manitoba and Alberta, it may be said that the winters are a little colder and steadier in Manitoba and the summers a little warmer, but the difference is not great. Saskatchewan has very much the same climate as Manitoba, and in both of these provinces the winters are less changeable than in Alberta. The large lakes of Manitoba have a moderating influence on the climate.

NATURAL RESOURCES OF THE DOMINION OF CANADA.
Saskatchewan and Alberta also have lakes, but most of them lie to the north of the Saskatchewan river, while in Manitoba the lakes extend far south in the province. It might be supposed that in provinces extending from $49^{\circ} \mathrm{N}$. latitude to $60^{\circ} \mathrm{N}$ the northern sections would be much colder than the soutbern, but the elevation decreases so steadily from south to north that the higher latitude is offset by the lower elevation, and there is very little difference in climate. Thus, while the elevation is 3,427 feet at Calgary, in southern Alberta, it is only 600 feet at the extreme north of the province of Alberta. Edmonton, in latitude N. $53^{\circ} 33^{\prime}$, is 1,269 feet lower than Calgary, in latitude N. $51^{\circ} 2^{\prime}$; Dunvegan, on the Peace river, in latitude $56^{\circ} \mathrm{N}$., is 2,099 feet lower than Calgary; while Fort Vermilion, on the Peace river, in latitude $58^{\circ} 24^{\prime}$, is 2,454 feet lower than Calgary; and Fort Smith, on the Slave river at the northern boundary of the province, over 2,800 feet lower. However, a great part of the Peace river country has a much higher elevation than the river valley, which is not very broad. The great plateau tbrough which the river flows is from 700 to 1,000 feet higher than the level of the river. As we proceed north, beyond the boundary of Alberta into the Northwest Territories, the altitude continues to decrease. A good illustration of the decreasing altitude may be found in the levels of the Mackenzie system of lake reservoirs. Lesser Slave lake has an altitude of 1,890 feet, lake Athabaska an altitude of 690 feet, Great Slave lake an altitude of 520 feet, and Great Bear lake an altitude of 391 feet.

Professor John Macoun, who made a careful study of this northwestern country, said that the spring begins in the Peace river district and advances southeast at the rate of 250 miles per day, and that winter begins in Manitoba and goes northwestward at the same rate. Many reasons have been assigned for the warm summers in the far northwest. The elevation of the country is thousands of feet lower than at the United States boundary. The British Columbia mountains are much lower at the north, and there are many passes in them through which come warm Chinook breezes from the Pacific, while the many lakes in the north favourably affect the temperature, and in the summer there is almost no night there. While there are long days in summer there are long nights in midwinter, and temperatures sometimes register very low. Yet even in the winter there is very little darkness, for when the moon is not shining the brilliant northern lights usually make the night bright.

There is land enough in the great hard wheat belt of the prairie country west of the Red river and lake Winnipeg to produce a very large proportion of the world's present demand. Nearly the whole area of these vast prairies is suitable for wheat growing. Scientific agriculturists say that this is the largest continuous expanse of rich soil on the American continent. In addition to a rich top soil there is a deep subsoil containing great stores of nitrogen, phosphoric acid and potash, so that without the use of fertilizers many crops can be taken off the land in succession.

The three Prairie Provinces combined have a land area of over 466,000,000 acres. In 1915 there were $13,433,600$ acres in wheat, $6,349,600$ acres in oats. $1,160,300$ acres in barley and $1,377,430$ acres in rye, flax,

## CLIMATE AND FARM PRODUCTS

mixed grains, peas, hay and clover, alfalfa, fodder corn, potatoes, turnips and other roots. The three most important cereal crops amounted to $393,391,000$ bushels of wheat, $338,422,000$ bushels of oats and $42,685,000$ bushels of barley. Suppose that ten times the acreage of 1915 were devoted to each of the crops grown that year it would require $223,209,300$ acres, less than half the total area of the three provinces, and if the yield per acre were the same as in 1915 we would have $3,933,910,000$ bushels of wheat, $3,384,220,000$ bushels of oats and 426,850,000 bushels of barley. In September 1915 the International Institute of Agriculture estimated the total production of wheat, oats, and barley for the year 1914, in countries representing all but seven p.c. of the world's total production, to be as follows: Wheat $3,685,860,000$ bushels, oats $3,960,800,000$ bushels, barley $1,410,710,000$ bushels. ${ }^{1}$ The production in 1914 was only slightly affected by the war, which began at the end of July. Thus less than half the area of the three Prairie Provinces, if put under cultivation, could produce in a good year more than as much wheat, nearly as much oats, and about one-third as much barley, as the whole world was estimated to produce in the year 1914. However, it is probable that when half the area of these provinces is under cultivation, mixed farming will be more general; so that the production of grain may be less than this estimate, while vast quantities of meats, cheese, butter and eggs will be produced. The climate is not favourable to fruit trees, although, with great care, certain hardy varieties of apples can be produced in some sections. There are wild plums in Manitoba; a number of the trees were planted on the Dominion Experimental Farm in Brandon some years ago, and there is now a fine orchard. The plums, which grow abundantly, are small but of fine flavour. Black and red currants, raspberries and strawberries grow very successfully.

At one time it was supposed that extensive areas in southern Saskatchowan and Alberta were too arid for farming, and would never be useful except as cattle ranches. Some of these lands have proved to be well adapted to farming even without irrigation, but extensive tracts have been brought under cultivation as a result of irrigation works constructed by the Canadian Pacific Railway Company and other companies. The irrigated land has proved to be as fertile as other sections of the prairie, and prosperous farms have taken the place of cattle ranches.

It will be noted that the far northwest, owing to local influences, is warmer than the far northeast in the same latitude, but the long summer days and the brilliant winter nights are common to both sections. The part of Manitoba northeast of lake Winnipeg is almost without inhabitants excepting hunters and fur traders. There are no farmers, and consequently the arricultural capabilities of the country cannot be judged by actual results, excepting what may be seen in the gardens of Hudson bay posts, where peas, beans, barley, oats, potatoes, turnips, radishes, carrots and cabbages are successfully grown. Black currants, red currants and gooseberries grow wild in great profusion.

[^2]
## NATURAL RESOURCES OF THE DOMINION OF CANADA.

Wild cherries are often seen. Explorers with scientific knowledge of soils who have examined the country as carefully as possible during hurried trips across its vast expanse have reported that there are great areas of good agricultural lands, and that the country, being well watered and having luxuriant grasses, is well adapted to mixed farming, especially dairying, but that much of the land will require drainage before it can be utilized. It is not probable that much wheat will ever be grown northeast of lake Winnipeg, but if butter, cheese, eggs, meats and vegetables are produced there in large quantities it will be just as advantageous to Canada as if wheat were largely grown.


Fig. 5. Prairie Wheat Farm near Edmonton, Alberta.
Mr. J. B. Tyrrell, D.L.S., who explored the forest country from . Split lake, one of the small reservoirs of the Nelson river, northeast of lake Winnipeg, to the Athabaska river, stated that the greater part of this forest belt would be well suited for agriculture if cleared. He estimated that this belt would average about 800 miles wide from north to south. He said that everywhere in travelling through it there was abundant evidence of rich vegetation, and wherever any kind of agriculture had been attempted in this forest belt it had been successful. The summers were warm and the days long, and, while the winter was very cold, that made no difference from an agricultural point of view, as things do not grow in winter. He thought that anything grown in the prairie country farther south would grow there. Mr. Frank Crean, another explorer, referring to a trip through northwest Saskatchewan in 1908, said: " The first frost registered by my ther-

## CLIMATE AND FARM PRODUCTS

mometer was on October 2, when the thermometer fell to $24^{\circ} \mathrm{F}$. I was at Methye portage, latitude N. $56^{\circ} 36^{\prime}$, on September 17, and the potato tops were not frozen in the least. The garden was also quite untouched. Nor had I seen any frozen vegetables on the way up. The lakes began to freeze on October 20, but remained open for perhaps two weeks, the weather turning quite mild again." In another report of explorations in the same district the following year, Mr. Crean said: " Lettuce and radishes in fourteen days grow from the seed to a size fit for table use. On Sunday, July 14, I saw some radishes one-and-a-half inches in diameter, fourteen days' growth."

In the settled parts of Ontario and Quebec old settlers say that many districts in which summer frosts are never experienced now were formerly quite liable to summer frosts, and they attribute the change to improved drainage. In districts of southern Manitoba, where the early settlers often lost their crops through summer frosts, no such trouble is now experienced. In these Manitoba districts the lands did not require drainage, but many farmers believe that the general cultivation of the soil, by opening it up to the sun and the air, warms it. They say that the cultivated soil receives and stores heat during the long, hot summer days, and in the cool nights the heat radiates from the soil, thus preventing blighting frosts. There is very little doubt that when the sections of Ontario and Quebec lying between the Height of Land and James bay and on the east and west sides of James bay and the northern half of Manitoba, Saskatchewan and Alberta have been thoroughly drained and brought under cultivation there will be a great improvement in climatic conditions so far as they affect agriculture. This is true also of a large portion of the Northwest Territories which lie to the north of the 60 th parallel of latitude. In fact, at some of the Hudson's Bay Company posts in these territories, the clearing, draining and cultivation of land has already had a remarkable effect, and if this is true where very small areas have been brought under cultivation it is conceivable that the cultivation of wide areas might have a very great influence in preventing summer frosts. If well cultivated soil does receive and store the sun's heat it seems reasonable to suppose that in these northern districts where the summer days are so long the general opening of the soil to the sun and the air should have a marked effect.

Mr. William Ogilvie, in a report on the Mackenzie river valley, made an interesting comparison between the hours of sunlight from May 1 to August 31, at Hudson's Bay Company posts on the lower Mackenzie river in the Northwest Territories and at the city of Ottawa. He pointed out that if the hours of sunlight were reduced to days of twenty-four hours at each place, Ottawa would have seventy-five days and five hours of full sunlight; Fort Simpson, eighty-nine days, eleven hours; Fort Good Hope, ninety-nine days, twenty-two hours; and Fort McPherson, one hundred and nine days, twenty-one hours during the four months. "Everywhere the Mackenzie basin is quite as capable, so far as quality of soil is concerned, of supporting an agricultural population as the greater part of the provinces of Ontario and Quebec," wrote Mr. Ogilvie in 1888, before Ontario and Quebec provinces had
been extended northward. Mr. Ogilvie also stated that when he was at Wrigley, latitude $63^{\circ} \mathrm{N}$., on August 15, the people were gathering blueberries, then fully ripe and as large and well flavoured as they are in Old Ontario. Ripe strawberries were found on August 9 , ninety miles below this, and raspberries soon afterward. Above Fort Wrigley wild gooseberries and both red and black currants were found in abundance, some of the small islands being literally covered with the bushes. The gooseberries were large and well flavoured and the currants compared favourably with the same fruit as cultivated in the vicinity of Ottawa, the black currants being especially large and mellow. He thought this district would compare favourably with Finland, having a population of $2,000,000$, or the Russian province of Vologda, having a population of $1,600,000$, both in about the same latitude and with similar climatic conditions.

In the region known as the "Barren Lands," lying between the Mackenzie river basin and Hudson bay, which is exposed to the cold winds blowing off the ice-fields of Davis strait and Hudson strait, the season of vegetation is much shorter than in the same latitude of the Mackenzie river basin. In the short summers these lands are clothed with a wealth of flowers of many bues. At all seasons of the year they furnish sustenance for countless millions of caribou or reindeer, which never have any difficulty in getting at the rich mosses, as the snowfall is light in winter. In his book, "Sport and Travel in the Northland of Canada," Mr. David Hanbury says: "No land can be called barren which bears wild flowers in profusion, numerous heaths, luxuriant grass in places up to the knee, and a variety of mosses and lichens. It is barren only in the sense that it is destitute of trees, hence the name 'Dechin-u-le' (no trees), which is the Indian name for it." Yet it seems to be generally agreed that the greater part of this region is unsuitable for agriculture, because the summer season without frost is too short to mature crops. As regards the winter climate, Mr. J. B. Tyrrell has made a comparison of the winter temperatures of the "Barren Lands" with those of northern Siberia, and has arrived at the conclusion that no section of these lands has winters as cold as some sections of Siberia that are now inhabited. While unsuitable for agriculture it will be shown in the sections of this article devoted to Wild Animals, Minerals and Fisheries that there are natural resources that might furnish a livelihood to a considerable population.

The climate of all the British Columbia islands and the coast lands is greatly affected by the warm water of the Japan current and the winds that blow off it; so that the winters are very mild and moist. Snow seldom falls, and when it does come never stays long. Soft, warm, moisture-laden winds also blow up the long inlets of the sea, which extend many miles inland and along the river valleys, losing their moisture as they go inland, but retaining sufficient heat to moderate greatly the climate of the central and northern plateaus. The most northerm islands and the mainland coast opposite them have a milder climate than Scotland, while the climate of the southern mainland coast and Vancouver island resembles that of the southwestern counties of England. The rainfall is heavy all along the coast. The plateau

## CLYMATE AND FARM PRODUCTS

between the Gold and Coast mountain ranges has about the same annual temperatures as the coast in the same latitudes, but the extremes of heat and cold are greater, while the climate is very dry. In the higher plateau between the Gold range and the Rockies the climate is colder, approximating to that on the eastern slope of the Rockies. In some parts of this plateau rain falls almost continuously in summer, and the snowfall in winter is very heavy, while in other sections of the same plateau it is comparatively dry. For example, the upper valley of the Columbia near the bend has a very great rainfall, but in the vicinity of the Columbia lakes the rainfall decreases, and the upper Kootenay valley in the same plateau has a dry climate. British Columbia furnishes many examples of the fact that altitude has as much effect upon climate as latitude. Above an elevation of 6,000 feet snow falls every month of the year, so that the high peaks are always capped with snow, and magnificent glaciers can be seen at various points along the transcontinental railway lines.

Owing to the mountainous character of the country the area of agricultural land is small in proportion to the size of the province, but there are valleys as well as mountains, and even a small proportion of so great a whole is equal to the agricultural area of some important countries. There are millions of acres of arable land, while the area suitable for pasturage is immense.

The area of lands suitable for agriculture is reduced by mountains on the islands as well as on the mainland, but nevertheless there are extensive acreages of good lands in Vancouver island, Queen Charlotte islands and some of the smaller islands. The settlement of these island lands, as well as those of the narrow strip of mainland terrritory between the Coast range and the seashore and the river valleys near the mainland coast, has been greatly retarded by the cost of clearing, owing to the dense forests and the enormous size of the trees, when undertaken by individual farmers. This work can be done much more cheaply when conducted on a large scale by companies having stumping machinery, and arrangements have been made to deal in this way with some extensive and well located railway lands in Vancouver island after the valuable timber has been taken off. The beautiful farms and rich gardens that may be seen near the city of Victoria on Vancouver island, and along the lower reaches of the Fraser river on the mainland, furnish good examples of the character of these lands when cleared. However, some of the garden lands along the lower Fraser were recovered from the river by dyking. The moist, mild climate of the islands and the coast lands, although most favourable to gardens and small fruits, is not so suitable for the growth of apples and peaches as the dry belt of the interior, where these fruits are grown to perfection in the irrigated lands. The districts in Vancouver island that have been cleared and brought under cultivation bear a remarkable resemblance to the rural districts of England.

The interior valley extending from the United States boundary to the Big Bend of the Columbia river at its junction with the Canoe river, in latitude $51^{\circ} \mathrm{N}$., which is drained by the Columbia and Kootenay rivers, is now generally recognized as a great fruit country. A bulletin

## NATURAL RESOURCES OF THE DOMINION OF CANADA.

issued by the British Columbia Department of Agriculture says of the Columbia-Kootenay valley: "This noble valley contains two-thirds more cultivable lands and much more timber and pasture lands than Switzerland, and in. addition possesses a wealth of minerals which is wholly lacking in the Swiss Republic, yet Switzerland supports a population of $3,500,000$ and produces annually over $2,000,000$ head of live stock, besides large quantities of butter, cheese, grains, fruits and vegetables."


Fig. 6. Young Apple Tree, Valley of the Skeena River, Northern B.C.
The greater part of this valley requires irrigation to produce the best results, but as water is easily obtained from the rivers and lakes and the cups of the neighbouring hills, irrigation is not costly. Remarkable success has been achieved in fruit growing, and the acreage of fruit trees is increasing very rapidly. Fruit grown in this valley has won many gold medals at exhibitions in England, the United States and Canada. Apples, peaches and prunes of the finest quality are now extensively produced, and, while grape growing has not been undertaken to the same extent, it has been proved that the best varieties of grapes can be grown. There are a number of small rivers and lakes in this

## CLIMATE AND FARM PRODUCTS

great valley, each having its own small valley with peculiar characteristics. The largest fruit-producing district at the present time is the Okanagan valley. Other districts where the fruit production is rapidly increasing are the Similkameen valley, the Kettle river valley, sometimes known as the "Boundary Country," owing to its nearness to the United States frontier, and the West Kootenay district, which includes the country surrounding the Arrow lakes, Kootenay lake and the South Columbia river. The East Kootenay district, having a higher elevation, is not as favourable to fruit, but the hardier varieties of apples do well.

Exploration parties sent out by the Grand Trunk Pacific Raiiway Company have reported very favourably on the soil and climate conditions in the districts drained by the upper Fraser river, the Nechako river, Endako river, Ootsa lake and François lake, comparing these


Fig. 7 Starting a Fary on Lake Kathlyn, Northern B.C.
districts to southern Michigan, southern Ontario and western New York in climate, and describing them as possessing large areas of fertile soil. It is stated that the few settlers already in the valleys of the Kitsumgallum, Lakelse and Copper rivers have had great success in growing apples, pears and plums. Of the valley of the Bulkley river, a tributary of the Skeena flowing north between about $54^{\circ}$ and $55^{\circ} \mathrm{N}$. latitude, it is stated in the Grand Trunk Pacific report: "The climatic conditions are approximately the same as those of northern New York or eastern Ontario. The country is generally open, or nearly so, and there is a continuous belt of extremely fertile land some fifteen to twenty miles wide extending from Burns lake to Moricetown, a distance of

## NATURAL RESOURCES OF THE DOMINION OF CANADA.

2pproximately eighty miles, the elevation above sea-level being from 1,350 feet to 2,300 feet. The conditions are parallel with those where the finest apples and plums are produced."

It has been noted that in the northern part of the province the mountains of the interior trend westward and join the Coast range; so that there is a broad plateau between the Rocky mountains and the Coast range, a great part of which is believed to be suitable for agriculture. The trees are comparatively small and the forest is not so dense; so that the cost of clearing is not great, and in some parts there are quite extensive prairies. How much of the land is suitable for cultivation is a matter of conjecture, as there has been no settlement and very little careful exploration. Professor John Macoun estimated that there were millions of acres of land in this north country as suitable for wheat growing as the best lands of the great Western Plain.

It is worthy of note that while the farms of the Western Plain are seldom smaller than 160 acres, and often much larger, the farms of British Columbia are nearly all small. Twenty acres is considered a good-sized fruit farm. Thus, when all the agricultural land in the small valleys of southern and central British Columbia is occupied by gardens and fruit farms the farming population will be larger than the areas of similar size in the great Western Plain.

The fertile valleys of British Columbia have the advantage of sublime scenery. There are mountains in sight everywhere, and many beautiful lakes and rivers.

## FOREST WEALTH.

The Forestry Branch of the Department of the Interior estimates that Canada has between $500,000,000$ and $600,000,000$ acres of forest, and that between $200,000,000$ and $300,000,000$ acres are covered with timber of merchantable size, including $30,000,000$ acres in British Columbia, $100,000,000$ acres in Quebec, $70,000,000$ acres in Ontario, 11,000,000 acres in Manitoba, Saskatchewan and Alberta, $9,000,000$ acres in New Brunswick and $5,000,000$ acres in Nova Scotia. With a view to ensuring a future supply of timber, maintaining sources of water supply and protecting wild animals and birds from extermination, $152,833,955$ acres of lands have been set aside as permanent forest reserves, including $107,997,513$ acres in Quebec province, $14,430,720$ acres in Ontario and 2,474,240 acres in British Columbia, under control of the provincial governments, and 27,931,482 acres in the four western provinces under Dominion control. On the eastern slope of the Rocky mountains in Alberta there is a reserve of $13,373,860$ acres, which will be of immense value in preserving the sources of many rivers flowing through the great Western Plain.

In Ontario the timber most largely cut into lumber is white pine, with hemlock, red pine, spruce and maple following in order of quantities; in Quebec province spruce leads, with white pine, hemlock, birch and balsam fir following; while in the Maritime Provinces spruce ranks first, with hemlock, white pine, balsam, fir and birch following. In Manitoba, Saskatchewan and Alberta spruce leads, with tamarack and jack pine following. In British Columbia the cut of Douglas fir
exceeds that of all other woods combined. Tamarack, cedar, spruce, yellow pine, hemlock, white pine and balsam fir follow in order of quantities cut. The lergest sawmills in Canada are located in British Columbia. In all the provinces, excepting Ontario and British Columbia, the cut of spruce exceeds the cut of all other woods.

The trees growing in the three Maritime Provinces-Prince Edward Island, Nova Scotia and New Brunswick-include white, red and black spruce, white pine, red or Norway pine, hemlock, white cedar, tamarack, yellow birch, sweet birch, paper birch, sugar maple, silver maple, red maple, balsam fir, basswood, jack pine, white elm, beech, white ash, black ash, red oak and scrub oak.

It is estimated that fully two-thirds of the area of Nova Scotia is either covered with forest growth or consists of burned-over forest land more suitable for re-afforestation than for any other use. The three woods most largely cut are, in order of quantity, spruce, hemlock and white pine. During the years 1909 and 1910, Prof. Fernow, the forestry expert of Toronto University, and a staff of assistants, made a forest reconnaissance of Nova Scotia at the request of the Provincial Government. Reviewing the conditions in Cape Breton island and the mainland separately, Prof. Fernow estimated that the mainland of Nova Scotia contains approximately $9,000,000,000$ feet of coniferous timber at present suitable for sawing, and that, including Cape Breton, the whole province contains nearly $10,000,000,000$ feet of such timber. He estimated that, in addition to this saw-timber, coniferous trees on the mainland suitable for pulpwood would yield about $10,000,000$ cords of pulpwood and those in Cape Breton island about $14,000,000$ cords, a total of about $24,000,000$ cords of pulpwood in the province. He made no estimate of the quantity of hardwood suitable for sawing, but the area of the hardwood is given as 330,901 acres on the mainland, and about 195,968 acres in Cape Breton island. However, there are large areas of land covered with young trees that will be large enough for sawing before many years.

At one time New Brunswick was noted for its immense forests of white pine, and the exports of pine timber, pine boards, shingles, staves, masts and spars were very large. Partly as the result of indiscriminate cutting, and partly because of great forest fires, the pine forests have to a large extent disappeared, but the area of the spruce forests has greatly increased, spruce trees having grown up on lands formerly occupied by pine. The annual cut of spruce is now about ten times as great as the cut of pine.

While Prince Edward Island has the same trees as Nova Scotia and New Brunswick, the forest areas are not large.

Estimates regarding the extent of the forest resources of Quebec do not include the newly added territory of Ungava, but it is not considered that the forests of that territory are very extensive. The forestry experts of the Quebec Government estimate that the forests of the old province of Quebec contain $50,000,000,000$ feet board measure of white and red pine, $125,000,000,000$ feet of spruce and balsam fir, $100,000,000,000$ feet of pulpwood, and $35,000,000,000$ feet of hardwood,

## NATURAL RESOURCES OF THE DOMINION OF CANADA.

birch, maple, etc., $20,000,000,000$ feet of cedar, a total of $330,000,000,000$ feet board measure.

Among the trees of Quebec province are white, red and black spruce, white pine, red or Norway pine, hemlock, white cedar, tamarack, yellow birch, sweet birch, paper birch, sugar maple, silver maple, red maple, balsam, basswood, jack pine, white elm, rock elm, red elm, beech, aspen poplar, balsam poplar, cottonwood poplar, white ash. black ash, white oak, red oak, black oak, scrub oak. There are small numbers of hickory, chestnut and butternut trees in a few localities of restricted area, but not in commercial quantities.

The province of Ontario extends over so many degrees of latitude that it possesses a great many kinds of trees. In addition to all the trees found in Quebec and the Maritime Provinces, Ontario has, in the Niagara peninsula and in the counties bordering on lake Erie, a number of species that are usually found only in more southern latitudes. In the original forests of southwestern Ontario black walnut and sycamore abounded; there were ten species of oak and six of hickories; white ironwood, willows, the sassafras tree and such flowering trees as the tulip tree, the cucumber tree and the flowering dogwood were found in favoured localities. Very few of these trees remain to-day, and they can hardly be said to exist in commercial quantities, although recent reports made by sawmills to the Forestry Branch of the Department of the Interior show that small quantities of nearly all of them are still sawn.

The late Mr. Aubrey White, for many years Deputy Minister of Lands and Forests in the province of Ontario, stated in a paper read before the Forestry Association in 1904, that the province of Ontario had 20,000 square miles of timber subject to license within the older part of the province south of the Mattawa river, lake Nipissing, French river and Georgian bay, most of these timber limits being along the Ottawa river and its tributaries, the rivers flowing into Georgian bay and lake Huron and the Trent river system. He estimated the quantity of red and white pine still standing on these licensed lands at $7,000,000,000$ feet board measure, of which he thought about two-thirds was white pine. He did not estimate the quantities of other kinds of timber, but said there were immense quantities of spruce, hemlock and jack pine. In northern Ontario, between the Height of Land and the Great Lakes, he estimated that there were on unlicensed lands $13,500,000,000$ feet of white and red pine, probably two-thirds white pine, besides great quantities of spruce, hemlock and jack pine. North of the Height of Land, he said, there were enormous quantities of pulpwood. He expressed the opinion that in a few years great pulp and paper mills would be erected at almost every point where the National Transcontinental railway crossed a river, and the logs would be floated down the rivers to the mills, which would be run with electric power generated at the numerous waterfalls in the district. The situation has changed very little since then. The annual growth would more than offset the present annual cut of timber if forest fires could be entirely prevented. Vigilant measures are now being taken to protect the forests against fires.


## FOREST WEALTH

The forest belt of the Western Plain has often been swept by fire, owing to the carelessness of Indians and traders, and consequently only a small proportion of the trees are very old. It is only in places where trees have escaped the ravages of fire that an idea can be formed of the possibilities of growth. It is the general opinion of explorers that if there had never been any fires the greater part of the forest belt would be covered with good-sized trees. There are enormous quantities of timber large enough for pulpwood or for fuel, but comparatively small quantities large enough for sawmill purposes. The dominating trees are spruce and jack pine, but there are also considerable quantities of tamarack, poplar and birch.

That part of southern Manitoba lying between the Lake of the Woods and lake Winnipeg is largely covered with forests. West of the Red river in southern Manitoba there are several hill districts, locally called "mountains," that were well wooded when settlement of the prairies began, and although a great deal of the timber has been cut and fires have done some damage they still have a considerable quantity of standing timber. They have all been set aside as Government forest reserves. There is also a swamp forest reserve.

In southern Manitoba, in the river valleys, there are a few elm, oak, basswood and white cedar trees of fair size. In southern Alberta, near the British Columbia boundary, the Douglas fir grows well.

Mr. Elihu Stewart, formerly Superintendent of Forestry, testified before a committee of the Dominion Senate that he thought the tree growth extended ten degrees farther north in the Mackenzie river basin than in Labrador. Aspen poplar, white poplar, balm of Gilead and birch grow as far north as Fort McPherson, in latitude $67^{\circ} 29^{\prime}$, the natives at Fort McPherson making their canoes out of birch bark. Even in the delta of the Mackenzie, north of Fort McPherson, the islands are heavily wooded. The birch trees about the delta of the Mackenzie attain a size from twelve to sixteen inches and are used at Fort McPherson in building log houses. Mr. Malcolm McLeod, testifying before a committee of the Dominion Senate, in 1888, said: "As to the wood of that far north I would observe that it is remarkably hard. I have a pair of snowshoes of peculiar shape made right and left of birch for frames, like iron in texture, and though perhaps about 100 years old, perfectly sound."

British Columbia is noted for the enormous size of its trees, the superior quality of its timber and the fact that it has the largest compact area of forests on the North American continent. It has often been stated that British Columbia has over $180,000,000$ acres of forests-and this is perhaps not an exaggeration if trees of all sizes are included-but the report of the Royal Commission of Inquiry on Timber and Forestry of British Columbia, published in 1910, stated that only a small proportion of this extensive area was covered with timber of merchantable size. It was estimated that there were in the province from $240,000,000,-$ 000 feet to $300,000,000,000$ feet of merchantable timber-probably the higher quantity. However, as trees grow rapidly in British Columbia, and the Provincial Government has adopted measures for the protection of the forests, the timber not yet of merchantable size is an asset of great
value. It is estimated that the annual growth of merchantable timber is much greater than the annual cut at the present time.

The forests on the islands and along the mainland coast, especially in the south, are very dense. One acre is said to have yielded 300,000 feet of lumber, and the average yield per acre is estimated to be about 45,000 feet. These forests have probably suffered less from fires than those in any other section of North America, owing to the heavy rainfall. This is one reason why so many of the trees are large, although the great size must be attributed chiefly to the fact that the climate and soil are favourable to rapid growth. In some sections of the interior, where the climate is dry, there have been serious forest fires. Even in the southern interior the forests are much less dense than on the coast, and the trees are smaller, while the northern interior is generally sparsely timbered and the trees are comparatively small.

In a country with so many varieties of climate it is manifest that there must be variation in the character of the tree growths. The most important tree of British Columbia is the Douglas fir, which takes its name from an eminent botanist who explored the province in the early years of the last century. This tree is very widely distributed in southern British Columbia and extends as far east as the Bow river in Alberta. It attains its greatest size in Vancouver island, on the mainland coast opposite Vancouver island, and in river valleys near the coast, many of the trees in those districts being of great age and enormous size. The age of a full-grown tree is said to average 500 years, and there are many specimens from 600 to 700 years old. The Douglas fir sometimes towers to a height of 300 feet, with a diameter of fifteen feet, but such trees are exceptional. However, trees 250 feet high and ten feet in diameter are often seen; they commonly reach a height of 180 feet with a diameter of four to five feet, the trunk being straight and clear of branches for upwards of 100 feet. In the interior of the province the trees are not so large. The wood is of great value for structural purposes, while the bark is useful in tanning. Tests made by railway engineers to ascertain the relative value of Douglas fir and oak for the building of railway cars showed that the Douglas fir would withstand a greater strain than the oak.

Next in importance to the Douglas fir is the red cedar, which rivals it in size. It grows in all parts of the province, but the largest trees are found in the coast districts, where the Douglas fir thrives best.

There are four varieties of spruce in British Columbia-white, black, Engelmann and Sitka. The most valuable is the Sitka-(Picea sitchensis), which is sometimes called Menzies spruce and sometimes British Columbia spruce. It thrives in the humid atmosphere of the north Pacific coast and the islands. The Engelmann spruce grows extensively in the interior.

Western hemlock grows abundantly along the coast, especially in the north, and in those sections of the interior where the rainfall is heavy. In Queen Charlotte islands and other islands adjacent to the northern coast the Douglas fir, so abundant in Vancouver Island, does not grow, but there are large quantities of red cedar, spruce and hemlock, while the yellow cedar or yellow cypress seems to thrive better


Canada Year Beok, 1916-17
Fig. 9. Stand of Douglas Fir (Pseudo-tsuga plicata taxifolia) in British Columbia.
in Queen Charlote islands than in any other part of the province. The yellow cedar resembles the red cedar in general appearance and size. It produces a wood of fine grain with a beautiful sulphur-yeHow colour, which is easily worked, takes a high polish and is very durable, but requires to be well seasoned before use to prevent shrinkage.

The British Columbia larch, which is very plentiful in the higher altitudes and in the northem part of the province, has been deseribed as similar in appearance to the eastern balsam, but much larger both in girth and height. It has a fine grain, is tough and durable, stains well and takes a beautiful finish. The wood of the British Columbia Broadleaf maple, owing to its curly appearance when cut, is in demand for panel work. There are many other varieties of trees, some of which produce good woods. Among others of commercial value are the western yellow pine, lodgepole pine, balsam poplar, aspen poplar; black cottonwood poplar, western white pine, red alder, garry oak, paper birch, western birch, mountain fir, amabilis fir and lowland fir. The last two are found chiefly along the coast.

As the finest forests of British Columbia are on the islands and near the coast, while the coast is indented with numerous inlets of the sea extending far inland and receiving the waters of many rivers, the cost of getting out the timber is low and the facilities for shipment abroad are probably unequalled. The forests of the interior are not so accessible for shipments overseas, but there will be a market in the Prairie Provinces for the timber cut by the interior mills.

## WILD ANIMALS.

Hunting was the chief means of livelihood of the North American Indians before the arrival of the white man, and fur trading was the first commercial enterprise of white men in Canads. That the business is stilk quite important, although wild animals are seldom seen in the settled parts of Canada, is evident from the statistical reports of the Customs Department, which show that during the last fiscal year before the outbreak of the war the exports of furs amounted in value to $\$ 5,569,476$, while even in the war year 1916 the exports were valued at $\$ 4,778,337$ In addition to the furs exported large quantities are used in Canada. Among the wild animals killed for their skins and furs were beavers, badgers, black, brown, grizzly and white bears, caribou, coyotes, deer, elk, ermine or weasels, black, blue, silver, red, white and cross foxes, grampus, lynx, martens, minks, moose, musk-ox, muskrats, otters, panthers, rabbits, raccoons, skunks, squirrels, fur seals, wolves and wolverines. New Brunswick claims that as a result of game protection laws, moose, caribou and deer have greatly increased in numbers, and that there is more big game to the square mile in that province at the present time than in any other part of North America.

The forest reservations of the Dominion and provincial governments contain many fur-bearing animals. With proper direction and protection they may be made to yield a large revenue.

It has already been noted that the mosses and lichens of the socalled "Barren Lands" of the Northwest Territories furnish sustenance to millions of reindeer or caribou. Ernest Thompson Seton, the

## NATCRAL RESOURCES OF THE DOMINION OF CANADA.

well-known naturalist, after a trip through that country, said regarding their numbers: "Cutting in half the estimates of explorers who went before me and making a most conservative estimate, there are not less than thirty millions of these caribou." Mr. J. W Tyrrell in his book, "Across the Sub-Arctics of Canada," says that the caribou of the Canadian "Barren Lands" is the same as the reindeer of the Laplander. These reindeer range in weight from one hundred to four hundred pounds. Mr. Tyrrell says:

As a source of venison the reindeer cannot be excelled, especially in the autumn season, when it is in prime condition. During September and October the males are rolling fat, and as food their flesh is equal to the finest beef. Of all meats I have ever tasted certainly reindeer tongues take the first place for daintiness and delicacy of flavour. From the skins of the reindeer the natives of the Arctic regions make almost every article of winter clothing. For this purpose it is most admirably suited, both because of its great warmth and its remarkable lightness. Through different methods of tanning and dressing it is made adaptable to a great variety of other uses. Sewing thread, lashing twine and other strong lines are also made from sinew obtained from along the spine of this animal,

As to their numbers, Mr. Tyrrell says:


#### Abstract

There were many great bands literally covering the country over wide areas. The valleys and hillsides for miles appeared to be moving masses of reindeer. To estimate their numbers would be impossible. They could only be reckoned in acres or square miles.


Could these animals be tamed or domesticated? It would seem so from the experience of Mr. Tyrrell in going among them with a camera. After describing how his party slaughtered a number of reindeer and obtained a large supply of meat, he said.

> Sceral days were spent in drying the eighteen or twenty carcasses which were preserved, and while this work was progressing my brother and I had ample time to roam over the hills and view and photograph the bands of deer which were still everywhere about me. After the slaughter of the first day we carried no rifes with us, but armed only with a camera walked to and fro through the herd, causing little more alarm than one would by walking through a herd of catile in a field. The experience was delightful -one never to be forgotten.

If domesticated, they would furnish a livelihood for thousands of people. Great meat-packing factories could be established, and even fresh meat might be shipped out during the short season of Hudson bay navigation. A large number of people might be employed in tanning and dressing the skins, which would find a ready market both in southern Canada and in Europe. Musk-oxen are not so numerous in the "Barren Lands" as reindeer, but there are considerable numbers of them in some sections, especially in those parts not frequented by the Eskimos.

Throughout both the Mackenzie basin and the Barren Lands the numerous lakes and rivers are full of fish which could be used by fur farmers to feed many fur-bearing animals.

There is reason to believe that the raising of fur-bearing animals may in future become an important Canadian industry. As the population increases the home demand for furs will be very large. The old

## WILD ANIMALS

method of hunting wild animals will be abandoned and fur-farming will become general. Thus far greater quantities of furs will be produced than formerly, and large numbers of people may find employment in feeding fur-bearing animals and preparing the skins for market.

Some years ago two farmers in the northern part of Prince Edward Island, noting that the fur of the Prince Edward Island silver black fox commanded higher prices than any other fox fur on the London market, entered into a partnership to breed foxes in captivity The stock was bred from Prince Edward Island wild foxes caught in traps and held in captivity in wire enclosures. The experiment proved a great success; the pelts sold at prices ranging from $\$ 100$ to $\$ 2,000$ each, seldom selling for less than $\$ 500$ a pelt, and the two pioneers amassed large fortunes before the nature of their enterprise became widely known. Their


Fig. 10. Prince Edward Island Black Fox.
example was followed by others, and it was soon found that more money could be made in selling pups for breeding purposes than in selling the pelts. The demand for silver fox pups became so great that the price steadily increased, and at the time the great war broke out five-monthsold silver fox pups of the best Prince Edward Island stock were selling at from $\$ 12,000$ to $\$ 16,000$ per pair, and old stock of proved fecundity realized as much as $\$ 35,000$ per pair. When the pups could be bought at from $\$ 1,000$ to $\$ 4,000$ per pair a number of farmers started fox ranches, but when the price went up above $\$ 10,000$ it became impossible for the ordinary farmer individually to buy foxes. Then it occurred to someone to organize joint stock companies for fox-breeding purposes. In April, 1914, there were in Prince Edward Island 194 limited liability joint stock companies that had been organized for the purpose of breeding fur-bearing animals, chiefly silver black foxes. These companies had an authorized capital of $\$ 31,232,700$, but a number of the companies have not yet been floated and probably not more than half the stock has been actually issued. A large proportion of the farmers of Prince Edward Island are said to have invested in the stock

NATURAL RESOURCES OF THE DOMINION OF CANADA.
of fur-farming companies. In April, 1917, Prinee Edward Island breeding foxes could be purchased at the following prices:

| Silver black foxes. | \$1,500 per pair. |
| :---: | :---: |
| Black foxes. | 1,800 " |
| Grey and brown foxes, about. | 600 |

Very few silver fox pelts have been sold in Prince Edward Island in recent years owing to the great demand for breeding stock, but it is generally agreed that, as the silver foxes on the ranches are rapidly increasing, the industry will come down to a pelt trasis in a few years. The calculation has been made that if the prices should keep up long enough to enable the farmers to get back the money they have invested in fox breeding they could afterward make good profits raising silver foxes for pelts if the price of pelts should fall as low as sixty dollars.

Mr J Walter Jones, who was selected by the Canadian Commission of Conservation to make a special study of Prince Edwand Island fur farming, soid, in reference to the price of fox pelts in 1914:
The average price of wild silver fox skias in Landon is about $\$ 200$,
and for ranch foxes such as are found with the best ranchers $\$ 1,200$. Wild
silver fox skins are not always prime, and they are frequently shot, chewed,
mangled and poorly dnessed, while ranched foxes are usandy killed when
their fur is in prime condition. The highest price ever paid at the London
sates for a silver fox skin was $\$ 2,900$. It is said that thig shin was sold by
a Paris firm which had bought it at \& previous sale for \$1, 850 , and that, it was
from a ranched for from Prince Edwand Islapa. The next highest price was
$\$ 2,700$, and half a dozen have sold for $\$ 2,500$ or more, all being from Prince
Edwand Island ranches. A remarkable sale was made in March, 1912, when
a pelt from a fox that died is James Rayner's raneh at Kildare, Prince
Edward Islard, on October 12, 1911, brought the highest prite, \$2:050,
although the skin would not have been fally prime before December.
Prince Edward Island fur breeders claim that the climate of the
island is more favourable to foxes than any other known locality, and
they point to the price realized by Prince Edward Island skins at the
London auction sales as proof of their contention.
Prince Edward Istand's example is being followed in other prov-
inces of the Dominion.

## FISHERIES OF CANADA.

Nature has endowed Canada with most extensive fisheries. The long coast line and the numenous bays, inlets and harbosirs on the Atlantic and Pacific oceans, the gulf of St. Lawrence, the bay of Fundy, Hudson bay and the Pacific ocean, as well as the great rivers and multitudinous lakes, both large and small, in the interior of the conntry have already been referred to. The coast line on the Arctic ocean need not be considered, as it is uncertain to what extent its waters can be utilized by fishermen, although there is a possibility that important sea fisheries may eventually develop directly north of the mouth of the Mackenzie, \& part of the Arctic which is even now frequented by whaling vessels coming from Behring sea.

The temperature of Canadian waters is favourable to the production of fish of fine flavour and good keeping qualities, while the extraordinary number of inlets, bays and harbours along the coasts not only
make feediag and breeding grounds for countless millions of fish, but afford convenient havens for fishing vessels, so that catches of fish ean be quickly prepared for mardet, and, whether fish are to be sold fresh or preserved by drying, smoking, pickling or canning, it must be evident that they are in better condition for human food when prepared and packed soon after being caught than if they must be transported long distances by the fishing vessels. Canada employs eight men in the in-shore fisheries for one employed in the deep-sea fisheries, but even the Canadian deep-sea fishermen have an advantage over Americans fishing in the same waters, because the Canadian home harbours are much nearer to the deep-sea fisheries. Nothing is more essential to successful fishing than convenient supplies of bait, and in securing bait the grest number af bays along the coast is of immense advantage to Canadian fishermen.

There are a number of varieties of salmon in Canadian waters. The Atlantic salmon, bearing the scientific name of Salmo salar, is found along the Atlantic and Gulf coasts and the rivers emptying into the sea in the Maritime Provinces sund Quebec. It is famous for its delicious flavour. In some of the lakes of New Brunswick there is a land-locked salmoa differing little from the Atlantic stalmon, and certain lakes of Quebec have a salmon of remarkably fine flavour known as the Ouananiche. While large quantities of salmon are caught in Quebec and the Maritime Provinces the most extensive salmon fisheries are in British Columbia, where a great canning industry has been established. Salmon swarma along the coast of British Columbia and ascend the rivers in myriads, climbing over rapids and waterfalls and swimming tharough the torrents of the canyons, to be caught sometimes 600 miles in the interior. British Columbia has a number of varieties of salmon. The one which is most important cammerxially is the Sockeye or Blueback, which is known to scientists as the Oncorhynchus nerka. This is the salmon used most extensively in the British Columbia canneries, as its flesh is not only of fime flavour, butcontains a large amount of oil. Other varieties canned are the Coho or Silver salmon, the Quinnat or Spring salmon and the Humpback or Pink salmon. The Quinnat or Spring salmon, which is the first to ascend the rivers, is the largest of the Pacific coast salmon. It is in great demand as a fresh fish. The Spring salmon are most plentiful in the waters around Queen Chariotte islands and the vicinity of the Skeena river. The Dog or Chum salmon is not regarded as very suitable for canning, but is excellent when fresh or salted, and large quantities of salted Dag salmon are oonsumed in Japan. A salmon of partieularly fine quality of the same variety as the Sockeye is known as the Alaskan Red. It swarms in the northern waters of British Columbia and Alaska and in the deep sea of the far north. Large quantities of salmon are caught in the Yukon territory for local use.

The Canadian lobster fisheries are confined to the coastal waters of the Atlantic amd the gulf of St. Lawrence. They are the most productive lotster fisheries in the world. There are a large number of lobster canmeries along the coasts of Nova Scotia, Prinoe Edward Island, New Brunswick and Quebec.

NATURAL RESOURCES OF THE DOMINION OF CANADA
Next to Newfoundland, Nova Scotia has the greatest cod fisheries, Quebec, New Brunswick and Prince Edward Island following in order of quantities caught. They are marketed as dried, green salted and fresh fish. The British Columbia cod is slightly different from the Atlantic cod, the head being larger, while the air-bladder or "sounds" is said to be smaller.

Herring are caught in large quantities in all the Maritime Provinces, Quebec and British Columbia.

There are no real sardines caught in Canadian waters, but in New Brunswick great quantities of young herring are canned and sold under the name of sardines.

British Columbia ranks first in the halibut fisheries, but considerable quantities are caught in Nova Scotian waters and small quantities in New Brunswick and Quebec.

Mackerel are caught extensively along the coast of Nova Scotia and in smaller quantities in New Brunswick, Prince Edward Island and Quebec.

The Canadian haddock, familiarly known as the " haddie," is confined to the waters of the Atlantic and the gulf of St. Lawrence. Nova Scotia leads in the catch, with New Brunswick, Prince Edward Island and Quebec following in order of quantities.

All three Maritime Provinces and Quebec market large quantities of hake and cusk. The pollack is caught in abundance along the coast of Nova Scotia and in New Brunswick along the coast of the bay of Fundy. The Maritime Provinces and British Columbia market considerable quantities of clams and quahaugs. Alewives are found only on the Atlantic coast, but shad, smelts, tomcod, flounders and sea trout are caught on both the Atlantic and Pacific coasts. Anchovies and oolachan abound along the coast of British Columbia. The common sturgeon is caught along the Atlantic coast and in the St. Lawrence river and its tributaries. The striped bass is fond of brackish water and ascends the New Brunswick rivers to spawn.

Hair seal-skins are caught in the Atlantic and gulf of St. Lawrence, and off the coast of British Columbia. There are no fur seals in the Atlantic, but a few are caught in British Columbia waters. Whales are caught in the gulf of St. Lawrence, Hudson bay, and along the coast of British Columbia.

The production of Canadian oysters is not very large at present, but there is reason to expect a great development in the oyster fisheries in a few years. Until recently no systematic measures to develop the oyster fisheries were taken, and as a result of wasteful methods the oyster beds were almost depleted. Prince Edward Island, which has always been particularly noted for the fine quality of its oysters, is leading the way in oyster development. All the areas in which there are live oyster beds and all those areas in which it is believed oysters could be successfully raised have recently been surveyed by the Government, and it is proposed to lease these areas under strict regulations to insure development. Small areas will be set aside for individuals and large areas for companies, and it is expected that in a few years a very important oyster industry will be developed. Dr. Joseph

## FISHERIES

Stafford, of McGill University, who has made a special study of oysters, and is regarded as the highest Canadian authority on oyster culture, states that the Canadian oyster is superior to any other. After referring to the high reputation of the flavour of the Canadian oysters as compared with the United States oysters, Dr. Stafford says:

> Our Canadian oysters took first place at the International Exposition at Paris some years ago. They had to be collected from various places in the Maritime Provinces, and during that time they were standing in barrels on wharves, sometimes in the hot sun. After having been subjected to that treatment thay had to be transported across the Atlantic and placed on wharves there until the exhibit could be arranged, and yet when placed in competition with European oysters, that had been taken from the water only the day before, they were awarded first place. So there must be something in their ability to withstand rough usage and change of climate. Oysters as well as fish that are taken out of cold waters can stand transhipment and retain their flavour better than those taken out of warm waters.

The British Columbia oyster is very small, never exceeding two inches in length, while the Prince Edward Island oysters often reach a length of seven or eight inches, and they have been known to reach a length of fifteen inches. The Attantic and Pacific oysters are distinct species and cannot inter-breed. However, some Prince Edward Island oysters were transplanted on the coast of southern British Columbia several years ago. They appear to be breeding and doing well, but the results are not yet definitely known.

The whitefish is the finest of freshwater fish. It is found in the lakes and rivers of New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, the Northwest Territories, British Columbia and the Yukon Territory. Sir John Richardson, the Arctic explorer, who lived in the Northwest Territories for a considerable time with no other food than the whitefish, which is abundant in all the northern lakes and rivers, wrote regarding this fish: "Though it is a rich, fat fish, instead of producing satiety it becomes daily more agreeable to the palate, and I know from experience that, deprived of bread and vegetables, one may live wholly upon this fish for months, or even years, without tiring."

In Ontario and Quebec there is a lake herring known as the cisco, which is particularly abundant in lake Erie. While Canada has both sea trout and freshwater trout, the greater part of the catch is in fresh water, all the provinces and territories except Nova Scotia and Prince Edward Island contributing to the total. The two most widely distributed varieties of freshwater trout are the salmon trout or lake trout and the speckled or brook trout. In certain lakes of Quebec there is a variety of trout known as the Red Canadian trout. Other freshwater fish widely distributed in the inland lakes and rivers of Canada are sturgeon, pickerel and pike, carp, tullibee, bass, catfish and goldeyes.

In Manitoba, Saskatchewan and Alberta the fishing is usually done in the winter, after the lakes are frozen over. At that season of the year the farmers have time to spare, and much of the fishing is done by them. Holes are cut in the ice.

With the exception of the visits of whaling vessels, the fisheries of Hudson bay and James bay have never been exploited, but the con-

NATURAL RESOURCFS OF THE DOMINION OF CANADA.
struction of the Government railway from Pas to Port Nelson, and the propesed extension of the Ontario Government railway to James bay, may bring about the development of these fisheries. An investigation of the possibilition of James bay was recently made by the Fisheries Branch of the Department of Marine and Fisheries. Many kinds of food fish were found in grest abundanee both in the bay and the rivers flowing into it. It is interesting to note that the whitefish, commonly regarded as exclusively freshwater fish, are found in abundance in James bay. They run up the rivers to spawn. The James bay whitefish are not as large as those of the lakes, but are of good flavowr.

## MINERAL RESGURCES.

The mineral resources of Canada have searcely been tovehed as yet. The greater part of the Dommion has never been prospected. Even in the older districts very little development work hes been done. The Canadian Geologieal Survey and the Mines Branck of the Department of Mines have done valuable exploration work. They have a number of very capable men at work and their reports are of great value in forming an estimate of the mineral resources of the Dominion, but the country is so vast that they can thoroughly examine only small portions of it, and at best they can do hittle more then describe surfaee indications. The real value of mineral deposits ean usually only be determined by costly developrant work, which must be left to the eaterprise of capitalists. In the past, Canada has lacked capital and this has retarded the development of mineral resources. However, it has been established beyond doubt that Carada has in the province of Ontario the moft valuable nickel deposits known to exist anywhere in the world; that the largest asbestos mines known are in the Canadian province of Quebee, and at present supply the greater part of the world's consumption of asbestos; that the amber mica deposits of Ontario and Quebec are very extensive, and are the only large supplies of this mineral known to exist outside Ceylon, while Canada already ranks third among the sitver producing countries of the world, the output of silver for the last seven years being $209,974,624$ oz., valued at $\$ 119,093,924$.

Gold.-Canada has always been \& producer of gold. The smallest output in any one year since Confederation was in 1892, when the production was $43,905 \mathrm{oz}$., valued at $\$ 907,601$. The largest production in any one year was $1,250,057 \mathrm{ex}$., valued $\mathrm{e} \boldsymbol{6} \$ 27,908,153$, in the year 1900 , when Klordyke gold mining reached its climax. The total production of geld for the fifty years from 1867 to 1916 was $17,199,70002$., valued at $\$ 355,549,839$. In 1916 , the produetion was 926,963 oz., valued at $\$ 19,162,025$.

The gold-bearing racks of Novas Seotis extend along the Atlantic voast from Canso to Yarmouth, and are estimated to cover about 3,000 square miles. Very little eapital has been invested in them, but mining operations on a small seale have been stesdily continued for a hittle over half a century, and ever seventeen and a half million dollars worth of gold has been extracted, the annusk average being over 18,000 oz. of gold. New Brunswick is not a producer of gotd, atthough small quantities of gold have been found in the washings of some of the rivers.

## MINERAL RESOURCES

Alluvial gold in small quantitios is found in Quebec in the valley of the Chaudière and its tributaries, but the total output of gold, including the amounts recovered from the copper sulphide ores and the alluvial gold, averages only about 700 oz . anmually.

The Porcupine lake district of Ontario is now a lange producer of gold. The first important discoveries of gold in this district were made in 1909. There are now a number of mines in the district producing gold, and the output is increasing. There are also gold producing mines at Kirkland, Swastika and Larder lakes in the district between Cobalt and Porcupine lake. Gold is produced in small quantities in the Parry Sound district, in the district north of lake Huron, at Michipicoten near the iron mines and in the vicinity of Shebandowan lake, Sturgeon lake and the lake of the Woods. In south-eastern Ontario gold has been found in Peterborough, Hastings, Lennox and Addington counties.

Gold in smali quantities has been found along the Peace and Liard rivers and their tributaries, but there have been no great discoveries of gold anywhere in the Prairie Provinces.

The Yukon Territory becarne famous during the latter part of the nineteenth century owing to the great rush of gold seekers to the Klondike region. From 1885 to 1913, inclusive, the Yukon Territory produced $7,369,955 \mathrm{oz}$. of fine gold. The greatest production was in the year 1900 , when $1,077,553 \mathrm{oz}$. of gold were produced. It decreased steadily after that until 1907, when the output was only $152,381 \mathrm{oz}$. Since 1907 there has been a gradual but steady increase, owing to the introduction of improved machinery.

From 1862 to 1915, inclusive, British Columbia produced 7,268,904 oz. of fine gold. The production in 1915 was $288,521 \mathrm{oz}$. of fine gold. Prior to 1890 nearly all the gold was taken out by placer miners. The Fraser river, Cariboo, Quesnel and Cassiar districts were in turn famous for their gold production. There is still quite a large production of gold from the placer and hydraulic operations in Cariboo, Quesnel, Omineca and Atlin districts, but in recent years lode mining has been responsible for the greater part of the output. The most productive gold mine is at Hedley, in the Similkameen district. There are a number of gold mines moperation in the Nelson district, at Paulson and Long lake, on Bridge river, on Princess Royal island, Moresby island, and on Taku arm, Atlin lake. Nearly all the copper ores of the province are auriferous, and many of them contain a combination of gold, silver and copper.

Silver.-Neither Nova Scotia nor New Brunswick is a producer of silver. Small quantities are produced in the province of Quebec. The province of Ontario leads Canada in silver production. In the year 1903, in the district of Timiskaming, a little to the west of lake Timiskaming, extensive deposits of silver-cobalt ores containing an extraordinarily high percentage of silver were found. During the first ten years that the mines were worked $185,500,000 \mathrm{oz}$. of silver were taken out, and the total dividends paid by the silver mining companies of the district during that period amounted to $\$ 48,922,130$. The ores containing phenomenal quantities of silver have been depleted in some of the mines, and ores of lower grades are being worked, so that to pro-

## NATURAL RESOURCES OF THE DOMINION OF CANADA.

duce the same quantity of silyer as formerly it is necessary to handle more ore, use more machinery and employ a larger number of men. The deposits are believed to be extensive enough to ensure a large output for many years. Silver has been found at a number of other points in northern Ontario, but the production outside the Cobalt district is small.

Many years ago silver was discovered in large quantities on a tiny island about ninety feet square in lake Superior near Thunder Cape. When the mine was abandoned in 1884, work had been carried on to a depth of 1,160 feet and it is estimated that silver to the value of $\$ 3,500,000$ had been extracted.

Electro-Plating with Cobalt.-It is estimated that the silver ores and concentrates as shipped from Cobalt contain on the average 3.20 p.c. of cobalt, 1.47 p.c. of nickel and 14.28 p.c. of arsenic. Some of the ores contain much larger quantities of cobalt, and it was the original discovery of ores remarkably high in cobalt that gave the name to the district. The smelting companies that buy the ore from the operators of silver mines usually pay nothing for the cobalt, nickel and arsenic, and an exact record of the output of cobalt is not obtainable; butit is estimated that the production in this district is greater than that of all other countries combined. Dr. Herbert T. Kalmus, who recently conducted a series of experiments in electro-plating with cobalt at Queen's University, Kingston, Ontario, for the Mines Branch of the Canadian Department of Mines, reports that a solution of cobalt known as XIII B is capable of electro-plating at a speed of at least fifteen times as great as nickel, that the cobalt deposited at this rapid speed is very much harder than the nickel deposited in any commercial nickel bath, and that consequently a lesser weight of this hard cobalt deposit will offer the same protective coat as will a greater weight of the softer nickel deposit, so that for many purposes one-fourth the weight of cobalt as compared with nickel is required. Dr. Kalmus says that no nickel solution begins to compare with XIII B for the range of work which it will do and for the extremely high current densities at which it will operate, and that it is possible to get a plate in five minutes or less with solution XIII B which will stand bending tests and will buff as satisfactorily as a plate which has taken one hour from the usual nickelplating baths. The cobalt plates take a very high polish with a beautiful lustre, which although brilliantly white possesses a slightly bluish cast. The director of the Mines Branch believes that as a result of these discoveries there will soon be a large demand for cobalt for electro-plating.

Silver-Lead Ores.-British Columbia has produced silver in considerable quantities steadily for many years. It comes chiefly from the argentiferous galena ores, but to some extent from the auriferous copper ores. Dr. Eugene Haanel says of the silver-bearing galena ores of British Columbia:

There are a few producing mines in the Sheep Creek district, south of Nelson, but the largest number of mines are located in the Ainsworth and Slocan districts. The Sandoa-Silverton camps especially are showing promise, development at depth having been very satisfactory. The ores are argentiferous galena and tetrahedrite, with native silver and sometimes gold, argentite, zinc blende, etc., in veins cutting sediments. The ores of the Lardeau may be said to belong rather to the silver ores than to the lead,

## MINERAL RESOURCES

and the same may be said of the Greenwood camp. The West fork of the Kettle river will probably add some shippers to the list with the opening of traffic on the Kettle Valley railway, and the Canadian Northern railway may provide sbipping facilities for the silver-lead properties of the North Thompson River Valley West of Princeton in the Similkameen, at Leadville, there are some properties, and on the coast Portland Canal district is another silver-lead producing area. Shipments have already been made from several mines in the neighbourhood of Hazelton on the Skeena river. Development has been going on quietly for several years awaiting the advent of transportation, and with better facilities shipments may be expected to inerease rapidiy The lead ores of British Columbia are nearly all shipped to the smelter of the Consolidated Mining and Smelting Company at Trail, which operates in connection therewith an electrolytic lead refinery, the products of which are refined gold, silver and lead, copper sulphate and antimony. A few of the coast ores find their way to American smelters.

The Yukon territory has been a steady producer of silver for some years. While indications of silver have been reported at various points in northern Manitoba, Saskatchewan and Alberta, it has not yet been found in economic quantities.

There are argentiferous galena deposits in Cape Breton county in the island of Cape Breton, but their value is uncertain.

Zinc and Lead Deposits.-Most of the British Columbia galena ores are said to contain enough zinc blende to make the recovery of the zinc a matter of importance, and the establishment of electrolytic reduction works at Trail, B.C. has made both the zinc and lead contents of these ores more profitable than when they had to be shipped to the United States for treatment. In January, 1917, there were twenty mines producing zinc. The Sullivan mine in East Kootenay is the most important. There are many deposits of zinc-bearing ores in the province in the interior, on the mainland coast and on Vancouver island that have never been worked.

Many discoveries of zinc and lead have been made in Quebec and Ontario, but very little mining has been done. Both zinc and lead are mined at Notre-Dame-des-Anges, Portneuf county, Quebec, in considerable quantities. There are zinc-lead deposits on Calumet island in the Ottawa river, and some mining has been done. Lead is mined on Chats island in the Ottawa river and in Frontenac and Hastings counties, Ontario. Zinc has been mined at Zenith, a few miles from Rossport station on the Canadian Pacific Railway, north of lake Superior. In most of the counties of Eastern Ontario and at a number of points north of lake Huron and lake Superior discoveries of zinc and lead have been made. Sometimes they are associated and sometimes separate. There are indicetions of lead in various parts of New Brunswick, but no important deposits have been discovered. There is a zinc blende deposit in Inverness county, Cape Breton, on a branch of the Cheticamp river.

Nickel.-Ontario has in the Sudbury district the greatest nickel mines in the world and supplies over two-thirds of the world's consumption of nickel. Dr. A. P Coleman has prepared for the Canadian Department of Mines a very interesting report of over 200 pages describing the nickel deposits of the Sudbury district from which the following information is condensed. The town of Sudbury, from which the mining region takes its name, lies about 35 miles north of Georgian

NATURAL RESOURCES OF THE DOMINION OF CANADA.
bay. It may be reached from Montreal by a joumey of 439 mides westward on the main line of the Cansadian Pacific railway, of from Toronto by a journey of 260 miles north on the Canadian Pacifie raid way or the Canadian Northern railway. The nearest mickel mines are about two miles to the north and three miles to the west. The smelting is mostly done at Copper Cliff, a short distance from the town of Sudbury. The nickel region has sharply defined geological boundazies, all the ore deposits being connected with a single great sheet of emptive rock, roughly boat-shaped, having its interior filled with sedimentary rocks.

The basin is thirty-six miles long and sixteen miles wide, and the known ore depesits are all either along the edge of the sheet or less than four miles away from it. The nickel deposits are not distributed uniformly around the basin. There afe rich portions sepazated by barren portions. Along a somewhat irregular line of thirty-three miles, on the southern margin of the nickel-bearing emptive, seventeen mines have produced nickel ore, and within two or three miles to the south of it ten other mines have been worked. While some of the deposits appear to be pockets, there are a number of extensive bodies of ore. It is believed that the Canadian Copper Company has enough ore in two of its mines to last for sixty years, while there are a number of other mines supposed to contain great quantities of ore. The whote nickel basin includes an area of 550 square miles; divided among twenty-four townships of the regular size and strape. Mining has taken plaee im eight of these townships, while important ore deposits are known to exist in several others. The Sudbury ores are sulphides, contsining on the average about 45 p.c. of iron, about 3.09 p.c. of nickel, 2.12 pre. of copper and small quantities of cobalt, gold, silver, platinum and palladium. The iron content of the ore is thrown out and wasted in the smelting process, the aim being to produce a nickel-copper matte suitable for shipment to the refineries in the state of New Jersey and in Wales.

The Sudbury ores all contain large quantities of sulphur, and the first process to which they are subjected is roasting to remove part of the sulphur. They are then smelted in water-jacket furnaces, produeing a matte which is re-smelted in Bessemer converters, making a matte containing from 75 to 80 p.c. of nickel and copper, of which less than half is copper. In the roasting process the sulphur thrown off is entirely wasted. It destroys all vegetation in the neighbourhood. Deposits of low-grade nickel have been reported in a number of other localities in Ontario. The Alexo mine in Dundonald township, near Matheson, in northern Ontario, is said to have the most promising niekel deposits outside of the Sudbury district. The discovery of a new nickel range near Schreiber on the Camadian Pacific railway has been reported. Small gnantities of nickel ore are found in the Cobalt silver ores. Arrangements have been made for the construction of great worlss for the refining of nickel in Canada.

Copper.-Besides the copper whieh is associated with niekel in the Sudbury district and near Matheson, copper sulphides have been found in Ontario in the North Hastings, Parry Sownd, Timiskaming and Thragami districts, and in the section west of Port Arthur, but their extent and value are unknowif, as there has been no develignment work.

## MJNERAL RESOURCES

Small quantities of native copper have been found on the shores of lake Superior, but as yet not in economic quantities. Between the Sudbury district and Sault Ste. Marie, along the north shore of lake Huron and extending northward for forty miles, is a distriet in which many discoveries of low-grade copper ores have been made. It is believed that there are large quantities of copper ore, but no economic method of concentration has been introduced, and all the mines that were opened have suspended operations. The Bruce and Walker mines in this district were at one time mueh talked sbout. Large quantities of ore were taken out. Practically all the copper produced in Ontario comes from the nickel ores of the Sudbury mines and the Alexo mine. Many small deposits of copper have been found in different parts of New Brunswick, but most of them have not been considered sufficiently large to be worth working. A considerable amount of capital has been invested in the Intercolonial Copper Company's mine near Dorchester, N.B. The ore of this mine contains an excessive quantity of lime, silica and iron, but it is claimed that an economical process of concentration has been adopted. A copper vein at Annidale, King's county, is also being worked. Copper sulphides have been discovered at a number of points in Nova Scotia, but no important producing mines have been developed. In the Eastern Townships of Quebec province many small deposits of copper sulphides have been discovered, and at some points they are found in considerable quantities. Mining operations have been conducted for many years. In the vieinity of Shertorooke there are three active mines. The sulphur content of the ore, which runs over 40 p.c., is utilized for the manufacture of sulphuric acid, and the copper is then recovered from the residues by smelting. Small quantities of gold and silver are also recovered from these ores.

Copper-bearing minerals have been found in a great many localities in British Columbia, both in the interior and on the coast and the islands along the coast. New discoveries may be expected from time to time. Dr. Eugene Haanel states that the copper-bearing minerals are usually chalcopyrite or bornite, or both. These may occur alone, but usually they are found in association with other minerals, the commonest of which are pyrrhotite, magnetite, pyrite, mispickel and occasionally blende and galena. The principal districts in which important discoveries have been made are in southern British Columbia, in the West Kootenay and Kamloops districts, in the Coast district at a number of points along the mainland, on Vancouver island and on some of the coastal islands. The most important active producing mines are at Rossland, at Phoenix, and at Motherlode in the interior, and at Britannia or Howe sound, Texada island, and Granby bay on the coast. In the Rossland ores gold is the most valuable constituent, the gold content varying from 0.4 oz . to about 1.5 oz . per ton, the silver from 0.3 oz . to 2.5 oz , per ton, while the copper content runs from 0.7 p.c. to about 3.5 p.e. The deposits of eopper-bearing ores in the Boundary district range in size from small lenses less than 20 feet in thickness and 100 feet in length to huge ore bodies, one miae at Phoenix having a thickness of 125 feet, a known. width of 900 feet and a length of about 2,500 feet. The average ore contains from 1.2 to 1.6 p.c. of copper with about one
dollar in gold and silver per ton. The most important producing mines are in the vicinity of Phœnix and at Deadwood, about four miles from Phoenix. The deposits of copper ores at Howe sound are believed to be very large, and extensive development work is in progress. They contain small quantities of gold and silver. The deposits of copper ores near Granby bay, about 110 miles from Prince Rupert, have proved very important. The copper ores of the Rossland district are smelted at Trail, forming a matte containing copper, silver and gold, which is sent to the United States for refining. The copper ores of the Boundary district are smelted at Grand Forks and at Greenwood. There is also a copper-smelting plant at Ladysmith, on the east side of Vancouver island, and a very large and completely equipped smelting plant recently commenced operations at Anyox, on Granby bay.

The late Dr. G. M. Diwson, while Assistant Director of the Canadian (ieological Survey, stated before a committee of the Dominion Senate, in 1888, that there was every reason to believe that the rocks along the Coppermine river were as rich in copper as those in the Iake Superior district of Michigan. Mr. J. B. Tyrrell, reporting on the copper posibilities of the far north, said:


#### Abstract

The copper-bearing rocks would seem to extend along the Arctic coast, both east and west of Coppermine river for about five hundred miles in all, and probably many of the smaller islands off the coast are also of the same rocks, and the total area of these rocks undoubtedly amounts to many thousands of square miles. Comparing the early accounts of the occurrence of native copper on lake Superior with the accounts which we now possess of the copper on Coppermine fiver, and considering the enormous extent of the northern deposits, we have reasonable grounds for hope that before many years the Coppermine area will produce as much copper as is now mined in northern Michigan.


The Eskimos of the far north all have spear and arrow heads, needles. etc., beaten out of pure copper. The Eskimos who come to Fort Churehill to trade have snow-knists, ice-chisels, and fish hooks made out of native copper. They use copper tops over their pipes while smoking, and any break in their guns is usually mended with copper. From the stories they tell it would appear that there are great quantities of native copper along the Arctic coast and on the islands of the Arctic, near the coast. So little real exploration for any minerals has been done in the Northwest Territories that it is impossible to speak very definitely of the general mineral possibilities, but experts of the Canedian Geological Survey have expressed the opinion that the rocks in the country, back of Chesterfield inlet, are similar in character to the Huronian rocks of Ontario which have yielded such rich results in copper, nickel. silver and gold. Coal of good quality is said to exist on some of the northern islands.

Asbestos.--The asbestos deposits of the province of Quebec are the most important yet discovered anywhere, and they are said to supply 80 p.e. of the world's consumption. The principal deposits so far discovered are at Thetford, Black lake, Robertsonville, Dunville and East Broughton, in the counties of Megantic and Richmond. Large mills are in operation preparing the asbestos for the market.

## MINERAL RESOURCES

Coal Fields.-The Canadian province of Nova Scotia has the only coal yet discovered on the Atlantic seaboard of America. The coal is bituminous, of good quality, some of the seams being particularly suited for steam-making and for the manufacture of coke for blast furnace use, while others are better adapted to the production of gas. There are extensive beds of coal with seams of great thickness on both the eastern and western coasts of Cape Breton island, in the central county of Pictou, and in Cumberland county at the extreme west of the province. Mining operations are carried on in each of these sections, so that there are mines convenient not only to all parts of the province of Nova Scotia, but also to Prince Edward Island and New Brunswick, while in summer shipments can be made from all the mines by way of the St. Lawrence river to the province of Quebec. Coal is believed to exist at a very great depth in Prince Edward Island, but the cost of getting at it would be so great as to make mining unprofitable in competition with the coal of Nova Scotia under present conditions.

According to geologists there are possibilities of coal discoveries in portions of nine counties of New Brunswick, viz., Gloucester. Northumberiand, Westmorland, Albert, Kent, Queen's, King's, Sunbury and York, but the seams so far discovered are very thin compared with those of Nova Scotia. The coal is bituminous, being similar in quality to Nova Scotia coals, but not of as high grade as the best Nora Scotia coal. In the vicinity of Grand lake, in Queen's county and Sunbury county, coal is estimated to underlie an area of about 100 square miles. Active mining operations are being carried on by several companies near Minto. There are two seams mined, one from twenty to thirty inches, and the other from six inches to ten inches thick. In many places the two seams are only separated by about six inches of shale. Small quantities of coal are being mined in Kent county in the vicinity of Beersville. There are deposits of peat in the counties of St. John, Gloucester, Northumberland and Kent.

Geologists say that no coal will ever be found in the provinces of Quebec and Ontario, south of the Height of Land. There are possibilities of coal discoveries north of that watershed. Peat of good quality is widely distributed in both provinces. It is remarkable that, while peat has been widely used in Europe for fuel and other purposes, in Canada this natural resource is almost entirely neglected.

Quebec province can get supplies of coal in summer from Nova Scotia by the St. Lawrence river, but Ontario is dependent almost entirely on the United States for coal, as Nova Scotia coal goes no farther west than Cornwall. Some of the mine operators of Nova Scotia believe that if the Ottawa and Georgian Bay Canal were constructed and the St. Lawrence canals enlarged, they could lay down coal at all ports of Ontario bordering on the Great Lakes and Georgian bay. Coal can be carried much more economically in large ships than in small ones, and the coal boats coming from Nova Scotia to Montreal are too large to pass through the St. Lawrence canals, while the cost of transshipment to smaller boats at Montreal is too great to allow competition of Nova Scotia coal with American coal, which is mined much nearer to Ontario.

## NATURAL RESOURCES OF THE DOMINION OF CANADA.

Lignite of rather poor quality is found in the Turtle Mounitain district of southwestern Manitaba, eovering an area of about forty miles long and twenty miles wide. While small quantities of this ligaite have been mined, no mining operations on an extensive scale have ever been undertaken. There are extensive beds of peat in Manitobs. In the Souris district of southern Saskatehewan there is lignite of better quality, beginning a little west of the Manitoba boundary, and extending along the United States frontier for about 150 miles, with an arerage width of about twenty-five miles from serth to morth. There are a number of small coal mines near Estevan in this district, and the present annual output is about 200,000 tons. There are believed to be deposits of lignite extending almost completely across the southern part of Saskatehewan from Estevan to Aberta. In the eastern part of the province of Alberta, both in the southern and northern districts, there are extensive deposits of semi-bituminous coal, grading between lignite and bituminous. The quality of the coal improves as it extends westward, and when the foothills are reached it becomes bituminous, while in the basin of the Cascade river, a few miles east of Banff, it becomes anthracite in some localities. It has been estimated that there are $400,000,000$ tons of anthracite coal and $1,200,000,000$ tons of soft coal in the basin of the Cascade river. The total areas of known coal deposits in the province of Alberta, including anthracite, bituminous and semi-bituminous coals, have been estimated to underie 30,000 square miles of the province. The principal mining centres of semi-bituminous coal are along the Belly river between Lethbridge and Medicine Hat, and in the vicinity of the city of Edmonton. The principal mines of bituminous coal being operated are clong the line of the Crowsaest branch of the Canadisa Pacific railway, a little east of the British Cohumbia boundary, while the anthracite mines are near Canmore and Bankhead on the main line of the Canadian Pacific raiknay.

Recent experiments made by the United States Bureau of Mines, with lignites inferior to those of the Prairie Provinoes of Canada, have demonstrated that cheap power can be produced from them. Referring to these experiments in a report to the Canadian Commassion of Conservation, Mr. W J. Dick says: "It was found that the low-grade lignite of North Dakota developed as much power when converted into producer gas as did the best West Virginia bituminous soal when utilized under the steam boiler." The Mines Branch, Canadian Department of Mines, made seven ordinary gas-producer trials with lignites and lignitic coals of low calorific values. Good results were obtained in every case, the gas being of high calorific walue and uniform in quality. It is believed that in districts where water-power cannot be econonaically developed electric energy can be generated from those lignites and distributed to towns some distance from the mines.

The Crowsnest Pass coalfield in British Columbia, not far from the Alberta boundary, has been estimated by Mr. James McEwoy to underlie 230 square miles, with a workable thickness of coal seams of 100 feet, and to contain $22,595,200,000$ tons of coal. Farther north, at the Kananaskis pass, partly in British Columbia and partly in Alberta,

## MINERAL RESOURCES

there is a coalfield which is stated by geological experts to contain large quantities of coal. The Nicola Valley coalfield, south of Nicola lake, in the Kamloops district, is conveniently located to supply the central part of southern British Columbia, but is less extensive than the Crowsnest. At Princeton, in the Similkameen vailey, a good quality of lignitic coal is being mined. There are a number of other coal fields in the southern interior of British Columbia awaiting development. In the Tellwa valley, in the northern part of British Columbia. near the Grand Trunk Pacific railway line, eoal of good quality varying from bituminous to semi-anthracibe has been discovered. Near the west fork of the Skeens river, in latitude N. $56^{\circ} 45^{\prime}$, there are deposits of anthracite or semi-anthracite coal which are believed to be extensive. In the British Columtis section of the Peace river valley coal has been discovered, and the field is reported to be very extensive. The first coal mines developed in British Columbia were those of Vancouver island, in the Nanaimo and Comox districts, on the east cosst. More recently a number of mines have been opened in Suquash district, atbout 125 miles north of the Comon field. Coal of good quality is also found in the Queen Charlotte islands.

Iron Ores.-In considering the iron ore deposits of Canada it must be said that, in the older sections, the optimistic predictions made by geologists many years ago have not been realized. In many cases what they supposed to be numerous outcroppings of a great ore bed proved to be prockets. So far no great bodies of high-grade ores have been found, but it must be noted that the supplies of high-grade iron ores within convenient reach of the blast furnaces of the grest iron and steel making countries are now almost exhausted, and the low-grade ores of Canada will not have to compete with them very long. In a paper read before the American Institute of Mining Engimeers, Mr. James Gryley said:
There are vast deposits of magnetic iron-ores in the United States
and Canada that are too low in iron for use at the present time, but which can
be economically concentrated into very rich material; in many cases the
fineness of crushing necessary to secure proper concentration has prevented
their use except in extremely limited quantities. The reclamation of these
ore-bodies will add tremendously to the ore-reserves of Canada and the
Enited States, and this can best be done by a simple and efficient method of
sintering.

He proceeded to explain a process of sintering that has proved successful at a number of iron and steel plants in the United States. The product is ideal for use in the blast furnace owing to the fact that it has a cellular structure like a popeorn. It is claimed that these sintered concentrates from low-grade ores are superior to the natural high-grade ores, and that the expense of treatment is not great.

There are indications of iron in almost every part of Nova Scotia, and at one time it was commonly supposed that the province had almost inexhaustible supplies of this mineral. Investigation showed that most of the deposits were merely pockets, and the impression became general that Nova Scotia iron ores were of fittle value. If all the iron ore deposits in Nova Scotia were concentrated at one point there would be enough to supply very extensive works. No section of the province is far from

## NATURAL RESOURCES OF THE DOMINION OF CANADA.

the sea, and there are so many excellent harbours on all the coasts of the province that the cost of shipment would not be great. Mr. J. E. Woodman, a mining engineer who has prepared an interesting report on the iron ores of Nova Scotia for the Dominion Department of Mines, expresses the opinion that there are, scattered throughout Nova Scotia, in close proximity to transportation facilities by rail or water, a large number of deposits which, while not individually extensive enough to justify the erection of local smelters, could be economically mined for transportation to smelting centres. Development work at Torbrook, in Annapolis county, indicates that the hematite deposits there are quite important. There is some reason to believe that there i:: an extensive ore bed at Arisaig, on the coast of Antigonish county, but as no development work has been done this is uncertain. The Londonderry iron range, in Colchester county, extends for many miles, and although the deposits are not very deep the total quantity of ore is believed to be quite large. There are a number of varieties of ore in this range, including hematite, limonite, ankerite, siderite and specular ores. Except in the case of some small pockets the iron ores of Nova Scotia are too high in phosphorus to make Bessemer pig iron. They are usually low in sulphur, but Nova Scotia coal is commonly somewhat high in sulphur.

The iron ores of Nova Scotia would probably have received more attention from the iron and steel companies if there had been no other supply available, but the iron and steel companies have extensive deposits of ore at Great Bell island, in Conception bay, off the coast of Newfoundland, about 400 miles from Sydney, and this ore can be mined and transported in large ships to the blast furnaces in Cape Breton island so cheaply that the smaller bodies of Nova Scotia ore cannot compete. Although outside the present limits of Canada these Newfoundland iron ore deposits must be considered in a statement of Canada's natural resources, because their accessibility to Cape Breton's coal and limestone deposits has made it possible to establish great Canadian iron and steel works on the seaboard with ample and permanent supplies of cheap raw materials. English mining engineers have estimated that there is enough iron ore in the areas already opened up by the two great steel companies of Cape Breton island to supply larger plants than those now in existence for over a hundred years, and there are outer areas which, if the seams are continuous, as is supposed, would in their opinion probably yield a much larger quantity of ore than the areas now being worked. The ore has a good percentage of iron. It is low in sulphur, but rather high in phosphorus.

British success in supplying foreign markets with iron and steel has been largely due to the fact that the United Kingdom had extensive supplies of coal and iron ore close to the seaboard, and could get supplies of iron ore conveniently from other countries, while the geographical position of the country is favourable to a world-wide commerce. Nowhere else can conditions be found more nearly similar than in the Canadian island of Cape Breton. Coal is very widely distributed in Cape Breton, but the most valuable seams are those included in the coal field of Sydney, extending from Mira bay on the

## MINERAL RESOUROES

east to Cape Dauphin on the west. a distance of thirty-one miles, and occupying a land area of over 200 square miles, besides extensive submarine areas. The greater part of these coal areas is controlled by the steel companies. They have also extensive limestone deposits close at hand.

Nany small deposits of iron ore have been found in different parts of the province of New Brunswick. The most important so far discovered are those in the Austin Brook district of Bathurst county where mining experts state that great masses of iron ore have been proved. The only development has been at the Drummond mine, on the Nipisiguit river. which is equipped to produce 1,000 tons per day but is at present idle. As a considerable percentage of the ore is low grade it is necessary to concentrate it. In Carleton county, near Woodstock, there is iron ore of good quality which was smelted with charcoal in the early days, but no mining has been done for years. There is iron ore in St. John's county within twalve miles of the city of St. John, but the extent of the deposits does not seem to have been ascertained. So little mining exploration work has been done in the province of New Brunswick that it is quite possible that very extensive deposit. of iron may yet be discovered.

Limestones are found in Charlotte, Kings, Albert, Carleton, Victoria, Madawaska and Gloucester counties, the finest deposits worked being those in St. John county, which are very extensive.

No very large bodies of good iron ore have been proved to exist in the province of Quebec, although there are widespread indications of iron, but it is possible that extrnsive beds of iron ore may yet be discovered, or that some of the known deposits now regarded as doubtful may prove to be of great value. There is some reason to believe that there may be extensive iron ore deposits along the Gatineau river in Hull township, Ottawa county, within a few miles of the city of Ottawa. Mr. Fritz Cirkel, of the Dominion Department of Mines, who made a report on the iron ore deposits along the Ottawa and Gatineau rivers, thought them of sufficient importance to justify mining on a large scale. There are a number of deposits of iron ore throughout the county of Pontiac. Some of them are evidently poor in quality and limited in extent. Others make a better showing, but only development work would prove whether they are of any value or not. On Calumet island in the Ottawa river both magnetite and hematite ores have been found, but no development work has been done and the quantity of ore is uncertain. An analysis of hematite ore showed it to be very low both in phosphorus and sulphur, but it contained a small percentage of titanic acid. There are large supplies of limestone within easy reach of the iron ore deposits along the Gatineau and the Ottawa rivers, and there are a number of waterfalls not far distant from which electric power could be obtained. It has been suggested that these ores might be smelted by electricity In Grenville township of Argenteuil county, about half way between the cities of Montreal and Ottawa, are iron deposits which have been talked of for years, but little development work has been done. There are a number of deposits of magnetite, but no large bodies of ore have been proved. It is estimated that there are many

NATURAL RESOURCES OF THE DOMINION OF CANADA.
milfions of tons of iron magnetite ssnds, containing a high percentage of irom, along the north shere of the St. Lawrence, in the county of Saguenay. These sands could be briquetted easity for use in blast furnaces; but unfortunately they contain a high percentage of titanium. Titanium, while not injurious to iron as sulphur and phosphorus are, causes trouble in the blast furnaces when present in quantity, and will not combine easily with either the iron or the slag. A wery small percentage may be handled without much trouble, and it improves the quality of the iron.

Experiments under direction of the Dominion Mines Department have demonstrated that by means of magnetie separators and briquetting mathines the sazd can be freed almost entirely from its titanium content and made into briquettes suitable for use in the blast furnace, and that pig iron of superior quality can be manufactured from these briquettes. There are a number of deposits of beg fron ore in the St. Lawrence valley remarkably free from sulphur and phosphorus, and conbainaing se small a percentage of titanium that it may be regarded as advantageous rather than injurious. These bog irom ores have been successfully used in chareoal blast furnaces at Radnor Forges and Drummondville for many years. Iron has never been made in Quebec province with coke as fuel. The province has many advantages for the manufacture of charcoal iron, but, while a very superior iron can be made with charcoal, the cost of manufacture is so much higher than whem coke is used as fuel that it cannot be produced at a cost to compete with the coke-made product, exeept when required for special purposes for which iron of superior quality is essential. If the melting of iron by electricity should ever become an ecorromic success in competition with the blast furnace using coke as fuel, Quebee province, with its numerous water-powers generating electricity, might become an impertant centre of iron manufacture. There are believed to be important deposits of iron in Ungava, both on the maimland and along the coast, and geologists think coal may also be found, hut as the country is almost unexplored nothing definite can be stated about its mineral resources.

Iron ore is fourd over wide areas in Frontenac, Lanark, Renfrew, Leeds, Hastings, Peterborough and Haliburton counties, in the eastern part of Old Ontario, but most of the deposits are now believed ta be merely perkets. Prospectors have been too ready to assume that when several depesits of ore are found in line with each other they must be outcrops of the same ore bed. There appear to be a great number of separate deposits, many of them containing considerable quantikies of ore, but as yet no very extensive body of good ore has been proved to exist in that part of Ontario. However, the country has never been thoroughsy prospected, and very little development work has been done. Magaetites are more eommon than hematites. Bog ore is'reported to exist in Lamark eounty.

Considerable quantities of both magnetite and hematite iron ores were shipped to the United States a number of years ago, and very favourable reports of the quality of some of the ores were received from the smelting companias, batt when the great iron ore beds on the Michigan shore of lake Superior were discovered these eastern Ontario

## MINERAL RESOURCES

mines were abondened. It is difficult now to ascertain what was proved by these old-time mining operations. It is certain that in some cases the analysiss showed the ores to be high in iron, low in both phosphorus and sulphur and free from titanium, but in other eases the ores were low grade and contained rather high percentages of sulphur, phosphoris on titanium. Some of the diposits seem to be irregular in quality, inferior ore being found in close proximity to first-class ore. It would probably be correct to say that in general the ores of eastern Ontario have a high percentage of iron, are low in phosphorus and titanium and ratber hingh in sulphar, but that there are exceptions. In some sections the wraguetite ores contain a large pereentage of titanium.

It mould be a mistake to assume too readily that no ore deposits of great value will be found in eastern Ontario. It is probable that a goad deal of ore will be taken from some of the mines already opened, and development work in some of the localities yet unworked may reveal valuable ore bets.

Farther north, in Ontario, iron ore has been found at many points from lakef Timagami and Timiskaming to Sault Ste. Marie, but no importanti iron ore bodies have been proved to exist in this region east of Sadbury.

About thirty-five miles north of Sudbury, near the village of Sellwood, in the tramship of Hutton, is the much talked of Moose mountain iron range, which promises to yield very large quantities of low-grade magnetite. By crushing the ore fine and passing it through a Grondal magnetite spararator a concentric is evolved with a high percentage of iron, and wery low in both phosphorus and sulphur. A large modern Grondal conceutrating and briquetting plant with a capacity of 800 tons of crude ore per day has been installed. Cheap electric power is obtained from a waterfall a few miles away. A branch of the Canadian Northern railway carries the ore from the mines to Key Harbour, on Georgian bay.

Tha Atikokan iron range on the line of the Canadian Nortbern railway, about 130 miles west of Port Arthur, is believed to contain large quantities of magnetite high in sulphur and varying in phosphorus content from very low to rather high.

The Michipicoten mining district takes its name from the Michipicoten river, which empties into a large and beautiful bay of the same name on the north shore of lake Superior, directly opposite the Marquette iron district on the Michigan side of the lake, where nearly all the iron ore used in the blast furnaces of the Northern States is mined. Several deposits of iron ore have been discovered in the Michipicoten district. Some of the ore taken out has been low in both phosphorus and sulphur and contained a high percentage of iron, but the bigh-grade deposits appear to have been exhausted. The deposits of low-grade non-Bessemer ore seem to be much more extensive, and millions of tons of red hematite have boen taken from the Helea mine, which is comented by a railway twelve miles long with large oreshippimg docks at Michipicoten harbour. Another mine of the district from which large quantities of ore have been taken is the Magpie, produrcing siderite, which is roasted before being shipped. Both these mimess are operated, by the' Algona Steel Company; a subsidiary company of the Lake Superior Corporation at Sault Ste. Marie. in In

## NATURAL RESOURCES OF THE DOMINION OF CANADA.

The fact that the population of the Prairie Provinces is not yet great enough to justify the manufacture of pig-iron and steel, and the great distance from any outside iron-making centre where iron ores could be sold, has prevented any systematic search for iron ores, but explorers have reported many indications of the existence of deposits of hematite, limonite and clay iron-stone in the northern part of Manitoba, Saskatchewan and Alberta.

On the mainland of British Columbia iron ore deposits have been reported at many points, including among others Kamloops, Kitchener, Bull Run and Bermis, but no development work has been done, and there is no information available regarding the extent and character of the deposits. On both the east and west coasts of Vancouver island and on the smaller islands between Vancouver island and the mainland there are many deposits of iron ore, some of which are merely pockets, but according to a report made by Mr. Einar Lindeman for the Mines Branch, Department of Mines, there are deposits of magnetite which appear to be of economic importance in the following localities: In the valley of the Gordon river, a few miles from Port San Juan on the west coast; at several places in the vicinity of Barclay sound on the west coast; at Head bay, Nootka sound, on the west coast; at Nimpkish river, a few miles from Alert bay on the northeast coast; in the vicinity of the Quinsam river, a tributary of the Campbell river which flows into the gulf of Georgia; and on Texada island between Vancouver island and the mainland. All these deposits are high in iron, very low in phosphorus and rather high in sulphur, but the sulphur could be roasted out. There are very large supplies of good limestone both on Texada island and Vancouver island, while none of these iron deposits is far distant from the coal mines of Vancouver island.

Molybdenum and Tungsten.-The war created a great demand for molybdenum and tungsten. The Mines Branch of the Department of Mines reports that shipments of molybdenite ores were made from at least seventeen different localities in Quebec, Ontario and British Columbia in 1916. The largest producers were the mines at Quyon, Pontiac county, Quebec, owned by the Canadian Wood Molybdenite Company, said to be the largest producers of molybdenite ore and concentrates in North America.

Important producers in Ontario were the Chisholm mine in Sheffield township, Addington county; the Spain mine in the township of Griffith, Renfrew county; and the Renfrew Molybdenum Mines, Mount St. Patrick, county of Renfrew. The Mines Branch of the Department of Mines perfected a system of concentrating molybdenite ores at their testing laboratories in Ottawa and by arrangement with the Imperial Munitions Board concentrates 100 tons of molybdenite ore weekly. The shipper of the ore is paid a fixed price in proportion to the molybdenum contents of the ore. The Canadian Wood Molybdenite Company have two concentrating mills, one at their mines and the other at Hull. There are also concentrating mills at Renfrew and Mount St. Patrick. Most of the concentrates are sent to the International Molybdenum Company at Orillia, Ontario, and to the Trivani Electric Steel Company at Belleville, Ont. At Orillia, ferro-molybdenum, molybdic acid and ammonium molybdate are produced; at Belleville only ferro-molyb-

## MINERAL RESOURCES.

denum. The Imperial Munitions Board has been ready to purchase all molybdenum products at fixed prices.

Tungsten is being mined in Now Brunswick on the southrest Miramichi river opposite Burnt Hill brook. The ore is wolframite. In Nova Scotia a mine at Scheelite, near Moose river, which was operated some years ago, was recently re-opened. The ore is scheelite. Tungsten is also found in scheelite ores in Beaver county, Quebec.

Feldspar and Fluorspar.-Deposits of feldspar believed to be extensive have been found in Ottawa county, Quebec, and one of the cleposits yields a remarkably pure white feldspar which is used in the manufacture of artificial teeth. Excepting the mining of small quantities for this purpose these feldspar deposits are at present entirely neglected. At Quatachon Bay, opposite Anticosti island, extensive deposits of feldspar are reported. High-grade feldspar is produced in Frontenac county, Ontario. A large deposit of fluorspar has been discovered near Madoc in Hastings county.

Kaolin or China Clay.-Kaolin or china clay of superior quality is obtained near St. Remi de Amherst, in Argenteuil county, Quebec province. There are said to be very extensive deposits. Considerable quantities are being shipped to the United States. There is also kiolin in the Michipicoten district of Ontario, but it is of inferior quality

Magnesite.--There are three companies mining magnesite in Grenrille township, Argenteuil county, Quebec, and one in Atlin, B.C. The superintendent of the steel furnaces of the Steel Company of Canada at Hamilton, Ontario, states that the Canadian magnesite from Grenville, when mixed with ground basic open hearth slag, makes a furnace lining equal in every respect to that obtained from Austrian magnesite which was used before the war. The work of lining can be done more quickly than with Austrian magnesite.

Amber Mica.-Between the Gatineau river and the Rivière au Lièvre, two tributaries of the Ottawa, there are extensive deposits of amber mica or phlogopite especially suitable for use as an insulator in electrical apparatus. There are also extensive deposits of this amber mica on the Ontario side of the Ottawa river, and the deposits in these two Canadian districts are so far as known the only amber mica found in economic quantities outside of Ceylon. Amber mica is found in many localities of eastem Ontario in a district having an area of about 900 square miles. There are a number of mines producing small quantities of mica, the most important being in Frontenac county.

Graphite.-There are indications of graphite in Nova Scotia, in Guysborough, Colehester and Kings counties, but no deposits of commercial importance have yet been recorded. Graphite exists in the counties of St. John, Charlotte, Kings and Westmorland, New Brunswick, but the extent of the deposits is unknown. The St. John county deposits were worked on a small scale for some years, but working is said to have been abandoned on account of water getting into the shaft. Graphite mines are being operated in Ontario at Brougham in Renfrew county, Cardiff and Monmouth in Hastings county, and North Elmsley in Lanark county. The graphite is prepared for the market in mills located near the mines. The quantity produced is not large. There are large quantities of graphite in the counties of Ottawa, Labelle and

NATURAL RESOURCES OF TFE DOMINION OF CANADA.
Argenteuil. The graphite occurs chiefly in the form of disseminated flakes, which often form a high percentage of the rock. A nursber of mills heve been opereted in the district. The late Dr. R. W Ells, of the Camadian Geological Surver, who made a thorough invertigation of these deposits and the method of treatment in the mills, reported that it has been clearly established that the graphite of this district, when treated in properly constructed mills, is eminently suitabte for all purposes to which graphite is usually applied, with the exception of fire pencil making. The graphite is said to be particularly adapted for the manufacture of crucibles when properly treated.

Caromite.-In the province of Quebec chromite is found in the counties of Brome, Megantic, Richmond, Wolfe and Gaspe. The deposits in the township of Coleraine, Megantic county, have been worked intermittently. A small quantity of chromite has been successfully manufactured into chrome steel by electric smelting at Buckingham. The present production of chromite in Canada is alnost entirely in the vicinity of Thetford and Black Lake.

Manganese.-In Nova Scotia considerable quantities of margenese are being mined near New Run, Lanenburg county, and smaller quantities near Enon, Cape Breton. Manganese ores have been found in Hints and Colchester counties. In New Brunswick there are deposits in Kings, St. John and Albert counties, some of which are betieved to be extensive.

Mineral Pigments.-There are many deposits of ochre in the counties to the north of the St. Lawrence river. Near the town of Three Rivers large quantities are dug, and deposits in Nicolet county, on the opposite side of the St. Lawrence, are also being worked. In New Brunswick experiments have shown that fine paints can be made from the stibrite deposits of Prince William, the chalcocite deposits at Dorchester in Westmorland county, the manganite at Mount Jordan in Kings county, the bog manganese at Mechanic's Settlement in Albert county, and the ferrugimous clay of Chaplins' island, Northumberland county. It is believed that large quantities of such mineral pigments are obtainable in various parts of the province, fumishing materials for an important paint industry.

Tin.-Tin ore has been found near New Ross, Lunenburg county, Nora Scotia, and geological experts have reported rather favourably, but no development work has been done and it is not known whether there are sufficient quantities to be of commercial value. Discoveries of tin have been reported in several localities in British. Columbia, but nothing very definite is known about them.

Gypsum.-Gypsum deposits of very fine quality are worked in Haldimand county, Ontario, along the banks of the Grand river. Gypsum of high grade occurs in large quantities in Nova Sootia, being found in Hants county, Cumberland county, Victoria county, Iaverness county and Cape Breton county. At present the annusl output is ralued at about $\$ 500,000$. In New Bromswick gypsum is mined in Albert, Victoria, St. Joha, Westmoriand and Kings corunties, the most extensive deposits worked being those in the vicinity of Millsbowough in Albert county, where there are seven quarries, and large quantities are ground, calcined and shipped out in barrels.

## MINERAL RESOURCES

Salt.-Salt of superior quality is produced in Huron, Bruce, Middlesex, Lambton and Essex counties in the southwestern peninsula of Ontario, the principal plants being located at Windser, Sarnia, Sendwich, Goderieb, Clinton and Kincardine. Salt beds have been proved to underlie a territory 2,500 square miles in extent, frenting on the shore of hake Huron, between Kincardine and lake Erie, and reaching indand at its greatest breadth to a distance of about forty miles. In some cases the water naturally, in filtrating through the rock salt, produces a brine which is pumped up, but in many cases it is necessary to pour water into bore-holes sunk to the salt beds and pump it up again after it has dissolved the salt, forming a brine. Samples of salt produced at Goderich, Ontario, have been compared with samples of roek salt of Cheshire, Eagland, the most productive salt field of Great Britain. An analysis of this Erglish salt, in a report to the British House of Commons. showed that it contsined eleven times more impurities than the Canadian salt contains. The purity of the Ontario salt makes it particularly suitable for the mannfacture of eaustic soda and bleaching powder. Salt springs have beenf found in Antigonish, Inverness, Cumberland and Hants counties, in Novs Seotia, but no attempt seems to have been made to utilize them. In the vicinity of the Skave and Athabaska rivers there sre many salt-water springs, and witnesses before a committee of the Dominion Senate reported large quantities of rook salt in the vieinity of Fort MeMurray on the Athabaska river. Mr. George A. Mulloy, in a report to the Forestry Branch of the Department of the Interior, said:

[^3]Natural Gas and Oil.-There is an extensive notural gas field underlying the psast of Ontario bordering on lake Erie and extending from the western end of lake Oatario to lake St. Clair and river St. Clair. At different peints in this district new disesveries of gas are being made from time to time. At present there are gas wells in operation in Wentworth, Welland, Haldimand, Norfolk, Kent, Elgin and Lambton counties. The gas is of remarkzbly uniform quality throughout the district, being noted for the absence of carbon dioxide and for its high calorifie value, which is estimated to be over 800 British thermal units. The cheapest. artificial gas in Ontario is sold in Torento, where the price is seventy cents per thousand for a gas with a calonific value of about 600 British thermad units. On the same basis of value per heat unit as Torento artificial gas, it is estimated that the natural gas now consumed in Ontario is worth $\$ 11,000,000$ annually gnd thatits use means the saving of a great quantity of coal. The natural gas is not only being piped to cities and towns, but is used in many farmhouses. Recently gas has beent discovered in Russell county, at Bourget, about twenty-six miles from Ottawa. Petroleum has been discovered at many peints in the southwestern peninsula of Ontaxio, but the most productive wells are in Lambton county, the Tifbury district in Kent county, and

NATERAL RESOURCES OF THE DOMINION OF CANADA. the Onondaga district in Brant county. In Albert county, New Brunswick, about eleven miles from Moncton, and in the adjoining part of Westmorland county, there is an extensive gas field. There are already a number of gas-producing wells, and new wells are being drilled. The city of Moncton is supplied with gas for light and power from these wells. Petroleum is also being pumped in this locality in small quantities. There are extensive beds of oil-bearing shales in both Albert and Westmorland counties, and it is proposed to establish a plant for the extraction of oil from these shales. It is believed that a plant having a capacity of treating 2,000 tons of shale per day will yield approximately 80,000 gallons of oil daily. The oil is of good quality. Natural gas has been discovered in St. Hyacinthe county, Quebec, about eight miles from the eity of St. Hyacinthe and thirty-five miles from Montreal, and several wells have been drilled with promising results. There are indications of gas in many other parts of the St. Lawrence valley, but whether it exists in large quantities or not is as yet uncertain.

In a district extending on both sides of the lower Athabaska river there are immense deposits of sand saturated with tar, which are supposed to have been produced by petroleum welling up from the underlying limestones. Dr. Robert Bell, of the Canadian Geological Survey, says: "At a temperature of sixty degrees F . the mass is sufficiently plastic to bend considerably before breaking. When cut with a knife the shavings or chips curl up like those of hard soap. When worked in the hand it becomes softened and may be moulded like putty and is quite brittle. In a fire of wood it soon ignites, burning for some time with a smoky flame and then falling to powder." Mr. Wyatt Malcolm, reporting to the Geological Survey, says of these tar sands: "The supply is almost inexhaustible. The beds vary in thickness from 140 to 220 feet, and although they have not been fully explored it has been estimated that they have a distribution of at least 1,000 square miles." Mr. R. G. McConnell, in a report to the Geological Survey, after describing these tar sands as of enormous extent, says: " The commercial value of the tar sands themselves as exposed at the surface is at present uncertain, but the abundance of the material and the high percentage of bitumen which it contains make it probable that it may in future be utilized for various purposes. Among the uses to which it is adapted may be mentioned roofing, paving, insulating electric wires; and it might also be mixed with lignite which occurs in the neighbourhood, and pressed into briquettes for fuel." The late Dr. R. W Ells, in a report to the Geological Survey, and other authorities have expressed the opinion that oil could be recovered from the tar sands by distillation. However, the wide interest that has been taken in these famous tar sands has been due to the belief that there must be immense quantities of petroleum somewhere beneath them, but whether these expectations will be realized or not remains to be seen. Several wells have been drilled without results.

There are petroleum springs at several points in Great Slave lake, near the shore. The oil comes up to the surface of the water. At various points along the Peace river there are indications of oil. Geologists say the the prospects of finding large quantities of oil in northern Alberta are very good. In the Pincher creek district in southern Alberta, southwest of the town of Macleod, oil has been struck in several

## MINERAL RESOURCES.

places, and it is claimed that a great oil field exists there, but the production of oil has been small up to the present time. A few miles south of the city of Calgary a light oil, about 90 p.c. gasoline, has been struck; a number of wells are being bored and great expectations have been aroused, but so far results have not been highly satisfactory. In drilling for oil near the mouth of the Pelican river, a tributary of the Athabaska, such a heavy flow of gas was struck at a depth of 820 feet that the roaring of it could be heard three miles away, and the work of drilling for oil had to be abandoned. Natural gas springs have been found at a number of points on the Peace and Athabaska rivers. There is a productive gas well near Wetaskiwin, about forty miles south of Edmonton, and gas is reported to have been struck at Tofield, on the Grand Trunk Pacific railway. In southern Alberta there are productive gas wells at a number of points in a wide district of which the city of Medicine Hat is the centre. In Medicine Hat itself the wells yield large quantities of gas, supplying the town with light and fuel both for domestic and industrial purposes. At Bow island, forty miles west of Medicine Hat, there are a number of productive wells from which gas is piped to Calgary, Lethbridge and other towns.

Antimony.-Antimony concentrates are obtained in small quantities at West Gore, in Hants county, Nova Scotia. In New Brunswick, antimony has been found in considerable quantities in the parish of Prince William, about twenty-five miles from Fredericton and three miles from the St. John river. The Canadian Antimony Company have a small reduction plant there. There is also antimony in Kings county. Some of the British Columbia silver-lead ores contain small quantities of antimony. In 1916 antimony was produced in small quantities at four mines in the Lillooet district: at Slocan, West Kootenay; at Togish lake, in the Atlin district; at Omineca, near Hazelton; and at Wheaton, in the Yukon territory.

Other Minerals.-There is a large body of tale near Madoc, in Hastings county, Ontario. Three mines are in operation, with grinding mills near the mines. Corundum of fine quality has been discovered at a number of points, within a belt seventy-five miles long, extending through Haliburton, Hastings and Renfrew counties in the province of Ontario. In Nova Scotia, tripolite or infusorial earth is found in Victoria, Inverness and Cumberland counties, but the only place where it is being taken out is at Bass River lake, in Cumberland county. In New Brunswick it covers the bed of the Pollet river lake and Pleasant lake in Kings county. Deposits of barytes are found in Nova Scotia in Colchester county, Pictou county and Inverness county, but the only deposits being mined are those in the vicinity of lake Ainslie, in Inverness county. There are a number of deposits in Lanark, Renfrew, Peterborough and Victoria counties in eastern Ontario; on Jarvis, McKellar and Pie islands in lake Superior; and in northern Ontario, near the Wanapitei river. Twenty-five or thirty years ago large quantities of mineral phosphate or apatite were produced in the vicinity of Buckingham, in the township of Ottawa. The deposits are extensive, but production bas almost ceased, because the cost of extraction was found to be too

## NATURAL RESOURCES OF THE DGMINION OF CANADA.

tigh to compete with the phosphates of Florida and Temnessees, which can be cheaply mined with steam shovels.

The shale overlying the cosl measures in the Grand Lake district, in New Brunswick, which has to be removed in maining the woul, is very suitable for the manufacture of highly finished facing brick, sewwer pipe, manteks, and other vitrified products. It takes a fery fine glaze, and becomes extremely hard. Treated in a different way it could be used for many purposes where a semi-refractory brick is calted for, such as boiler settings, ooke-oven blocks, stove linings, etc. At preserat it is a waste product, piled up in great dumps near the cood mimas but Mr. J. K. Keele, of the Canadian Geological Survey, submitted it to numerous tests with highly satisfactory results.

In Ontario there are a number of important pyrites deposits in Hastings county, and several mines are being operated. They are also found in many localities north of lake Superior, and are being mined in the Michipicoten district Part of the ore is used in sulphtric acid piants in the province, and part exported to the United States.

Granite is quarried in Hastings, Leeds, Muskoka and Parry Sound, in Ontario ; marble in Hastings and Lanark; sandstone in Carleton, Halton and Peel; trap rock in Peterborough county, near Bruce mines, on the north shore of lake Huron, and in the vicinity of Thunder bay; while slate has been found near New Liskeard, in the Nipissing district. In Nova Scotia granite is quarried near Halifax and at Nictan in Annapolis county. Very fine sandstones for building purposes are quarried in Cumberland and Pictou counties. New Brunswick is noted for its building stones. Granite is quarried near St. George's, Charlotte county, and at Hampstead, Queens county. Northumberland and Westmorland have sandstone quarries.

Discoveries of mercury have been reported at Field, in the mountains, and at Sechart, on the west coast of Vancouver island. Small quantities of mercury were mined some years ago at the western end of Kamloops lake. Small quantities of platinum have been recovered from many of the gold placer deposits in British Calumbia. Clay for the manufacture of bricks is widely distributed throughout Canada. Firectay suitable for the manufacture of firebricks has been found at Shubenacadie, in Hants county, Nova Scotia. Milstone grit is quarried in Pictou county, Nova Scotia, and manufactured into grindstones of excellent grades, ranging in size from very small stones to those used for the grinding of woodpulp, which weigh about two-and-a-half tons each. Grindstones are also manufactured in New Brunswick, in Westmortand, Gloucester and Northumberland counties, from millstone grit quarried in the neighbourhood of the works.

It is not pretended that this is a compdete account of the minerads of Canada. In a new country of vast area discoveries are being mande almost every day. Sometimes development wort shows that the surface indications of mineral wealth were misheading. In other cases expectations are more than justified.

The writer has given a more complete description of the natural resources of the Dominion in the book "Camada the Gountry of the

## PHYSICAL CHARACTERISTICS OF CANADA

Twentieth Century," which was prepsred acoording to the instructions of the Minister of Trade and Commerve for the prupase of giving business men who have never visibed Canada a comprebensive but epitomized review of its agricultural, forest and mineral tesounces, its industrial and commercial development and its regraphical relation to the maxliets of the world.

## IL. PHYSICAL CHARACTERISTICS OF CANADA.

## GEOGRAPHFCAL FEAFURES.

General Formation.-On the eastern coast of the North American continent the Appalachian range of mountains gives shape to the eastern coast of the United States and, extending into Camada, forms the Gaspé peninsula and the Maritime Provinces. Around Hudson bay is a V-shaped platear constituting the Laurentian highland and extending from Labrador down to the St . Lawrence river and thence nortbwestward to the Arctic ocean. In the west are the Cordillera ranges of the Pacific coast, extending into British Columbia and the Yakon territory. They occupy a large area in Canada, and comprise several parallel ranges. In British Columbia they are over 400 miles in width, and consist of the coast range along the coast; the Rocky mountains, properly so called, and, between them, the Selkirk, Gold, Cariboo, Cassiar and other ranges. To the north of British Columbia lies the Yukon territory, including a great mountain area drained by the Yukon river and the Kloadike valley, famous for its gold. West of the Canadian Yukon lies the United States territory of Alaska. Canada may further be conveniently divided into five sectioms: (1) the peninsula which in Canada includes Gaspé and the three Maritime Provinces; (2) the lowlands of southern Ontario and southern Quebee, with the Great Lakes and the Ottawa and St. Lawrence rivers draining the interior into the Atlantic ocean; (3) the Central plain; (4) the Laurentian highland; (5) the western Cordillera.

Mountains.-In the western Cordillera are found the highest mountain ranges and peaks of Canada. In the Yukon territory, and forming part of the St. Elias range, is mount Logan, 19,539 feet, the highest known point in Canada. In the Rocky mountains are many peaks rising to heights of 11,000 or 12,000 feet, and Mount Robson, $13,700 \mathrm{feet}$, in the Yellowhead pass, is the highest of that range. The Selkirk range contains heights of from 9,000 feet to over 11,000 feet.

Waterways.-The waterways of Canada constitute one of the most remarkable of its geographical features. East of the Rocky mountains the southern part of the Dominion slopes northeastward towards Hudson bay; and the rivers in the south flow eastward. Thus the Saskatchewan river, with its northern and southern branches, flows eastward into lake Winnipeg and thence northward ky Nelson river into Hudson bay. On the north the Great Plain has a northerly slope, and the Mackenzie river, with its tributaries, the Slave, Liard, Athabaska, ard Peace rivers, flows inte the Arctic ooean. The Mackenzie, exclusive of its tributaries, but including the Slave, Peace and Finlay rivers, of which it is the continuation, has a total length of 2,525

PHYSICAL CHARACTERISTICS OF CANADA miles. The Yukon river in the Yukon territory also flows northward. passing through Alaska into Behring strait after a course of 2,300 miles. In British Columbia, the Fraser, Columbia, Skeena, and Stikine rivers flow into the Pacific ocean.

Drainage Basins.-The large drainage basins of Canada are the Atlantic ( 554,000 square miles), the Hudson bay ( $1,486,000$ square miles), the Arctic ( $1,290,000$ square miles), the Pacific ( 387,300 square miles) and the gulf of Mexico ( 12,365 square miles). Table 1 gives a list of the river drainage basins, and Table 2 gives the lengths of the principal rivers with their tributaries and sub-tributaries.

> 1.-Drainage Basins of Canada.

| Drainage Basins. | Area Drained. | Drainage Basins. | Area <br> Drained. |
| :---: | :---: | :---: | :---: |
| Atlantic Basin. | Sq. miles. | Hudson Bay Basin.-con. | Sq. miles. |
| Hamilton. | 29,100 | Churchill.. | 115,500 |
| Miramichi. | 5,400 | Kazan... | 32,700 |
| St. John. | 21,500 | Dubawnt. | 58,500 |
| St. Lawrence. | 309,500 |  |  |
| Saguenay.. | 35,900 | Total . | 1,486,000 |
| St. Maurice. | 16,200 |  |  |
| French. | 8,000 |  |  |
| Nipigon. | 9,000 | Pacific Basin. |  |
| Ottawa... | 56,700 | Yukon.. | 145,800 |
| Lièvre. | 3,500 | Porcupine.. | 24,600 |
| Gatineau. | 9,100 | Stewart. | 21,900 |
| Total. | 554,000 | Pelly | 21,300 35,000 |
|  |  | White. | 15,000 |
| Hudson Bay Basin. |  | Alsek.... | 11,200 |
| 'Koksoak. | 62,400 | Taku. | 7,600 |
| George. | 20,000 | Stikine. | 20,300 |
| Big. | 26,300 | Naas. | 7,400 |
| Eastmain. | 25,500 | Skeena. | 19,300 |
| Rupert. | 15,700 | Fraser.. | 91,700 |
| Broadback. | 9,800 | Thompson. | 21,800 |
| Nottaway | 29,800 | Nechako... | 15,700 |
| Moose.: | 42,100 | Blackwater. | 5,600 |
| Abitibi ${ }_{\text {Missinaibi }}$ | 11,300 | Chilcotin. | 7,500 39,300 |
| Missinaibi. | 10,600 | Columbia. | 39,300 15,500 |
| Albany. | 59,800 | Kootenay | 15,500 |
| Kenogami. Attawapiskat. | 20,700 18,700 | Total. | 387,300 |
| Winisk. | 24,100 |  |  |
| Severn. | 38,600 | Arctic Basin. |  |
| Nelson: | 370,800 | Backs. | 47,500 |
| Winnipeg. | 44,000 | Coppermine... | 29,100 |
| English. | 20,600 | Mackenzie. | 682,000 |
| Red. | 63,400 | Liard.. | 1,700 |
| Assiniboine. | 52,600 | Hay. | 25,700 |
| Saskatchewan. | 158,800 | Peace. | 117,100 |
| N. Saskatchewan. | 54,700 | Athabaska... | 58,900 |
| S. Saskatchewan. | 65,500 18,300 | Total | 1,290,000 |
| Bow... | 11,100 |  |  |
| Belly...... | 8,900 | Gulf of Mexico Basin. | 12,365 |

Nore.-Owing to overlapping, the totals of each drainage basin do not represent an addition of the drainaqe areas as given. Tributarics and sub-tributaries are indicated by indentation of the names.

## GEOGRAPHICAL FEATURES <br> 2.-Lengths of Principal Rivers and Tributaries in Canada.

| Names. | Miles. | Names. | Miles. |
| :---: | :---: | :---: | :---: |
| Flowing into the Atlantic Ocean. |  | Flowing into the Hudson Bayconcluded. |  |
| Hamilton (to head of Ashuanipi). | 350 |  |  |
| Natashkwan. | 220 | Winnipeg (to head of Firesteel) | 475 |
| Romaine. | 270 | English. | 330 |
| Moisie. | 210 | Saskatchewan (to head of Bow) | 1,205 |
| St. Marguerite... | 130 | North Saskatchewan. . . | 760 |
| St. John. | 390 | South Saskatchewan (to head |  |
| Miramichi., | 135 | of Bow) | 865 |
| St. Lawrence (to head of St. |  | Bow... | 315 |
| Louis). .. | 1,900 | Belly. | 180 |
| Manikugan. | 310 | Red Deer | 385 |
| Outarde. | 270 | Churchill. | 1,000 |
| Bersimis...... . - . | 240 | Beaver | 305 |
| Saguenay (to head of Peri- |  | Kazan. | 445 |
| bonka). | 405. | Dubawnt. | 58 |
| Peribonka. | 280 | Severn. | 420 |
| Mistassini. | 185 | Winisk. | 295 |
| Ashrapmuchuan. | 165 | Attawapiskat. | 465 |
| Chaudiere. | 120 | Albany (to head of Cat river)... | 610 |
| St. Maurice... | 325 | Moose (to head of Mattagami)... | 340 |
| Mattawin. | 100 | Mattagami. | 275 |
| Richelieu. | 210 | Missinaibi. | 265 |
| Ottawa. | 685 | Harricanaw. | 250 |
| North. | 70 | Nottaway (to head of Waswanipi) | 400 |
| Rouge | 115 | Waswanipi. | 190 |
| North Nation. | 60. | Rupert. | 380 |
| Lièvre... | 205 | Eastmain. | 375 |
| Gatineau. | 240 | Big. | 520 |
| Coulonge. | 135 | Great Whale. | 365 |
| Dumoine. | 80 | Leaf. | 295 |
| South Nation. | 90 | Koksoak (to head of Kaniapiskau) | 535 |
| Mississippi. | 105 | Kaniapiskau. | 445 |
| Madawaska. | 130 | George. | 365 |
| Petawawa. | 95 |  |  |
| Moira. | 60 | Flowing into the Pacific Ocean. |  |
| Trent. | 150 |  |  |
| Grand. | 140 | Columbia (total) | 1,150 |
| Thames. | 135 | Columbia (in Canada).. | 465 |
| French (to head of Sturgeon).. | 180 | Kootenay | 400 |
| Sturgeon. | 110 |  | 695 |
| Spanish. | 153 | Thompson (to head of North |  |
| Mississagi. | 140 | Thompson). | 270 |
| Thessalon, ${ }^{\text {a }}$, | 40 | North Thompson... | 185 |
| Nipigon (to head of Ombabika). | 130 | South Thompson.. Chilcotin. | 120 |
| Flowing into the Hudson Bay. |  | Blackwater. | 140 |
|  |  | Nechako.. | 255 |
| Nelson (to Lake Winnipeg). | 890 | Stuart. | 220 |
| Nelson (to head of Bow). ... | 1,660 | Skeena. | 335 |
| Red (to head of lake Traverse) | 355 | Nass. | 205 |
| Red (to head of Sheyenne). | 545 | Stikine. | 335 |
| Assiniboine. | 450 | Alsek. | 260 |
| Souris. | 450 | Yukon (mouth to head of Nisutlin) | 1,765 |
| Qu'Appelle. | 270 | Yukon (Int. boundary to head of Nisutlin). | 655 |

PHYSICAL CHARAETERISTICS OF CANADA
2.-Lenglhts of Prineipal Rivers and Tributaries in Cunada-concluded.


Nore.-In the above table the tributaries and sub-tributaries are indicated by indentation of the names. Thus the Ottawa and other rivers are shown as tributary to the St. Lawrence, and the Gatineau and other rivers as tributary to the Ottawa.

St. Lawrence River System.-Most important of the lakes and rivers in Canada is the cbain of the Great Lakes with their connecting rivers, the St. Lawrence river and its tributaries. This chain is called the St. Lawrence River System. The Great Lakes, separating the province of Ontario from the United States and connected by a series of artificial canals with the St. Lawrence river, allow of access from the Atlantic ocean to the interior of the Dominion at Fort William and Port Arthur, twin cities situated at the head of lake Superior.

The Great Lakes.-Table 3 shows the length, breadth, areas and elevation above sea-level of each of the Great Lakes.
3.-Area and Elevation of the Great Lakes.

|  | Lakes. | Length. | Breadth. | Area. | Elevation above Sea-level. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | MiIes. | Miles. | Sq. Miles. | Feet. |
| Superior. | $\ldots$ | 354 | 162 | 31,809 | 602 |
| Mischigan. |  | 316 | 118 | 22,400 | 581 |
| Finron. |  | 207 | 101 | 23,200 | 581 |
| St. Clair |  | 28 | 24 | 445 | 575 |
| Erie. |  | 239 | 59 | 10,000 | 272 |
| Ontario. | $\cdots$ | 193 | 53 | 7,26i | 246 |

Lake Superior, with its area of 31,800 square miles, is the largest body of fresh water in the world. As the international boundary between Canada and the United States passes through the centre of lakes Superior, Huron, Erie and Ontario, only half of the areas of these lakes given in the above statement is Canadian. The whole of lake Michigan is within United States territory. From the western end of lake Superior to the mouth of the St. Lawrence there is, with the aid of the

## GEOGRAPHICAL FEATURES.

canal system, a continuous navigable waterway. The total length of the St. Lawrence river from the head of the St. Louis river to the Pointe-des-Monts, at the entrance to the gulf of St. Lawrence, is $\mathbf{1 , 9 0 0}$ miles. The tributaries of the St. Lawrence, several of which have themselves important tributaries, include the Ottawa river, 750 miles long; the St. Maurice river, 400 miles long; and the Saguenay, 100 miles long.

Other Inland Waters.-In addition to the Great Lakes there are large bodies of inland water in other parts of Canada. Of these only the following principal lakes, with their respective areas, need be mentioned here: in Quebec, lake Mistassini ( 975 square miles); in Ontario, lake Nipigon ( 1,730 square miles); in Manitoba, lake Winnipeg ( 9,457 square miles); lake Winnipegosis ( 2,086 square miles) and lake Manitoba ( 1,817 square miles); in Saskatchewan, Reindeer lake ( 2,437 square miles); in Alberta, lake Athabaska ( 2,482 square miles). All these are within the boundaries of the provinces as at present constituted, and are exclusive of lakes situated in the Northwest Territories, as, for instance, the Great Bear lake ( 11,821 square miles) and the Great Slave lake ( 10,719 square miles) in the Mackenzie District.

Table 4 gives a list of the principal lakes of Canada by provinces, with the area of each in square miles. The table has been revised to correspond with the constitution of the provinces as altered by the Boundary Extension Act, 1912 (2 Geo. V ce. 32, 40 and 45).
4.-Areas of Principal Canadian Lakes by Provinces.

| Names of Lakes. | Areas. | Names of Lakes. | Areas. |
| :---: | :---: | :---: | :---: |
|  | Square Miles. |  | Square Miles. |
| Nova ScotiaBras d'Or Little Bras d'Or |  | Quebec (con.) - |  |
|  | 230 | Kakabonga. | 65 |
|  | 130 | Kaniapiskau. | 441 |
|  |  | Kipawa... | 117 |
|  | 360 | Matapedia.... | 16 |
| New BrunswickGrand. | 74 | Manouan. | 113 |
|  |  | Mattagami. | 87 |
| Quebec- |  | Melville. | 14 1,298 |
| Abitibi, part... | 25 | Memphremagog, portion |  |
| Apiskigamish. | 392 | Quebec. .- | 28 |
| Ashuanipi. | 319 | Menihek. | 112 |
| Attikonak. | 331 | Minto. | 735 |
| Aylmer | 8 | Mishikamau. | 612 |
| Baskatong. | 171 | Mishikamato.. | 122 |
| Burnt. . | 56 | Mistassini. . | 975 |
| Champlain, portion in Quebec | 3 | Mistassinis. | 206 |
| Chibouganau. | 138 | Nemiskau. | 56 |
| Clearwater | 478 | Nichikun. | 208 |
| Evans. | 231 | Nomining.... | 9 |
| Expanse. | 59 | Obatogamau. | 56 |
| Gull. ${ }^{\text {Grand }}$ Victoria | 125 | Olga... | 50 |
| Grand Victoria. | $\begin{array}{r}57 \\ 245 \\ \hline\end{array}$ | Ossokmanuan. | 131 |
| Indian House. | 306 | Patamisk. | 5 44 |
| Ishimanikuagan.............. | 87 | Payne. ........ | 747 |

## PHYSICAL CHARACTERISTICS OF CANADA

4.-Areas of Principal Canadian Lakes by Provinces-con.

| Names of Lakes. | Areas. | Names of Lakes. | Areas. |
| :---: | :---: | :---: | :---: |
| Quebec (con.)- | Square Miles. | Ontario (con.) - | Square Miles. |
| Petitsikapau. | 94 | St. Joseph... ... : . . | 245 |
| Pipmaukin. | 100 | Saganaga, portion in Ontario. | 21 |
| Pletipi... | 138 | Sandy | 245 |
| Quinze, Lac des. | 46 | Seul... | 392 |
| Richmond. | 269 | Simeoe. | 271 |
| St. Francis, Beauce county | 13 | Scugog. | 391 |
| St. Francis river, St. Lawrence, part. | 59 | Stony Sturgeon, English river. | 19 106 |
| St. John. | 350 | Sturgeon, Victoria county. | 18 |
| St. Louis. | 50 | Superior, portion in Ontario. | 11,178 |
| St. Peter | 130 | Temagami... | 90 |
| Sandgirt .. | 106 | Timiskaming, part. | 52 |
| Simon. : | 12 | Trout English river | 134 |
| Timiskaming, part. | 65 | Trout Severn river.. | 233 |
| Temiscouata.... | 29 | Wanapitei. ${ }^{\text {W }}$ - | 45 |
| Thirty-one Mile. Two Mountains. | 23 63 | Woods, lake of the, part in Ontario. | 1,325 |
| Upper Seal. . | 270 |  |  |
| Wakonichi. | 44 |  | 41,188 |
| Waswanipi. | 100 | Manitoba- |  |
| Whitefish. | 19 | Atikameg. | 90 |
|  | 11,110 | Cormorant. | 141 |
| Ontario- |  | Dauphin. | 200 |
| Abitibi. | 331 | Dog. . | 64 |
| Bald. | 2 | Ebb-and-flow | 39 |
| Balsam. | 17 | Etawney | 625 |
| Buckhorn. | 14 | Gods. | 319 |
| Cameron. | 6 | Granville.. | 392 |
| Couchiching. | 19 | Island. | 551 |
| Deer | 7 | Kiskitto.: | 69 |
| Dog. | ${ }^{61}$ | Kiskittogisu. | +122 |
| Erie, portion is Ontario | 128 5,019 | Manitoba. | 1,817 |
| Erie, portion in Ontario George, portion in Ontario.. | 5,019 11 | Moose. Nameu, part. | 12 |
| Huron, including Georgian bay, portion in Ontario. |  | North Indian. | 184 |
| La Croix, portion in Ontario. | 14,331 23 | Playgreen. | 22 |
| Lansdowne. | 98 | Reed. | 86 |
| Long. $\because$ P itou | 75 | Red Deer, west of lake Winni- |  |
| Manitou, Manitou island. | 38 | pegosis. ${ }^{\text {a }}$ | ${ }_{13}$ |
| Mille Lacs, Lac de | 104 | Reindeer, part. | 134 |
| Mud... | 13 <br> 54 | St. Martin. Setting. | 58 |
| Namakau, portion in Ontario. | 19 | Shoal. | 102 |
| Nipigon. | 1,730 | South Indian. | 1,53 88 |
| Nipissing. ${ }^{\text {O }}$. | 330 3 | Swan. | ${ }^{8}$ |
| Ontario, portion in Ontario.. | 3,727 35 | Wadatara, part | 8 |
| Pigeon. | 15 | Wekusko. | 8 |
| Rainy, portion in Ontario... | 260 | Winnipeg. | 9,459 |
| Rice. ${ }^{\text {St }}$ io ${ }^{\text {a }}$ - | ${ }_{2}^{27}$ | Winnipegosis . ${ }^{\text {Woods }}$ lake of part. | 2,086 60 |
| St. Clair, portion in Ontario. St. Francis, river St. Lawrence, part. | 257 24 | Woods, lake of the, part.. | 19,894 |

## GEOGRAPHICAL FEATURES

4.-Areas of Principal Canadian Lakes by Provinces-concluded.

| Names of Lakes. | Areas. | Names of Lakes. | Areas. |
| :---: | :---: | :---: | :---: |
|  | Square Miles. |  | Square Miles. |
| Saskatchewan- |  | British Columbia-con. |  |
| Amisk. | 111 | Stuart. | 220 |
| Athabaska, part. | 1,801 | Tacla. | 135 |
| Buffalo. | 281 | Tagish, part. | 91 |
| Candle. | 150 | Teslin, part.... | 123 |
| Chaplin. .. | 66 406 | Upper Arrow | 99 |
| Cree.... ${ }^{\text {d }}$ | 166 |  | 2,439 |
| Dove. $\quad \therefore$ | 242 |  |  |
| Ile a la Crosse. | 187 |  |  |
| Johnston.. | 131 |  |  |
| Last Mountain. | 98 | Northwest Territories- |  |
| Little Quill. .. | 70 | Aberdeen. | 514 |
| Manitou. | 67 | Aylmer. | ${ }_{6}^{612}$ |
| Montreal. | 138 | Baker $\quad$ O. | 1,029 |
| Nameu, part. | 54 | Clinton-Colden. | 674 |
| Plonge, Lac la. . | 383 | Dubawnt. | 1,654 |
| Quill.. . ... | 163 | Franklin. | 122 |
| Red Deer on Red Deer river. | 97 | Garry | 980 |
|  | 2,302 | Gras, Lac de... | 674 |
| Ronge, Lac la. | 343 | Great Bear | 11,821 |
| White Loon. | 97 | Great Slave. | 10,719 |
| Witchikan. | 70 | Kaminuriak. | 368 |
| Wollaston. | 906 | Lower Seal. | 220 |
|  | 8,329 | Macdougall. | 318 |
|  |  | Maguse... | 490 |
|  |  | Martre, Lac la... | 1,225 |
|  |  | Mackay . | 980 |
| Alberta- |  | Nueltin, part.... | 230 |
| Athabaska, part. |  |  | 343 |
| Beaver ${ }_{\text {Bic }}$ | 1,041 89 | Pelly. ${ }_{\text {Schul }}$ | 331 |
| Buffalo. . | 55 | Schultz. | 123 |
| Claire. ${ }^{\text {a }}$ | 404 | Todstara, part.. | - 52 |
| Lesser Slave. | 480 | Yathkyed... | 858 |
| Pakowoki... |  |  |  |
| Sullivan. | 64 |  | 34.521 |
|  | 2,360 |  |  |
|  |  | Yukon- |  |
| British Columbia- |  | Aishihik. | 107 |
|  |  | Atlin, part. | 12 |
| Atlin, part. | $\begin{array}{r} 52 \\ 331 \end{array}$ | Kluane. | 184 |
|  |  | Kusawa. | 56 |
| Babine. | 306 | Laberge. | 87 |
| Chilko...... | 172 | Marsh. | 32 |
| Harrison. | 122 | Tagish, part. | 48 |
| Kootenay.... | 220 | Teslin, part... | 123 |
| Okanagan. |  |  |  |
|  | $135$ | Canada. | 649 |
| Quesnel..... | 147 |  |  |
| Shuswap. | 124 |  | 120,924 |

## PHYSICAL CHARACTERISTICS OFF CANADA

Islands.-The northern and western coasts of Canada are skirted by clusters of islands. Those on the north are mostly within the Arctic circle. On the west, Vancouver and Queen Charlotte Islands are the largest and most important. On the east, besides the separate island colony of Newfoundland, there are the Cape Breton Island, forming part of the province of Nova Scotia, Prince Edward Island, forming one of the nine provinces of Canada, the Magdalen Islands and the island of Anticosti. To the south of Newfoundland are the two small islands of St. Pierre and Miquelon belonging to France. In lake Huron is the island of Manitoulin and the so-called Thirty Thousand Islands of Georgian Bay. In the St. Lawrence river, just below lake Ontario, are the picturesque Thousand Islands.

## ECONOMIC GEOLOGY IN CANADA, 1916.

## By Wyatt Malcolm, Geological Survey, Ottawa.

The purpose of this paper is to present a brief review of the most important reports and articles published during the year 1916 that treat of the economic geology of Canada. It is hoped that this review will serve also to indicate to the reader where detailed information regarding different ore deposits may be obtained. The numbers appearing in brackets throughout this paper refer to the names of the publishers as listed at the end.

Antimony.--Brief descriptions of antimony deposits in Nova Scotia, New Brunswick, Quebec, British Columbia and Yukon appear in the Summary Reports for 1915 of the Geological Survey and the Mines Branch, Department of Mines.

Chromite.-A few notes on the occurrence of chromite in British Columbia appeared during the year ( 1 and 5). These are of interest because of the increased demand for chrome iron ore occasioned by war conditions.

Clay and Shales.-The results of investigations into the commercial value of clays and shales of Ontario, of the Moncton area, New Brunswick, and of southern Saskatchewan are described by J. Keele and N. B. Davis (2). Most of the shale deposits of the Moncton area are suitable for the manufacture of building brick, face brick, hollow blocks, roofing tile and field drain tile. In southern Saskatchewan there is an abundant supply of high-grade clays suitable for the manufacture of refractories, stoneware, Rockingham ware, white earthenware and materials for structural purposes. The occurrence of workable seams of lignite in the vicinity of these Saskatchewan clays is of great importance in their commercial development.

Coal.-The coal deposits of Graham island and of the Flathead area in British Columbia are described in two memoirs (1) by J. D. MacKenzie. On Graham island bituminous coal of Cretaceous age is found in two basins; in one basin there is a seam 8 feet thick and in another a seam 4 to 18 feet thick. In a portion of the Flathead area bituminous coal of good coking quality occurs. Seams 4, 7, 8, 25 and 36 feet thick are found in the Kootenay formation.

## ECONOMIC GEOLOGY IN CANADA

Copper.-Some copper deposits in the Telkwa valley and vicinity, British Columbia, are described by J. D. MacKenzie and those of Highland Valley copper camp by C. W Drysdale in the Summary Report of the Geological Survey for 1915. The same publication contains a short description, by E. L. Bruce, of the large body of sulphides discovered at Flin Flon lake north of Pas, Manitoba. The sulphides consist of chalcopyrite, galena, sphalerite, and pyrite. This deposit and another rich deposit of sulphide ore occurring on the west side of the middle arm of Schist lake, as well as other mineral deposits, were examined for the Manitoba Public Utilities Commission by R. C. Wallace and J. S. DeLury, and extracts from their report were published in various mining journals (6). "As a rule the sulphides occur in basic or intermediate volcanic rocks in close proximity to the younger granite. They have been formed as replacement deposits in zones of weakness, along fault planes or planes of brecciation.

The massive ore at the centre of the deposits is mainly copper pyrites, banded with zincblende. Toward the margins copper sulphide gives place to pyrite, which grades insensibly into unmineralized schist." At Schist lake the centre of the deposit consists of very high-grade copper ore, and in spite of the great difficulties of transportation, shipments were being made during the winter of 1916-17 The whole of northern Manitoba is underlain by rocks of pre-Cambrian age in which there are large areas that have not been prospected, and that are worthy of attention.

Feldspar.-Feldspar is a mineral that is used chiefly in the pottery industry and in the manufacture of sanitary and electrical ware and enamelled brick and tile. It is used also in the manufacture of enamel ware and opalescent glass, as a bond in emery and carborundum wheels, as poultry grit and as a covering for tar roofing papers. A small quantity is utilized in making abrasive soaps, and a few tons of high-grade feldspar are used in the manufacture of artificial teeth. In "Feldspar in Canada" (2), by Hugh S. de Schmid, are to be found descriptions of the leading known feldspar deposits of the country. These consist of dykes, and occur in great numbers in southern Ontario and Quebec. Feldspar is one of the chief potash minerals, and the discovery of an economic method of extracting the potash would probably lead to greatly increased mining operations.

Gold.-Early in the year a short report by P E. Hopkins on the Kowkash area (3) appeared. This area attracted some attention because of the discovery of small quantities of gold in veins cutting greenstones of Keewatin age. Occurrences of native gold and of tellurides in quartz veins and veinlets in Keewatin greenstone and later intrusions of granite and porphyry in the Boston Creek district, Ontario, are described by A. G. Burrows and P E. Hopkins (3). Notes are also given by the same writers on an occurrence of gold at Goodfish lake (3), two miles northeast of Kirkland lake, Ontario.

Extracts from a report by R. C. Wallace and J. S. DeLury on goldbearing quartz veins on Herb lake in northern Manitoba appeared in several mining journals (6). E. L. Bruce (6) describes the most important vein discovered on Herb lake prior to the winter of 1914-15 as occurring in a zone of schist 200 feet wide in massive greenstone. It is

## PHYSICAL CHARACTERISTICS OF CANADA

 lenticular in form: varying from nine feet to two feet in width. Visible gold occurs in flakes along dark lines in the quartz or on fracture planes, and in places is seen in apparently unfractured quartz. Some notes by J. S. DeLury on the gold deposits of the Rice lake, Gold lake and Long lake areas, east of lake Winnipeg, appear in the Canadian Mining Journal, volume 37, pages 362-364, August 1, 1916.In a paper by J. B. Tyrrell (6) on the gold occurring in North Saskatchewan river a description is given of the geology of the country through which the river flows, followed by a discussion of theories advanced to explain the source of the gold. He concludes that the fine gold in the river is derived from the Cretaceous rocks on its banks, and that these rocks were derived originally from the mountains west of the Upper Columbia valley.

Information regarding various gold deposits of British Columbia appears in the Annual Report of the Minister of Mines for that province for 1915. Attention might be called more particularly to J. D. Galloway's report on the Nelson mining district. A short report on the Bridge river deposits is given by C. W Drysdale, and one on deposits in the Mayo and Wheaton areas, Yukon, by D. D. Cairnes in the Summary Report of the Geological Survey for 1915.

Infusorial Earth.-A deposit of infusorial earth occurring on Loon island lake, Liverpool river, Queens county, Nova Scotia, is reported on by E. R. Faribault (1). A map showing the areal extent and the thickness of the deposit at various points accompanies the report.

Lead and Zinc.--In a report entitled "Lead and Zine Deposits in Ontario and in Eastern Canada"(3), W L. Uglow presents in concise form the information that had been previously published on this subject and gives the results of much original investigation. In a report on the "Geology of Parts of the Townships of Montauban and Chavigny and of the Seigniory of Grondines" (4), J. Austen Bancroft includes a detailed description of the zine and lead deposits in the vicinity of Notre Dame des Anges, Portneuf county, Quebec. These deposits, which occur in rocks of pre-Cambrian age, are being worked at present.

The lead and zinc deposits of the Slocan, Fort Steele and Windermere mining divisions (5) are briefly described by J D. Galloway. In a paper on the Ainsworth mining camp (6) S. J. Schofield describes the silver-lead deposits of Ainsworth. The district is underlain by a sedimentary series consisting of mica and hornblende schists with beds of limestone, quartzite and argillite: the sediments have been intruded by granite bodies. The ore is found in true fissure veins or as replacements in the limestone. Some fissure veins are parallel with the bedding planes while others are transverse. It is thought that the ore was deposited from solutions given off by the granite. The silver-lead deposits of the Mayo and Wheaton areas, Yukon, are described by D. D. Cairnes in the Summary Report of the Geological Survey for 1915.

Limestone.-Some of the results of investigations made into the nature of the limestones of Quebec are given by Howells Frechette (2). Chemical analyses of a great number of samples are published.

Magnesite.-Reference is made by C. W Drysdale to the occurrences of magnesite associated with serpentinized peridotite in the

## ECONOMIC GEOLOGY IN CANADA

Bridge River district, British Columbia (1). A report by G. A. Young on the hydromagnesite of Atlin mining district, British Columbia (1) may also be had. The hydromagnesite forms beds lying in depressions upon the surface of the earth with a clear-cut boundary between it and the underlying clay-like soil. There are several small areas, the largest of which is about eighteen acres. The thickness of the beds varies from one to five feet, and it is estimated that there are 180,000 tons of hydromagnesite. There is no over-burden to remove in mining operations, and the deposits are so situated that they can be easily drained. Magnesite when calcined is a high-grade refractory material, and all deposits are of particular interest in these days because the product of the Austrian deposits, the most important in the world, are available only to the central European powers.

Molybdenum.-Owing to the increased demand for molybdenum for steel manufacture occasioned by the war, much attention has been devoted to the molybdenite deposits of Canada, and a number of these are being mined. Descriptions of certain deposits and the results of milling tests of molybdenum ores are given by G. C. Mackenzie, W B. Timm and C. S. Parsons (2).

A deposit of molybdenite occurring on Lost creek in the Nelson mining division is described by C. W Drysdale. An ore zone about ten feet thick occurs in a body of granite a few feet from its contact with intruded sediments. In the ore zone the joint planes of the granite are closely spaced, interfinger, and lie generally about parallel to the contact. The molybdenite forms reticulating veinlets following the joint planes and impregnates the granite between the veinlets. Drysdale infers that the molybdenite is slightly younger than the enclosing granite, although from the same parent sources, and that it either accompanied or followed the intrusion of pegmatite dykes, which represent the last stages of crystallization of the granite magma.

Nickel.-A short paper by C. W Knight published in the Engineering and Mining Journal of May 6, 1916, volume 101, pages 811-812, is an important contribution to the literature treating of the origin of the nickel-copper ores of the Sudbury district.

Peat.-The report on the "Investigation of the Peat Bogs and Peat Industry of Canada, 1913-14," by A. Anrep (2), is a profusely illustrated report containing descriptions of a number of peat bogs examined in Ontario, Quebec, Prince Edward Island and Nova Scotia. Diagrams are given showing the area of the bogs and the thickness of the peat.

Phosphate.-After the discovery of float phosphatic rock in the vicinity of Banff by the Commission of Conservation, a closer examination of the district was made by Hugh S. de Schmid, of the Mines Branch. A number of occurrences of phosphate in place were discovered in the upper part of the Rocky Mountain Quartzite (Pennsylvanian), but unfortunately none of these can be considered of economic importance. The results of de Schmid's investigations were published as Bulletin No. 12 of the Mines Branch (2).

Road Materials.--The first memoir published by the Geological Survey on road materials (1) appeared in 1916. This sets forth the results of field work conducted by L. Reinecke, in 1914, on the north

## PHYSICAL CHARACTERISTICS OF CANADA

shore of lake Huron, in Essex and Kent counties, and on the north shore of lake Ontario from Hamilton to Port Hope. Attention is directed to the great quantity of diabase, one of the most valuable of road materials, found on the north shore of lake Huron, and to the fact that conditions are favourable for economical quarrying and transportation. Descriptions are given of gravel deposits occurring in Essex and Kent and near lake Ontario, and an estimate is made of the amount of material available. In the Summary Report of the Geological Survey for 1915 (1) many results of investigations carried on in 1915 in Ontario and Quebec are presented in tabular form.

General.-The Summary Reports of the Geological Survey and of the Mines Branch for 1915 contain many short descriptions that are of interest to the economic geologist. The annual reports of the departments of mines of the provinces are also of great value. The Mining Lands and Yukon Branch, Department of the Interior, published during 1916 a well illustrated report entitled " The Yukon Territory, its History and Resources." This report contains a great deal of valuable information regarding the mineral resources of Yukon. A paper by D. D. Cairnes on the "Economic Possibilities of Yukon" (6) also describes briefly the mineral resources of the territory.

Exploration.-During 1916 the results of certain explorations carried on in little known parts of the country were made public. Charles Camsell presented in a memoir (1) a description of the country along a route that lay between the middle of the north side of lake Athabaska and the mouth of Taltson river, which empties into Great Slave lake forty miles east of the mouth of Slave river. The only other white man known to have entered this country is Samuel Hearne, who passed through this section from west to east in the winter of 1771-1772. The results of explorations made by Charles Camsell in the northern interior of British Columbia, by F. J. Alcock in the Lower Churchill River region, by T. L. Tanton in the Harricanaw basin, and by H. C. Cooke on the headwaters of the Broadback and Nottaway rivers, were published in the Summary Report of the Geological Survey for 1915.

## Source of Reports and Articles Referred to in Text.

(1) Geological Survey, Ottawa. (2) Mines Branch, Department of Mines, Ottawa. (3) Bureau of Mines, Toronto, Ontario. (4) Mines Branch, Department of Colonization, Mines and Fisheries, Quebec, Que. (5) Department of Mines, Victoria, B.C. (6) Canadian Mining Institute, Ritz-Carlton Hotel, Montreal, Que.

## III.-AREA AND POPULATION.

Area by Provinces and Territories.-Table 1 shows the total area of the Dominion in land and water and the distribution into provinces and territories:
1.-Land and Water Area of Canada by Provinces and Territories.

| Provinces. | Land. | Water. | Total Land and water. |
| :---: | :---: | :---: | :---: |
|  | sq. miles. | sq. miles. | sq. miles. |
| Prince Edward Island. . | 2,184 | - | 2,184 |
| Nova Scotia. | 21,068 | 360 | 21,428 |
| New Brunswick. | 27,911 | 74 | 27,985 |
| Quebec. | 690,865 | 15,969 | 706,834 |
| Ontario.. | 365,880 | 41,382 | 407,262 |
| Manitoba. | 231,926 | 19,906 | 251,832 |
| Saskatchewan. | 243,382 | 8,318 | 251,700 |
| Alberta. | 252,925 | 2,360 | 255,285 |
| British Columbia. | 353,416 | 2,439 | 355,855 |
| Yukon.... | 206,427 | 649 | 207,076 |
| Northwest Territories. .. | 1,207,926 | 34,298 | 1,242,224 |
| Total. | 3,603,910 | 125,755 | 3,729,665 |

The water area is exclusive of Hudson bay, Ungava bay, the bay of Fundy, the gulf of St. Lawrence, and all other tidal waters, excepting that portion of the river St. Lawrence which is between Pointe-des-Monts in Saguenay and the foot of Lake St. Peter in Quebec.

Increase of Population.-According to the corrected returns of the fifth Census, the total population on June 1, 1911, was 7,205,643, representing an increase of $1,835,328$ since the previous Census of April 1, 1901. For the period covered, the rate of increase, viz., 34.17 p.c., is the largest in the world, and is due to the heavy tide of immigration which set in with the beginning of the present century. The countries next in order, in respect of the percentage rates of increase during the same decade, are: New Zealand 30.5, the United

## AREA AND POPULATION

States 21, Germany 15.2, Holland 14.8, Switzerland 13.2, Denmark 12.6, Belgium 10.9, Austria 9.3, United Kingdom 9.1, Hungary 8.5, Sweden 7.5, Italy and Norway 6.8 and France 1.6. Ontario and Quebec continue to be the most largely populated of the nine provinces, the former having $2,523,274$ and the latter $2,003,232$ inhabitants. None of the other provinces has yet reached half a million; but Saskatchewan has the third largest population with 492,432 . All the provinces show an increase since 1901, excepting Prince Edward Island, where the population has decreased by 9,531 , or 9.23 p.c. The Yukon and Northwest Territories, with relatively sparse populations, show decreases as compared with 1901. The greatest relative increase is in the western provinces, especially in Saskatchewan and Alberta. The population of Saskatchewan, 492,432, as compared with 91,279 in 1901, shows an increase of 401,153 , or over 439 p.c. Alberta has grown from 73,022 in 1901 to 374,663 in 1911, an increase of 301,641 , or 413 p.c. Manitoba, 455,614 , shows an increase of 200,403 from 255,211 , or 78.5 p.c., and British Columbia one of 213,823 , or over 119 p.c., the population having grown from 178,657 in 1901 to 392,480 in 1911.

Average Density.-The average density of the population works out to 1.93 per square mile, calculated upon the total of $3,729,665$ square miles, as shown in Table 1. This figure may be compared with the density per square mile of other new countries, as, for instance, the United States 30.69, the Argentine Republic 5.99, the Commonwealth of Australia 1.53, the Dominion of New Zealand 9.63 and Newfoundland 1.47 Prince Edward Island has a density of 42.91, Nova Scotia of 22.98, New Brunswick of 12.61, Ontario of 9.67, Manitoba of 6.18 and Quebec of 5.69 . The other three provinces, Saskatchewan, Alberta and British Columbia, are each below 2 per square mile.

## 2.- Population of Canada by Provinces and Territories in the years 1\$71-81-91-1901-11.

| Provinces. | 1871. | 1881. | 1891. | 1901. | 1911. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Prince Edward Island. | 94,021 | 108,891 | 109,078 | 103,259 | 93,728 |
| Nova Scotia. | 387,800 | 440,572 | 450,396 | 459,574 | 492,338 |
| New Brunswick. | 285,594 | 321,233 | 321,263 | 331,120 | 351,889 |
| Quebec. | 1,191,516 | 1,359,027 | 1,488,535 | 1,648,898 | 2,003,232 |
| Ontario. | 1,620,851 | 1,926,922 | 2,114,321 | 2,182,947 | 2,523,274 |
| Manitoba... | 25,228 | 62,260 | 152,506 | 255,211 | 455,614 |
| Saskatchewan. | - | - | , | 91,279 | 492,432 |
| Alberta.. |  | - | - | 73,022 | 374,663 |
| British Columbia. | 36,247 | 49,459 | 98,173 | 178,657 | 392,480 |
| Yukon.... $\quad$. | - | - | - | 27,219 | 8,512 |
| Northwest Territories. | 48,000 | 56,446 | 98,967 | 20,129 | 18,481 |
| TotaIs for Canada | 3,689,257 | 4,324,810 | 4,833,239 | 5,371,315 | 7,206,643 |

## POPULATION

3.-Population of Canada by Provinces and Territories in 1871 and 1911 and increase in each decade from 1871 to 1911.

| Provinces. | $\begin{gathered} \text { Popula- } \\ \text { tion } \\ \text { in } \\ 1871 . \end{gathered}$ | Increase in each decade 1871 to 1911. |  |  |  |  | $\begin{gathered} \text { Increase } \\ 1871 \\ \text { to } \\ 1911 . \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 1871 \\ \text { to } \\ 1881 . \end{gathered}$ | $\begin{gathered} 1881 \\ \text { to } \\ 1891 . \end{gathered}$ | $\begin{gathered} 1891 \\ \text { to } \\ 1901 . \end{gathered}$ | $\begin{gathered} 1901 \\ \text { to } \\ 1911 . \end{gathered}$ |  |  |
| Pr. Ed. Island | 94,021 | 14,81 | 187 | -5,819 | 1 | 93,728 | -293 |
| Nova Scotia | 387, | 52,772 | 9,824 | 9,178 | 32,764 | 492,338 | 04,538 |
| New Brunswick | 285,594 | 35,639 | 30 | 9,857 | 20,769 | 351,889 | 66,295 |
| Quebec. | 1,191,516 | 167,511 | 129,508 | 160,363 | 354,334 | 2,003,232 | 811,716 |
| Ontario. | 1,620,851 | 306,071 | 187,399 | 68,626 | 340,327 | 2,523,274 | 902,423 |
| Manitoba.. | 25,228 | 37,032 | 90,246 | 102,705 | 200,403 | 455,614 | 430,386 |
| Saskatchewan.. |  |  |  | 91,279 | 401,153 | 492,432 | 492,432 |
| Alberta. |  |  |  | 73,022 | 301,641 | 374,663 | 374,663 |
| Brit. Columbia. | 36,247 | 13,212 | 48,714 | 80,484 | 213,823 | 392,480 | 356,233 |
| Yukon. |  |  |  | 27,219 | -18,707 | 8,512 | 8,512 |
| orthwest <br> Territories | 48,000 | 8,446 | 42,521 | -78,838 | -1,648 | 18,481 | -29,519 |
| Totals | 3,689,25 | 635,553 | 508,429 | 538,07 | 835,3 | 7,206, | 517 |

4.-Population of Canada by Provinces and Territories, 1901 and 1911.


## 5.-Area and Popalation of Canada in 1911 by Provinces and Districts and Popalation in 1901.

| Provinces and Districts. | Popdlation in 1911. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Area in acres. | Male. | Female. | Total. | Per square mile. | $\begin{aligned} & \text { Popula- } \\ & \text { tion in } \\ & \text { 1901. } \end{aligned}$ |
| CANADA | 2,386,985,3951 | 3,821,995 | 3,384,648 | 7,206,643 | 1.93 | 5,371,315 |
| Prince Edward Istand. | 1,397,991 ${ }^{1}$ | 47,069 | 46,659 | 93,728 | 42.91 | 103,259 |
| Kings... | 410,355 | 11,598 | 11,038 | 22,636 | 35.31 | 24,725 |
| Prince. | 498,065 | 16,551 | 16,228 | 32,779 | 42.12 | 35,400 |
| Queens. . ... | 489.571 | 18,920 | 19,393 | 38,313 | 50.09 | 43,134 |

Note.-The totals of areas for Canada and the provinces and territories are as measured by a planimeter on the map, and embrace land and water; while those for districts are the totals of their respective subdistricts, and are land areas only, excepting, as may be indicated by footnotes, where large areas are unsurveyed and unoceupied.

Note. The sign ( - ) denotes a decrease.
${ }^{1}$ By map measurement.

## AREA AND POPULATION

## 5.-Area and Population of Canada in 1911 by Provinces and Districts and <br> Population in 1901-con.

| Provinces and Districts. | Area in acres. | Population in 1911. |  |  |  | $\begin{gathered} \text { Popula- } \\ \text { tion in } \\ 1901 . \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Total. | $\begin{aligned} & \text { Per } \\ & \text { square } \\ & \text { mile. } \end{aligned}$ |  |
| Neva Sceti | 13,713,920 ${ }^{1}$ | 251,019 | 241,319 | 492,338 | 22.98 | 459,574 |
| Annapolis. | 847,280 | 9,374 | 9,207 | 18,581 | 14.04 | 18,842 |
| Antigonish. | 355,840 | 5,915 | 6,047 | 11,962 | 21.51 | 13,617 |
| Cape Breton N.and Victoria. | 867,264 | 15,435 | 14,453 | 29,888 | 22.06 | 24,650 |
| Cape Breton S. | 462,016 | 28,853 | 24,499 | 53,352 | 73.90 | 35,087 |
| Colchester | 928,640 | 11,746 | 11,918 | 23,664 | 16.31 | 24,900 |
| Cumberland | 1,077,120 | 20,708 | 19,835 | 40,543 | 24.09 | 36,168 |
| Digby | 640,000 | 10,206 | 9,961 | 20,167 | 20.17 | 20,322 |
| Guysborough.... Halifax City and | 1,059,840 | 8,858 | 8,190 | 17,048 | 10.29 | 18,320 |
| County | 1,358,960 | 40,061 | 40,196 | 80,257 | 37.80 | 74,662 |
| Hants.... | 786,560 | 10,016 | 9,687 | 19,703 | 16.03 | 20,056 |
| Inverness. | 910,600 | 13,079 | 12,492 | 25,571 | 18.15 | 24,353 |
| Kings.. | 552,960 | 10,995 | 10,785 | 21,780 | 25.21 | 21,937 |
| Luenburg. | 769,280 | 17,121 | 16,139 | 33,260 | 27.67 | 32,389 |
| Pictou. | 719,360 | 18,213 | 17,645 | 35,858 | 31.90 | 33,459 |
| Richmond. | 312,960 | 6,828 | 6,445 | 13,273 | 27.14 | 13,515 |
| Shelburne \& Queens | 1,294,387 | 12,261 | 11,950 | 24,211 | 11.97 | 24,428 |
| Yarmouth... | 549,604 | 11,350 | 11,870 | 23,220 | 27.04 | 22,869 |
| New Brunswick. | 17,910,400 ${ }^{1}$ | 179,867 | 172,022 | 351,889 | 12.61 | 331,120 |
| Carleton. | 838,785 | 11,034 | 10,412 | 21,446 | 16.36 | 21,621 |
| Charlotte. | 821,376 | 10,774 | 10,373 | 21,147 | 16.48 | 22,415 |
| Gloucester | 1,196,676 | 16,588 | 16,074 | 32,662 | 17.47 | 27,936 |
| Kent. . | 1,137,931 | 12,435 | 11,941 | 24,376 | 13.71 | 23,958 |
| Kings and Albert | 1,345;110 | 15,470 | 14,815 | 30,285 | $1+.41$ | 32,580 |
| Northumberland. | 3,033,985 | 16,150 | 15,044 | 31,194 | 6.58 | 28,548 |
| Restigouche. | 2,092,595 | 8,434 | 7,253 | 15,687 | 4.80 | 10,536 |
| St. John City and County | 394,163 | 26,082 | 27,490 | 53,572 | 86.98 | 51,759 |
| Sunbury and Queens | 1,618,742 | 8,986 | 8,130 | 17,116 | 6.77 | 16,906 |
| Victoria and Madawaska. | 2,153,549 | 15,086 | 13,136 | 28,222 | 8.39 | 21,136 |
| Westmorland. | 922,993 | 22,703 | 21,918 | 44,621 | 30.94 | 42,060 |
| York. | 2,307,367 | 16,125 | 15,436 | 13,561 | 8.75 | 31,620 |
| Quebec. | 225,198,561 ${ }^{1}$ | 1,011,502 | 991,730 | 2,003,232 | 5.69 | 1,648,898 |
| Argenteuil. | 501,355 | 8,657 | 8,109 | 16,766 | 21.43 | 16,407 |
| Bagot.. | 221,530 | 9,135 | 9,071 | 18,206 | 52.60 | 18,181 |
| Beauce. | 1,210,266 | 26,035 | 25,364 | 51,399 | 27.18 | 43,129 |
| Beauharnois. | 94, 105 | 10,640 | 10,162 | 20,802 | 141.47 | 21,732 |
| Bellechasse | 417,690 | 10,632 | 10,509 | 21,141 | 32.39 | 18,706 |
| Berthier. | 1,403,359 | 9,950 | 9,922 | 19,872 | 9.06 | 19,980 |
| Bonaventure. | 2,216,550 | 14,379 | 13,731 | 28,110 | 8.12 | 24,495 |
| Brome. | 312,422 | 6,871 | 6,345 | 13,216 | 27.07 | 13,397 |
| Chambly and Vercheres. | 215,680 | 14,327 | 14,388 | 28,715 | 85.21 | 24,318 |
| Champlain. | 6,353,248 | 23,293 | 19,465 | 42,758 | 4.31 | 32,015 |
| Charlevoix. | 1,455,034 | 10,649 | 9,988 | 20,637 | 9.08 | 19,334 |
| Chateauguay | 169,779 | 6,647 | 6,675 | 13,322 | 50.22 | 13,583 |
| Chicoutimi and Saguenay.. | 87,795,034 | 32,729 | 30,612 | 63,341 | 0.46 | 48,291 |

${ }^{1}$ By map measurement.

## POPULATION

5.-Area and Population of Canada in 1911 by Provinces and Districts and Population in 1901-con.

| Provinces and Districts. | Area in acres. | Popolation in 1911. |  |  |  | Population in 1901. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Fermale. | Total. | Per square mile. |  |
| Quebec-con. Compton... | 920,986 | 15,655 | 13,975 | 29,630 | 20.59 | 26,460 |
| Dorchester | 602,624 | 12,930 | 12,166 | 25,096 | 26.65 | 21,007 |
| Drummond and Arthabaska. | 766,607 | 21,233 | 20,357 | 41,590 | 34.72 | 38,999 |
| Gaspé... | 2,912,941 | 18,195 | 16,806 | 35,001 | 7.69 | 30,683 |
| Hochelaga. | 1,784 | 36,707 | 38,342 | 75,049 | 26,918.58 | 56,919 |
| Huntingdon | 231,200 | 6,707 | 6,533 | 13,240 | 36.65 | 13,979 |
| Jacques-Cartier | 73,803 | 32,737 | 32,286 | 65,023 | 563.86 | 26,168 |
| Joliette. | 1,928,640 | 11,841 | 12,070 | 23,911 | 7.93 | 22,255 |
| Kamouraska. | 664,006 | 10,619 | 10,269 | 20,888 | 20.13 | 19,099 |
| Labelle. | 2,456,052 | 21,131 | 19,220 | 40,351 | 10.52 | 32,901 |
| Laprairie and Napierville. | 204,288 | 9,937 | 9,398 | 19,335 | 60.57 | 19,633 |
| L'Assomption. | 157,854 | 7,577 | 7,587 | 15,164 | 61.48 | 13,995 |
| Laval. | 95,287 | 15,370 | 14,607 | 29,977 | 201.34 | 19,743 |
| Lévis. | 173,977 | 14,319 | 14,594 | 28,913 | 106.35 | 26,210 |
| L'Islet. | 494,596 | 8,538 | 7,897 | 16,435 | 21.27 | 14,439 |
| Lotbinière. | 464,895 | 11,144 | 11,014 | 22,158 | 30.50 | 20,039 |
| Maisonneuve. | 6,338 | 85,577 | 85,401 | 170,978 | 17,265.27 | 65,178 |
| Maskinonge | 1,881,600 | 8,265 | 8,244 | 16,509 | 5.62 | 15,813 |
| Megantic. | 499,304 | 16,4.99 | 14,875 | 31,314 | 40.14 | 23,878 |
| Missisquoi. | 240,140 | 8,893 | 8,573 | 17,466 | 46.55 | 17,339 |
| Montcalm. . | 2,698,120 | 7,066 | 6,796 | 13,862 | 3.30 | 13,001 |
| Montmagny | 403,286 | 8,729, | 8,627 | 17,356 | 27.54 | 14,757 |
| Montmorency | 1,367,654 | 6,606 | 6,609 | 13,215 | 6.18 | 12,311 |
| Montreal-Ste. Anne | 829 | 11,402 | 10,274 | 21,676 | 16,738. 22 | 23,368 |
| MontrealSt. Antoine. | 1,062 | 23,709 | 24,929 | 48,638 | 29,317,66 | 53 |
| Montreal- |  |  |  |  |  |  |
| St. Jacques. | 438 | 22,0 | 22,029 | 44,057 | 64,410.82 | 42,618 |
| MontrealSt. Laurent | 544 | 27,637 | 28,223 | 55,860 | 65,717.65 | 48,808 |
| Montreal- |  |  |  |  |  |  |
| Ste. Marie | 621 | 27,282 | 27,628 | 54,910 | 56,608.25 | 40,631 |
| Nicolet. | 400,690 | 15,077 | 14,978 | 30,055 | 48.01 | 27,209 |
| Pontiac. | 12,747,098 | 15,634 | 13,782 | 29,416 | 1.48 | 25,722 |
| Portneuf | 952,832 | 15,336 | 15,193 | 30,529 | 20.51 | 27,159 |
| Quebec Centre | 824 | 9,522 | 12,141, | 21,663 | 16.793 .02 | 20,366 |
| Quebec East. | 594 | 22,457 | 24,972 | 47,429 | 51,108.83 | 39,325 |
| Quebec West. | 503 | 4,370 | 5,248 | 9,618 | 12,236.64 | 9,149 |
| Quebec County | 1,746,239 | 12,858 | 12,986 | 25,844 | 9.48 | 22,101 |
| Richelieu. | 141,602 | 10,332 | 10,354 | 20,686 | 93.50 | 19,518 |
| Wolfe. | 783,565 | 20,230 | 19,261 | 39,491 | 32.26 | 34,137 |
| Rimouski. | 3,574,468 | 26,491 | 24,999 | 51,490 | 9.22 | 40,157 |
| Rouville. | 155,505 | 6,609, | 6,522 | 13,131 | 54.12 | 13,407 |
| St. Hyacinthe. | 177,671 | 10,633 | 11,709 | 22,342 | 80.48 | 21,543 |
| St. Johs and Iberville. | 257,934 | 11,062 | 10,820 | 21,882 | 54.29 | 20,679 |
| Shefford. | 363,008 | 12,145 | 11,831 | 23,976 | 42.27 | 23,628 |
| Sherbrooke. | 152,064 | 1],648 | 11,563 | 23,211 | 97.69 | 18,426 |
| Soularges. | 87,111 | 4,640 | 4,760 | 9,400 | 69.06 | 9,928 |

## AREA AND POPULATION <br> 5.-Area and Population of Canada in 1911 by Provinces and Districts and Population in 1901-con.

| Provinces and Districts. | Area in acres, | Population in 1911. |  |  |  | $\begin{gathered} \text { Popula- } \\ \text { tion in } \\ 1901 . \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Total. | Per square mile. |  |
| Quebec-con. |  |  |  |  |  |  |
| Stanstead. | 276,786 | 10,301 | 10,464 | 20,765 | 48.03 | 18,998 |
| Temiscouata. | 1,155,961 | 18,650 | 17,780 | 36,430 | 20.17 | 29,185 |
| Terrebonne. | 500,366 | 14,592 | 14,426 | 29,018 | 37.12 | 26,816 |
| Three Rivers and St. Maurice. | 1,643,552 | 18,203 | 17,050 | 36,153 | 14.08 | 29,311 |
| Two Mountains. | 178,725 | 7,002 | 6,866 | 13,868 | 49.66 | 14,438 |
| Vaudreuil. | 128,414 | 5,585 | 5,454 | 11,039 | 55.02 | 10,445 |
| Wright... | 1,553,711 | 24,771 | 23,561 | 48,332 | 19.91 | 42,830 |
| Yamaska. | 233,578 | 9,805 | 9,706 | 19,511 | 53.46 | 20,564 |
| Quebecunorgadized |  | 1,332 | 734 | 2,066 | - | 2,405 |
| Ontari | 166,951,636 ${ }^{3}$ | 1,299,290 | 1,223,984 | 2,523,274 | 9.67 | 2,182,947 |
| Algoma E | 31,433,370 | 28,938 | 15,690 | 44,628 | 0.91 | 25,211 |
| Algoma W | 14,248,389 | 17,948 | 10,804 | 28,752 | 1.29 | 17,894 |
| Brant. | 213,905 | 9,735 | 9,524 | 19,259 | 57.62 | 18,273 |
| Brantford. | 55,592 | 13,750 | 12,867 | 26,617 | 306.44 | 19,867 |
| Brockville. | 175,919 | 8,990 | 9,541 | 18,531 | 6742 | 18,721 |
| Bruce ${ }^{\text {N }}$ | 608,608 | 12,166 | 11,617 | 23,783 | 25.00 | 27,424 |
| Bruce S. | 447,655 | 13,284 | 12,965 | 26,249 | 3753 | 31,596 |
| Carleton. | 416,558 | 14,762 | 13,644 | 28,406 | 43.64 | 24,380 |
| Dufferin | 356,248 | 9,229 | 8,511 | 17,740 | 31.87 | 21,036 |
| Dundas. | 245,199 | 9,048 | 9,117 | 18,165 | 47.43 | 19,757 |
| Durham | 402,549 | 13,617 | 12,794 | 26,411 | 42.00 | 27,570 |
| Elgin E | 232,014 | 9,002. | 8,595 | 17,597 | 48.54 | 17,901 |
| Elgin W | 228,849 | 13,469 | 13,246 | 26,715 | 74.72 | 25,685 |
| Essex N | 153,133 | 19,497 | 18,509 | 38,006 | 158.84 | 28,789 |
| Essex S. | 299,222 | 15,070 | 14,471 | 29,541 | 63.18 | 29,955 |
| Frontenac. | 1,021,380 | 11,492 | 10,452 | 21,944 | 13.75 | 24,746 |
| Glengarry | 305,660 | 10,608 | 10,651 | 21,259 | 44.51 | 22,131 |
| Grenville. | 296,209 | 8,479 | 9,066 | 17,545 | 37.91 | 21,021 |
| Grey E. | 440,356 | 10,145 | 9,505 | 19,650 | 28.57 | 23,663 |
| Grey ${ }^{\text {N }}$ | 286,784 | 13,778 | 13,213 | 26,991 | 60.23 | 24,874 |
| Grey S. | 365,885 | 9,725 | 9,525 | 19,250 | 33.67 | 21,053 |
| Haldimand | 313,203 | 11,045 | 10,517 | 21,562 | 44.18 | 21,233 |
| Halton. | 232,120 | 11,535 | 10,673 | 22,208 39793 | 61.23 $14,792.94$ | 19,545 24,000 |
| Hamilton $\mathbf{E}$. | 1,724 | 20,989 | 18,804 | 39,793 37,279 | $14,792.94$ $1,053.08$ | 24,000 28,634 |
| Hamilton W | 2,266 80204 | 18,644 13,075 | 18,635 <br> 11,903 | 37,279 24,978 | $\begin{array}{r}1,053.08 \\ 19.34 \\ \hline\end{array}$ | 28,634 27,943 |
| Hastings E . | 826,504 660,205 | 13,075 | 11,903 15,388 | 24,978 30,825 | 19.34 | 27,943 |
| Hastings W | 660,205 274,073 | 15,437 8,090 | 15,388 8,199 | 30,825 16,289 | 29.89 38.04 | 19,227 |
| Huron E . | 274,073 298,535 | 8,090 9,764 | 8,199 9,744 | 16,289 | 41.82 | 19,881 |
| Huron ${ }_{\text {H }}$ ( | 298,535 | 9,764 | 9,744 <br> 8,734 | 17,508 | 44.88 | 19,712 |
| Kent E. | 265.336 | 12,137 | 11,561 | 23,698 | 57.16 | 25,328 |
| Fent if | 321,963 | 16,414 | 15,883 | 32,297 | 64.21 | 31,866 |
| Kingston. | 2,266 | 9,825 | 10,835 | 20,660 | 5,836. 16 | 19,788 |
| Lambton E | 351,140 | 11,267 | 10,956 | 22,223 | 40.51 | 26,919 |
| Lambton W | 368,363 | 14,901 | 14,208 | 29,109 | 50.58 | 29,723 |
| Lamark, N | 362,641 | 7,018 | 7,606 9,847 | 14,624 | 25.82 | 17,236 |
| Lanark S.. | 365,666 | 9,904 | 9,847 | 19,751 | 34.57 | 19,996 19,254 |
| Leeds... | 399,876 | 9,157 | 9,065 | 18,222 | 29.14 | 19,254 |
| Lennox and Addington | 748,654 | 10,131 | 10,255 | 20,386 | 17.42 | 23,346 |

'By map measurement.

## POPULATION

## 5.-Area and Population of Canada in 1911 by Provinces and Districts and Population in 1901-con.

| Provinces and Districts. | $\begin{gathered} \text { Area } \\ \text { in acres. } \end{gathered}$ | Population in 1911. |  |  |  | Population in 1901. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Total. | $\begin{gathered} \text { Per } \\ \text { square } \\ \text { mile. } \end{gathered}$ |  |
| Ontario-con. |  |  |  |  |  |  |
| Lincoln. | 212,739 | 17,902 | 17,527 | 35,429 | 106.58 | 30,552 |
| London. | 4,252 | 21,901 | 24,399 | 46,300 | 6,962.41 | 37,976 |
| Middlesex E | 264,718 | 10,666 | 10,148 | 20,814 | 50.32 | 20,228 |
| Middlesex N | 279,332 | 7,011 | 6,726 | 13,737 | 31.47 | 16,419 |
| Middlesex W | 242,994 | 8,164 | 8,050 | 16,214 | 42.70 | 18,079 |
| Muskoka. | 1,014,650 | 11,204 | 10,029 | 21,233 | 13.39 | 20,901 |
| Nipissing. | 20,206,767 | 43,284 | 30,846 | 74,130 | 2.35 | 28,349 |
| Norfolk. | 405,927 | 13,702 | 13,408 | 27,110 | 42.74 | 29,177 |
| NorthumberlandE. | 280,737 | 10,307 | 9,620 | 19,927 | 45.44 | 23,495 |
| NorthumberlandW. | 170,007 | 6,356 | 6,609 | 12,965 | 48.80 | 13,055 |
| Ontario N. | 323,086 | 8,797 | 8,344 | 17,141 | 33.95 | 18,390 |
| Ontario S | 222,523 | 12,263 | 11,602 | 23,865 | 68.64 | 22,018 |
| Ottawa City | 3,043 | 34,790 | 38,403 | 73,193 | 15,396.21 | 57,640 |
| Oxford N | 262,756 | 12,691 | 12,386 | 25,077 | 61.08 | 25,644 |
| Oxford S. | 226,554 | 11,355 | 10,939 | 22,294 | 62.98 | 22,760 |
| Parry Sound. | 2,514,109 | 14,460 | 12,087 | 26,547 | 6.76 | 24,936 |
| Peel. | 299,849 | 11,644 | 10,458 | 22,102 | 47.18 | 21,475 |
| Perth N | 275,051 | 15,241 | 14,994 | 30,235 | 70.35 | 29,256 |
| Perth S. | 262,281 | 9,677 | 9,270 | 18,947 | 46.23 | 20,615 |
| Peterborough E. | 570,479 | 8,028 | 7,471 | 15,499 | 17.39 | 18,291 |
| Peterborough W | 354,437 | 12,936 | 13,215 | 26,151 | 47.23 | 20,704 |
| Prescott. | 316,344 | 13,669 | 13,299 | 26,968 | 54.46 | 27,035 |
| Prince Edward | 249,853 | 8,448 | 8,702 | 17,150 | 43.93 | 17,864 |
| Renfrew N | 676,998 | 12,091 | 11,526 | 23,617 | 22.32 | 24,556 |
| Renfrew S. | 1,052,770 | 14,299 | 13,643 | 27,852 | 16.93 | 27,676 |
| Russell. | 447,152 | 20,188 | 19,246 | 39,434 | 56.44 | 35,166 |
| Simcoe E | 338,805 | 18,324 | 16,970 | 35,294 | 66.67 | 29,845 |
| Simcoe N | 367,917 | 12,664 | 12,035 | 24,699 | 42.46 | 26,071 |
| Simeoe S. | 357,508 | 12,621 | 12,439 | 25,060 | 44.86 | 26,399 |
| Stormont ${ }_{\text {Thunder }}$ Bay and | 263,890 | 12,273 | 12,502 | 24,775 | 60.10 | 27,042 |
| Thunder Bay and Rainy River | 46,450,167 | 42,293 | 24,956 | 67,249 | 0.93 | 28,987 |
| Toronto Centre. | 651 | 27,550 | 25,575 | 53,125 | 52,083.33 | 43,861 |
| Toronto E. | 2,198 | 33,888 | 35,024 | 68,912 | 20,090.97 | 40,194 |
| Toronto N. | 1,867 | 24,499 | 31,970 | 56,469 | 19,338.70 | 40,886 |
| Toronto S . | 2,917 | 24,312 | 19,644 | 43,956 | 9,639.47 | 38,108 |
| Toronto W | 3,144 | 51,593 | 53,698 | 105,291 | 21,444.22 | 44,991 |
| Victoria. | 1,813,908 | 19,068 | 17,431 | 36,499 | 12.89 | 38,511 |
| Waterloo N | 174, 849 | 16,616 | 17,003 | 33,619 | 123.06 | 27,124 |
| Waterloo S. | 155,271 | 14,475 | 14,513 | 28,988 | 119.47 | 25,470 |
| Welland. | 247,849 | 22,272 | 19,891 | 42,163 | 108.87 | 31,588 |
| Wellington N | 371,496 | 11,366 | 10,926 | 22,292 | 38.40 | 26,120 |
| Wellington S . | 280,882 | 16,265 | 15,935 | 32,200 | 75.36 | 29,526 |
| Wentworth... | 289,257 | 17,724 | 16,910 | 34,634 | 76.63 | 26,818 |
| York Centre. | 213,586 | 13,827 | 12,221 | 26,048 | 78.05 | 21,505 |
| York N | 275,554 | 11,456 | 10,959 | 22,415 | 52.05 | 22,419 |
| York S. | 69,745 | 34,703 | 33,315 | 68,018 | 624.13 | 20,699 |
| Manitoba. | 47,188,298 ${ }^{1}$ | 250,056 | 205,558 | 455,614 | 6.18 | 255,211 |
| Brandon. | 1,864,902 ${ }^{2}$ | 22,127 | 17,607 | 39,734 | 13.64 | 25,047 |
| Dauphin. | 13,193,2492 | 24,384 | 19,616 | 44,000 | 2.14 | 22,631 |
| Lisgar....... | 1,093,1972 | 12,304 | 11,197 | 23,501 | 13.76 | 24,736 |

${ }^{1}$ By map measurement. Total land area.

## AREA AND POPULATION

5.-Ares and Population of Canada in 1911 by Provinces and Districts and Population in 1901-concluded.

| Provinces and Districts. | Area in acres. | Poptlation in 1911. |  |  |  | Population in 1901. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Total. | $\begin{aligned} & \text { Per } \\ & \text { square } \\ & \text { mile. } \end{aligned}$ |  |
| Manitoba-con. |  |  |  |  |  |  |
| Macdonald. . | 2,392,612 ${ }^{2}$ | 19,984 | 15,857 | 35,841 | 9.50 | 23,866 |
| Marquette. | 3,333,889 ${ }^{2}$ | 18,829 | 14,769 | 33,598 | 6.45 | 20,431 |
| Portage la Prairie. | 1,754,456 ${ }^{2}$ | 15,565 | 12,385 | 27,950 | 10.20 | 23,483 |
| Provencher | 3,610,628 ${ }^{2}$ | 21,732 | 18,961 | 40,693 | 7.21 | 24,434 |
| Selkirk. | 11,444, $17 \mathrm{l}^{2}$ | 28,879 | 24,212 | 53,091 | 2.97 | 24,021 |
| Souris. | 2,469,244 ${ }^{2}$ | 16,142 | 12,907 | 29,049 | 7.53 | 24,222 |
| Winnipeg City .... | 12,750 | 70,110 | 58,047 | 128,157 | 6,432.94 | 42,340 |
| Saskatchewan. | 161,088,000 | 291,730 | 200,702 | 492,432 | 1.95 | 91,279 |
| Assiniboia . | 4,803,514 | 24,619 | 17,937 | 42,556 | 5.67 | 9,332 |
| Battleford. | 34,889,994 | 28,734 | 18,341 | 47,075 | 0.86 | 6,171 |
| Humboldt. | 7,489,8692 | 30,405 | 21,790 | 52,195 | 4.45 | 2,166 |
| Mackenzie. | 5,404,8392 | 22,204 | 18,354 | 40,558 | 4.80 | 13,537 |
| Moosejaw. | 21,664,196 ${ }^{2}$ | 55,101 | 32,624 | 87,725 | 2.59 | 5,761 |
| Prince Albert. | 66,087, 803 ${ }^{2}$ | 20,847 | 15,472 | 36,319 | 0.35 | 12,795 |
| Qu'Appelle. . | 3,429,965 ${ }^{2}$ | 20,053 | 15,555 | 35,608 | 6.64 | 17,178 |
| Regina:.. | 5,075,695 ${ }^{2}$ | 44,478 . | 26,078 | 70,556 | 8.90 | 7,703 |
| Saltcoats. | 2,687,635 ${ }^{2}$ | 16,019 | 12,676 | 28,695 | 6.83 | 9,479 |
| Saskatoon. | 4,230,970 ${ }^{2}$ | 29,270 | 21,875 | 51,145 | 7.74 | 7,157 |
| Alberta. | 163,382,4001 | 223,989 | 150,674 | 374,663 | 1.47 | 73,002 |
| Calgary ... | 3,671,5202 | 36,991 | 23,511 | 60,502 | 10.55 | 8,362 |
| Edmonton. | 78,034, $886^{2}$ | 34,567 | 22,478 | 57,045 | 0.46 | 12,823 |
| MacLeod. | 6,020,634 ${ }^{2}$ | 20,516 | 13,988 | 34,504 | 3.66 | 7,856 |
| Medicine Hat. | 16,396,476 ${ }^{2}$ | 43,724 | 26,882 | 70,606 | 2.75 | 10,804 |
| Red Deer | 13,977,487 ${ }^{2}$ | 37,085 | 24,287 | 61,372 | 2.81 | 10,314 |
| Strathcona. | 6, $880,155^{2}$ | 28,536 | 20,937 | 49,473 | 4.62 | 12,345 |
| Victoria. . | 36,890,843 ${ }^{2}$ | 22,570 | 18,591 | 41,161 | 0.71 | 10,518 |
| British Columbia. | 227,747,200 ${ }^{1}$ | 251,619 | 140,86) | 392,480 | 1.09 | 178,657 |
| Comox-Atlin. | 91,680,886 ${ }^{2}$ | 30,969 | 11,294 | 42,263 | 0.30 | 21,457 |
| Kootenay | 17,290,420 ${ }^{2}$ | 33,974 | 16,798 | 50,772 | 1.88 | 31,962 |
| Nanaimo. | 1,738,880 ${ }^{2}$ | 20,124 | 11,698 | 31,822 | 11.71 | 22,293 |
| New Westminster | 3,100,480 | 35,906 | 19,773 | 55,679 | 11.50 | 23,976 |
| Vancouver City | 417,280 ${ }^{2}$ | 74,390 | 49,512 | 123,902 | 10.190 .03 | 28,895 |
| Victoria City. | $1,894^{2}$ | 19,089 | 12,571 | 31,660 | 10,695.95 | 20,919 |
| Yale and Cariboo.. | 111,956,530 ${ }^{2}$ | 37,167 | 19,215 | 56,382 | 0.32 | 29,155 |
| Yukon. | 132,528,6401 | 6,508 | 2,004 | 8,512 | 0.041 | 27,219 |
| N.W. Territories. | 229,878,400 | 9,346 | 9,135 | 18,481 | 0.010 | 20,129 |

[^4]
## POPULATION

6.-Population of Cities and Towns having over 5,000 inhabitants in 1911, compared with 1871-81-91-1901.

| Cities and Towns. | Provinces. | Popdlation. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1871. | 1881. | 1891. | 1901. | 1911. |
| Montrea ${ }^{3}$ | Quebec. | 115,000 | 155,238 | 219,616 | 267,730 | 470,480 |
| Toronto ${ }^{1}$ | Ontario... | 59,000 | 96,196 | 181,215 | 208,040 | 376,538 |
| Winnipeg ${ }^{1}$ | Manitoba. | 241 | 7,985 | 25,639 | 42,341 | 136,035 |
| Vancouver ${ }^{1}$. | British Columbia.. |  |  | 13,709 | 27,010 | 100,401 |
| Ottawa ${ }^{1}$ | Ontario... | 24,141 | 31,307 | 44,154 | 59,928 | 87,062 |
| Hamilton' |  | 26,880 | 36,661 | 48,959 | 52,634 | 81,969 |
| Quebec. | Quebec. | 59,699 | 62,446 | 63,090 | 68,840 | 78,710 |
| Halifax. | Nova Scotia. | 29,582 | 36,100 | 38,437 | 40,832 | 46,619 |
| London. | Ontario... | 18,000 | 26,266 | 31,977 | 37,976 | 46,300 |
| Calgary. | Alberta. |  |  | 3,876 | 4,392 | 43,704 |
| St. John. | New Brunswick. | 41,325 | 41,353 | 39,179 | 40,711 | 42,511 |
| Victoria. | British Columbia.. | 3,270 | 5,925 | 16,841 | 20,919 | 31,660 |
| Regina... | Saskatchewan.... |  | - |  | 2,249 | 30,213 |
| Edmonton. | Alberta... |  |  | - | 2,626 | 24,900 |
| Brantford. | Ontario. | 8,107 | 9,616 | 12,753 | 16,619 | 23,132 |
| Kingston. | " | 12,407 | 14,091 | 19,263 | 17,961 | 18,874 |
| Maisonneuve. | Quebec. |  |  |  | 3,958 | 18,684 |
| Peterborough... | Ontario... | 4,611 | 6,812 | 9,717 | 11,239 | 18,360 |
| Hull. | Quebec. | 3,800 | 6,890 | 11,264 | 13,993 | 18,222 |
| Windsor | Ontario. | 4,253 | 6,561 | 10,322 | 12,153 | 17,829 |
| Sydney. | Nova Scotia. | - | 1,480 | 2,427 | 9,009 | 17,723 |
| Glace Bay |  |  |  | 2,459 | 6,945 | 16,562 |
| Fort William. | Ontario. |  |  |  | 3,633 | 16,499 |
| Sherbrooke. | Quebec. | 4,432 | 7,227 | 10,110 | 11,765 | 16,405 |
| Berlin. | Ontario. | 2,743 | 4,054 | 7,425 | 9,747 | 15,196 |
| Guelph.... |  | 6,878 | 9,890 | 10,537 | 11,496 | 15,175 |
| Westmount... | Quebec. | 200 | 884 | 3,076 | 8,856 | 14,579 |
| St. Thomas. | Ontario... | 2,197 | 8,367 | 10,366 | 11,485 | 14,054 |
| Brandon. | Manitoba... |  |  | 3,778 | 5,620 | 13,839 |
| Moosejatw. | Saskatchewan | 7 | - ${ }^{-}$ |  | 1,558 | 13,823 |
| Three Rivers. . | Quebec. | 7,570 | 8,670 | 8,334 | 9,981 | 13,691 |
| New Westminster | Brit. Columbia. |  | 1,500 | 6,678 | 6,409 | 13,199 |
| Stratford. | Ontario... | 4,313 | 8,239 | 9,560 | 9,959 | 12,946 |
| Owen Sound. |  | 3,369 | 4,426 | 7,497 | 8,776 | 12,558 |
| St. Catharines. |  | 7,864 | 9,631 | 9,170 | 9,946 | 12,484 |
| Saskatoon. | Saskatchewan.. | - | - | - | 113 | 12,004 |
| Verdun..... | Quebec. | - | 5 | 2016 | 1,898 | 11,629 |
| Moncton. | New Brunswick. | 600 | 5,032 | 8,762 | 9,026 | 11,345 |
| Port Arthur.. | Ontario. | - | , |  | 3,214 | 11,220 |
| Charlottetown... | P. E. Island. | 8,807 | 11,485 | 11,373 | 12,080 | 11,198 |
| Sault Ste. Marie. | Ontario. | 879 | 780 | 2,414 | 7,169 | 10,984 |
| Chatham. |  | 5,873 | 7,873 | 9,052 | 9,068 | 10,770 |
| Lachine.. | Quebec. | 1,696. | 2,406 | 3,761 | 5,561 | 10,699 |

${ }^{1}$ Population of the city municipality.

| 6.- Population of Cities and Towns having over 5,000 inhabitants in 1911, compared with 1871-81-91-1901-con. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cities and Towns. | ovinces. | Popuation. |  |  |  |  |
|  |  | 1871. | 1881. | 1891. | 1901. | 1911. |
|  |  |  |  |  |  |  |
| Sarnia |  |  | 3,3,874 <br> 3,84 | ${ }_{\text {7,692 }}^{7,535}$ | ${ }_{8,176}^{7,566}$ | $\xrightarrow[\substack{10,299 \\ 9,94}]{ }$ |
| St. Hyacintie. | Quebec |  |  | ${ }_{\text {7,016 }}^{\text {9,916 }}$ | ¢, | ${ }_{9}^{9,797}$ |
| Valleyfield. | 40 |  | 3,906 | 5,515 | ${ }^{11,055}$ | , |
| Brockville. | ${ }^{\text {ario. }}$ | ¢ | , | ${ }_{8}^{8,791}$ | 8,940 | ${ }^{9,374}$ |
| Niagara Falls. |  |  | 2,347 | $\underset{\substack{8,319}}{8,61}$ | ${ }_{\substack{8,7,23}}$ | 9,248 |
| Amberst. | Nova, | 5,636 | cient | coinc\| | 4 | 8,973 |
| Nanaimo... | ${ }_{\text {Brite }}{ }_{\text {ciclue }}$ Columbia. |  | ${ }_{\substack{1,665}}^{\text {1,791 }}$ | ${ }_{\substack{6,669 \\ 4,595}}^{\text {a }}$ | ${ }_{6,130}^{7,057}$ | 8,430 8,306 |
| North ${ }_{\text {Lethridgeo... }}$ | ${ }^{\text {Alberia. }}$ |  |  |  | 2,072 | 8,196 <br> 8,050 |
| North bay | Ontario. |  |  |  | 30 | ${ }_{7}^{7,783}$ |
| Sty | Mova Scotia. |  | ci, | $\xrightarrow{1,4653}$ |  | 7,483 |
|  | Cuebec |  | 7,592 | 7,001 | T,7839 | $\underset{7,432}{7,45}$ |
| Thetiord Mines. | Quebec. |  |  |  | 3,256 | ${ }_{7}$ |
| ${ }_{\text {F }}^{\text {Fredericton }}$ Colingwod. | New Brusswick. | (6,006 | ${ }_{6}^{6,218} 4$ | - 6.5092 | 7,7175 | $\xrightarrow{7,208}$ |
| Lindsay | " | \| | 5,080 | 6,081 |  | 6,964 |
| ${ }_{\text {Fraservilie }}$ | Quebec | ${ }_{\substack{1,511}}^{1,282}$ | 2,291 | ${ }_{4}^{4,175}$ | ${ }_{4}^{4,569}$ | ${ }^{6,7874}$ |
| Yarmouth... | Nova Scotia | 2,500 | 3,485 | 6,0899 | 6,430 | 6,600 |
| ${ }_{\text {Cornwal }}$ | Ontario | $\xrightarrow{2,033} 8$ | ${ }^{4}$ | cisis) | \|i, | -6,598 |
| New Glasgow | Nova Scotia. |  | ${ }^{2,595}$ | 3,776 | 4 | 6,383 |
| Joliete Se | Ontare. | $\xrightarrow{1,150}$ | , |  | ci, | ${ }_{6,346}^{6,37}$ |
| Prince Albert. | Saskatchewan. |  |  |  | 1,785 | 6,254 |
|  | Nova Seotia |  | 3,461 | ${ }_{5}^{1,1020}$ |  | ${ }_{6,107}^{6,108}$ |
| St. Johns. | Quebe | 3,022 | 4,314 | 4,7222 | 4,030 | 5,903 |
| Portage la Prairie. | Muebee. | 1,393 | 1,935 |  | 3,826 |  |
| Spring Hill... | Nova Scotia. |  | ,900 | 4,813 | 5,178 | ${ }_{5}^{5,713}$ |
| Pembroie. | ${ }^{\text {and }}$ | 1,508 | 2,820 | 4,401 | 5,156 | 5,620 |
| Medicine Hat. | Alberta. |  |  |  | 1,550 | ${ }_{\text {5,579 }}$ |
| North Sydiey | $\stackrel{\text { Nov }}{\text { Ont }}$ |  | 1,520 | 2,513 | 4,6 | ${ }_{5}^{5,418}$ |
| Welland. | O | 1, 110 |  |  | ${ }_{1}^{1,863}$ | ${ }_{5}^{1,318}$ |
| ${ }_{\text {Port Hope. }}$ |  | ${ }_{5}^{5}, 114$ | 5,5811 | 5,042 | 4,1838 | 5,092 |
| Dartmouth. | Nova Scotia. |  | ${ }_{3,786}$ | ${ }_{6,252}^{4,2}$ | 4.806 | 5,058 |
|  |  |  |  |  |  |  |

## POPULATION

## 7.-Urban Population of Canada by Size Groups, 1901 and 1911.

| In Cities and Towns of | 1901. |  |  |  | 1911. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Places | Population. | Per cent. of |  | Number of Places | Population. | Per cent. of |  |
|  |  |  | Urban Pop. | Total Pop. |  |  | Urban Pop. | Total Pop. |
| Over 400,000... | - | - | - | - | 1 | 470,480 | 14.34 | 6.53 |
| Between |  |  |  |  |  |  |  |  |
| 300,000 and 400,000 | - | - ${ }^{-}$ |  | - | 1 | 376,538 | 11.48 | 5.22 |
| 200,000 and 300,000 | 2 | 475,770 | 23.53 | 8.86 | - |  | 1 |  |
| 100,000 and 200,000 | - |  | - | - | , | 236,436 | 7.21 | 3.28 |
| 50,000 and 100,000 |  | 181,402 | 8.97 | 3.38 | 3 | 247,741 | 7.55 | 3.44 |
| 25,000 and 50,000 | 5 | 188,869 | 9.34 | 3.52 | , | 241,007 | 7.35 | 3.34 |
| 15,000 and 25,000 | 3 | 55,499 | 2.75 | 1.03 | 13 | 237,551 | 7.24 | 3.30 |
| 10,000 and 15,000 | 8 | 95,266 | 4.71 | 1.77 | 18 | 221,322 | 6.74 | 3.07 |
| 5,000 and 10,000 | 37 | 275,919 | 13.65 | 5.14 | 46 | 323,056 | 9.85 | 4.48 |
| 3,000 and 5,000 | 50 | 190,789 | 9.44 | 3.55 | 60 | 226,212 | ${ }^{6.89}$ | 3.14 |
| 1,000 and 3,000 | 187 | 320,433 | 15.85 | 5.97 | 251 | 429,553 | 13.09 | -5.97 |
| 500 and 1,000 | 179 | 130,238 | 6.44 | 2.42 | 247 | 180,784 | 5.51 | 2.51 |
| Under 500 |  | 107,614 | 5.32 | 2.00 | - | 90,284 | 2.75 | 1.25 |
| Total. |  | ,021,7991 | 100.06 | 37.64 | - | 3,280,964 | 100.00 | 45.53 |

## 8.-Rural and Urban Population of Canada in 1901 and 1911 by Provinces, and increase or decrease in the decade.

| Provinces. | Poptlation 1901. |  | Population 1911. |  | Increase or Decrease. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rural. | Urban. | Rural. | Urban. | Rural. | Urban. |
| Prince Edward Istand. | 88,304 | 14,955 | 78,758 | 14,97i | -9,546 | 15 |
| Nova Scotia. | 330,191 | 129,383 | 306,210 | 186,128 | $-23,981$ | 56,745 |
| New Brunswick. | 253,835 | 77.285 | 252,342 | 99,547 | $-1,493$ | 22,262 |
| Quebec.... | 992,667 | 656,231 | 1,032,618 | 970,614 | 39,951 | 314,383 |
| Ontario. | 1,246,969 | 935,978 | 1,194,785 | 1,328,489 | $-52,184$ | 392,511 |
| Manitoba. | 184,738 | 70,473 | 255,249 | 200,365 | 70,511 | 129,892 |
| Saskatchewan. | 73,729 | 17,550 | 361,067 | 131,365 | 287, $3: 38$ | 113,815 |
| Alberta.. ${ }^{\text {British Columbia }}$ | 52,399 | 20,623 | 232, ${ }^{2} 26$ | 141,937 | 180,327 | 121,3!4 |
| British Columbia.. | 88,478 | 90,179 | 188,796 | 203,684 | 100,318 | 113,505 |
| Northwest Territories | 20,129 | 9,42 | -4,641 | 3,865 | $-13,430$ <br> $-1,648$ | -5,2i7 |
| Canada. | 3,349,516 | 2,021,799 | 3,925,679 | 3,280,964 | 576,163 | 1,259,165 |

Nore.--The sign minus (-) denotes a decrease.

AREA AND POPULATION
9.-Rural and Urban Population of Canada by Provinces and Sexes, 1911.

| Provinces. | Males. |  |  |  | Females. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rural. | Urban. | Total. | Excess of Rural over Urban. | Rural. | Urban. | Total. | Excess of Rural over Urban. |
| PrinceEdw'd Island. | 40,192 | 6,877 | 47,069 | 33,315 | 38,566 | 8,093 |  | 30,473 |
| Nova Scotia. | 157,878 | 93,141 | 251,019 | 64,737 | 148,332 | 92,987 | 241,319 | 55,345 |
| New Brunswick. |  |  | 179,867 | 83,331 |  | 51,279 | 172,022 |  |
| Quebec. | 533,117 | 478,385 | 1,011,502 | 54,732 | 499,501 | 492,229 | 991,730 | 7,272 |
| Ontario. | 639,850 | 659,440 | 1,299,290 | -19,590 | 554,935 | 669,049 | 1,223,984 | -114,114 |
| Manitoba | 141,912 | 108,144 | 250,056 | 33,768 | 113,337 | 92,221 | 205,558 | 21,116 |
| Saskatchew'n | 212,522 | 79,208 | 291,730 | 133,314 | 148,545 | 52,157 | 200,702 | 96,388 |
| Alberta. | 140,781 | 83,208 | 223,989 | 57,573 | 91,945 | 58,729 | 150,674 | 33,216 |
| British | 128,242 | 123,377 |  | 4,865 | 60,554 | ,307 | 140,861 | -19,753 |
| Yukon. | 3,634 | 2,874 | 6,508 | 760 | 1,013 | 991 | 2,004 | 22 |
| Northwest Territories | 9,346 | _ | 9,346 | 9,346 | 9,135 | - | 9,135 | 9,135 |
| Canada. | 2,139,073 | 1,682,922 | 3,821,995 | 456,151 | 1,786,606 | 1,598,042 | 3,384,648 | 188,564 |

Note.-The sign minus (-) denotes a decrease.

Sex Ratios.-The male population of Canada was returned as $3,821,995$ and the female as $3,384,648$; so that the excess of males over females is 437,347 , which is in the ratio of $1.13: 1,-$ an excess percentage of $13,-$ or of 130 males per 1,000 females. Reciprocally the number of females per 1,000 males is 886 , the deficiency of females as compared with males being greater in Canada than probably in any other country. Amongst other countries showing a similar female deficiency per 1,000 males are Ceylon (888), the Dominion of New Zealand (896), the Commonwealth of Australia (926), the Union of South Africa (941), the United States (943) and India (953). Excepting India and Ceylon, where female infanticide has prevailed, the countries named are new, and the proportions are affected by immigration in which the male element predominates. In England and Wales the number of females per 1,000 males was 1,068 both in 1911 and 1901, and only Norway shows a greater proportion, viz., 1,069 . In other European countries the number of females per 1,000 males is: Scotland 1,063, Denmark 1,061, Sweden 1,046; Austria 1,036, France 1,033 (in 1901), Switzerland 1,031, Germany 1,026, Holland 1,021, Hungary 1,019, Belgium 1,017, Italy 1,010 (in 1901) and Ireland $1,004$.

The proportions by provinces in Canada are shown in Table 10 for the two census years 1901 and 1911. For the latter year the number

## POPULATION

of females per 1,000 males for each province was: British Columbia 560, Manitoba 622, Alberta 673, Saskatchewan 688, Ontario 942, New Brunswick 956, Nova Scotia 961, Quebec 980 and Prince Edward Island 991. It will be seen that the disparity is especially marked in the western provinces.

Table 11 shows the percentage proportion of females to males in the rural and urban divisions of the population, respectively, for the census year 1911. Amongst the rural population the female element is in defect for Canada by 16.48 p.c., but amongst the urban population it is so by only 5.05 p.c. The defect is most marked in the western provinces. Of the urban population, in two out of the three Maritime Provinces, in Quebec and in Ontario, there is actually an excess of the female population, such excess being as high as 17.68 p.c. in Prince Edward Island. But in the west the female deficiency is again apparent, though (except as regards Saskatchewan) not to the same extent as in the rural population.

$$
\text { 10.-Population of Canada by Sexes, } 1901 \text { and } 1911 .
$$

| Provinces. | 1901. |  |  | 1911. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Excess of Males. | Males. | Females. | $\begin{aligned} & \text { Excess } \\ & \text { of } \\ & \text { Males. } \end{aligned}$ |
| Prince Edward Island... | 51,959 | 51,300 | 659 | 47,069 | 46,659 | 410 |
| Nova Scotia... .. | 233,642 | 225,932 | 7,710 | 251,019 | 241,319 | 9,700 |
| New Brunswick... | 168,639 | 162,481 | 6,158 | 179,867 | 172,022 | 7,845 |
| Quebec... | 824,454 | 824,444 | 10 | 1,011,502 | 991,730 | 19,772 |
| Ontario. | 1,096,640 | 1,086,307 | 10,333 | 1,299,290 | 1,223,984 | 75,306 |
| Manitoba. | 138,504 | 116,707 | 21,797 | 250,056 | 205,558 | 44,498 |
| Saskatchewan. | 49,431 | 41,848 | 7,583 | 291,730 | 200,702 | 91,028 |
| Alberta. | 41,019 | 32,003 | 9,016 | 223,989 | 150,674 | 73,315 |
| British Columbia. | 114,160 | 64,497 | 49,663 | 251,619 | 140,861 | 110,758 |
| Yukon. | 23,084 | 4,135 | 18,949 | 6,508 | 2,004 | 4,504 |
| Northwest Territories.. | 10,176 | 9,953 | 223 | 9,346 | 9,135 | 221 |
| Canada. | 2,751,708 | 2,619,607 | 132,101 | 3,821,995 | 3,384,648 | 437,347 |

Number of Females per $\mathbf{1 , 0 0 0}$ Males.

| Provinces. | 1901. | 1911. | Provinces. | 1901. | 1911. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Prince Edward Island. | 987 | 991 | Saskatchewan.. | 847 | 688 |
| Nova Scotia. | 967 | 961 | Alberta. | 780 | 673 |
| New Brunswick. | 963 | 956 | British Columbia... | 565 | 560 |
| Quebec. | 1,000 | 980 | Yukon... | 179 | 308 |
| Ontario... | 990 | 942 | Northwest Territories. | 978 | 977 |
| Manitoba... | 643 | 622 | Canada. | 952 | 886 |

## AREA AND POPULATION <br> 11.-Ratio of Females to Males in Rural and Urban Divisions, 1911.

| Provinces. | Rural. | Urban. | Provinces. | Rural. | Urban. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | p.c. | p.c. |  | p.c. |  |
| Prince Edward Island. | 95.95 | 117.68 | Saskatchewan. | 69.90 | 65.85 |
| Nova Scotia. | 93.95 | 99.84 | Alberta... | 65.31 | 70.58 |
| New Brunswick. | 91.75 | 106.24 | British Columbia. | 47.22 | 65.00 |
| Queber | 93.69 | 102.89 | Yukon. | 30.35 | 34.48 |
| Ontario... | 86.73 | 101.46 | Northwest Territories.. | 9774 | - |
| Manitoba.... | 79.86 | 85.28 | Canada. | 83.52 | 94.95 |

12.-Conjugal Condition of the people of Canada, classified as single, married, widowed, divorced, legally separated and not given, by Provinces, Census of 1911.

| Provinces. | Males. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Single. | Married. | Widowed. | Divorc- <br> ed. | Legally separated. | Not Given. | Total. |
| Prince Edward Isl'd. | 30,216 | 15,266 | 1,513 | 7 | 5 | 62 | 47,069 |
| Nova Scotia. | 156,643 | 86,277 | 6,891 | 38 | 37 | 1,133 | 251,019 |
| New Brunswick. | 113,015 | 61,131 | 4,978 | 51 | 40 | 652 | 179,867 |
| Quebec. | 637,113 | 342,933 | 26,064 | 134 | 401 | 4,857 | 1,011,502 |
| Ontario. | 762,330 | 492,650 | 33,564 | 189 | 539 | 10,018 | 1,299,290 |
| Manitoba. | 160,159 | 83,897 | 3,926 | 50 | 50 | 1,884 | 250,056 |
| Saskatchewan. | 192,352 | 90,765 | 4,291 | 85 | 82 | 4,155 | 291.730 |
| Alberta. | 147,587 | 70,706 | 3,385 | 106 | 53 | 2,152 | 223,989 |
| British Columbia. | 160,218 | 83,096 | 4,079 | 145 | 70 | 4,011 | 251,619 |
| Yukon. | 4,672 | 1,623 | 169 | 31 | 7 | 6 | 6,508 |
| N. H. Territories. | 5,461 | 3,419 | 294 | 3 | 2 | 167 | 9,346 |
| Canada . | 2,369,766 | 1,331,853 | 89,154 | 839 | 1,286 | 29,097 | 3,821,995 |
| Provinces. | Females. |  |  |  |  |  |  |
|  | Single. | Married. | Widowed. | Divoreed. | Legaily separated. | Not Given | Total. |
| Prince Edward Isl'd. | 28,162 | 15,138 | 3,279 | 8 | 10 | 62 | 46,659 |
| Nova Scotia. | 139,958 | 84,008 | 18.440 | 36 | 55 | 822 | 241,319 |
| New Brunswick. | 101,288 | 60,060 | 10,380 | 37 | 42 | 206 | 172,022 |
| Quebec. | 608,366 | 334,564 | 46,658 | 169 | 511 | 1,462 | 991,730 |
| Ontario. | 672,923 | 468,186 | 78,407 | 227 | 693 | 3,548 | 1,223,984 |
| Manitoba.: | 118,669 | 78,751 | 7,260 | 38 | 82 | 758 | 205,558 |
| Saskatchewan. | 112,387 | 82,189 | 5,556 | 34 | 55 | 481 | 200,702 |
| Alberta. | 83,026 | 62,710 | 4,509 . | 37 | 60 | 332 | 150,674 |
| British Columbia. | 71,585 | 61,359 | 6,178 | 87 | 69 | 1,583 | 140,861 |
| Yukon.... | 834 | 1,012 | ${ }^{135}$ | 18 | 4 | 1 | 2,004 |
| N. W Territories. | 4,688 | 3,482 | 854 | - | 3 | 108 | 9,135 |
| Canada. | 1,941,886 | 1,251,468 | 179,656 | 691 | 1,584 | 9,363 | 3,384,648 |

Foreign-born Population.-A special report issued by the Census and Statistics Office in 1915 gives the foreign-born population of Canada in 1911 as 752,732 , which is 10.4 p . c. of the total population of $7,206,643$. The report possessed special interest in consequence of the war, and Table 13, which is constructed from data contained therein, shows how the foreign-born population in Canada is distributed as between the present hostile, allied and neutral countries.

Tables 14 to 18 show the numbers of the foreign-born population of Canada in 1911 under a variety of classifications as to sex, year of arrival, province, birth-place and citizenship. Table 19 shows the numbers of the foreign-born population in cities of 15,000 and over. Although numerically the numbers of the foreign-born in Montreal and Toronto are greater than in any of the western cities, yet the proportions are considerably smaller, being $9 \cdot 2$ p.c. for Montreal and $8.8^{\circ}$ p.c. for Toronto, as compared with 27.6 p.c. for Vancouver, 24.2 p.c. for Winnipeg, 22.6 p.c. for Regina, 22.5 p.c. for Edmonton and over 20 p.c. for Calgary and Victoria.
13.-Distribution of Foreign-born Popalation as between Hostile, Allied and Neutral Countries, 1911.

| Hostile countries. |  | Allied countries. |  | Neutral countries. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Austria-Hungary. | 121,430 | Belgium. | 7,975. | Denmark. | 4,937 |
| Germany . | 39,577 | France. | 17,619 | Iceland. | 7,109 |
| Turkey and Syria | 4,768 | Italy | 34,739 | Norway and |  |
| Bulgaria.. . | 1,666 | Japan. . | 8,425 | Sweden. | 49,194 |
|  |  | Russia... | 89,984 | Other countries. . | 15,568 |
|  |  | Finland... | 10,987 |  |  |
|  |  | Rumania. | 7,991 |  |  |
|  |  | China. | 27,088 |  |  |
|  |  | United States. | 303,680 |  |  |
| Total... | 167.441 | Total... | 508,483 | Total. | 76,808 |

The immigration records show tbat, for the fiscal years 1912 to 1915, 78,999 Austro-Hungarians and 17,626 Germans have entered the country. No statistics of departures are available. Of the total of 752,732 foreign-born persons in Canada, in 1911, 470,927, or $62 \cdot 6$ p.c., were males and 281,805 , or $37 \cdot 4$ p.c., were females, the males amongst the foreign-born of hostile countries being for Austria-Hungary 77,562, for Germany 39,577 and for Turkey and Syria 3,523. The total number of foreign-born who have become naturalized British subjects in Canada is 344,557 , or nearly 46 p.c. of the total foreignborn. Persons born in the enemy countries, but who have become naturalized in Canada, number for Austria-Hungary 60,949 , or 50 p.c., for Germany 23,283 , or 59 p.c., and for Turkey and Syria 1,889 , or 39 p.c. Of the total foreign-born population, 303,680 were born in the United States. Of this number 152,308 were naturalized and 151,372 were still alien. Of the immigrant population born in the United States 136,720 were of British, 1,804 were of Austro-Hungarian and 45,374 were of German origin. Of these numbers, 70,527 of British origin, 813 of Austro-Hungarian origin, and 21,362 of German origin were naturalized.

AREA AND POPULATION.
14.-Foreign-born Males, 21 years of age and over, by Citizenship and by Provinces, 1911.

| Provinces. | Total males foreignborn | Aggregate. |  | Naturalized. |  |  | Alien. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number. | Per cent of total males. | Number. | Per cent of total males. | Per cent of males 21 and over. | Number. | Per cent of total males. | Per <br> cent <br> of <br> males <br> 21 and <br> over. |
| Prince Edward Island. | 473 | 161 | 34.04 | 101 | 21.35 | 62.73 | 60 | 12.69 |  |
| Nova Scotia. | 6,679 | 4,451 | 66.64 | 1,518 | 22.72 | 34.10 | 2,933 | 43.92 | 65.90 |
| New Brusswick. | 4,396 | 2,755 | 62.67 | 1,255 | 28.55 | 45.55 | 1,500 | 34.12 | 54.45 |
| Quebec. | 42,647 | 29,822 | 69.93 | 13,042 | 30.58 | 43.73 | 16,780 | 39.35 | 56.27 |
| Ontario.. | 94,952 | 74,026 | 77.96 | 21,022 | 22.14 | 28.40 | 53,004 | 55.82 | 71.60 |
| Manitoba. | 54,027 | 38,679 | 71.59 | 21,831 | 40.41 | 56.44 | 16,848 | 31.18 | 43.56 |
| Saskatchewan.. | 96,781 | 65,345 | 67.52 | 33,518 | 34.63 | 51.29 | 31,827 | 32.89 | 48.71 |
| Alberta. | 87,780 | 59,799 | 68.12 | 26,787 | 30.52 | 44.79 | 33,012 | 37.60 | 55.21 |
| British Columbia | 80,500 | 68,963 | 85.67 | 12,188 | 15.14 | 17.67 | 56,775 | 70.53 | 82.33 |
| Total ${ }^{1}$ | 468,235 | 344,001 | 73.48 | 131,262 | 28.03 | 38.16 | 212,739 | 45.45 | 61.84 |

${ }^{1}$ Exclusive of Yukon and Northwest Territories with total males (2,692) of unreported years of immigration of whom 2,522 were 21 years of age and over. Of the latter only 27 were reported naturalized.
15.-Foreign-born Male Population of Canada, 21 Years of Age and over, by Birthplace and Citizenship, 1911.

| Country of Birth. | Males 21 years of age and over. |  |  | Country of Birth. | Males 21 years of age and over. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Na-turalized. | Alien. | Total. |  | Na-turalized. | Alien. | Total. |
| Europe- |  |  |  | Asia- |  |  |  |
| Austria- |  |  |  | China. | 2,144 | 21,442 | 23,586 |
| Hungary | 23,846 | 33,904 | 57,750 | Japan. | 1,491 | 5,208 | 6,699 |
| Belgium. | 1,674 | 2,451 | 4,125 | Turkey | 1,074 | 1,813 | 2,887 |
| Bulgaria and |  |  |  | Other.. | 76 | 212 | 288 |
| Rumania.. | 1,400 | 3,201 | 4,601 |  |  |  |  |
| Denmark. | 4,023 | 2,199 | 6,222 | Total, Asia. | 4,785 | 28,675 | 33,460 |
| France... | 4,624 | 4,607 | 9,231 |  |  |  |  |
| Germany | 12,001 | 8,632 | 20,633 | United States... | 42,131 | 59,636 | 101,767 |
| Greece.. | 353 | 1,628 | 1,981 | Other Countries. | 476 | 951 | 1,427 |
| Holland. | 536 | 1,230 | 1,766 |  |  |  |  |
| Italy | 4,232 | 20,141 | 24,373 | Total, Foreign |  |  |  |
| Norway and Sweden. | 11,722 | 17,930 | 29,652 | born 21 years and over | 131,289 | 215,234 | 346,523 |
| Russia and |  |  |  |  |  |  |  |
| Finland. | 18,478 | 27,540 2,509 |  |  |  |  |  |
| Other. . | 1,008 | 2,509 | 3,517 |  |  |  |  |
| Total, Europe | 83,897 | 125,972 | 209,869 |  |  |  |  |

POPULATYON.
16.-Foreign-born Population of Canada by Sex and Year of Arrival, 1911.

17.-Foreign-born Population of Canada by Provinces, 1911, with year of Arrival.

| Provinces. | Total foreign born, June, 1911. | Year of Arrival. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1906. <br> June, <br> 1911. | $\begin{gathered} 1901- \\ 1905 . \end{gathered}$ | $\begin{gathered} 1891- \\ 1895 . \end{gathered}$ | $\begin{aligned} & \text { 1896- } \\ & 1900 . \end{aligned}$ | $\begin{aligned} & 1890 \\ & \text { and } \\ & \text { before. } \end{aligned}$ | $\begin{aligned} & \text { Year } \\ & \text { Un- } \\ & \text { known. } \end{aligned}$ |
| Prince Edward Island. . | 932 | 364 | 170 | 40 | 81 | 107 | 70 |
| Nova Scotia. | 10,972 | 4,435 | 1,819 | 408 | 802 | 754 | 2,754 |
| New Brunswick. | 8,134 | 2,077 | 1,026 | 328 | 548 | 1,275 | 2,880 |
| Quebec. | 74,421 | 27,849 | 15,072 | 3,344 | 6,602 | 7,459 | 14,095 |
| Ontario... | 148,764 | 71,239 | 23,752 | 5,552 | 9,449 | 27,617 | 11,155 |
| Manitoba. | 95,688 | 35,040 | 27,920 | 4,792 | 14,166 | 8,807 | 4,963 |
| Saskatchewan. | 162,610 | 83,560 | 44,105 | 4,277 | 15,353 | 4,860 | 10,455 |
| Alberta. . | 142,711 | 80,509 | 35,836 | 3,950 | 12,729 | 2,768 | 6,919 |
| British Columbia. | 105,097 | 55,451 | 17,842 | 5,102 | 12,009 | 7,924 | 6,769 |
| Yukon... | 3,316 | Year | of arriv | al not | record | ed. | 3,316 |
| Northwest Territories.. | 87 | Year | of arriv | al not | record | ed. | 87 |
| Total | 752,732 | 360,524 | 167,542 | 27,793 | 71,739 | 61,571 | 63,563 |

AREA AND POPULATION.
18.-Foreign-born Population of Canada by Country of Birth and by Provinces, 1911.

| Country of Birth. | Prince Edwar Island |  |  | New M <br> Bruns- <br> wick. <br> t  <br> P  <br> in  | Mari- time Prov- inces. $\|$ | Quebec. | Ontario. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All foreign-born.... | 932 |  | 972 | 8,134 | 20,038 | 74,421 | 148,764 |
| Europe.... | 78 | 96 | 217 | 2,052 | 7,348 | 41,191 | 86,967 |
| Austria-Hungary... |  |  | 252 | 91 | 1,343 | 3,860 | 15,555 |
| Belgium.. |  |  | 571 | 76 | 647 | 1,468 | 480 |
| Bulgaria. |  |  | 46 | 99 | 145 | 216 | 1,020 |
| Denmark. |  |  | 47 | 249 | 296 | 195. | 670 |
| Finland. |  |  | 12 | 17 | 29 | 209 | 6,871 |
| France. |  | 8 | 380 | 158 | 546 | 5,928 | 1,879 |
| Germany.. |  | 7 | 549 | 150 | 706 | 1,897 | 15,010 |
| Greece |  |  | 56 | 24 | 80 | 545 | 1,119 |
| Holland. | 11 | 1 | 24 | 32 | 67 | 174 | 687 |
| Iceland. |  |  | 5 |  | 5 | 5 | 145 |
| Italy | 12 | 2 | 711 | 282 | 1.005 | 6,386 | 16,411 |
| Norway and Sweden. | 23 |  | 227 | 281 | 531 | 800 | 5,294 |
| Russia. | 18 | 8 | 250 | 558 | 1,826 | 15,233. | 19,418 |
| Rumania. | - |  | 19 | 12 | 31 | 3,697 | 1,220 |
| Other |  |  | 68 | 23 | 91 | 578 | 1,188 |
| Asia. | 19 | 9 | 540 | 257 | 816 | 2,844 | 6,388 |
| China. |  | A | 125 | 91 | 222 | 1,536 | 2,717 |
| Japan. |  |  | 1 |  | 1 | 29 | 108 |
| Turkey and Syria. | 13 | 3 | 393 | 159 | 565 | 1,132 | 2,297 |
| Other ${ }^{1}$. |  |  | 21 | 7 | 28 | 147 | 266 |
| United States. | 829 |  | 802 | 5,766 1 | 11,397 | 29,842 | 55,674 |
| Other Countries ${ }^{2}$ |  | 5 | 413 | 59 | 477 | 544 | 735 |
| Country of Birth. | Manitoba. | Saskathewan | Alberta | $\text { ta }\left\|\begin{array}{c} \text { British } \\ \text { Colum- } \\ \text { bia. } \end{array}\right\|$ | $\begin{gathered} \text { West- } \\ \text { ern } \\ \text { Prov- } \\ \text { inces. } \end{gathered}$ | Yukon and North west Terri- tories. | $\begin{aligned} & \text { Can- } \\ & \text { ada. } \end{aligned}$ |
| All foreign-born . | 95,688 16 | 62,610 | 142,711 | 11 105,097 | 506,106 | 3,403 | 752,732 |
| Europe: | 78,051 | 91,104 | $68,{ }^{\text {c }} 71$ | 71 40,1811 | 1268.057 | 1,378 | 404,941 |
| Austria-Hungary | 37,731 | 35,482 | 21,112 | 12 6,220 | O] 100,545 | 5127 | 121,430 |
| Belgium. | 2,284 | 1,271 | 1,007 | 27 803 | 3, 5 , 305 | 515 | 7,975 |
| Bulgaria. | 6 | 107 |  | 65105 | 5.283 |  | 1,666 |
| Denmark. | 593 | 982 | 1,380 | 80763 | 3 3,718 | 85 | 4,937 |
| Finland. | 159 | 537 | 1,019 | 19 2,103 | 3,818 | 8 60 | 10,987 |
| France. | 3,146 | 2,940 | 1,843 | 13.246 | 9,175 | 5 91 | 17,619 |
| Germany | 4,294 | 8,300 | 6,102 | 1023.054 | 21,750 | 214 | 39,577 |
| Greece.. | 64 | 40 |  | 97 683 <br> 870  | ${ }_{8}^{884}$ | 4 12 | 2,640 3808 |
| Holland. | 730 | 628 | 1,136 | 36 379 | 2,873 | -7 | 3,808 <br> 7 <br> 109 |
| Iceland. | 5,135 | 1,337 | 1.825 | 25 ${ }^{247}$ | 7 $\begin{array}{r}6,954 \\ 1085\end{array}$ |  | 34,739 |
| Italy ${ }^{\text {Norway and Sweden. }}$ | -687 | 13,834 | 12,825 | 8,107 <br> 10,850 | 1 10,885 42,082 | 2 $\quad 487$ | 34,39 49,194 |
| Norway and Sweden. | 5,292 16,375 | 13,834 | 10,011 | $11{ }^{\text {a }}$ | [ 53,446 | 3 61 | 89.984 |
| Rumania | 777 | 1,798 | 337 | 1379 | 3,031 | 12 | 7,991 |
| Other. | 778 | 498 | 496 | 96 1,476 | 3,248 | 8. 180 | 5,285 |
| Asia. | 1,098 | 1,619 | 2.216 | 16 26,988 | 31,322 | 276 | 40,946 |
| China. | 844 | 1,160 | 1,784 | 84 18,819 | 22,607 | 71 | 27,083 |
| Japan.. | 19 | 58 | 244 | 44 7,894 | 8,215 | - 72 | 8,425 |
| Turkey and Syria. | 174 | 266 |  | $95 \quad 237$ | $7 \quad 772$ | . | 4,768 |
| Other ${ }^{1}$. | 62 | 35 |  | 93.38 | \% 228 |  |  |
| United States... | 16,326 | 69,628 | 81,357 | 567 37,548 | 204,859 | 8 1,908 | 303,680 3165 |
| Other Countries? | 212 | 359 | 367 | 67.430 | 1,368 | 1 [1] | 3,165 |

[^5]POPULATION.
19.-Foreign-bom Population in Cities of $\mathbf{1 5 , 0 0 0}$ and over, 1911.

| Cities | Population June, 1911. | Number. | Per cent of total | Cities. | Population June, 1911 | Number. | Per cent of total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Montreal. | 470,480 | 43,188 | 9.2 | Victoria. | 31,660 | 6,632 | $20 . \mathrm{c}$ |
| Toronto. | 376,538 | 33,131 | 8.8 | Regina. | 30,213 | 6,830 | 22.6 |
| Winnipeg. | 136,035 | 32,959 | 24.2 | Edmonton. | 24,900 | 5,598 | 225 |
| Vancouver.. | 100,401 | 27,713 | 27.6 | Brantford.. | 23,132 | 2,020 | 8.7 |
| Ottawa. | 87,062 | 5,243 | 6.0 | Windsor | 17,829 | 2,022 | 11.3 |
| Hamilton. | 81,969 | 7,698 | 9.4 | Sydney | 17,793 | 2,124 | 12.0 |
| London. | 46,300 | 2,316 | 5.0 | Fort William.. | 16,499 | 4,746 | 28.7 |
| Calgary | 43,704 | 9,030 | 20.6 | Kitchener | 15,196 | 2,207 | 14.5 |

Population of Military Age.-Tables 20 to 22, compiled from the census records of 1911, relate to the male population of military age in Canada (excluding the Yukon and Northwest Territories); that is to say, of all ages from 18 to 45 , both years included. Table 21, read horizontally, shows the percentage proportions for Canada and by provinces of the male population of military age that on June 1 , 1911, were Canadian-born, British-born or foreign-born. The Canadianborn were 98.37 p.c. in Prince Edward Island, 93.42 p.c. in New Brunswick, 87.22 p.c. in Nova Scotia, or over 90 p.c. for the Maritime provinces as a whole. In Quebec the Canadian-born represents 87.44 p.c., in Ontario 70.57 p.c. In all the Western provinces the Canadianborn constitute less than one-half, being $40 \cdot 62$ p.c. in Manitoba, $38 \cdot 51$ p.c. in Saskatchewan, 30.46 p.c. in Alberta and 26.23 p.e. in British Columbia. British-born males are 18.38 p.c. of the total in Ontario, and from 24 to $34 \frac{1}{2}$ p.e. in the provinces west of the Great Lakes. Foreign-born males constitute the largest proportion in Alberta and British Columbia.

Table 22, read vertically, shows the percentage distribution by provinces of the Canadian-born, British-born and foreign-born males of military age. Of the Canadian-born porulation, Quebec contained 30.81 p.c. and Ontario 37.04 p.e. Of the British-born, Ontario contained nearly 35 p.c. and the four western provinces nearly 54 p.c. Of the foreign-born, 2115 p.e. were in Ontario, $20 \cdot 39$ p.c. in British Columbia and over 47 p.c. in the middle west.

Table $\mathbf{2 0}$ gives in absolute numbers the male population of military age, classified according to nativity, by single years and by provinces.

## AREA AND POPULATION.

20.-Male Population of Canada 18 to 45 years of age, classified according to Nativity by Single Years and by Provinces, Census, 1911.

| Ages. | $\begin{aligned} & \text { Total } \\ & 18 \text { to } 45 \end{aligned}$ | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Caniadal | 1,720,070 | 73,369 | 70,055 | 74,569 | 77,237 | 77,964 | 76.056 | 78,924 | 79,817 | 76,416 |
| Canadian-born | 1,109,383 | 56,285 | 52,470 | 52,869 | 53,458 | 51,690 | 49,234 | 49,263 | 47,518 | 45,561 |
| British-born | 306.377 | 6,847 | 7.575 | 9,25 ${ }^{\text {¢ }}$ | 11,329 | 12,369 | [3,178 | 14,822 | 18,020 | 15,772 |
| Foreign-born. | 304,310 | 10.937 | 10,010 | 12,44 | 12,450 | 13,905 | 13,644 | 14,839 | 16,278 | 15,083 |
| Prince Eqward Island | 16,568 | 1,089 | 937 | 897 | 851 | 783 | 703 | 721 | 56 | 664 |
| Canadian-born | 16,592 | 1,073 | 922 | 883 | 839 | 772 | 695 | 709 | 644 | 5 |
| British-born.. | 157 | ${ }_{10}^{6}$ | 10 5 | 6 | 8 | 6 | 2. | 7 | ${ }_{3}^{8}$ | 4 |
| Nova Scotia | 98,493 | 5.081 | 4,761 | 4,697 | 4,466 | 5,535 | 4,161 | 4,217 | 4,152 | 3,820 |
| Canadian-born. | 85,909 | 4,673 | 4,338 | 4,234 | 3,991 | 4,041 | 3,672 | 3.642 | 3.504 | 3,256 |
| British-born. | 8.437 | 239 | 262 | 311 | 309 | 335 | 327 | 367 | 434 | 350 |
| Foreign-born. | 4,147 | 179 | 153 | 152 | 166 | 159 | 162 | 208 | 214 | 214 |
| New Brestutek | 68,710 | 3,906 | 3,551 | 3.513 | 3.100 | 3.030 | 2.827 | 2,912 | 2.724 | 2,701 |
| Canadian-bora | 64,188 | 3,692 | 3,350 | 3,340 | 2,933 | 2,856 | 2,856 | 2,717 | 2.533 | 2,547 |
| British-born. | 2,371 | 113 | 111 | 80 | 78 | 100 | 94 | 94 | 91 | 74 |
| Foreign-born. | 2,151 | 101 | 90 | 93 | 88 | 74 | 77 | 301. | 100 | 80 |
| Quebec | 390.897 | 20.182 | 18,496 | 18,937 | 18,292 | 18.678 | 17,682 | 17,341 | 17,104 | 15,835 |
| Canadian-born | 341.783 | 18.681 | 17,047 | 17.288 | 16,681 | 16,683 | 15,754 | 15,232 | 14,566 | 13.715 |
| British-born. | 23,066 | 566 | 587 | 638 | ${ }_{8} 738$ | ${ }^{852}$ | . 8882 | , 972 | 1.111 | 1,014 |
| Foreign-born | 26,048 | 935 | 862 | 1,011 | 875 | 1,144 | 1,046 | 1,137 | 1,427 | 1,106 |
| Ontario | 582.246 | 25,309 | 24,550 | 24,983 | 26,482 | 25,498 | 24,796 | 25,951 | 25,823 | 24,811 |
| Canadian-bord | 410.896 | 20,318 | 19,286 | 18.775 | 19.888 | 18,357 | 17,558 | 17,769 | 18,950 | 16.535 |
| British-born. | 106.997 | 2.829 | 2,996 | 3,451 | 4,012 | 4,093 | 4.372 | 4,887 | 5,105 | 5.006 |
| Foreign-born. | 64,353 | $\underline{2}+251$ | 2,268 | 2,757 | 2.584 | 3,048 | 2,866 | 3,295 | 3.568 | 3.270 |
| Manitoga | 122,762 | 4.862 | 4,529 | 3.308 | 5,555 | 5,659 | 5,725 | 5,963 | 6,364 | 5.939 |
| Canadian-bor | 49,888 | 2,664 | 2,410 | 2.515 | 2.659 | 2,457 | 2.434 | 2.297 | 2.413 | 2,145 |
| British-bor | 39,806 | 867 | 993 | 1,365 | 1,581 | 1,768 | 1,887 | 2.116 | 2.296 | 2,261 |
| Foreign-born. | 33,088 | 1,331 | t,128 | 1.428 | 1,315 | 1,434 | 1,403 | 1,550 | 1,681 | 1,533 |
| Saskatceevian | 158,907 | 5,380 | 5,520 | 6,620 | 7,426 | 7,719 | 7.857 | 8,368 | 8,575 | 8,313 |
| Canadian-born | 61,193 | 2,254 | 2,266 | 2.584 | 2,975 | 3.046 | 2,082 | 3,329 | 3,247 | 3,129 |
| British-born | 38,871 | 847 | 1,010 | 1,289 | 1,682 | 1.767 | 1,890 | 2,115 | 2.154 | 2,233 |
| Foreign-born. . | 58,843 | 2,279 | 2,244 | 2.737 | 2,768 | 2,906 | 2,985 | 2,924 | 3.174 | 2,061 |
| Alberta | 122,915 | 3.947 | 3.996 | 4,822 | 5,527 | 5,771 | 5,891 | B.024 | 6.389 | 8,282 |
| Cabadian-born | 37,446 | 1,323 | 1,284 | 1,546 | 1,707 | 1,700 | 1,786 | 1,746 | 1,826 | 1,800 |
| British-born. | 31,954 | 653 | 743 | 918 | 1,291 | 1,444 | 1,584 | 1,689 2.589 | 1,789 | 1,847 |
| Foreign-born. . | 53.515 | 1,971 | 1,969 | 2,358 | 2,329 | 2,627 | 2,521 | 2,589 | 2,774 | 2,635 |
| British Colombia | 158,272 | 3,518 | 3.725 | 4.782 | 5,538 | 6,290 | 6,414 | 7,427 | 8,230 | 8,051 |
| Canadian-born | 41.508 | 1,606 | 1,569 | 1,604 | [,787 | 1.778 | 1,697 | 1,822 | 1,836 | 1,779 |
| British-born | 54,718 | 727 | 863 | 1,196 | 1,638 | 2,005 | 2,136 | 2,577 | 3.087 | 2,983 |
| Foreign-born . . . . . . . . . . . . | 62.048 | 1,180 | 1,293 | 1,902 | 2,115 | 2,507 | 2,581 | 3,028 | 3,307 | 3,290 |

[^6]
## POPULATION.

Lale Popalation of Canada 18 to 45 years of age, classified according to Nativity by Single Years and by Provinces, Census, 1911-con.


Exelugive of Yukon and Northwest Territories.

AREA AND POPULATION.
20.-Male Population of Canada 18 to 45 years of age, classified according to Nativity by Single Years and by Provinces, Census, 1911-concluded.

| Ages. | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Canada | 45.873 | 52,868 | 42,356 | 60,509 | 35,947 | 44,063 | 35,361 | 35,856 | 45,530 |
| Canadian-bera. | 30.225 | 34,396 | 28,224 | 37,808 | 23,930 | 29,523 | 24,438 | 25,097 | 30,677 |
| British-born. | - 7.895 | 9,290 | 7.585 | 11,028 | 6,477 | 7,754 | 5,881 | 5.694 | 7,634 |
| Foreign-born. | 7.753 | 9,183 | 6.547 | 11,67\% | 5,540 | 6,788 | 5,047 | 5,085. | 7,219 |
| Patses Edward Island | $46 \hat{i}$ | 502 | 432 | 603 | 398 | 474 | 391 | 428 | 514 |
| Canadian-born. | 454 | 492 | 426 | 590 | 389 | 486 | 384 | 422 | 503 |
| British-bord. | 9 | $\bar{i}$ | 3 | 7 | 5 | 6. | 5 | 5 |  |
| Nova Scotia | 2,733 | 3,224 | 2.702 | 3,648 | 2,170 | 2,740 | 2,177 | 2,304 | 2,893. |
| Canadian-born | 2.410 | 2,819 | 2.388 | 3,133 | 1,871 | 2,393] | 1,922 | 2,059 | 2,544. |
| British-born. | 230 | ${ }^{276}$ | 219 | 348 | 240 | 271 | 185 | 194 | 235 |
| Foreigu-born. | 93 | 129 | 98 | 167 | 59 | 108 | 70 | 51 | 114. |
| New Bhunswtex | 1,894 | 2.248 | 1,829 | 2,530 | 1,436 | 1,882 | 1,574 | 1,535 | 2,167 |
| Canadian-born | 1,767 | 2.102 | 1.696 | 2,354 | 1,321 | 1,767 | 1,467 | 1.434 | 2,030. |
| British-born. | 63 | 83 | 67 | 86 | 87 | 69 | 60 | 57 | 87 |
| Foreig-bora, | 64 | 63 | 66 | 90 | 48 | 46 | 47 | 44 | 50. |
| Quebec | 10,735 | 12,201 | 9,813 | 13,183 | 7.854 | 10,298 | 8.256 | 8,478 | 10,070- |
| Canadian-born | 9,412 | 10.402 | 8,620 | 10,914 | 6,933 | 9,014 | 7,366 | 7.629 | $8,665$. |
| British-born | 625 | 831 | 629 | 1,071 | 476 | 709 | 481 | 440 | 746 |
| Foreign-born. | 695 | 968 | 564 | 1,19\% | 445 | 575 | 409 | 409 | 659 |
| Ontario | 13,915 | 18.56: | 15,048 | 20,908 | 13.247 | 16,169 | 13,214 | 13,615 | 16.848 |
| Canadian-born | 11,508 | 13.282 | 10,779 | 14,399 | 9,736 | 11,802 | 9,864 | 10,233 | 12,343. |
| Britigh-born. | 2.838 | 3,450 | 2,959 | 4,069 | 2,473 | 3,015 | 2,361 | 2,431 | 3,644 |
| Foreign-born. | 1,569 | 1.835 | 1,311 | 2,440 | 1.038 | 1,352 | 989 | 951 | 1,462' |
| Manitoba | 3,000 | 3,53; | 2.715 | 4.220 | 2,427 | 2,762 | 2,268 | 2.208 | 2,917 |
| Canadian-born | 1.166 | 1,393 | 1,099 | 1,611 | 1,003 | 1,112 | 1,002 | 921 | 1,132 |
| British-born. | 924 | 1,096 | 890 | 1,204 | 762 | 876 | 646 | 639 | 841 |
| Foreign-born. | 910 | 1,048 | 726 | 1,405 | 662 | 774 | 620 | 649 | 944 |
| Shskatchewan | 3.905 | 4,171 | 3.180 | 4,860 | 2,535 | 3,080 | 2,433 | 2,222 | 3,575 |
| Canadian-born | 1.484 | 1.522 | 1,452 | 1,813 | 953 | 1,110 | 929 | 830 | 1,208 |
| British-boro. | 996 | 1,018 | 75: | 1,085 | 682 | 769 | 554 | 463. | 627 |
| Foreiga-bora. | 1,445 | 1,630 | 1.173 | 1,982 | 1,000 | 1,18] | 950 | 920 | 1,360 |
| Alberta | 2,974 | 3.480 | 2,792 | 3.996 | 2,391 | 2,642 | 2,003 | 2.062 | 2,651 |
| Canadian-born. | 938 | 1,082 | 909 | 1.244 | 764 | 816 | 631 | 677 | 887 |
| British-born. | 755 | 873 | 722 | 987 | 587 | 649 | 488 | 478 | 822 |
| Foreign-born. | 1,281 | 1,525 | 1,16t | 1,765 | 1,040 | 1,177 | 894 | 907 | 1,142 |
| British Columbia | 4,250 | 4.939 | 3,844 | 6,561 | 3,380 | 4.036 | 3.045 | 3,003 | 4.294 |
| Canadian-born. | 1.108 | 1,302 | 1,058 | 1,750 | 960 | 1.073 | 878 | 883 | 1,365. |
| Britisb-born. | 1.452 | 1,655 | 1,388 | 2,172 | 1,185 | 1.390 | 1,101 | 987 | 1,427 |
| Foreign-bom. . . . . . . . . | 1.692 | 1,982 | 1,447 | 2,639 | 1.244 | 1,573 | 1,066 | 1,133 | 1,502 |

[^7]21.-Percentage Proportion by Provinces of the Male Population 18 to 45 years of age which was Canadian-born, British-born or Foreign-borm on June 1, 1911.

| Province. | Canadianborn. | Britishborn. | Foreignborn. | Total. |
| :---: | :---: | :---: | :---: | :---: |
| Prince Edward Island. | 98.37 | 0.93 | 0.70 | 100.00 |
| Nova Scotia. | 87.22 | 8.57 | 4.21 | 100.00 |
| New Brunswick. | 98.42 | 3.45 | 3.13 | 100.00 |
| Quebec. | 87.44 | 5.90 | 6.66 | 100.00 |
| Ontario. | 70.57 | 18.38 | 11.05 | 100.00 |
| Manitoba. | 40.62 | 32.43 | 26.95 | 100.00 |
| Saskatchewan. | 38.51 | 24.46 | 37.03 | 100.00 |
| Alberta. | 30.46 | 26.00 | 43.54 | 100.00 |
| British Columbia... | 26.23 | 34.57 | 39.20 | 100.00 |
| Canada. | 64.49 | 17.82 | 17.69 | 100.00 |

22.-Percentage Distribution by Provinces of the Canadian-born, British-born and Foreign-born Male Poyulation, 18 to 45 years of age on June 1, 1911.

| Province. | Canadianborn. | Britishborn. | Foreignborn. |
| :---: | :---: | :---: | :---: |
| Prince Edward Island. | 1.50 | 0.05 | 0.03 |
| Nova Scotia. | 7.74 | 2.75 | 1.36 |
| New Brunswick. | 5.79 | 0.77 | 0.71 |
| Quebec. | 30.81 | 7.53 | 8.56 |
| Ontario.. | 37.04 | 34.93 | 21.15 |
| Manitoba. | 4.49 | 12.99 | 10.87 |
| Saskatchewan. | 5.51 | 12.69 | 19.34 |
| Alberta.... | 3.38 | 10.43 | 17.59 |
| British Columbia. | 3.74 | 17.85 | 20.39 |
| Canada.................. | 100 n | 100.00 | 100.00 |

Population of the Prairie Provinces, 1916.-The Census and Statistics Act, 1905, provided for the taking of a census of population and agriculture in Manitoba, Saskatchewan and Alberta in 1906 and in every tenth year thereafter, thus instituting, in connection with the general decennial census for all Canada, a quinquennial census of population and agriculture for the three Prairie Provinces. The quinquennial census of Manitoba, Saskatchewan and Alberta was therefore taken as for June 1, 1916, and the results are now in process of compilation and publication. In Table 23 are given the male and female population of Manitoba, Saskatchewan and Alberta (a) by provinces; (b) by the electoral districts constituted by the Representation Act, 1914 (4-5 Geo. V, c. 51), and (c) by cities, towns and villages, as compared with the population by sex for 1911 and by totals for 1901 and 1906. The total population of the three Prairie Provinces in 1916 is returned as $1,698,220$, compared with $1,328,725$ in 1911, 808,863 in 1906 and 419,512 in 1901. Thus the population in the three provinces has increased by $1,278,708$, or 305 p.c., since the beginning of the century: by 889,357 , or 110 p.c., during the last ten years; and by 369,495 , or 23 p.c., during the five years ended 1916.

AREA AND POPULATION
23.-Population of the Prairie Provinces, 1901, 1906, 1911 and 1916.

| Provinces. | 1901. | 1006. | 1911. |  |  | 1915. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total. | Total. | Males. | Females. | Total. | Males. | Females. | Total. |
|  | No. | No. | No. | No. | No. | No. | No. | No. |
| Manitoba <br> Saskatchewan | 255,211 | 365.688 | 253, 056 | 208.574 | 461,630 | 294.609 | 250,251 |  |
|  | 91,279 | 257,763 | 291.730 | 200,702 | 492.432 | 363,787 | 284,048 | 647,835 |
| Alberta. | 73,022 | 185,412 | 223,989 | 150,674 | 374,868 | 277,256 | 219,269 | 496,523 |
| Total | 419,512 | 808,863 | 768,775 | 559,950 | 1,328,725 | 935,652 | 762,568 | 1,698,220 |
| Manlisha. |  |  |  |  |  |  |  |  |
| Brandon | 25,04* | 34,375 | 22,127 | 17,607 | 39,734 | 22.270 | 18.886 | 41,106 |
| Dauphin | 12,617 | 10,425 | 12,787 | 10,624 | 23.411 | 15,454 | 13,160 | 28,614 |
| Lisgar. . | 26,899 | 27,587 | 13,634, | 12,344 | 25,978 | 14,781 | 13,280 | 28,661 |
| Macdonald | 17.324 | 19,331 | 11,492 | 9,310 | 20,802 | 11,846 | 9.792 | 21,638 |
| Marquette | 20,435 | 27.720 | 18,159 | 14,225 | 32,384 | 30,779 | 16,735 | 37.514 |
| Neepawa | 19,140 | 22.724 | 13,470 | 10,453 | 23,923 | 14.787 | 11,801 | 20.588 |
| Nelson. | 2,359 | 5,020 | 6,291 | 5,682 | 11,973 | 9,684 | 6.774 | 16.458 |
| Portage la Prairie | 14.969 | 18,339 | 12,229 | 9,830 | 22,059 | 11,138 | 8,435 | 20.573 |
| Provenche | 14,1298 | 19,861 | 13.142 | 11,134 | 24,276 | 14,232 | 12,039 | 26,271 |
| Selkir | 22,634 | 27,709 | 15,082 | 12,051 | 27.133 | 15,748 | 12,464 | 28,212 |
| Springfield | 20,290 | 28,986 | 20,222 | 17.025 | 37.247 | 28,458 | 24,624 | 53,082 |
| Winnipeg Centre |  |  | 33,661 | 25,242 | 58,903 | 34,490 | 32,548 | 67,038 |
| Winnipeg North | 42,925 | 91,140 | 24,807 | 20,875 | 45,682 | 31,186 | 29.430 | 60,616- |
| Wirnipes South |  |  | 18;184 | 17,391 | 35,525 | 23,299 | 25,277 | 48,575 |
| Total . . . . . . . . . . . . | 255,211 | 365,688 | 253,056 | 208,574 | 461,630 | 294,609 | 259,251 | 553,860 |
|  |  |  |  |  |  |  |  |  |
| Pratege la Prairie | 3,901 | 5,106 | 3,118 | 2,774 | 5,892 | 2,978 | 2.901 | 5,879 |
| St. Boniface. | 2,019 | 5,119 | +,029 | 3,454 | 7,483 | 5,488 | 5.533 | 11,021 |
| Winnipeg. | 42,340 | 90,153 | 74,406 | 61,629 | 136,035 | 82,227 | 80.773 | 163,000 |
| Towns- | - | - | 459 | 388 | 847 | 465 | 414 | 879 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Carman. | 1.439 | 1,530 | ${ }^{635}$ | 636 | 1.271 | 696 | 730 | 1,426 |
|  |  |  |  |  |  |  |  |  |
| Deloraine. | 320 | 856 | 398 | 410 | 808 | 400 | 378 | 1.778 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 659 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Minnedosa. ...... | 1.052 | 1,299 | 793 | ${ }^{690}$ | 1.483 | 250 | 88.3 | 1.838 |
|  |  |  |  |  |  |  |  |  |
| Morris. | 465 | 513 1895 | 322 | 276 | 1.894 | 349 | 929 | 1,854 |
|  |  | 1.895 | 927 | 94 | 1,848 | 226 | 242 | 408 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 607 | 1,270 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

## POPULAT1ON

23.-Population of the Prairie Provinces, 1901, 1906, 1911 and 1916-con.


## AREA AND POPUZATION

23.-Population of the Prairie Provinces, 1901, 1906, 1911 and 1916-con.

| Districts, Cities, Towns and Incorporated Fiilages. | 1001. | 1906. | 1911. |  |  | 1916. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total. | Total. | Males. | Females. | Total. | Males. | Femglea | Total. |
| Sastatchewan-cou. | No. | No. | No. | No. | No. | No. | No. | No. |
| Towns-ucon | 230 | 608 | 388 | 314 | 702 |  |  |  |
| Canora. . | 230 | 169 | 241 | 19 | 435 | 460 | 410 | 875 |
| Carlyle. | 23 | 374 | 187 | 171 | 358 | 212 | 200 | 412 |
| Camduff | 100 | 491 | 225 | 244 | 469 | 269 | 286 | 5515 |
| Caron. |  | 215 | 117 | 105 | 222 | 140 | 11 | 254 |
| Craik | - | 229 | 281 | 204 | 435 | 230 | 197 | 427 |
| Davidson |  | 520 | 215 | 174 | 389 | 284 | 220 | 513 |
| Delisle. |  |  | 133 | 101 | 234 | 163 | 124 | 286 |
| Duek Lake. | 301 | 439 | 193 | 186 | 379 | 241 | 218 | 459 |
| Estevas. | 141 | 877 | 1.138 | 845 | 1.981 | 1,059 | 1,071 | 2,140 |
| Fletoing. | 100 | 260 | 144 | 126 | 270 | 170 | 140 | 310 |
| Francis. |  | $14!$ | 154 | 109 | 263 | 123 | 98 | 222 |
| Govan. |  |  | 238 | 152 | 390 | 270 | 230 | 500 |
| Grentell | 452 | 677 | 364 | 345 | 780 | 472 | 401 | 873 |
| Guld Lake |  |  | 338 | 268 | 606 | 398 | 314 | 712 |
| Hanley. | - | 568 | 219 | 162 | 381 | 210 | 15 | 368 |
| Herbert. |  |  | 310 | 249 | 359 | 533 | 417 | 850 |
| Humboldt. | - | 279 | 489 | 370 | 859 | 777 | 655 | 1.435 |
| Indian Head | 768 | 1,545 | 657 | 628 | 1,285 | 678 | 655 | 1,634 |
| Knmsack. |  | 304 | 258 | 215 | 473 | 625 | 573 | 1.202 |
| Kermbert. | - |  | 231 | 89 | 320 | 207 | 26 | 571 |
| Kindersley . . . . . . . . . . . | - | - | 276 | 180 | 456 | 433 | 337 | 770 |
| Langham. | - | 249 | 207 | 182 | 389 | 183 | 168 | 352 |
| Lanigan... | - |  | 226 | 166 | 392 | 197 | 176 | 372 |
| Lemberg. . . . . . . . . | - | 365 | 166 | 138 | 303 | 215 | 195 | 410 |
| Lloydminster (part).... | - | 389 | 235 | 206 | 441 | 260 | 234 | 494 |
| Inumsden. | 134 | 461 | 400 | 295 | 695 | 309 | 306 | 615 |
| Macklin.. |  |  | 205 | 117 | 322 | 142 | 108 | 250 |
| Maple Creek | 382 | 687 | 481 | 455 | 986 | 590 | 550 | 1,140 |
| Melfort. | - | 351 | 825 | 274 | 598 | 496 | 475 | 971 |
| Melville. | $\sim$ |  | 1,130 | 886 | 1,816 | 1,095 | 1,005 | 2,100 |
| Milestone. |  | 244 | 249 | 187 | 436 | 249 | 201 | 450 |
| Moosomin | 868 | 1,152 | 590 | 553 | 1,143 | 683 | 646 | 1,329 |
| Morse. | - | - | 166 | 124 | 290 | 249 | 203 | 452 |
| Mortach. | - | 127 | 132 | 87 | 219 | 265 | 191 | 456 |
| Nokomis. | - | - | 201 | 173 | 374 | 278 | 230 | 508 |
| Ogema. | - | - | 117 | 54 | 171 | 159 | 117 | 276 |
| Outlook. | - | - | 449 | 236 | 685 | 319 | 294 | 813 |
| Oxbow | 280 | 527 | 308 | 327 | 630 | 853 | 325 | 678 |
| Qu'Appelle | 434 | 778 | 439 | 412 | 851 | 380 | 342 | 722 |
| Radisson. |  | 156 | 163 | 142 | 305 | 220 | 218 | 438 |
| Radvilie. | - | - | 147 | 86 | 233 | 354 | 267 | 681 |
| Rosetown. | - |  | 220 | 97 | 317 | 438 | 293 | 731 |
| Rosthern. | 418 | 918 | 608 | 564 | 1,172 | 597 | 603 | 1,200 |
| Rouleau. |  | 304 | 397 | 282 | 679 | 269 | 226 | 495 |
| Saitcoats. | 155 | 265 | 233 | 199 | 432 | 255 | 236 | 495 |
| Scott...... |  | - | 241 | 179 | 420 | 157 | 159 | 316 |
| Sbaunavon | - | 17 |  | 170 | 31 | 490 | 407 | 897 304 |
| Sintaluta. | 155 | 317 | 212 | 179 | 391 | 195 | 168 | 364 544 |
| Strassburg. | - | 203 | ${ }_{291}^{535}$ | 276 130 | 811 | 504 | 336 | 944 |
| Vonda...................... | - | 174 | 157 | 111 | 268 | 175 | 148 | 323 |
| Wadena | $\therefore$ | 141 | 141 | 114 | 255 | 237 | 212 | 449 |
| Wapella | 397 | 459 | 263 | 222 | 485 | 233 | 208 | 44 |
| Watrous. |  |  | 436 | 345 | 731 | 450 | 398 | 843 |
| Watano. | - | 129 | 122 | 89 | 211 | 122 | 124 | 246 |
| Whitewood | 359 | 501 | 236 | 211 | 447 | 224 | 222 | 446 |
| Wilkie. | - | -393 | 351 | 186 | ${ }_{98} 58$ | 454 | 361 | 1,054 |
| Wolseley. | 409 | 938 | 525 | 436 | ${ }_{515}^{961}$ | 575 | 479 | 1,682 |
| Wynyard. |  | 344 | 308 209 | 207 190 | ${ }_{459}$ | 377 | 186 | ${ }_{408}^{682}$ |
| Yorkton.... | 700 | 1,363 | 1,303 | 1,006 | 2,309 | 1.596 | 1,548 | 3,144 |
| Zealandia. |  |  | 180 | 84 | 264 | 137 | 105 | 242 |
| Villages- |  |  |  |  |  |  |  |  |
| Abbey... | - | - | 7 | 13 | 40 | ${ }^{71}$ | 30 | 101 |
| Aberdeen..... .......... | - | $\stackrel{\rightharpoonup}{298}$ | 127 |  | 240 | 113 | 118 | 249 |
| Abernethy............... |  | 292 | 138 | 135 | 273 | 133 | 136 | 249 |

## POPULATION

23.-Population of the Prairie Provinces, 1901, 1906, 1911 and 1916-con.


AREA AND POPULATION
23.-Population of the Prairie Provinces, 1901, 1906, 1911 and 1916-con.


## POPULATION

23.-Population of the Prairie Provinces, 1901, 1906, 1911 and 1916-con.


## AREA AND POPULATION

## 23.-Population of the Prairie Provinces, 1901, 1906, 1911 and 1916-con.



## POPULATION

23.-Population of the Prairie Provinces, 1901, 1906, 1911 and 1916-con.

| Districts. Cities, Towns and Ineorporated Villages | 1201. | 1908. | 1811. |  |  | 1916. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total. | Total. | Males. | Females. | Total. | Males. | Females. | Tetal. |
| Saskathewar-concluded. Villages-concluded. | No, | No. | No. | No. | No. | No. | No. | No. |
| Tyvan. | - | 100 | 92 | 92 | 184 | 100 | 91 | 191 |
| Jjnity... | - |  | 87 | 62 | 149 | 258 | 204 | 457 |
| Vanguard. | - | - | - | - | - | 210 | 129 | 339 |
| Vawn.... | - | - | - | 0 | - | 30 | 18 | 49 |
| Yenn.. | - | - | 38 | 20 | 58 | 37 | 24 | 61 |
| Verigin. | - | - | - | - | - | 98 | 100 | 199 |
| Yerwood | - | - | - | - | - | ${ }^{67}$ | 49 | 116 |
| $V$ Vibsol. | - | - | - | - | - | 114 | 130 | 244 |
| Viceroy. | - | - | 4 | $\overline{7}$ | 2 | 79 | 61 | 140 |
| Yiscount | - | - | 43 | 29 | 72 | 97 | 80 | 177 |
| Wakaw. | - | - | - | - | - | 130 | 120 | 250 |
| Waldeek. | - | - | - | - | - | 104 | 78 | 182 |
| Waldheim | - | - | 05 | 49 | 14 | 118 | 112 | 230 |
| Waldron.. | - | - | 65 | 49 | 114 | 48 | 41 | 89 |
| Warman | - | 129 | 87. | 62 | 148 | 92 | 95 | 187 |
| Waseca. | - |  | - | - |  | 47 | 32 | 79 |
| Wauchope | - | 72 | 74 | 53 | 127 | 72 | 55 | 127 |
| Waxota. | - | - | 113 | 87. | 200 | 140 | 128. | 268 |
| Webb. | - | - | 48 | 27 | 75 | 119 | 77 | 196 |
| Weldon. | - | - | - | - | - | 55 | 43 | 98 |
| Welwym. | - | - | 86 | 53 | 139 | 107 | 89 | 196 |
| Wilcor. | - | - | 166 | 96 | 262 | 131 | 112 | 243 |
| Windthorst. | - | - | 126 | 82 | 208 | 125 | 91 | 216 |
| Wisetor. | - | - | - | - | - | 40 | 26 | ${ }_{68}$ |
| Woodrow | - | - | - | - | * | 98 | 75 | 188 |
| Wroston. | - | - | - | - | $\overline{7}$ | 48 | 49. | 97 |
| Young. | - | - | 42 | 81 | 73 | 86 | 75 | 161 |
| Zelma. | - | - | 23 | 24 | 4 | 39 | 32 | 71 |
| Alberts. |  |  |  |  |  |  |  |  |
| Districts- |  |  |  |  |  |  |  |  |
| Batile River | 597 | 5,598 | 15,936 | 10,416 | 26,352 | 23,55\% | 17,091 | 40,648 |
| Bow River | 1,565 | 6,576 | 17.968 | 9,336 | 27,304 | 20,287 | 14,108 | 34,395 |
| Calgary East. | 5,526 | 19,996 | 23,621 | 13,542 | 35,163, | 21,744 | 18,351 | 40,005 |
| Calgary West | 3,546 | 9,103 | 18,036 | 11,087 | 30,023 | 21,460 | 18,865 | 40.323 |
| Edmonton East. | 7,685 | 19,495 | 17,752 | 13.542 | 31,284 | 27,437. | 22,601 | 50.038 |
| Edmonton West | 7,641 | 11,593 | 21,888 | 13,498 | 35,386 | 31,125 | 24,188 | 55,313 |
| Lethbridge. | 5,995 | 12,129 | 17,286 | 12,201 | 29,485 | 17,087 | 13,876, | 31,563 |
| Macleod. | 8,228 | 23.549 | 18.231 | 12,548 | 30,779 | 19,379 | 14,504 | 33,883 |
| Medicine Hat | 3,185 | 6,897 | 15.278 | 9,424 | 24,697 | 23,206 | 17,135 | 40,341 |
| Red Deer. | 7,568 | 22,960 | 22,519 | 14,988 | 37,507 | 23,244 | 18,410 | 41,654 |
| Strathicoma | 12,635 | 21,211 | 15,867 | 12,488 | 28,355 | 20,951 | 17,989 | 38,940 |
| Vistoria. | 8,851 | 26,215 | 21,812 | 16,704 | 38,316 | 27,178 | 22,153: | 49,332 |
| Tetal. | 73,022 | 185,412 | 223,989 | 150,674 | 374,663 | 277,256. | 219,269 | 496,525 |
| Cities- |  |  |  |  |  |  |  |  |
| Calgary | 4,392 | 13,573 | 26.565 | 17,189 | 48.704 | 29.278 | 27.238 | 56,514 |
| Edmonton. | 4,176 | 14,088 | 17,054 | 13,425 | 30,479 | 27,462 | 26,384 | 53,946 |
| Lethbridge. | 2,072 | 2,313 | 4,462 | 3,588. | 8,050 | 4.886 | 4.540 | 9.436 |
| Medicine Ha | 1,570 | 3,020 | 3,207 | 2,401 | 5.808 | 4,781 | 4,491 | 9,272 |
| Red Deer............... | 323 | 1,418 | 1,213 | 905 | 2,118 | 1,127 | 1,076 | 2,203 |
| Wetaskimin.............. | 550 | 1,652 | 1,264 | 1,147 | 2.411 | 1,047 | 1,001 | 2.048 |
| Towns- |  |  |  |  |  |  |  |  |
| Athabaska Landing. . . . . . | 268 | 407 | 157 | 70 | 227 | 268 | 229 | 497 |
| Bassano.. | - | - | 333 | 207 | 540 | 291 | 278 | 569 |
| Beverley................... | - | - | , | - | 析 | 430 | 388 | 813 |
| Blairmore.............. | 231 | 449 | 734 | 403 | 1,137 | 723 | 496. | 1,219 |
| Bos İtand. ............ | $-$ | - | 202 | 105 | 1,307 | 184 | 136 | 320 |
| Brooks. . . . . . . . . . . . . . | - | - | 327 | 155 | 486 | 165. | 125 | 290 |
| Camrose................ | 8 | 412 | 1,059 | 527 | 1,586 | 878. | 819 | 1,692 |
| Cardston................ | 689 | 1,001 | 642 | 565 | 1,207 | 703. | 667 | 1,370 |
| Carmanguay ............ | - | - | 162 | 124 | 286 | 171 | 161 | ${ }^{332}$ |
| Castor.................. | - | -680, | 1,041 | ${ }_{352}^{818}$ | 1,659, | 396 | 359 | 755 |
| Coleman................. | - | 915 | 976 | ${ }_{581} 31$ | 1,557 | 3591 | ${ }_{683} 38$ | 687 1.559 |

## AREA AND POPULATION <br> 23.-Population of the Prairie Provinces, 1901, 1906, 1911 and 1916-con.

| Districts, Cities, Towns and Incorporated Villages. | 1901. | 1906. | 1911. |  |  | 1916. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total. | Total. | Males. | Females. | Total. | Males. | Females. | Total. |
| Alberta-con. <br> Towns-con. | No. | No. | No. | No. | No. | No. | No. | No. |
| Coronation. | - | $-$ | - |  | - | 257 | 199 | 456 |
| Daysland. | - | 288 | 204 | 145 | 349 | 210 | 174 | 384 |
| Didsbury........ | 112 | 477 | 404 341 | 322 156 | 726 | 334 | 306 | 640 |
| Fort Saskatchewan | 306 | 585 | 341 447 | 156 335 | 789 | 257 580 | 243 413 | 500 993 |
| Gleichen........ | 101 | 199 | 390 | 193 | 583 | 362 | 229 | 591 |
| Granum. |  | 104 | 139 | 111 | 250 | 159 | 133 | 292 |
| Grouard. | - | - | 253 | 194 | 447 | 150 | 118 | 268 |
| Hanna....... | - | - | - |  | - | 425 | 286 | 711 |
| Hardisty... | 153 | 1018 | 223 | 128 | 351 | 188 | 169 | 357 |
| High River........ | 153 | 1,018 | 640 | 542 | 1,182 | 650 | 532 | 1,182 |
| Innisfail.... | 317 | 643 | 311 | 291 | 602 | 438 | 400 | 838 |
| Lacombe. | 499 | 1,015 | 188 | 185 | 1372 | 203 | 218 | 421 |
| Langdon. |  | 1,015 | +93 | 496 | 1.159 | 545 84 | 182 77 | 1,047 161 |
| Leduc. . | 112 | 391 | 269 | 254 | 523 | 299 | 285 | 584 |
| Lloydminster Park |  | 130 | 98 | 124 | 222 | 152 | 142 | 294 |
| Macleod. . . . . . . . | 796 | 1,144 | 1.121 | 723 | 1,844 | 976 | 835 | 1,811 |
| Magrath... | 424 | 884 | 535 | 460 | , 995 | 506 | 432 | ${ }^{1838}$ |
| Morinville. | 49 | 203 | 213 | 172 | 385 | 156 | 175 | 331 |
| Nanton.. |  | 382 | 302 | 269 | 571 | 319 | 271 | 590 |
| Okotoks. | 245 | 508 | 293 | 223 | 516 | 286 | 239 | 525 |
| Olds......... | 218 | 554 | 493 | 424 | 917 | 356 | 374 | 730 |
| Pincher Creek | 335 | 589 | 555 | 472 | 1,027 | 531 | 495 | 1,026 |
| Ponoka. | 151 | 473 | 352 | 290 | 642 | 317 | 287 | 604 |
| Raymond. |  | 1,568 | 799 | 666 | 1,465 | 629 | 576 | 1,205 |
| Redcliff... | - | - | $\bigcirc$ | - |  | 724 | 570 | 1,294 |
| St. Albert | 472 | 543 | 308 | 306 | 614 | 327 | 328 | 655 |
| Stavely. | - | 129 | 145 | 100 | 245 | 146 | 122 | 268 |
| Stettler... | - | 570 | 884 | 560 | 1,444 | 646 | 522 | 1,168 |
| Stony Plain. | - | - | 273 | 232 | 505 | 148 | 145 | 293 |
| Strathmore. | - | - | 334 | 197 | 531 | 298 | 213 | 511 |
| Taber. | - | 578 | 800 | 600 | 1,400 | 758 | 654 | 1,412 |
| Tofield. | - |  | 402 | 184 | 586 | 237 | 218 | 455 |
| Vegreville. | - | 344 | 574 | 455 | 1,029 | 564 | 592 | 1,156 |
| Vermilion......... | - | 623 | 360 | 265 | 625 | 496 | 433 | \$29 |
| Wainwright. ............ | - |  | 481 | 307 | 788 | 449 | 369 | 818 |
| Villages- |  |  |  |  |  |  |  |  |
| Acme... | - | - | 119 | 62 | 181 | 76 | 72 | 148 |
| Airdrie. | - | - | 101 | 63 | 164 | 85 | 71 | 156 |
| Alix. . | - | - | 161 | 106 | 267 | 82 | 100 | 182 |
| Barons. | - | - | 48 | 27 | 75 | 108 | 76 | 184 |
| Bashaw. | - | - | - | - | - | 126 | 101 | 227 |
| Bawlf. | - | - | 151 | 119 | 270 | 99 | 88 | 187 |
| Big Valley | - | - | 151 | - | - | 158 | 139 | 297 |
| Bittern Lake. | - | - | - | - | $\overline{7}$ | 31 | 33 | 64 |
| Blackfalds.. | - | 156 | 90 | 60 | 150 | 53 | 52 | 105 |
| Blackje... | - |  | - | - |  | 107 | 78 | 185 |
| Botha... | - | - | - | - | - | 42 | 35 | 77 |
| Bow City | - | - | $\overline{7}$ | - | $\overline{-7}$ | 17 | 11 | 28 |
| Bowden. | 12 | 171 | 97 | 81 | 178 | 74 | 65 | 139 |
| Bruderheim | - |  | 72 | 60 | 132 | 99 | 83 | 182 |
| Burdett... | - | - |  | - | - | 53 | 42 | 95 |
| Cadogan. | - | - | - | - | - | 30 | 25 | 55 |
| Carbon. | - | - | - | - | - | 244 | 196 | 440 |
| Carlstadt. | 2 | 7 | 5 | - | 70 | 63 | 60 | 123 |
| Carstairs. | 20 | 297 | 151 | 119 | 270 | 188 | 160 | 348 |
| Cayley. | - | 48 | 74 | 52 | 126 | 74 | 56 | 130 |
| Cereal. | - | - | - | - | - | 56 | 33 98 | -89 |
| Champion. | - | - | - | - | - | 137 86 | 98 67 | 235 153 |
| Chauvin... | - | - | - | - | - | -86 113 | 67 76 | 153 |
| Chipman................... | - | - | - | - | - | 69 | 65 | 134 |
| Clive..................... | - |  | - | - | - | 59 | 56 | 115 |
| Clyde. | - | - | - | - | - | 25 | 28 | 53 |
| Coalhurst................ | 2 | 158 | - | $\overline{139}$ | 395 | ${ }_{144}$ | 148 | 742 284 |
| Cochrane. . . . . . . . . . . . . | 92 | 158 | 256 | 139 | 395 | 144 | 140 | 284 |

POPULATION
23.-Population of the Prairie Provinces, 1901, 1906, 1911 and 1916-concluded.


1 Now part of Edmonton City.

## AREA AND POPULATION

Urban Population of the Prairie Provinces.-Winnipeg remains the only city in the Prairie Provinces that has a population exceeding 100,000 , and this city has grown from 136,035 in 1911 to 163,000 in 1916. Two cities have, however, risen to the category exceeding 50,000, viz., Calgary and Edmonton in Alberta. In 1916 Calgary is shown to have 56,514 inhabitants as compared with 43,704 in 1911, and Edmonton 53,846 as compared with 30,479 in 1911. In the case of Edmonton, however, the increased population includes Strathcona, now forming part of the city as Edmonton South. Two cities exceed 20,000, viz., Regina ( 26,127 ) and Saskatoon $(21,048)$. The former has receded from a population of 30,213 in 1911, and the latter has increased from 12,004 in 1911. Of the remaining twelve cities three exceed 10,000, viz., Moosejaw, in Saskatchewan, with 16,934; Brandon, Manitoba, with 15,215 ; and St. Boniface, Manitoba, with 11,021 .

## VITAL STATISTICS.

Vital Statistics by Provinces.-In Canada the registration of births, marriages and deaths is under provincial control, and at present divergent methods, with, in New Brunswick, entire lack of statistics, render impossible the deduction for any series of years of annual birth-, marriage- and death-rates for the Dominion as a whole.

Table 24 shows, however, by provinces (New Brunswick excepted) the number of births, marriages and deaths in each of the years 1911 to 1915 , according to the latest returns of the provincial registrars. Using the census figures of population for 1911, and estimates of the Census and Statistics Office for 1912, 1913, 1914, and 1915, crude birth-, marriage-, and death-rates per 1,000 of the population living have been calculated for each year, as well as the excess of births over deaths. For Prince Edward Island no data for the year 1912 are available. The figures by provinces in this table are not strictly comparable, owing to the diversity of practice which at present prevails as between the different provincial registrars. Not only is the statistical year not uniform for all the provinces, but there is no uniformity in the practice as regards the inclusion or exclusion of still-births. Thus, in Nova Scotia, Quebec and Ontario still-births are eliminated from the calculations; but in Prince Edward Island, the Prairie Provinces and British Columbia they are included, and for these provinces the numbers of still-births, which are too small to affect materially the birth-and deathrates calculated, are given in a note at the foot of the table.

Vital Statistics of Cities.-Table 25 records the number of births, marriages and deaths by principal cities for the years 1913 and 1915 in continuation of the tables given in previous editions. In this table the natural increase per 1,000 of the population is based upon the locally estimated population in all cases where given.

VITAL STATISTICS.
24.-Number of Births, Marriages and Deaths, by Provinces, 1911-1915.


Inctuding still-births as follows: P. E. Island 4 in 1911, 1 in 1913, 3 in 1914, 12 in 1915; Manitoba 243 in 1911, 316 in 1912; Saskatchewan 48 in 1911, 170 in 1912, 134 in 1913, 182 in 1914; Alberta 160 in 1911, 230 in 1912, 250 in 1913-in 1914 and 1915, 315 and 305 are not included; British Columbia 191 in 1911, 240 ini 1912, 279 in 1913, 235 in 1914, 246 in 1915; Yuson 3 in 1914. In Manitoba in 1913 and 1914 still-births are excluded. 'Incomplete. '1l months.

AREA AND POPULATION
25.-Number of Births, Marriages and Deaths, by Principal Cities, 1913-1915.

| Cities. | Year. | Population. | Birthe. | Marriages. | Deaths. | Excess of Births over Deatbs. | Natural Increase per 1,000 of Population. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P. E. IslandCharlottetown |  |  |  |  |  |  |  |
|  | 1913 | - | 183 | Dot given | 128 | 58 | - |
|  | 1914 |  | $46^{2}$ | " | 188 | - | - |
|  | 1915 | 12,000 | $197{ }^{2}$ | * | 253 | - | - |
| Nova ScotiaHalifax. |  |  |  |  |  |  |  |
|  | 1913 | 47109 | 1,402 | $\stackrel{\text { a }}{ }$ | ${ }^{912}$ | 490 | 9.79 |
|  | 1914 | 47,109 | 1,464 | " | 1,031 | 433 | 9.19 |
|  | 1915 | 55,000 | 1,492 | " | 1,128 | 364 | 6.62 |
| Sydney | 1913 | 17,996 | $\begin{array}{r}641 \\ 544 \\ \hline\end{array}$ | " | 368 349 | 273 195 | $10 . \overline{84}$ |
|  | 1915 | 18,338 | 588 | " | 246 | 342 |  |
| Glace Bay | 1913 | - | 455 | " | 276 | 179 | - |
|  | 1914 | 16,741 | 531 | * | 271 | 260 | 15.53 |
|  | 1915 | 16,975 | 528 | " | 294 | 234 | - |
| QuebecMontreal... |  |  |  |  |  |  |  |
|  | 1913 | - | 20,490 | 6,280 | 12,299 |  | - |
|  | 1914 | - | 20,386 | 5,781 | 11,721 | 8,665 | - |
|  | 1915 1913 | - | 3,096 | 638 | 1,668 | 1,428 | - |
| Quebec. | 1914 | - | 3,136 | 612 | 1,784 | 1,352 | - |
|  | 1915 | - | - | - | - | - | - |
| Maisonneuve. | 1913 | - | $835{ }^{2}$ | $147{ }^{2}$ | 403 | - | - |
|  | 1914 | - | $743^{2}$ | $131^{2}$ | 460 | - | $\stackrel{-}{-}$ |
|  | 1915 | - | - | $\square$ | - | - | - |
| Hull. | 1913 | - | $655^{2}$ 879 | 1374 | 204 | - | - |
|  | 1915 | - | - | - | - | - | - |
| Sherbrooke. | 1913 | - | $704{ }^{2}$ | $137{ }^{2}$ | 337 | - | $=$ |
|  | 1914 | - | $673^{2}$ | $107^{2}$ | 374 | - | - |
|  | 1915 | - | $1 \stackrel{-}{8}^{2}$ | 24* | $\overline{89}$ | - | - |
| Westmount. .. | 1914 | - | $162^{2}$ | $48^{2}$ | 94 | - | - |
|  | 1915 | - | - | - | - | $-$ |  |
| Three Rivers.. | 1913 | - | 656 | 133 | 343 | 313 | - |
|  | 1914 | - | 660 | 120 | 275 | 385 | - |
|  | 1915 | - | $\square_{505}$ | -692 |  |  | - |
| Verdun. | 1913 | - |  |  |  | - | - |
|  | 1914 | - | $582^{2}$ | $75^{2}$ | $\stackrel{345}{-}$ | - | - |
| Lachine. . | 1915 | - | $3 \square^{-}$ | 652 | 233 | - | - |
|  | 1914 | - | $422^{2}$ | $54^{2}$ | 241 | - | - |
|  | 1915 | - | - | 0 | 22 | - | $\stackrel{+}{\square}$ |
| St. Hyacinthe. | 1913 | - | 325 | 1062 |  |  | - |
|  | 1914 | - | 342 | $99^{2}$ | 221 | 121 | - |
|  |  |  |  |  |  |  |  |
| Toronto. |  |  |  |  | 6.223 | 7,499 | 16.5 |
|  | 1914 | 475,000 | 13,949 | 5,964 | 5,602 | 8,347 | 17.57 |
|  | 1915 | 475,000 | 12,8,6 | 5,676 | 5,548 | 7,258 | 15.28 |

[^8]VITAL STATISTICS.
Number of Births, Marriages and Deaths, by Principal Cities, 1913-1915 -continued.

| Cities. | Year. | Population. | Births. | Marriages. | Deaths. | Excess of Births over Deaths. | Natural Increase per 1,000 of Population. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { io-con. } \\ & \text { iwa. } \end{aligned}$ |  |  |  |  |  |  |  |
|  | 1913 | 96,350 | 2,482 | 1,044 | 1,767 | 715 | 7.42 |
|  | 1914 | 97,900 | 2,592 | 1,072 | 1,697 | 895 | 9.14 |
|  | 1915 | 96,340 | 2,554 | 1,051 | 1,662 | 892 | 9.25 |
| nilton. | 1913 | 100,650 | 2,706 | 1,395 | 1,211 | 1,495 | 14.85 |
|  | 1914 | 101,190 | $\stackrel{2}{2} 845$ | 1,163 | 1,158 | 1,687 | 16.67 |
|  | 1915 | 100,310 | 2,771 | 1,151 | 1,197 | 1,574 | 15.69 |
| lon. .. .. ... | 1913 | 52,940 | 1,203 | 605 | 854 | 348 | 6.59 |
|  | 1914 | 54,220 | 1,200 | 607 | 802 | 398 | 7.34 |
|  | 1915 | 55.880 | 1,185 | 710 | 837 | 348 | 6.23 |
| itford. | 1913 | 26,100 | 742 | 323 | 369 | 373 | 14.29 |
|  | 1914 | 26,100 | 808 | 296 | 281 | 527 | 20.19 |
|  | 1915 | 25,180 | 636 | 269 | 306 | 330 | 13.10 |
| zston... .. | 1913 | 21,010 | 523 | 268 | 439 | 84 | 4.00 |
|  | 1914 | 21,260 | 517 | 287 | 372 | 145 | 6.82 |
| rborough. | 1915 | 21,330 | 522 | 291 | 405 | 117 | 5.48 |
|  | 1913 | 19,170 | 470 | 232 | 268 | 202 | 10.54 |
|  | 1914 | 19,650 | 476 | 207 | ${ }_{2}^{254}$ | 222 | 11.30 |
|  | 1915 | 19,430 | 482 | 223 | 277 | 205 | 10.55 |
| dsor. | 1913 | 21,610 | 511 | 1,423 | 327 | 184 | 8.51 |
|  | 1914 | 22,500 | 626 | 622 | 316 | 310 | 13.78 |
|  | 1915 | 23,640 | 632 | 529 | 293 | 339 | 14.34 |
| . William. | 1913 | 24,070 | 866 | 309 | 390 | 476 | 19.78 |
|  | 1914 | 27,180 | 956 | 254 | 311 | 645 | 23.73 |
|  | 1915 | 20,850 | 1,009 | 199 | 258 | 751 | 36.02 |
| hener | 1913 | 18,500 | 506 | 202 | 245 | 261 | 14.11 |
|  | 1914 | 18,880 | 531 | 222 | 211 | 320 | 16.95 |
|  | 1915 | 19,090 | 534 | 191 | 200 | 334 | 17.49 |
| ¢ph. | 1913 | 16,320 | 394 | 175 | 220 | 174 | 10.66 |
|  | 1914 | 16,800 | 353 | 145 | 209 | 144 | 8.57 |
|  | 1915 | 16,740 | 366 | 184 | 214 | 152 | 9.08 |
| Chomas.. | 1913 | 14,520 | 318 | 205 | 178 | 140 | 9.64 |
|  | 1914 | 15,490 | 340 | 186 | 218 | 122 | 7.88 |
|  | 1915 | 15,840 | 362 | 169 | 188 | 174 | 10.98 |
| tford. | 1913 | 14,570 | 337 | 141 | 192 | 145 | 9.95 |
|  | 1914 | 14,570 | 357 | 139 | 165 | 192 | 13.18 |
|  | 1915 | 15,150 | 378 | 156 | 185 | 193 | 12.74 |
| n Sound.... ... | 1913 | 12,790 | 329 | 127 | 178 | 151 | 11.81 |
|  | 1914 | 12,560 | 342 | 125 | 138 | 204 | 16.24 |
| Jatharines. | 1915 1913 | 12,380 | ${ }^{312}$ | 112 | 140 | 172 | 13.89 |
|  | 1914 | 15,860 | 500 | 238 | 243 | 257 | 16.20 |
|  | 1915 | 16,660 | 587 | 257 | 255 | 332 | 19.92 |
| Arthur.... ... | 1913 | 18,030 | 706 | 249 | 294 | 412 | 22.85 |
|  | 1914 | 18,320 | 702 | 210 | 215 | 487 | 26.58 |
|  | 1915 | 14,310 | 589 | 138 | 163 | 426 | 29.77 |
| t Ste. Marie... | 1.913 | 12,290 | 306 | 157 | 236 | 70 | 5.70 |
|  | 1914 | 13,200 | 279 | 180 | 198 | 81 | 6.14 |
|  | 1915 | 12,590 | 288 | 168 | 180 | 108 | 8.58 |
| tham. | 1913 | 12,390 | 260 | 207 | 207 | 53 | 4.28 |
|  | 1914 | 12,830 | 250 | 194 | 230 | 20 | 1.56 |
|  | 1915 | 13,090 | 256 | 179 | 189 | 67 | 5.11 |

## AREA AND POPULATION

25.-Number of Births, Marriages and Deaths, by Principal Cities, 1913-1915
-continued.

| Cities. | Year. | Population. | Births. | Marriages. | Deaths. | Excess of Births over Deaths. | Natural Increase per 1,000 of Population. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Ontario-con. } \\ & \text { Galt. } \end{aligned}$ | 1913 | 11,930 | 280 | 150 | 156 | 124 | 10.39 |
|  | 1914 | 12,020 | 323 | 132 | 139 | 184 | 15.31 |
|  | 1915 | 11,810 | 298. | 108 | 144 | 154 | 13.04 |
| Sarnia. | 1913 | 11,550 | 258 | 184 | 149 | 109 | 9.44 |
|  | 1914 | 12,090 | 270 | 179 | 156 | 114 | 9.43 |
|  | 1915 | 12,140 | 295 | 128 | 164 | 131 | 10.79 |
| Belleville. | 1913 | 10,600 | 258 | 138 | 187 | 71 | 6.70 |
|  | 1914 | 11,230 | 240 | 130 | 149 | 91 | 8.10 |
|  | 1915 | 11,940 | 260 | 124. | 172 | 88 | 7.37 |
| Brockville. | 1913 | 9,675 | 225 | 127 | 186 | 39 | 4.03 |
|  | 1914 | 9,275 | 228 | 85 | 173 | 55 | 5.93 |
|  | 1915 | 9,460 | 236 | 106 | 193 | 43 | 4.55 |
| Woodstock. | 1913 | 9,485 | 223 | 106 | 143 | 80 | 8.43 |
|  | 1914 | 9,600 | 203 | 131 | 124 | 79 | 8.23 |
|  | 1915 | 9,600 | 210 | 111 | 110 | 100 | 10.41 |
| Niagara Falls. | 1913 | 12,020 | 267 | 492 | 131 | 136 | 11.31 |
|  | 1914 | 11,650 | 294 | 291 | 140 | 154 | 13.22 |
|  | 1915 | 11,450 | 263 | 292 | 133 | 130 | 11.35 |
| North Bay.. | 1913 | 9,490 | 340 | 124 | 144 | 196 | 20.65 |
|  | 1914 | 10,980 | 406 | 121 | 146 | 260 | 23.68 |
|  | 1915 | 8,935 | 416 | 91 | 128 | 288 | 32.23 |
| ManitobaWindipeg. | 1913 | 184,730 | 5,577 | 3,404 | 2,204 | 3,373 | 18.26 |
|  | 1914 | 203,255 | 5,789 | 3,070 | 1,955 | 3,834 | 18.86 |
|  | 1915 |  | - | - | - |  | - |
| Brandon. | 1913 | 15,911 | 680 | 296 | 279 | 401 | 25.20 |
|  | 1914 | 17,177 | 641 | 274 | 229 | 41. | 23.99 |
|  | 1915 |  | 327 | 109 | 389 | - | - |
| St. Boniface.. | (1913 | 11,405 12,025 | 327 421 | 1109 | 302 | 119 | 9.90 |
|  | 1915 |  | 1 | - | - | - | - ${ }^{-1}$ |
| Portage la Prairie. . | 1913 | 6,343 | 231 | 97 | 118 | 113 | 17.81 |
|  | 1914 | 6,500 | 204. | 85 | 126 | 78 | 12.00 |
|  | 1915 | - | - | - |  | - | - |
| SaskatchewanRegina.. | 1913 | - | 845 | 528 | 486 | 359 | - |
|  | 1914 | 50,000 | 1,006 | 493 | 298 | 708 | 14.16 |
|  | 1915 | - | - | $\stackrel{-}{4}$ | 28 | ¢ 31 | - |
| Moosejaw. | 1913 | - ${ }^{-}$ | 515 | 484 | 284 | 231 | 13.23 |
|  | 1914 | 30,000 | 607 | 400 | 210 | 397 | 13.23 |
|  | 1915 | - | 856 | 576 | 429 | 427 | - |
| Saskatoon.. | 1914 | 30,000 | 914 | 433 | 265 | 649 | 21.63 |
|  | 1915 | - | - | 74 | 67 | 172 | - |
| North Battleford. . | 1913 | - 00 | 239 | 74 | 67 | 172 |  |
|  | 1914 | 6,000 | 198 | 92 | 46 | 152 | 25.33 |
|  | 1915 1913 | - | 310 | 178 | 172 | 138 | - |
| Prince Albert. | 1914 | 10,000 | 274 | 144 | 123 | 151 | 15.10 |
|  |  | - | - | - | - | - | - |
| Swift Current. | 1913 | 6,000 | 159 | 141 | 49 | 110 | 18.33 |
|  | 1915 |  |  |  |  | - | $1-$ |

## VITAL STATISTICS

25.-Number of Births, Marriages and Deaths, by Principal Cities, 1913-1915
-concluded.

| Cities. | Year. | Population. | Births. | Marriages. | Deaths. | Excess of Births over Deaths. | Natural Increase per 1,000 of Population |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Saskatchewan-con. Weyburn. | $\begin{array}{r} 1913 \\ 1914 \\ 1915 \end{array}$ | 5,343 | 165 | 114 | 48 | 117 | 21.90 |
| AlbertaCalgary. |  |  | 2,278 | 1,379 | 878 | 1,400 |  |
|  | 1914 | - | 2,354 | 1,121 | 685 | 1,469 | - |
|  | 1915 | 56,302 | 2,162 | 1,000 | 636 | 1.526 | 210 |
| Edmonton.: | 1913 | - | 1,365 | 986 | 778 | 587 | - |
|  | 1914 | - | 1,824 | 1,009 | 652 | 1,172, | - |
|  | 1915 | 53,794 | 1,909 | 976 | 612 | 1,2971 | 24.11 |
| Lethbridge.. | 1913 | - | 241 | 242 | 166 | 75 | - |
|  | 1914 | \% | 247 | 221 | 138 | 109 ; | - |
|  | 1915 | 9,437 | 277 | 198 | 105 | 172: | 1532 |
| Medicine Hat. | 1913 | - | 328 419 | 264 179 | 215 | 113: | - |
|  | 1915 | 9,269 | 372 | 171 | 104 | $26{ }^{\circ}$ | 2591 |
| British Columbia-m Vancouver | 1913 | 11420 |  |  |  |  |  |
|  | 1914 | 114,220 | 2,425 | 1,717 | 1,178 | 1,247 | 20.28 |
|  | 1915 | 100,000 | 2,311 | 1,274 | 1,127 | 1,184 | 11.84 |
| Victoria. | 1913 | , | 986 | 851 | 569 | 417 | - |
|  | 1914 | - | 772 | 770 | 459 | 313 | - |
|  | 1915 |  | 820 | 480 | 464 | 356 | - |
| New Westminster. . | 1913 | 17,198 | 855 | 378 | 491 | 364 | 21.16 |
|  | 1914 | 15,000 | 538 | 222 | 302 | 234 | 15.60 |
|  | 1915 | 15,000 | 289 | 173 | 225 | 64 | 4.26 |
| Nanaimo.. | 1913 | 8,000 | 318 | 120 | 149 | 169 | 91.12 |
|  | 1914 | 8,500 | 340 | 98 | 133 | 207 | 24.35 |
|  | 1915 | 8,500. | 304 | 88 | 162 | 142 | 16.70 |

## IMMIGRATION.

Immigrant Arrivals, 1916-17.-For the fiscal year ended March 31, 1917, the number of immigrant arrivals in Canada was 75,374 , as compared with 48,537 in 1916, 144, 789 in 1915 and 384,878 in 1914, the year before the war broke out. Of the total who arrived in 1916-17, 8,282 , or 11 p.c., came from the United Kingdom, 61,389 , or 81 p.c., came from the United States and 5,703 , or 8 p.c., came from other countries. As shown by Table 26, the increase in the number of immigrants in 1916-17 was mainly due to arrivals from the United States, the number of United States immigrants being 61,389, as against 36,937 There was also an increase in the arrivals from "other countries," the figures being 5,703 , as against 2,936 ; but in the case of the United Kingdom the number was 8,282 , as against 8,664. For the calendar year 1916 the number of immigrant arrivals was 65,836 , including 8,596 from the United Kingdom, 51,701 from the United States and 5,539 from other countries. Table 28 records the rejections and deportations of immigrant arrivals by principal causes for the years 1903 to 1917 For 1917, the statistics of rejection and deportation by causes and by nationalities are given by the Immigration Branch of the Depart-

## AREA AND POPULATION

ment of the Interior under shorter classifications than heretofore. Tables 28 and 29 follow, therefore, the new classifications for the series of years from 1903.

Juvenile lmmigration.-For the year ended March 31, 1917, 251 children came to Canada through five different agencies, and were placed in foster-homes or situations. Applications for the services of these children numbered 28,990 , as shown in Table 30. Altogether, over 78,000 children have been placed out in Canada since the organization of this class of immigration began in 1868. Of the total, about 26,300 have come from the Dr. Barnardo Homes. In his annual report for the year 1916, the Chief Inspector of British Immigrant Children and Receiving Homes writes that upwards of 8,700 young men, who came to Canada as boys through the British juvenile societies and agencies, have enlisted for service in the war, this number representing nearly 25 p.c. of the total number of boys who came to Canada under these auspices. The enlistments of former members of the Dr. Barnardo Homes alone number over 5,300 . The young soldiers are reported as bearing their part nobly in the great struggle. One of them has gained the Victoria Cross, and others have received honours of different kinds, including the Distinguished Service Order, the Military Cross and the Distinguished Conduct Medal.

Chinese Immigration.-The conditions under which Chinese immigrants have been allowed to enter Canada have been described in previous issues of the Year Book (see edition for 1915, page 110). The number of Chinese who entered Canada during the two fiscal years ended March 31, 1917, has been much reduced owing to the operation of the Order in Council (renewed every six months since December 8 , 1913), under which the landing in British Columbia of skilled and unskilled artisans and labourers is prohibited. In 1916-17 the number of Chinese immigrants was 272, as compared with 20 in 1915-16, 1,155 in 1914-15 and 5,274 in 1913-14. A record of Chinese immigration from 1886 to 1917 is given as Table 33.
26.-Number of Immigrant Arrivals in Canada, 1897-1917.

| Fiscal <br> Years | Immigrant Arrivals from |  |  | Total. | Fiscal <br> Years. | Immigrant Arrivals from |  |  | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | United Kingdom. | United States. | Other Countries. |  |  | United Kingdom. | United | Other Countries. |  |
|  | No. | No. | No. |  |  |  | No. | No. |  |
| $1897{ }^{1}$ | 11,383 | 2,412 | 7,921 | 21,716 | 1908 | 120,182 | 58,312 | 83,975 | 262,469 |
| $1898{ }^{1}$ | 11,173 | 9,119 | 11,608 | 31,900 | 1909 | 52,901 | 59,832 | 34,175 | 146,908 |
| $1899^{1}$ | 10,660 | 11,945 | 21,938 | 44,543 | 1910 | 59,790 | 103,798 | 45,206 | 208,794 |
| $1900^{2}$ | 5,141 | 8,543 | 10,211 | 23,895 | 1911 | 123,013 | 121,451 | 66,620 | 311,084 |
| 1901 | 11,810 | 17,987 | 19,352 | 49,14.9 | 1912 | 138,121 | 133,710 | 82,406 | 354,237 |
| 1902 | 17,259 | 26,388 | 23,732 | 67,379 | 1913 | 150,542 | 139,009 | 112,881 | 402,432 |
| 1903 | 41,792 | 49,473 | 37,099 | 128,364 | 1914 | 142,622 | 107,530 | 134,726 | 384,878 |
| 1904 | 50,374. | 45,171 | 34,786 | 130,331 | 1915 | 43,276 | 59,779 | 41,734 | 144,789 |
| 1905 | 65,359 | 43,543 | 37,364 | 146,266 | 1916 | 8,664 | 36,937 | 2,936 | 48,537 |
| 1906 | 86,796 | 57,796 | 44,472 | 189,064 | 1917 | 8,282 | 61,389 | 5,708 | 75,374 |
| $1907{ }^{3}$ | 55,791 | 34,659 | 34,217 | 124,667 |  |  |  |  |  |

${ }^{2}$ Calendar year. ${ }^{2}$ Six months, January to June, inclusive. ${ }^{3}$ Nine months ended March 31.

IMMYGRATION
27.-Arrivals at Inama ard Ecem Perts in Canada in fiscal years 1911-1917.

| Nationalities. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No. | No. | No. |
| English.. | 84,707 | 95,107 | 108,082 | 102,122 | 30,807 | 5,857 | 5,174 |
| Irish. | 6,877 | 8,327 | 9,706 | 9,585 | 3,525 | 818 | 958 |
| Scotch | 29,924 | 32,988 | 30,735 | 29,128 | 8,346 | 1,887 | 2,062 |
| Weleh. | 1,505 | 1,699 | 2,019 | 1,787 | 598 | 102 | 88 |
| Total for U.K. | 123, 813 | 138,121 | 150,5d2 | 142,622 | 43,276 | 8,664 | 8,282 |
| Armenian.. | 20 | 60 | 100 | 139 | 36 |  | 3 |
| Australian. | 286 | 184 | 106 | 106 | 51 | 32 | 8 |
| Austrian... | 7,891 | 4,871 | 1,050 | 3.147 | 502 | 15 | 1 |
| Belgism. | 1,768 | 1,601 | 1,826 | 2,651 | 1,149 | 172 | 126 |
| Bukowinian... | 700 | 328 | 687 | 1,549 | 72 |  |  |
| Bulgarian.. | 1,068 | 3,295 | 4,616 | 1,727 | 4,048 | 1 |  |
| Chinese. | 5,278 | 6,247 | 7,445 | 5,512 | 1,258 | 88 | 393 |
| Danish. | 535 | 628 | 798 | 871 | 326 | 167 |  |
| Dutch. | 931 | 1,077 | 1,524 | 1,506 | 605 | 186 | 51 |
| Finnish. | 2,123 | 1,646 | 2,391 | 3,183 | 459. | 139 |  |
| French. | 2,741 | 2,094 | 2,755 | 2,683 | 1,206 | 180 | 199 |
| Galician... | 3,553 | 1,594 | 497 | 1,698 | 36 |  |  |
| German, n.e.c. | 2,530 | 4,645 | 4,938 | 5,525 | 2,470 | 27 | 9 |
| Greek. | 777 | 698 | 1,390 | 1,102 | 1,147 | 145 | 258 |
| Hebrew, Austrian. | 248 | 269 | 392 | 728 | 160 | 1 |  |
| Hebrew, German.. | 19 | 2 | 16 | 20 |  | - |  |
| Hebrew, Polish. | 85 | 52 | 26 | 22 | 6 | - |  |
| Hebrew, Russim. | 4,188 | 4,460 | 6,304 | 9,622 | 2,674 | 46 | 108 |
| Hebrew, n.e.s.. | 606 | 537 | 649 | 860 | 266 | 18 | 28 |
| Hindu.. | 5 | 3 | 5 | 88 | - | 1 |  |
| Hungarian. | 756 | 482 | 578 | 833 | 218 |  |  |
| Icelandic. | 250 | 205 | 231 | 292 | 145 | 15 | 9 |
| Italian. | 8,859 | 7,590 | 16,601 | 24,722 | 6,228 | 388 | 758 |
| Japanese. | 437 | 765 | 724 | 856 | 592 | 401 | 648 |
| Newfoundland. | 2,229 | 2,598 | 1,036 | 496 | 338 | 255 | 1,243 |
| New Zealand. | 116 | 61 | 39 | 24 | 2 I | 18 | 12 |
| Norwegian...... | 2,169 | 1,692 | 1,832 | 1,647 | 788 | 232 | 303 |
| Polish, Austrian. | 1,065 | 2,773 | 4,462 | 4,310 | 1,272 | - | 8 |
| Polish, German. | 43 | 21 | 29 |  |  |  |  |
| Polish, Russian. | 800 | 1,624 | 4,488 | 4,507 | 544 | 7 |  |
| Polish, n.e.s. | 269 | 642 | 966 | 930 | 153 |  |  |
| Rumanian. | 511 | 793 | 1,116 | 1,504 | 361 | , |  |
| Russian, n.e.s.. | 6,621 | 9,805 | 18,623 | 24,485 | 5,201 | 40 | 25 |
| Ruthenian. | 2,869 | 13,346 | 17,420 | 18,372 | 5,830 |  |  |
| Servian.. | 50 | 209 | 366 | 193 | 220 | 7 | 1 |
| Swedish.. | 3,213 | 2,394 | 2,477 | 2,435 | 916 | 177 | 332 |
| Swiss.... | 270 | 230 | 246 | 269 | 209 | 42 | 30 |
| Syrian.. | 124 | 144. | 232 | 278 | 79 | 3 |  |
| Turkish. ....... | 469 | 632 | 770 | 187 | 33 | - | 5 |
| U.S. (via ocean ports)... | 121,451 | 133 | 121 | 121 | 41 | 15 | 20 |
| United States... | 121,451 | 133,710 | 139,009 | 107,530 | 59,779 | 36,937 | 61,389 |
| West Indies...... | ${ }_{963} 39$ | ${ }^{314}$ | 398 | ${ }^{474}$ | 356 | 38 | 293 |
| Other nationalities... |  | 1,655 | 2,611 | 5,006 | 1,710 | 76 | 705 |
| Total. .. .. | 188,071 | 216,116 | 251,890 | 242,256 | 101,513 | 39,873 | 67,092 |
| Grand total. | 311,084 | 354,237 | 402,432 | 384,878 | 144,789 | 48,537 | 75,374 |

Note.-"n.e.s." signifies "not elsewhere specified."

## AREA AND POPULATION.

28.-Rejections of Immigrants upon arrival at Ocean Ports and Deportations after admission, by principal causes, 1903-1917.

| Principal Causes. | Rejections at Ocean Ports. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{\|} \hline 1903-1 \\ 1907 \end{array}$ | 1908 | 1909 | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | Totals |
| Accompanying patients.. | No. 89 | No. 58 | No. 60 | No. 42 | No. 104 10 | No. 53 | No. | No. ${ }^{\text {76 }}$ | No. | No. ${ }_{4}$ | ${ }^{\text {No. }}$ | No, 580 |
| Bad character........... | 74 | 181 | 87 | 98 | 122 | 112 | 80 | 102 | 56 | 17 | 4 | 933 |
| Contract labour.......... | 14 | 23 <br> 17 | - | 33 | 28 | 3 | - | - | - | $-$ | 二 | 87 |
| Criminality............. | 14 | 17 | - ${ }^{6}$ | ${ }^{9}$ | 10 | ${ }_{6} 6$ | ${ }^{4}$ | ${ }^{3}$ | ${ }^{2}$ | 4 | 二 | 74 |
| Lack of funds............. | 1 | 85 | 67 | 34 | 1,038 | 246 | 204 | 994 | 452 | 38 | 55 | 3,214 |
| Likely to become a public charge. | 235 | 292 | 66 | 681 | 274 |  |  |  | 71 | 55 | 5 | 2,025 |
| Medical causes........... | 1,679 | 513 | 216 | 585 | 585 | 256 | 328 | 398 | 319 | 34 | 30 | 4,943 |
| Not complying with regulations. |  | 3 | 7 | 33 | 48 | 119 | 55 |  |  |  | 22 | 546 |
| Previously rejected... | - | - |  | - |  | , | 1 |  |  |  |  | 10 |
| Totals. | 2,122 | 1,172 | 509 | 1,515 | 2,210 | 972 | 756 | 1,827 | 998 | 163 | 174 | 12,418 |
| Princtral Causes. | Deportations after Admission. |  |  |  |  |  |  |  |  |  |  |  |
| Accompanying patients.. | 47 | 26 | 21 | - | 18 | 17 | 16 | 10 | 34 | 5 |  | 203 |
| Bad character........... | 5 | 30 | 71 | 44 | 71 | 120 | 165 | 159 | 128 | 68 | 60 | 921 |
| Criminality............. | 22 | 68 | 115 | 130 | 172 | 242 | 334 | 376 | 404 | 329 | 277 | 2,469 |
| Medical causes Not complying with regulations. <br> Public charges............ | 404 | 392 | 467 | 212 | 222 | 229 | 370 | 570 | 379 | 206 | 93 | 3,549 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ${ }_{98}$ | $\overline{309}$ | 1, $\overline{074}$ | $\overline{348}$ | 12 289 | ${ }^{8} 8{ }^{8}$ | 392 | 715 | $\overrightarrow{789}$ | 635 | 161 | 28 5,153 |
| Totals. |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 576 | 825 | 1,748 | 734 | 784 | 959 | 1,281 | 1,834 | 1,734 | 1,243 | 605 | 12,323 |

29.-Number by Nationalities of Deportations after admission, 1903-1917

| Nationalities. | Deportations after Admission. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 1903- \\ & 1907 \end{aligned}$ | 1908 | 1909 | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | Totals |
| British. | No. 473 | No. 607 | No. | No. | No. | No. | No. | No. | No. 877 | No. 602 | Nio. | No. |
| American. | 10 | 37 | 98 | 119 | 169 | 256 | 377 | 405 | 461 | 437 | 324 | 2,693 |
| Other countries. | 93 | 181 | 415 | 129 | 157 | 163 | 345 | 477 | 396 | 204 | 95 | 2,655 |
| Totals. | 576 | 825 | 1,748 | 734 | 784 | 959 | 1,281 | 1,834 | 1,734 | 1,243 | 605 | 12,323 |

30.-Juvenile Immigrants and Applications for their Services, 1901-1917.

| Fiscal <br> Year. | Juvenile <br> immigrants. | Applications <br> for their <br> services. | Fiscal <br> Year. | Juvenile <br> immigrants. | Applications <br> for their <br> services. |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. |  | No. | No. <br> 1901 <br> 1902 |
| 9,577 | 5,783 | 1910 | 2,422 | 18,477 |  |
| 1903 | 1,979 | 8,587 | 1911 | 2,524 | 21,768 |
| 1904 | 2,212 | 14,219 | 1912 | 2,689 | 31,040 |
| 1905 | 2,814 | 16,573 | 1913 | 2,642 | 33,493 |
| 1906 | 3,258 | 19,833 | 1914 | 2,318 | 32,417 |
| 19071 | 1,455 | 15,800 | 1915 | 1,899 | 30,854 |
| 1908 | 2,375 | 17,239 | 1916 | 821 | 31,725 |
| 1909 | 2,424 | 15,417 | Total...... | $\mathbf{3 4 , 6 0 0}$ | 359,589 |

Nore.-The above are included in the total number of immigrants recorded elsewhere. ${ }^{1}$ Nine months.

## IMMIGRATION

31.-Sex, Occupation and Destination of Immigrants for the fiscal year ended March 31, 1917.


## ${ }^{1}$ Included in British Columbia.

AREA AND POPULATION 32.-Destination of Immigrants into Canada by Provinces, 1901-1917.

| Fiscal Year. | $\begin{aligned} & \text { Mari- } \\ & \text { time } \\ & \text { Prov. } \end{aligned}$ | Quebec. | Ontario. | Manitoba. | Sas-katchewan. | Alberta. | $\begin{gathered} \text { British } \\ \text { Colum- } \\ \text { bia. } \end{gathered}$ | Not shown | Totals. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No. | No. | No. | No. | No. |
| 1901.. | 2,144 | 10,216 | 6,208 | 11,254 |  | ,160 | 2,600 | 2,567 | 49,149 |
| 1902. | 2,312 | 8,817 | 9,798 | 17,422 |  | ,199 | 3,483 | 3,348 | 67,379 |
| 1903. | 5,821 | 17,040 | 14,854 | 39,535 |  | ,898 | 5,378 | 1,838 | 128,364 |
| 1904. | 5,448 | 20,222 | 21,266 | 34,911 |  | ,397 | 6,994 | 1,093 | 130,331 |
| 1905. | 4,128 | 23,666 | 35,811 | 35,387 |  | ,289 | 6,008 | 1,977 | 146,266 |
| 1906. | 6,381 | 25,212 | 52,746 | 35,648 | 28,728 | 26,177 | 12,406 | 1,766 | 189,064 |
| 1907 (9m.) | 6,510 | 18,319 | 32,654 | 20,273 | 15,307 | 17,559 | 13,650 | 395 | 124,667 |
| 1908. | 10,360 | 44,157 | 75,133 | 39,789 | 30,590 | 31,477 | 30,768 | 195 | 262,469 |
| 1909. | 6,517 | 19,733 | 29,265 | 19,702 | 22,146 | 27,651 | 21,862 | 32 | 146,908 |
| 1910. | 10,644 | 28,524 | 46,129 | 21,049 | 29,218 | 42,509 | 30,721 |  | 208,794 |
| 1911. | 13,236 | 42,914 | 80,035 | 34,653 | 40,763 | 44,782 | 54,701 |  | 311,084 |
| 1912. | 15,973 | 50,602 | 100,227 | 43,477 | 46,158 | 45,957 | 51,843 | - | 354,237 |
| 1913. | 19,806 | 64,835 | 122,798 | 43,813 | 45,147 | 48,073 | 57,960 | - | 402,432 |
| 1914. | 16,730 | 80,368 | 123,792 | 41,640 | 40,999 | 43,741 | 37,608 | - | 384,878 |
| 1915. | 11,104 | 31,053 | 44,873 | 13,196 | 16,173 | 18,263 | 10,127 | - | 144,789 |
| 1916. | 5,981 | 8,274 | 14,743 | 3,487 | 6,001 | 7,215 | 2,836 | - | 48,537 |
| 1917 | 5,710 | 10,930 | 26,078 | 5,247 | 9,874 | 12,418 | 5,1172 | - | 75,374 |
| Totals. | 148,805 | 504,882 | 836,410 | 460,483 | 856, | ,869 | 354,062 | 13,211 | 3,174,722 |

33.-Record of Chinese Immigration, 1886-1917.

| Fiscal Year. | Paying tax. | Exempt from tax. | Percentage of total arrivals admitted exempt from tax. | Registration for leave. | Total Revenue. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1886-91.... | No. 4,590 | $\overline{\text { No. }_{222}}$ | P.C. 4.61 | $\overline{7,041}$ | $\begin{gathered} \$ \\ 239,664 \end{gathered}$ |
| 1892. | 3,276 | 6 | 0.18 | 2,168 | 166,503 |
| 1893. | 2,244 | 14 | 0.62 | 1,277 | 113,491 |
| 1894. | 2,087 | 22 | 1.04 | 666 | 105,021 |
| 1895. | 1,440 | 22 | 1.50 | 473 | 72,475 |
| 1896. | 1,762 | 24 | 1.34 | 697 | 88,800 |
| 1897 | 2,447 | 24 | 0.97 | 768 | 123,119 |
| 1898. | 2,175 | 17 | 0.78 | 802 | 109,754 |
| 1899. .. | 4,385 | 17 | 0.39 | 859 | 220,310 |
| 1900....... .. | 4,231 | 26 | 0.61 | 1,102 | 215,102 |
| 1901. | 2,518 | 26 | 1.02 | 1,204 | 178,704 |
| 1902. | 3,525 | 62 | 1.73 | 1,922 | 364,972 |
| 1903. | 5,245 | 84 | 1.58 | 2,044 | 526,744 |
| 1904. | 4,719 | 128 | 2.64 | 1,920 | 474,420 |
| 1905. | 8 | 69 | 89.61 | 2,080 | 6,080 |
| 1906. | 22 | 146 | 86.90 | 2,421 | 13,521 |
| $1907{ }^{1}$. | 91 | 200 | 68.73 | 2,594 | 48,094 |
| 1908. | 1,482 | 752 | 33.67 | 3,535 | 746,535 |
| 1909. | 1,411 | 695 | 33.00 | 3,731 | 713,131 |
| 1910. | 1,614 | 688 | 29.89 | 4,002 | 813,003 |
| 1911. | 4,515 | 805 | 15.13 | 3,956 | 2,262,056 |
| 1912. | 6,083 | 498 | 7.57 | 4,322 | 3,049,722 |
| 1913. | 7,078 | 367 | 4.93 | 3,742 | 3,549,242 |
| 1914. | 5,274 | 238 | 4.32 | 5,450 | 2,644,593 |
| 1915. | 1,155 | 103 | 8.19 | 4,373 | 588,124 |
| 1916. | 20 | 69 121 | 77.53 30.78 | 4,064 3,312 | 19,389 140,487 |
| 1917 | 272 | 121 | 30.78 | 3,312 | 140,487 |
| Totals... | 73,669 | 5,445 | 6.88 | 68,525 | 17,593,056 |

${ }^{1}$ Nine months. ${ }^{2}$ Includes 315 Yukon.

IMMIGRATION
34.-Record of Oriental Immigration, 1901-1917.

35.-Expenditure on Imuigration in the fiscal years 1868-1917.

| Year. | \$ | Year. | \$ | Year. | $\$$ | Year. | $\delta$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1868. | 36,050 | 1881... | 214,251 | 1894. .. | 202,235 | 1907' ${ }^{\text {- . . }}$ | 611,201 |
| 1869 | 26,952 | 1882. | 215,339 | 1895. | 105,653 | 1908. | 1,074,697 |
| 1870 | 55,966 | 1883. | 373,958 | 1896. | 120,199 | 1909. | 979,326 |
| 1871. | 54,004 | 1884. | 511,209 | 1897 | 127,438 | 1910. | 960,676 |
| 1872. | 109,954 | 1885. | 423,861 | 1898. | 261,195 | 1911. | 1,079,130 |
| 1873. | 265,718 | 1886. | 257,355 | 1899. | 255,879 | 1912 | 1,365,000 |
| 1874. | 291,297 | 1887 | 341,236 | 1900. | 434,563 | 1913. | 1,427,112 |
| 1875. | 278,777 | 1888. | 244,780 | 1901. | 441,730 | 1914.. .. | 1,893,298 |
| 1876... | 338,179 | 1889. | 202,499 | 1902. | 494,842 | 1915. | 1,658,182 |
| 1877 | 309,353 | 1890. | 110,092 | 1903. | 642,914 | 1916. | 1,307,480 |
| 1878. | 154,351 | 1891. | 181,045 | 1904 | 744,788 | 1917 | 1,181,991 |
| 1879 | 186,403 | 18 | 177,605 | 5. | 972,35 |  |  |
| 1880. | 161,213 | 1893. | 180,677 | 1906. | 842,668 | Total. . | 24,979,687 |

${ }^{1}$ Nine months.

## IV.-EDUCATION.

## SUMMARY OF CONTENTS.

| Geveral Features or Canadun Ebucaton | Mantoba Page. |
| :---: | :---: |
| General Features or Canadian Education | Manitoba: General Organization: |
| Provinclal Powers under the British Education; Night Schools; Specill |  |
|  |  |
| Religious Instriction and Exercises in the | Teachers' Sprecial Course; Foreign |
| Public Elfmentary Schools ...... .......120-123 | Travel; Consolidated School Districis; |
| Separate School System in Ontario...... 122 | School Gardens; Schools for the Deap |
| Separate School System in Quebec.......122-123 | School |
| Arrangements in other Provinces...... 123 | Sabkatchewan: Elementary Schools; |
| Elementary and Secondary Educati | Secondary Schools; School Gran |
| Provinces.............................123-143 Formation of School Dis |  |
| Prince Edward Island: General | solidated School Districts; Small |
| Organization; Local M | Districts; School Districts established |
| Sources of Income.......................123-124 | by the Minister; Professional Training |
| Nova Scotia: General Organization; | alberta: General Organization; Elemen- |
| Inspection; Elementary Schools; Socrces of Income; School Grades; Superaniuation of Teachers; Second-ary Edecation; Religious Instruction; Manual Training, etc.; Miscellaneous 124-127 |  |
|  | Arrangements; Sources of Revenue; |
|  | Secondary Education; Training or |
|  | Teachers............................... 139-141 |
|  | British Columbia: Ge |
| New Brunswick: General Organtzation; tion; Elementary Education; Sec- |  |
| Cotrses of Instruction; School Dis- | ondary Eddcation................... . 141-142 |
| tricts; Support of Schools; Secondary | Yukon Territory . . . . . . . . . . . . . . . . . . . . 142-143 |
| Education; Consolidated Schools; | Higher Education in Canada. ............. 143-148 |
| Manual Trainiva and Household | Religious Affiliation of Universities |
| Science; Teachers; Schools for Deaf | and Colleges: Anglican or Church of |
| and Blind; Superannuition of | England; Roman Catholic; Other |
| Teachers; Physical Training; Inspec- | Denominations |
| tion; Normal School; School Gardens 127-129 | Universities and Colleges by Provinces: |
| Quebec: General Organtation; Roman | Prince Edward Island; Nova Scotia; |
| Catholic and Protestant Committees; | New Brunswick; Quebec; Ontario; |
| School Menicipalities; Board of School | Manitoba; Saskatchewan; Alberta; |
| Commissioners; Sources of Income; | Britigh Coluatbia. ..................... 144-148 |
| Religiots Minorities; Elementary | Education Statistics of Canada........... 148-175 |
| Schools; Secondary Education; Roman | Statistics of Public Schools; Growth of |
| Catholic Classical Colleges; Prot- | Expenditure on Public Education; |
| estant Secondary Schools; Training | Statistics of Higher Education; Tables: |
| of Teachers; Superannuation or | Public Schools, Teachers and Pupils by |
| Teachers . . . . . . . . . . . . . . . . . . . . . 129-133 | Provinces; Teachers and Pupils in |
| Ontario: General Organization; Elemen- | Normal, Model and High Schools: |
| tary Education; Separate Schools; | Receipts and Expenditure for Public |
| Secondary Education; Training of | Education; Average Annual Salaries |
| Teachers; Superannuation of | of Teachers; Universities and Col- |
| Teachers; Private Schools.............133-135 | leges. . . . . . . . . . . . . . . . . . . . . . . . . . . 149-175 |

This section includes a description of the Canadian system of public elementary and secondary education, a description of the facilities for higher education in Canada and a series of statistical tables relating to the public elementary and secondary schools and to the colleges and universities of Canada. A summary of the statistics of illiteracy and school attendance in Canada for 1910, as returned by the Census of 1911, was published in the Year Book of 1914, pages 92-93.

## general features of Canadian education system.

Under the British North America Act, 1867, the right to legislate on matters respecting education was reserved exclusively to the provincial legislatures, subject to the maintenance of the rights and privileges of the denominational and separate schools as existing at the time of union or admission of provinces. In general there are two fundamental systems of education throughout Canada, one that of the Protestant communities, free from the control of religious bodies, and the other
that of the Roman Catholic French and Irish communities in which education is united with the religious teaching of the Roman Catholic Church. In Ontario, Roman Catholies, Protestants and coloured people have each the right to establish "Separate Schools" for elementary education, the local rates for the support of these schools being separately levied and applied. In Quebec, the religious minority in any municipality, whether Roman Catholic or Protestant (the Jews being "Protestants" for all the purposes of the School Law), may dissent and maintain its own elementary and model schools and academies or high schools, the taxation of the minority being separate from that of the majority for the three classes of school. That is to say, the separate system is complete. In Saskatchewan and Alberta a separate school may be established by the minority, whether Protestant or Roman Catholic, subject, however, to identical regulations as to courses, certificates, inspection, etc. In the remaining provinces there are special provisions for the education of Roman Catholies in the larger cities and towns.

In all the provinces the cost of education is defrayed from the public revenues, provincial and local, and public elementary education is free to parents or guardians, except for certain small fees which are payable in parts of the province of Quebec. With the exception of Quebec all the provinces have laws of compulsory education, but under conditions that differ as between one province and another. As a rule, the provincial laws provide for uniformity in the training of teachers, the use of text books and the grading of pupils. Secondary schools or departments, and colleges or universities for higher education, exist under govermment control in all the provinces, and the three classes of teaching institutions are more or less co-ordinated to allow of natural transition from the lower to the higher. School terms and holidays are arranged to suit climatic and other local conditions; and it is frequently possible for students to work their own way through college and the university. Arrangements for the superannuation of teachers as hereinafter described, are applied in Nova Scotia, New Brunswick, Quebec and Ontario.

Recent movements in the direction of nature study, manual instruction, school gardens, agriculture, domestic science and technical education are all energetically in progress, and in the more progressive provinces the higher education of women is an important feature of university life.

## PROVINCIAL POWERS UNDER THE BRITISH NORTH AMERICA ACT.

The powers of the provincial legislatures respecting education are laid down in Section 93 of the British North America Act, 1867, as follows:
93. In and for each province the legislature may exclusively make laws in relation to education, subject and according to the following provisions:
(1) Nothing in any such law shall prejudicially affect any right or privilege with respect to denominational schools which any class of persons have by law in the province at the union.
(2) All the powers, privileges and duties at the union by law conferred and imposed in Upper Canada on the separate schools and school trustees of

## EDUCATION

theTQueen's Roman Catholic subjects shall be, and the same are hereby extended to the dissentient schools of the Queen's Protestant and Roman Catholic subjects in Quebec.
(3) Where in any province a system of separate or dissentient schools exist by law at the union or is thereafter established by the legislature of the province, an Appeal shall lie to the Governor-General in Council from any act or decision of any provincial authority affecting any right or privilege of the Protestant or Roman Catholic minority of the Queen's subjects in relation to education.
(4) In case any such provincial law as fron time to time seems to the Governor-General in Council requisite for the due execution of the provisions of this Section is not made, or in case any decision of the Governot-General in Council on any appeal under this Section is not duly executed by the proper provincial authority in that behalf, then and in every euch case, and as far only as the circumstances of each case require, the Parliament of Canada may make remedial laws for the due execution of the provisions of this Section and of any decision of the Governor-General in Council under this Section.
The purpose of these sections was to preserve to a religious minority in any province the same privileges and rights in regard to education which it had at the date of Confederation, but the provincial legislatures were not debarred from legislating on the subject of separate schools, provided they did not thereby prejudicially affect privileges, previous to Confederation, enjoyed by such schools in the province.

## RELIGIOUS INSTRUCTION AND EXERCISES IN THE PUBLIC SCHOOLS.

Under the powers conferred by the above-quoted section of the British North America Act, each province has passed laws and regulations concerning religious or devotional exercises at the opening or closing of school and the direct religious instruction, if any, to be given to the pupils. As a general rule, denominational teaching, except in the case of the Roman Catholic separate schools, is excluded; but in almost all cases there is provision for instruction in the " principles of Christian morality" as derived from Holy Scripture. In every province the school law contains a conscience clause permitting the withdrawal of any pupil from religious exercises or instruction if so desired by parent or guardian.

The following is a brief description of the regulations in force in each province. In Prince Edward Island the public schools are nonsectarian. The Bible is authorized to be read, but without comment, explanation or remark by the teacher. It is usual to open the schools with the Lord's Prayer. In Nova Scotia the question of devotional exercises is left to the local board of trustees, subject to the conscience clause, but such exercises are in fact usually held. In New Brunswick the regulations provide that it shall be the privilege of every teacher to open and close the daily exercises of the school by reading a portion of Scripture (out of the common or Douay version as he may prefer) and by offering the Lord's Prayer, and that his duty shall be "to maintain a deportment becoming his position as an educator of the young, and to strive diligently to have exemplified, in the intercourse and conduct of the pupils throughout the school, the principles of Christian morality.", The regulation further enumerates certain "moral actions and habits" concerning which it shall be the duty of the teacher to give instruction

## RELIGIOUS INSTRUCTION AND EXERCISES

to the school as occasion may require. He may not, however, use in school any religious catechism nor interfere with the religious tenets of any pupil.

In the Protestant schools of the province of Quebec the regulations provide that the first half-hour of each day shall be devoted to the opening exercises, Scripture reading, singing and prayer, instruction in Scripture and morals, including readings and lessons upon godliness, truthfulness, honour, respect for others, good manners, temperance, health, kindness to animals, etc. Bible study is devised upon a plan of graded readings, including, for the first year, from the New Testament, events in the life of Our Lord, and from the Old Testament, outlines of chief events to the end of the life of Joseph. Provision is also made for the committal to memory of the Lord's Prayer, the Beatitudes and six named texts of Scripture.

In Ontario the regulations provide that every public school shall be opened with the reading of the Scriptures and the repeating of the Lord's Prayer, and shall be closed with the Lord's Prayer, or the prayer authorized by the Department of Education. The Scriptures are read daily and systematically, and alternative selections are prescribed for adoption by the local board of trustees. This board may also order readings of the Scriptures by both pupils and teachers daily at the closing of the school, and in addition the repeating of the Ten Commandments once a week and the memorization of passages selected by the principal from the Bible. Finally, a clergyman of any denomination has the right to give religious instruction to the pupils of his own denomination at least once a week after the hour of closing the school in the afternoon. A provision of the Ontario school law lays it down as the duty of every teacher "to inculcate by precept and example respect for religion and the principles of Christian morality and the highest regard for truth, justice, loyalty, love of country, humanity, benevolence, sobriety, industry, frugality, purity, temperance, and all other virtues."

In Manitoba the question as to whether there shall be religious exercises in a public school is entirely at the option of the school trustees for each district; but such exercises must be conducted according to the regulations of the Advisory Board, which is a central authority of the province. It is provided that religious teaching shall take place in any public school (a) if authorized by resolution of the majority of the school trustees, and (b) on petition to the trustees of a stated number of parents or guardians of the children attending school. It is further provided that the religious teaching shall take place between half-past three and four in the afternoon, and that it shall be conducted by any Christian clergyman whose charge includes any portion of the school district or by any person or teacher authorized by him. Provision is also made that a Roman Catholic or non-Roman Catholic duly certified teacher shall be appointed on petition to the trustees where the average attendance of Roman Catholic or non-Roman Catholic children reaches a given minimum. Other provisions of the law prescribe the segregation of Roman Catholic and non-Roman Catholic children during the time that religious instruction is being given.

In Saskatchewan and in Alberta the local board of trustees has the power to prescribe the religious instruction that shall be given, but this instruction may only be given during the half-hour preceding the close of the school in the afternoon, except that the board may direct that the school be opened by the recitation of the Lord's Prayer.

In British Columbia the public schools are conducted on strictly secular and non-sectarian principles. The school law provides that " the highest morality shall be inculcated, but no religious dogma or creed shall be taught." The Lord's Prayer may be used in opening or closing school.

Separate School System in Ontario.-The public schools law of Ontario provides for the establishment as may be required of separate schools (a) for Roman Catholics, (b) for Protestants, and (c) for coloured people, the whole being governed by the Separate Schools Act of the Ontario Legislature. For Roman Catholics the Act provides that not less than five Roman Catholic heads of families resident within any public school section may convene a public meeting for the establishment of a separate school, trustees being elected by the meeting for their management. On declaring their intention to support the separate school, Roman Catholic ratepayers are relieved of the obligation to contribute to the ordinary public schools, and, instead, are rated for the support of the separate school. The separate school shares in legislative grants received from the central authority, and provided for by the Provincial Legislature. The schools are managed by the boards of trustees, two from every ward in cities and towns and six in every village. Under the management of the board of trustees the children of the schools receive distinctive religious training according to the tenets of the Roman Catholic Church: but in matters of secular education the schools are subject to the ordinary school law under the administration of the Department of Education of the Provincial Government. and the teachers, who are of the Roman Catholic faith, are subject to the same examinations and receive their certificates of qualification in the same manner as the ordinary public school teachers. Protestant separate schools may only be established in school sections where the teacher is a Roman Catholic.

Separate School System in Quebec.-In Quebec, separate schools are an important integral part of the system of public education, which in its application is adapted to the peculiar conditions of the Frenchspeaking province of the Dominion. Whilst the French Roman Catholic element largely predominates, there is in most of the populous centres a strong Protestant minority, and in certain parts, like the Eastern Townships, the Protestants are frequently the local majority. In practice, the main public schools of a locality are either Roman Catholic or Protestant, according to the religion of the majority. The minority, Roman Catholic or Protestant as the case may be, have then the right to dissent and to form a board of trustees, managed under generally the same conditions as the schools of the majority. The chief difference between the majority, or commissioners' schools, and the minority, or trustees' sehools, is that the commissioners are five in number whilst the trustees are not more than three. Whereas in

Ontario the separate schools are in almost all cases synonymous with Roman Catholic schools, in Quebec the separate schools may be either one or the other; in local education parlance, the distinction between the two classes is not Roman Catholic and Protestant, but "commissioners' schools" and "trustees' schools." The procedure for the establishment of a separate school is similar to that of Ontario, one difference, however, being that in Quebec any number of ratepayers may give the statutory notice of dissent. If the dissentient ratepayers amount to two-thirds of those ratepayers whose religion differs from that of the majority, then all the ratepayers professing the same religion as that of those who have given the notice, and whose children do not attend the majority schools, are deemed to be dissentients and are rated accordingly. The religious training prescribed for the Roman Catholic schools consists in prayers, the teaching of the catechism, of sacred history, and of manners.

Arrangements in other Provinces.-There are no separate schools in the Atlantic provinces; they formerly existed in New Brunswick, but were abolished by the Legislature in 1871. In Manitoba separate schools were established in 1871, very soon after the creation of the province, but they were abolished by the Manitoba Legislature in 1890. In Saskatchewan and in Alberta there is provision for the establishment of separate schools by either Protestant or Roman Catholic minorities under general conditions similar to those above described.

## ELEMENTARY AND SECONDARY EDUCATION IN CANADA.

## PRINCE EDWARD ISLAND.

General Organization.-The Public Schools Act of 1877 forms the basis of the existing system of education in Prince Fdward Island. Supreme control lies with the Board of Education, which consists of the members of the Executive Council, the Chief Superintendent of Education and the principal of the Prince of Wales College and Normal School. The province is divided into school districts. In urban centres these consist of the whole city or town, and for rural communities each district contains an area of about four square miles.

Local Management.-The local management for each school district is in the hands of three trustees, one of whom retires annually. In Charlottetown and Summerside there are seven trustees, four of whom are appointed by the Board of Education and three by the city council. The schools are divided into (1) primary, (2) advanced or graded and (3) first class schools, and the teachers are trained in the Normal School Department of the Prince of Wales College. The annual school meeting is held in every district on the third Tuesday in June, when moneys are voted for all school purposes, and a trustee is elected in place of the retiring member of the board. The school year consists of two teaching terms, one ending on June 30 and the other on December 31. The vacations are: six weeks beginning July 1, two weeks in October, and the last week in December. Charlottetown and Summerside arrange for their own times of vacation with the approval of the board. A majority vote at an annual meeting

## EDUCATION

empowers trustees to take July and August as the vacation period. There are ten inspectors of schools in as many inspectorial divisions. Primary education is free and compulsory; but the regulations regarding compulsory attendance are not very rigorously enforced.

Sources of Income.-The schools are supported by government grants, supplemented by the local rates levied by assessments on property. There may be also a poll tax not exceeding \$1, if the ratepayers at the annual meeting so decide.

## NOVA SCOTIA.

General Organization.-Education in Nova Scotia is under the general administrative control of the Council of Public Instruction, which consists of the Executive Council of the province with the Superintendent of Education as Secretary. The Premier, who is also the Provincial Secretary, is practically the Minister for Education, although he presides in the Council and shares his responsibility with all the other members of the Cabinet. The Secretary of the Council of Public Instruction, as Superintendent of Education, is the chief executive officer, occupying a position virtually the equivalent of a deputy minister. An Advisory Board of Education consisting of seven members, five appointed by the Lieutenant-Governor in Council and two elected biennially by the teachers at the regular conventions of the Provincial Educational Associations, advises the Council and the Superintendent on matters referred to it by them or otherwise coming under its jurisdiction under the statute. There are 33 boards of district commissioners, of not less than seven members each, appointed by the Council of Public Instruc-tion-each board covering a territory averaging half a county. Their principal function now is the control of the size and boundaries of school sections, the condemning of defective schoolhouses, the appointing of trustees and the authorizing of the levy of school rates, when these are not regularly or effectively provided for. The executive officer of each board is the inspector within whose division the district lies. He is not only the clerk of the board, but the most important member of it.

Inspection.-There are twelve regular inspectors, whose inspectorial divisions average a county and a half. They are also the agents of the Superintendent of Education in paying the provincial aid to teachers and the municipal fund to trustees. They examine, pass and compile the statistics of the annual returns from teachers and school trustees, and are responsible for the legal administration and conduct of the schools under their jurisdiction. There is also a Director of Rural Science Education for the province; an Inspector of Mechanic Science, Domestic Science, and Technical local schools; and a special Visitor for the bilingual French (Acadian) schools.

Elementary Schools.-The province is further divided into school sections, each of which is a self-governing educational corporation, comprising the territory of a city, town, or a rural area approximating four miles in diameter, and electing three trustees for the local management of the schools. At the annual meeting of the school section, held on the last Monday in June-except in fishing settlements, where the Council of Public Instruction on petition of the school board fixes the

## ELEMENTARY AND SECONDARY EDUCATION IN CANADA.

first Monday in March before the fishermen go to sea-the board of three school trustees presents its report for the past year and its estimates for the next year to the ratepayers for their decision. The senior trustee retires, and his successor is elected for three years. The Board has full control of all school affairs, subject to the conditions fixed by law and to the oversight of the inspector. In towns, the school board consists of three members of the town council and two members appointed by the Government. In Halifax six commissioners are appointed by the City Council and six are appointed by the Provincial Government. The school year technically begins on August 1 , in the middle of the summer vacation. The teaching term opens at the end of August and closes at the end of June. There are two weeks of vacation at Christmas. The operation, in each section, of legal provisions as to compulsory attendance is dependent upon their adoption by a vote of the ratepayers, except in cities and towns, where no option is allowed. Subject to certain exemptions, compulsory attendance is general for children from 6 to 16 in the cities and towns and from 7 to 12 in the country.

Sources of Income.-The school revenue is derived from (1) the local or sectional assessment voted at the annual meeting; (2) the municipal school fund amounting to 35 cents per capita of each rural municipality (of which there are 24), but levied on the real and personal property; and (3) the provincial aid to teachers. The municipal school fund is distributed to school boards as follows: $\$ 25$ for each teacher employed, and the balance, about an equal aggregate, according to the attendance of pupils. The law allows municipalities to raise a larger fund; three counties have now a fund based on 50 cents per capita, and grant $\$ 50$ for each teacher employed. The provincial aid is paid to the teacher in proportion to the class of license held. Class D (third class) receive $\$ 60$ per annum; Class C (second class) $\$ 90$; Class B (first class) $\$ 120$; Class A (superior first class) $\$ 150$; and Class "Academic," whose scholarship must henceforward be of university graduate grade, $\$ 180$ or $\$ 210$, according to position.

School Grades.-The public school programme forms a single system from grade I to grade XII, each grade covering the average annual work of a pupil. The first eight are also known as the "common school," and the remaining four as the "high school" grades. In 1916 there were 2,837 schoolrooms in operation. Of these, 1,659 were schools with only one teacher, and 1,083 were giving instruction to a few pupils of high school grade in addition to the common school instruction. Four hundred and fifty-three graded schools gave some high school instruction in addition to the common school work. There were only 64 pure high school systems in operation. There were in the same year (1916), 99,463 pupils in the common school grades-of whom 5,941 presented themselves at the provincial terminal examinations for "pass" certificates of one of the four high school grades-and 9,726 in the high school grades.

Teachers.-There are five classes of teachers for the regular (academic) school system, namely: Third (or D), Second (or C), First (or B), Superior First (or A), and the Academic. The general scholarship basis of each is respectively as follows: Provincial high school pass
of grade IN, X, XI, XII, or graduation from a recognized universits; plus normal training, physical training under the Dominion Department of Militia, age, health and character conditions. Without normal training the teacher's minimum professional examination pass admits the candidate to a class one degree lower; and third class licenses may be granted without the physical training certificate.

Superannuation of Teachers.-After thirty-five years' teaching, or thirty years' if sixty years of age, teachers can retire, drawing thereafter semi-annually their respective provincial aid grants. Academic teachers can draw double the amounts of their grants or more according to their importance as measured by position and salary-no annuity to exceed $\$ 600$. Normal college teachers and inspectors can retire with annuity under somewhat similar conditions.

Secondary Education.-This is provided for partly by the four bigh school grades of the public schools (N to XII) and partly by county academies, of which there are eighteen in the province, situated usually in the county towns. In return for an extra grant called the "Academic," the county academy admits free any pupil from the county who passes the county academy entrance examination, which is the common schoolleaving examination on the standard of grade VIII. Every high school must admit pupils free from within its own school section. In 1916, out of 9,726 high school pupils, 2,057 were attending the county academies. Provincial examinations are held for the high school grades at about sixty-five stations during the last week of school term, all candidates, whether making a "pass" or not, receiving a certificate showing the proficiency of the candidate in each subject. These certificates are accepted for what they are worth for admission to the normal and other colleges and universities, not only in Nova Scotia, but by many provinces and states abroad. The relation of the secondary schools to higher institutions is practically as close as is that of the common schools to the high schools, due especially to the device of four grades of high school certificates containing estimates of proficiency in each subject. The universities and colleges of the province accept these certificates so far as they cover their respective matriculation standards in each subject.

Manual Training, etc.-There is a threefold system affiliated to the regular (academic) school system: "Mechanic Science"-wood, paper and iron work, mostly in the cities and towns; "Domestic Science"-cooking, laundry and other household work, mostly in the cities and towns; "Rural Science "-the elements of science and art underlying agriculture, horticulture and forestry, school gardensand home gardens under school direction. There is a Director of Rural Science Education, and the members of the staffs of the normal and agricultural colleges, at Truro, co-operate with the Dean of the Rural Science Training School in conducting a vacation course in July and August for teachers desirous of obtaining "rural science" diplomas. There is also an inspector for the Mechanic and Domestic Science schools which receive special grants.

Miscellaneous.-Phenological observations have for many years been conducted by the pupils of the schools under the direction of the

## ELEMIENTARY AND SECONDARY EDUCATION IN CANADA.

teachers, which are annually reported to the Education Office, where they are compiled, preserved and reported for publication in the meteorological service, in the Proceedings of the Royal Society and the Transactions of the Nova Scotian Institute of Science. There are a school library system, consolidated schools, government night schools, industrial and truant schools, and provision for retarded pupils. Medical and dental inspections of schools are now being introduced into all the cities and some of the towns. There is a school for the Blind, and one for the Deaf; and the Victoria School of Art and Design is co-operating with and stimulating the elementary art work of the public schools.

## NEW BRUNSWICK.

General Organization.-The public schools of New Brunswick are free and non-sectarian. School privileges are provided free to all children resident in a district between the ages of six and twenty. The Board of Education, with the Chief Superintendent of Education as secretary, is in supreme control of the public schools. The board is composed of the Lieutenant-Governor, the members of the Executive Council, the Chancellor of the University of New Brunswick and the Chief Superintendent of Education. Three members of the Executive, with the chairman (who must be the Lieutenant-Governor, or, in his absence, the premier) and the Chief Superintendent of Education, constitute a quorum.

Courses of Instruction.-The common school course includes the first eight grades of instruction. The high school course provides for work beyond the eighth grade, and prepares students for the university

School Districts.-A rural school district must contain an area of at least three and one-half square miles, or must have at least fifty children of school age. Each city and town is usually a school district. In rural districts, schools are under the control of a board of trustees. consisting of three ratepayers of the district, elected for a term of three years. In cities and towns the board of trustees consists of from nine to eleven members, the majority of whom are appointed by the city or town council, and the remainder by the Executive Council of the province. Two of the members may be women, one appointed by the city or town council and one by the Executive Council.

The school year technically begins on July 1 and ends on June 30, and is divided into two terms, one beginning about August 26 and ending on the Friday preceding Christmas week, and the other beginning early in January and ending June 30. There are eight weeks vacation in summer, beginning July 1 , and two weeks in winter, between terms. There is also an Easter vacation, extending from Good Friday until the following Wednesday. A compulsory attendance law becomes operative only when adopted by the annual school meeting, which is held on the second Monday in July, or when adopted by the city or town council in urban school districts.

Support of Schools.-Schools are supported from three sources, viz., government grants, county fund grants, and local district assessment. The county fund is provided for by municipal assessment, and is a sum equal to sixty cents per head of the population, according to the last
decennial census. The trustees receive from the county fund $\$ 30$ per annum for each school or department in operation the full term. The balance of the county fund is distributed among the schools of the county pro rata, according to the attendance of a school as compared with that for the county. The government grants are made upon the basis of the qualifications and length of service of the teachers, under conditions prescribed by the school law. Special grants are given to consolidated schools and for the convevance of children. All other funds for schools must be provided by direct taxation upon the local school district.

Secondary Education.-This is provided for in grammar and superior schools. The law provides for the establishment of one grammar school in each county, and fourteen of the fifteen counties of New Brunswick operate grammar schools. Grammar schools must provide for instruction in grades IX, X and XI. A grammar school is free to all pupils resident in the county in which it is situated, and above grade VIII of the graded school course. Only one grammar school in the province, that in St. John, provides for a four years' course. One superior school may be established in each county for every 6,000 inhabitants, or a majority fraction of 6,000 . An additional superior school may be established on the recommendation of the school inspector. A superior school may be required to provide instruction in the high school grades IX and $\dot{X}$ and may provide for instruction in grade XI. There are about fifty superior schools in the province. A superior school is free to all pupils residing within the parish in which the school is established, and who are above grade VI of the graded school course.

Consolidated Schools.-Consolidated schools have been established at Riverside, Florenceville, Hampton, Kingston and Rothesay. A consolidated school district must include not less than three rural school districts, and must provide for instruction in household science, manual training and school garden work, in addition to the regular school work of the grades. These schools are supported in the same way that other schools are, viz., by government and county fund grants and by local assessment. In addition to these grants, a consolidated district receives a special government grant, usually $\$ 1,000$ per annum. Children are conveyed from remote parts of the districts in vans provided by the district, and the government pays one-half the cost of conveyance.

Manual Training and Household Science Teachers.-Manual training and housebold science departments are aperated by school boards in a number of the cities and towns outside of the consolidated schools. The government pays one-half the cost of equipment of manual training and household science departments, also one-half the cost of the initial supply of materials. Household science and manual training teachers who devote their whole time to the work receive a government grant of $\$ 200$ per annum. Teachers who teach these subjects not less than three hours per week, in addition to the regular work of the school, receive a government grant of $\$ 50$ per annum. The normal sehool provides training in these branches.

Schools for Deaf and Blind.-The Board of Education does not provide or control these schools, but grants are made to them at the

## ELEMENTARY AND SECONDARY EDUCATION IN CANADA.

rate of $\$ 125$ per year, for each pupil in attendance, by both the Government and the Municipality where the pupil has a settlement. The New Brunswick School for the Deaf, at Lancaster, St. John Co., the School for the Deaf, at Halifax, N.S., and the School for the Blind, Halifax, N.S., provide school privileges for the deaf and the blind children of New Brunswick.

Superannuation of Teachers.-Provision is made for the pensioning of teachers. Male teachers of the age of sixty, and female teachers of the age of fifty-five years, may, upon retiring after thirty-five years of service in the public schools, and upon application to the Board of Education, receive a yearly pension for life, equal to one-half of their annual salary during the last five years of their service in the schools, provided, however, that no pension shall exceed $\$ 400$ per annum.

Physical Training.-All teachers, before being admitted to the examinations for license, are required to hold certificates of qualification to teach physical drill, as prescribed in the text published by the Executive Council, Strathcona Trust. Trustees of schools are required to make provision for giving this instruction in the schools under their charge.

Inspection.-The province is divided into eight inspectorial districts, with one school inspector for each district. It is his duty to visit all ungraded schools in his district once in each school term and each graded school or department once in each year. He is required to make monthly reports of the visitation of schools to the Education Department, and generally to assist the department in promoting educational efficiency in the schools of his district.

Normal School.-A normal and a model school for the training of teachers are provided for by the Board of Education; they are situated at Fredericton. Teachers entering for a class higher than the third or lowest class must attend the normal school at least one school year. The normal school year begins on the first teaching day in September and ends about June 1.

School Gardens.- This department of work is chiefly under the control and direction of the Department of Agriculture, and government grants are made to teachers and trustees of districts in which school gardens are maintained from the moneys provided for agricultural education. The work is supervised and directed by an official called the Director of Elementary Agricultural Education. Agricultural schools for the qualifying of teachers are held annually at Woodstock and Sussex. Any board of school trustees that provides for and satisfactorily maintains instruction in elementary agriculture, with school garden, in accordance with the course prescribed by the Board of Education in this subject, is entitled to receive a special grant of $\$ 50$ per annum for the first year, and thereafter $\$ 30$ per annum. A partial course certificated teacher receives at the rate of $\$ 30$ per school year, and a full course certificated teacher receives at the rate of $\$ 50$ per school year.

QUEBEC.
General Organization.-The system of education in the Frenchspeaking province of Quebec differs fumdamentally from that of the
other provinces. It has its roots in the religious organization of the Roman Catholic Church and dates from the French régime (1608 to 1759). Prior to Confederation important laws were passed in 1836, when the first steps were taken towards division of the province into school municipalities; in 1841, when a Department of Education was established; and in 1846, when an Act was passed which is the basis of the existing school law of the province. At present the school organization of Quebec is under the control of a Department of Public Instruction, presided over by a Superintendent of Public Instruction. Where the duties of this officer are not specifically defined by law he receives directions from the government through the Provincial Secretary. There is no special Minister of Education for the province. The Council of Public Instruction is composed of all the Roman Catholic Bishops, or Vicars Apostolic, whose dioceses or parts of whose dioceses are in the province of Queber, now numbering sixteen, an equal number of Roman Catholic laymen appointed by the Crown and an equal number of Protestants similarly appointed.

Roman Catholic and Protestant Committees.-The Council is divided into two Committees, one composed of the Roman Catholic and the other of the Protestant members. The Roman Catholic Committee has, in addition to the full members of the Council, four associate members, two being priests, principals of normal schools, and two being laymen, officers of public instruction. The Protestant Committec has five associate members elected by the Committee, and onemember annually elected by the Protestant Teachers' Provincial Association. The associate members of the Protestant Committee have the same powers as the other members of the Committee, but do not form part of the Council of Public Instruction. School questions in which the interests of Roman Catholics and Protestants are collectively concerned are decided by the whole Council; but ordinarily the Committees meet separately and have independent and final jurisdiction over schools of their own faith. Each Committee makes regulations subject to the approval of the Lieutenant Governor in Council (1) for the organization, administration and discipline of public schools; (2) for division of the province into inspection districts; (3) for normal schools: (4) for boards of examiners; (5) for the examination of candidates for school inspector; (6) for the school holidays. The Superintendent is assisted by a staff of fifty-t wo inspectors under two Inspectors-General, one for the Roman Catholic schools and one for the Protestant schools.

School Municipalities.-The basis of the school organization is the school municipality which is established solely for education purposes. Except in the cities the school municipalities are created by the Lieuten-ant-Governor on the recommendation of the Superintendent of Public Instruction.

Board of School Commissioners.-The local authority in each school municipality is vested in a board of five school commissioners elected by the ratepayers to serve for three years. The board is responsible for the erection, equipment and maintenance of schools, the administration of the sehool property and the fixing of the school assessment and monthly dues from the parents. Its annual report to the Superinten-

## ELEMENTARY AND SECONDARY EDUCATION IN CANADA.

dent of Public Instruction includes a census of the children from five to eighteen years of age, the rate of the yearly assessment and monthly fee and the amount collected. In the cities of Montreal and Quebec the boards are not elected but are appointed, and in Montreal the rate of taxation is fixed by provincial statute.

Sources of Income.-The financial resources of the school municipalities comprise (1) the sums raised by local rates and (2) grants made by the Legislature. The former consist of the school assessment, which is levied on all rateable property of a school municipality, and the monthly fee, which may be collected for every child who attends or who should attend the public schools. The grant of the Legislature is divided proportionally to the number of the children enrolled.

Elementary Schools.- The primary or elementary schools are classified as either Roman Catholic or Protestant, which is usually equivalent to a classification as French and English respectively, both as to race and language. The Irish Roman Catholics are usually classified among the Roman Catholics without distinction as to language. School attendance is not compulsory. The school age is generally understood to be from seven to fourteen years, but children have the right to enter at five years of age and continue until they are eighteen. Before attaining this latter age they have either completed their education or have entered the intermediate or the secondary schools. In the city of Montreal, elementary education is free to the Protestant and Jewish children in the schools of the Protestant commissioners. In nearly all other elementary schools in the province fees are charged at a rote which cannot exceed fifty cents a month nor be less than five cents, but sehool boards may by resolution abolish the monthly fee. The average monthly fee is about twenty-five cents. It is payable for each child from seven to fourteen whether attending school or not. School fees cannot, however, be exacted from indigent persons, nor for insane, deaf, dumb or blind children, nor for children absent on account of prolonged illness or attending schools elsewhere. The fee is rather a poll tax than a fee. It is collected by the treasurer of the school board, generally together with the ordinary tax on real estate. In no case is a teacher allowed to receive it from the pupils, and the law provides that no child from seven to fourteen may be excluded from school for nonpayment of monthly fees.

Secondary Education.-As a general rule secondary education is under the same board of commissioners as that which controls the elementary or primary schools. The secondary schools comprise model or intermediate primary schools and academies or higher primary schools. In the primary elementary schools there are four grades, in the primary intermediate or model two, and in the higher primary or academic two. The course of study is a continuous one for the three classes of schools. The Roman Catholic secondary schools, provided by the ordinary school boards, are either maintained by taxation, fees and government grants, or they are " independent," being supported by fees, government grants and in some cases subsidies from school boards. They are subject to government inspection, are required to follow the authorized course of study and to observe the regulations of the Roman Catholic Committee.

## EDUCATION

Of the intermediate schools there are 552 , controlled by school boards and attended by 95,091 pupils, and 121 independent schools, attended by 10,740 pupils. The board schools are almost invariably mixed, whilst many of the independent are for either boys or girls. The secondary board schools are eighty-two in number and have an attendance of 30,190 ; there are also 155 independent secondary schools, with an attendance of 25,052 . Most of the latter are boys' schools under the direction of friars, or girls' schools under nuns. Many of the school boards employ religious rather than lay teachers. In these two classes of schools 4,700 religious teachers are employed with 926 lay teachers.

Roman Catholic Classical Colleges.-These are twenty-one in number, with an attendance of 8,251 , and are staffed by 717 religious and thirty-seven lay professors. They are all under the control of the bishops of the various dioceses and are carried on with some slight assistance from the government. They are residential colleges which boys may enter at twelve, while doing their elementary work, and in which they may continue until they fit themselves for the B.A. or B.Sc. degree, or for entrance upon the study of the learned professions. They do elementary, secondary and even university work, the degrees being conferred by the University of Laval, to which they are affiliated. Commercial classes are also included and are taken by about one-third of the total number of pupils.

Protestant Secondary Schools.-These are provided by the ordinary school boards and are supported in the same way as the elementary schools. They are divided into model or intermediate schools and academies or secondary schools. Two high schools, one in Montreal and one in Quebec, succeeded two Royal grammar schools, which were established in 1816. Since Confederation, each has received a grant from the province, and the Lieutenant-Governor has the right of nominating fifty free scholars for the higher classes of these two high schools. There are thus always in attendance at these two schools fifty free scholars holding what are called " Government Scholarships." About fifty scholarships entitling the holders to free tuition in the high school, carrying them to university matriculation, are also offered by the Protestant School Board of Montreal, and a similar plan is followed in Quebec, the scholarships being, however, fewer in number. There are other secondary schools in the province, including a grammar school at Lennoxville under the control of the Church of, England, a boarding school for both sexes at Stanstead controlled by the Methodist Church of Canada, but receiving a government grant.

Training of Teachers.-Teachers are trained in normal schools, in the universities or not at all. Every teacher in schools under the control of the school commissioners or trustees must hold a diploma conferred by a normal school or a board of examiners. Ministers of religion and the members of a religious corporation of either sex, instituted for teaching purposes, are exempt from the regulation. Roman Catholic teachers in secondary schools are trained in normal schools with those of the lower grade. There are no special training colleges for secondary teachers in Protestant schools, but McGill University has recently founded a Chair of Education, and teacher-training facilities also exist at Bishop's College.

## elementary and secondary education in canada

Superannuation of Teachers.-Pensions are paid from a fund, maintained partly by contribution from the Government and local authorities and partly by stoppages from the salaries of teachers. All teachers, excepting those in holy orders and nuns, must contribute annually two p.c. of their salaries, whether wishing to participate in the benefits or not. Teachers without certificates must contribute, but receive no pensions till they have taken certificates. A male teacher may contribute three p.c. of his salary, and his widow will receive a half pension. A teacher may receive a pension after teaching for twenty years and reaching the age of fifty-six, or after making twenty contributions to the fund if retiring on account of ill-health. A teacher retiring because of ill-health, after teaching more than ten but less than twenty years, may withdraw all payments without interest; a teacher who has served less than ten years forfeits all payments. The pension for a man is as many fiftieths of his average salary as the number of years that he has served. A woman receives the same pension increased by a half, but not more than 90 p.e. of her salary. The maximum in either case is $\$ 1,050$ per annum.

## ONTARIO.

General Organization.--In Ontario, education is under the control of a Department of Education, conducted by virtue of the Department of Education Act, passed by the Ontario Legislative Assembly. The Department is presided over by a Minister of Education as its political head. A Deputy Minister of Education acts as permanent administrative chief, and a Superintendent of Education has the general supervision and direction of schools, teachers' examinations and school inspectors. Under the control of the Department are public elementary schools (including kindergartens), continuation schools, night schools, high schools, collegiate institutes, art schools, model schools, normal schools, teachers' institutes, libraries, technical and industrial schools. As now organized, the Ontario system of education may fairly be described as an organic whole, elementary, secondary and higher education being duly co-ordinated.

Elementary Education.-Elementary education in Ontario owes its main features to the late Rev. Dr. Egerton Ryerson, who, appointed Chief Superintendent of Education in 1844, held this office for thirty-two years. From the Common Schools Act of 1846 his term of administration included a successive series of Education Acts culminating in the Ontario School Law of 1871 which gave effect to the following principles: (1) free tuition; (2) compulsory education of children of school age; (3) county inspection and (4) uniform examinations for promotion to the high schools. Under the existing law, and especially the Public Schools Act, elementary education is provided for in Public Schools, and in what are known as "Separate Schools" for the children of Roman Catholics. Both of these classes of schools are controlled by boards of trustees. In rural districts the townships are divided into school sections, and the trustees, three in number, hold office for three years, one going out of office annually, when his successor is elected.

In urban districts each ward is represented by two trustees, or in municipalities, where there is no division into wards, six trustees are elected. The duties of the trustees as laid down by the Public Schools Act include the provision, equipment and maintenance of schools, the engagement of teachers and the preparation of financial estimates. The legal school age is from five to twenty-one years and the compulsory age of attendance is from eight to fourteen. The financial support of the schools is derived from three sources, viz., (1) the appropriation from the Legislature; (2) county rates and (3) municipal assessments.

Secondary Education.-Secondary education in Ontario is provided by continuation schools (in connection with the public and the separate schools), high schools and collegiate institutes, the latter having superior equipment and employing more teachers of higher attainments than those of the high schools. They are controlled by trustees whose duties are similar to those of the public school trustees, and they are supported financially from four different sources: (1) government grants: (2) county grants; (3) district or municipal grants and (4) fees from students. Only graduates in arts of a university within the British Dominions may hold the position of principal in these schools. In June every year a uniform examination called the "entrance examination" is held, and only those pupils who pass it, or who have been specially recommended by the teacher as fit to pass it, are admitted to a high school or collegiate institute.

Training of Teachers.-Elaborate provision is made for the training of teachers for elementary schools by means of a number of county model schools, and of seven normal schools, with model or practice schools as adjuncts, situated at Toronto, Hamilton, Ottawa, London, Peterborough, Stratford and North Bay. Teachers for the highest grade of certificate in the public schools, and all those in high schools and collegiate institutes, are trained at one or other of the faculties of education at Queen's (Kingston) and Toronto Universities. Every position from the lowest in the kindergarten to the highest in a collegiate institute must be filled by a trained teacher, and no permanent teaching certificate is granted to any candidate who does not possess the threefold qualifications of scholarship, a knowledge of pedagogical principles and successful practical experience. Public school teachers, except those of the lowest grade, who are trained in county model schools and whose certificates are valid only in sparsely settled districts, must have a second class certificate.

Superannuation of Teachers.-The Teachers' and Inspectors' Superannuation Act, 1917, establishes a superannuation fund to which all teachers and inspectors must contribute annually two and a half p.c. of their salaries. The Government adds a sum equal to the amount of these contributions. In the case of teachers employed by the Government, or by any board or corporation, the contributions are to be stopped, out of the salaries. Every teacher or inspector retiring after forty years' service is to receive an annual allowance equal to one sixtieth of the average salary during the last ten years of employment multiplied by the number of years of employment. Those retiring after thirty years are to receive an allowance "actuarially equivalent" to the above. On retirement

## ELEMENTARY AND SECONDARY EDUCATION IN CANADA.

owing to ill-health after fifteen years' service the full allowance for forty years' service is to be-paid. The contributions are to be refunded to the representatives of a person who dies while still serving, and may be refunded to a person retiring after five years' service if this is found to be permissible after an actuarial valuation of the fund to be made in 1921, and every three years thereafter.

Private Schools.-There are also a number of private educational institutions, including, for boys, Upper Canada College, Toronto; St. Andrew's College, Toronto; Trinity College School, Port Hope; Ridley College, St. Catharines; and Ashbury College, Ottawa; for girls, Bishop Strachan School, Toronto; Havergal College, Toronto; Moulton College, Toronto; Branksome Hail, Toronto; St. Margaret's College, Toronto; Westminster College, Toronto; Ontario Ladies' College, Whitby; Alma College, St. Thomas; and the Presbyterian Ladies' College, Ottawa; and for boys and girls, Pickering College, Newmarket; and Woodstock College, Woodstock; besides convent schools in Toronto, Ottawa, Hamilton, Brantford and London.

## MANITOBA.

General Organization.-The elementary and secondary schools of Manitoba are under the control of a Minister of Education, who is advised and assisted by a Deputy Minister and a Superintendent. An advisory board, composed of twelve members, prescribes curricula, authorizes text books, grants standing and controls examinations. Two of the members of this board are elected by the public school teachers of the province, one by the high school teachers, one by the inspectors; and the rest are appointed by the Department of Education. Two of these appointees are selected from and represent the rural school trustces of the province.

Elementary Education.-Education is free and compulsory. The school district is the unit of administration, and the average rural district in Manitoba comprises an area of about sixteen square miles. Each school district receives from the provincial treasury the sum of seventy-five cents per teacher per day. In addition to this the municipality, which may contain from ten to fifty school districts, raises over its whole area a levy known as the "general school tax," which is distributed to the various districts on a basis of $\$ 1.20$ per teacher per day. The balance of the budget is raised by a special tax upon the lands comprising the district. In addition to the grant of seventy-five cents per day from the provincial treasury referred to above, there may be paid from this source a further grant of $\$ 100$ if the people in the locality are unable through poverty to raise a sufficient sum to operate their school, and an additional $\$ 100$ grant is given if the district has been formed in newly settled territory beyond the pale of municipal organization.

Secondary Education.-The course of studies provides for eight grades in the elementary school, and upon its completion the pupil writes an examination known as the "entrance." If he passes this he may enter one of the secondary schools. When ten or more pupils

## EDUCATION

above the entrance attend a school having two or more departments, the school board may make application for intermediate standing. In order to gain this they must employ a principal holding at least a firstclass professional certificate and an assistant holding at least a secondclass professional. Such a school is entitled to a special grant of $\$ 200$ per annum from the Department. There are now sixty-seven of these schools in Manitoba, most of them employing from four to five teachers in public and high school work, and with an average attendance of more than twenty pupils per secondary school. In addition to these there are thirty-seven larger secondary institutions, known as high or collegiate schools, employing two or more teachers devoting their whole time to secondary work, and with larger enrolment than is required for intermediate standing. These schools receive liberal grants, determined by their enrolment, equipment and the scope of their curriculum.

Night Schools.-The value of the night school is becoming generally recognized. By its aid the adult foreigner is enabled to gain a working knowledge of the English language, young people who left school at an early age are assisted in making good their deficiencies, and the ambitious and energetic are enabled to gain technical qualification for the occupations which they follow. This work was earried on in some forty centres in the province during the past year.

Special Subjects.-The secondary schools of Manitoba offer the usual course leading to university matriculation and a general cultural course for teachers. In addition to these, certain schools provide instruction in commercial subjects and special courses in agriculture and home economics, while the technical schools in the city of Winnipeg give training in the various branches of household art and domestic science, as well as in printing, electrical working, blacksmithing, machine shop practice, cabinet-making, pattern making and mechanical drawing.

Training of Teachers.-Any applicant for admission to a normal school must hold a grade XI certificate, which means the satisfactory completion of three years' work in the high school. The full normal school course for a second class professional or permanent license is thirty-eight weeks, which includes four weeks spent at the Agricultural College for special instruction in elementary agriculture, nature study and school gardening. Students may complete the year's training in one course in the provincial normal schools at Winnipeg and Brandon, or they may take an elementary course of fifteen weeks and receive third class professional certificates valid for teaching purposes for three years; after teaching for at least one year they may return to the provincial normal school to complete their training for the permanent license. Classes in the elementary course are held annually at Portage la Prairie, Manitou and Dauphin, as well as at Winnipeg and Brandon. The Winnipeg school aims chiefly to prepare teachers for the urban centres, while the Brandon institution gives special attention to the rural problem.

Teachers' Special Course.-Each year the Summer School of Science and Handicrafts enables teachers desirous of strengthening their teaching equipment to take special courses in school gardening, nature study, wood and iron-working, domestic science, household art, playground supervision and oral French for High School teachers.
elementary and secondary education in canada.
Foreign Travel.-The "Hands Across the Seas" Movement, organized under the auspices of the Department, enables teachers at comparatively small expense to avail themselves of the advantages of foreign travel. Already 496 teachers have taken advantage of the opportunities afforded and have visited England, Scotland, Ireland, France, Italy, Malta and Egypt. Operations were suspended after the outbreak of the war, but it is hoped to resume them when peace comes.

Consolidated School Districts.-The enlarging of the administrative unit has been chiefly by way of consolidation, and there are now seventytwo consolidated districts in Manitoba. The advantages of the system are numerous and have been frequently recapitulated. The disadvantages are due to difficulties arising out of the problem of transportation. Ten years' experience in this province has shown the scheme to be a great improvement upon the one-roomed country school.

School Gardens.-More than 525 schools were reported during the year 1916 as having school gardens worthy of the name. A special grant of $\$ 25$ per annum is paid to every teacher who does satisfactory work along this line and earns the recommendation of the local inspector.

Schools for the Deaf and Blind.-The Manitoba School for the Deaf is situated in the city of Winnipeg, and serves the whole of Western Canada in regard to the education of the deaf, the different provinces having an inter-provincial arrangement whereby each province is able to grant free education to every deaf person of school age in Western Canada. The present population is 168 , divided as to sex into ninetyone males and seventy-seven females. Two methods of instruction are used, the manual and oral. Great importance is attached to the use of technical training; so that each deaf person may have a trade to make a profitable living. Blind children for Manitoba are at present cared for in the Ontario School at Brantford. There are now ten Manitoba children there. They are clothed by their parents, and the province pays board and tuition at the rate of $\$ 150$ per child for the school term.

Industrial Training School.-The Industrial Training School at Portage la Prairie gave instruction during the year 1916 to 140 boys. Of these sixty-six were admitted during the year 1916 and forty-seven released. These lads are those whom their parents have been unable properly to discipline, and an opportunity is given the boys to start work anew under more favourable auspices. Two regularly qualified teachers give instruction in ordinary school subjects, and instructors are provided in blacksmithing, shoemaking, tailoring, baking, horticulture, laundering and farming. The boys are offered every inducement to live a busy, happy life, and a short time spent in the school generally alters their whole viewpoint on life. A system of self-government has been introduced among the boys, and the discipline of the school is largely in their own hands. This system is working out very satisfactorily.

## SASKATCEEWAN.

Elementary Schools.-The educational system of the province of Saskatchewan, so far as elementary schools are concerned, is administered under the provisions of the School Act. A Department of Education, presided over by a Minister of Education, has the control, management
and equipment of all kindergarten schools, public and separate schools, normal schools, model schools, teachers' institutes and of institutions for the education of deaf, deaf mute and blind persons. An Educational Council, consisting of five members appointed by the LieutenantGovernor, holds sessions at least once a year, and all general regulations respecting the inspection of schools, the examination, training, licensing and grading of teachers' courses of study, teachers' institutes, and text and reference books, before being adopted or amended, are referred to the Council for consideration and report.

Regulations made by the Minister, subject to the approval of the Lieutenant-Governor in Council, provide: (a) for the classification, organization, government, examination and inspection of schools; (b) for the construction, furnishing and care of school buildings and the arrangement of school premises; (c) for the examination, licensing and grading of teachers and for the examination of persons who may desire to enter professions, or who may wish certificates of having completed courses of study in any school; (d) for a teachers' reading course and teachers' institutes and conventions; (e) for giving instruction in manual training, domestic science and physical training.

A Superintendent of Education has the general supervision and direction of high schools and collegiate institutes, model schools, public and separate schools, training schools for teachers, the granting of teachers' certificates, technical schools, departmental examinations, teachers' institutes, teachers' reading courses, school libraries and the inspectors of any such schools.

Secondary Schools.-The secondary schools of Saskatchewan are administered under the provisions of the Secondary Education Act, which provides for the establishment of high school districts within the limits of town and city municipalities. The conditions of establishment are that-

1. At the time of the receipt of the petition for such establishment there are at least five teachers reguiarly employed in the schools situated within the municipality and organized under the provisions of The School Act.
2. Within a period of two years prior to the receipt of such petition no other high school district bas been established within a distance of forty miles from the municipalities as measured by the nearest road allowance.
3. It is shown to the satisfaction of the Minister that if the district is established there will be in attendance at the high school at least twenty-five pupils above Grade VIII.

Any high school in the province may be raised to the rank of a collegiate institute on the following conditions:-

1. That the average attendance of pupils above Grade VIII attending the high school for the two terms next preceding the date of application was at least seventy-five, and that during such terms at least four duly qualified teachers were regularly employed.
2. That the board has provided or is prepared to provide within one year accommodation suitable for the pupils and staff of a collegiate institute satisfactory to the Minister.
3. That all regulations of the Department with respect to coilegiate institutes have been complied with.

School Grants.-Elementary Schools are supported partly by taxes levied by the municipalities concerned, and partly by grants paid by the Government in accordance with the School Grants Act. Funds for high schools are raised by the municipalities concerned and are assisted

## ELEMENTARY AND SECONDARY EDUCATION IN CANADA.

by the government grants payable on the conditions prescribed by the Secondary Education Act. As a further source of revenue to both public and high schools, grants are paid from the supplementary revenue fund in accordance with the provisions of the Supplementary Revenue Act.

Formation of School Districts.-The School Act for Saskatchewan provides for the establishment of schools wherever necessary, and any portion of the province with an area not exceeding twenty square miles may be organized into a school district, provided there are residing therein ten children of school age, and four persons, each of whom on its organization is liable to be assessed for school purposes. These schools are under the control of local bodies of trustees chosen on a popular vote. The appointment of teachers is in the hands of the trustees, and the central authority (the Education Department of the Province) issues the certificates of qualification.

Consolidated School Districts.-Provision was made in 1913 for the establishment of consolidated districts containing from thirty-six to fifty square miles for the purpose of conveying pupils to a central school. There are sixteen consolidated schools in operation, and wherever due care and judgment have been exercised by the officials the results are satisfactory. In addition to the usual school grant the Government pays an additional grant of one-third of the actual cost of conveyance.

Small Districts.-In case a small district is unable to raise sufficient taxes by reason of its limited area to operate a school, or has insufficient school population, the resident children may be conveyed to a neighbouring school at the expense of the district. In this case also the Government pays one-third of the cost of conveying the children.

School Districts Established by the Minister.-In case an unorganized area is settled by families with children of school age, the Minister may order the establishment of such area into a school district. This action is necessary only in foreign-speaking settlements where the settlers are not sufficiently acquainted with the English language to conduct organization proceedings.

Professional Training of Teachers.-There are two normal schools for the professional training of teachers. They are located at Regina and Saskatoon. In addition, local sessions of the normal school for the training of teachers for elementary schools are held during the winter months at several points in the province and are conducted by the inspectors of schools. Normal school training is considered of supreme importance, and permanent certificates are issued only to those who have received professional training in the training schools of the province or upon satisfactory evidence of equivalent training elsewhere. A reading course for teachers is regarded as part of the professional training, and permanent certificates are not issued until the regulations governing the course are complied with.

## ALBERTA.

General Organization.-There is a Department of Education presided over by a Minister of Education who is assisted by a Deputy Minister as permanent administrative head.

## EDUCATION

Elementary Schools.-The administrative unit of the educational system of Alberta is the school district. A district usually includes an area of approximately four miles square, and may be organized on the initiative of the ratepayers as soon as the area proposed to be formed into a district contains eight resident children of school age and four resident ratepayers. Should the indifference or opposition of the settlers prevent the organization of a school district, the Minister of Education is vested with power to establish such a district without regard to the attitude of the ratepayers, and should the indifference in any community, or any other cause, result in the failure of the board of trustees to administer satisfactorily the affairs of the district, the Minister may appoint an official trustee to perform, under the school laws and regulations, all the functions of a school board. There is also provision whereby the minority, either Protestant or Roman Catholic, in a school district may establish a separate school district, which, bowever, is subject to the same laws and regulations with respect to teachers' qualifications, courses of studies, inspection, grants, etc., as a public school district.

Town Schools.-In the case of a school district in which is situated a city or a town the municipal council is responsible for the assessment and also for the levying thereon and the collection of the amount of taxes requisitioned by the board of trustees of the school district. Similarly, the council of a rural municipality is entrusted with the collection of taxes for each of the school districts within the limits of the municipality, while in the case of a village school district these duties and responsibilities rest with the school board and its officials.

Financial Arrangements.-Schoolhouses are usually built from the proceeds of school debentures. Such debentures must first be authorized by the Board of Public Utility Commissioners, and when issued must be registered and countersigned at the Department before they are marketable. In order to secure the best possible price for school debentures, statutory provision is now made whereby the Department of Education may negotiate the sale of debentures in behalf of school districts, and by offering a comparatively large block composed of the debentures issued by several districts, a market may be tapped which would not be open to individual sehool boards.

Sources of Revenue.-The revenue of a school district, which is required to meet debenture payments, teachers' and officials' salaries, supplies, fuel, insurance and other current expenditures, is derived from two sources-government grants and local taxation. The grants are paid on the basis of the number of days during which the school is in operation, and the scale of grants is so arranged that the nowly organized district receives a larger grant than the older district, and as a community grows into a populous centre it is gradually thrown more and more upon its own resources so far as school grants are concerned. On the other hand, provision is made for grants for supervisors, and for instructors in special subjects, such as manual training, household science, music, art, agriculture, etc., which compensates the progressive town or city school board in a large measure for the lowering of the grant payable in the larger centre.

## ELEMENTARY AND SECONDARY EDUCATION IN CANADA.

Secondary Education.-In the development of the system of education in the province there has been a constant purpose so to arrange the school grades as to provide for an almost imperceptible transition from the elementary to the secondary grades, as well as from the secondary grades to the university. To further this purpose and to guard against any divided interests with respect to elementary and secondary education, the plan that has been adhered to from the beginning is that of having all schools in a school district, whether elementary or secondary, administered under the same local school board. Thus there are technically no high schools in the province, though the schools giving instruction in grades I-VIII inclusive are commonly spoken of as public schools, and those giving instruction in grades IX-XII inclusive as high schools. Upon completing the work of grade XI, that is, the third year of the secondary or high school course, a candidate may enter on the first year of his university course, or, upon completing the work of grade XII, he may enter upon the second year of the university course.

Training of Teachers.-Every person employed as a teacher by a school board must hold a certificate of qualification from the Department of Education. The qualifications consist of two parts-academic and professional. The academic qualification required for first class teachers is the grade XII Alberta Diploma, or other standing admitted by the Department to be at least equivalent thereto. The academic qualification for second class teachers is the grade XI Alberta Diploma, or its equivalent. Alberta students with the requisite academic standing, as described above, are admitted to one of the provincial normal schools to train for first or second class certificates according to the academic standing of the candidate. Teachers from the other provinces of Canada, from the United Kingdom or elsewhere, may be granted such standing as the Department finds them entitled to receive. Should the applicant be found to possess the requisite standing, both academic and professional, no further examination is demanded, but should be possess the academic without the professional training required, he is admitted to one of the normal schools to train for the grade of certificate which his academic standing will warrant. Every teacher obtaining professional standing in the province is granted an interim certificate, and is required to prove his ability in the schoolroom for at least one year before receiving a permanent certificate.

## BRITISH COLUMBIA.

General Organization.--The members of the Executive Council constitute a Council of Public Instruction, and the Provincial Secretary acts also as Minister of Education. A Superintendent of Education has, subject to the Council of Public Instruction, the supervision and direction of the inspectors and schools.

Elementary Education.-The public or common schools of the province are organized in accordance with the provisions of the Public Schools Act, which prescribes in considerable detail the powers of the Council of Public Instruction, the duties of the Superintendent of Education, of the school inspectors and of the teachers. It is provided that all public education shall be free, and that it shall be secular in the
sense that there shall be no religious education, although the highest morality must be inculcated. Education is compulsory upon all children between the ages of seven and fourteen, provided that there is a school within a reasonable distance of the child's home. For education purposes the province is divided into municipal and rural sehool districts, and the schools are of three classes, viz., municipality schools, rural schools and assisted schools. The municipality schools are subdivided into four classes, the government grant varying according to the class. Assisted schools are those established in outlying districts by sums granted specially by the provincial government, The local management of the schools is in the hands of trustees elected by the ratepayers, the number varying according to the classification adopted by the Act and as prescribed therein. The schools are supported partly from the provincial treasury and partly from the sums raised by district assessment. In the common schools there are three grades: the junior, the intermediate and the senior.

Secondary Education.-The term " common school " is used to distinguish the elementary from the superior or high school. Wherever there are ten pupils qualified and available for high school studies a superior sebool may be formed in connection with the existing common school. The subjects of the junior high school course may be taught in the superior school. Wherever twenty or more pupils are qualified and available for high-school studies a high school is established. The high school course is divided as follows: the preliminary course, junior grade; the advanced course, junior grade; the intermediate grade; the senior grade and the senior academic grade. There is also a commercial course covering three years. Provision is also made for agricultural and technical courses. Except in the case of the common schools, the passage from one grade to another is determined by an examination conducted by the Education Department. In June each year an entrance examination for admission to the high schools is conducted, and no pupil may enter a bigh school who does not possess the entrance certificate. There are normal schools for the training of teachers at Vancouver and at Victoria.

## YUKON TERRITORY.

A Superintendent of Schools for the Yukon Territory was appointed in 1902, when a general system of education was inaugurated. The course of study is similar to that adopted in Saskatchewan and Alberta. No teachers are employed unless they hold at least a second class certificate, with normal school training. There are at present two permanent school centres, viz., Dawson and Whitehorse. At Dawson there are two schools: (1) the Dawson Public School of seven departments, including two departments for high school work; (2) St. Mary's Roman Catholic Separate School, the teachers of which are chosen from the Sisters of St. Ann. The high school branch of the Dawson Public School was instituted in 1903. There are two teachers in charge of this branch, one a specialist in classics, modern languages and history, the other a specialist in mathematics and science. In the high grades of the Dawson High School the course of study prescribed

## HIGHER EDUCATION IN CANADA

by the University of Toronto for pass and honour matriculation is followed, and candidates are prepared for university matriculation. There are eight rooms in the Dawson School, three of which are devoted to high school purposes and one to the kindergarten. The Whitehorse Public School has three departments, being now a "continuation" school, teaching work up to the pass for junior matriculation. In certain districts, where the number of children does not warrant the establishment of a regular school under the provisions of the school ordinance, regulations have been made by the Commissioner for the establishment of " assisted schools," but the average attendance must be at least five pupils between the ages of six and sixteen, and the course of studies must be prescribed by the Council of Public Instruction. Teachers of "assisted schools" are also appointed, subject to the approval of the Commissioner and Superintendent of Schools. No territorial or local tax for school purposes is collected within the Yukon Territory. All schools controlled by the Territorial Government are maintained solely by appropriations voted therefor by the Yukon Council out of the consolidated revenue on the recommendation of the Commissioner of the Territory.

## HIGRER EDUCATION IN CANADA.

Higher education in Canada is provided for by a number of universities and colleges. Of the universities, Toronto and McGill (Montreal) are the largest, and with Queen's University (Kingston, Ont.) and Dalhousie University (Halifax, N.S.) take national rank. The oldest university in Canada, viz., King's College, Windsor, Nova Scotia, dates from 1789, and claims to be also the oldest university in His Majesty's Overseas Dominions. Several of the universities are affiliated to the older universities of the Mother Country, viz., Oxford, Cambridge and Dublin, whilst some of the smaller Canadian universities, as well as most of the colleges, are affiliated to either Toronto or McGill. In the West, provincial universities have been established for Manitoba at Winnipeg (1877), Saskatchewan at Saskatoon (1907), Alberta at Edmonton (1906) and British Columbia at Vancouver (1907)

## religious affillations of universities and colleges.

Some of the universities and colleges are under the control of religious denominations as follows:

Anglican or Church of England in Canada:-King's College, Windsor, N.S.; University of Bishop's College, Lennoxville, Quebec; University of Trinity College, Toronto; Wycliffe College, Toronto; and Emmanuel College, Saskatoon.

Roman Catholic Church:-University of St. Francis Xavier's College, Antigonish, N.S.; Laval University, Quebec; Laval University, Montreal; University of Ottawa; St. Michael's College, Toronto.

Other Denominations:-Knox College, Toronto (Presbyterian); Mount Allison University, Sackville, N.B.; Victoria University, Toronto; and Wesley College, Winnipeg (Methodist); Acadia University, Wolfville. N.S.; McMaster University, Toronto; and Woodstock College, Woodstock, Ontario (Baptist).

## EDUCATION

## UNIVERSITIES AND COLLEGES BY PROVINCES.

The following is a description of the facilities for higher education in Canada, by provinces.

Prince Edward Island.--Students who have passed the entrance examinations attend the Prince of Wales College at Charlottetown, in which a three years' course is arranged. Successful candidates of the third year are admitted as third year students in Dalhousie University, and those of the second year enter as second year students in all the Eastern Canadian universities. St. Dunstan's College, Charlottetown, which is a Roman Catholic institution and receives no government support, is affliated to Laval University, and prepares its students for B.A. and B.L. degrees.

Nova Scotia.-The universities that have degree-conferring powers are four in number, mostly with denominational affiliations. The largest had in 1916 an enrolment of 339 , and of all four the enrolment was 758. They are independent of the Education Department, but have affiliated to them first the Technical College, and secondly the teachers' examination system, graduation from a recognized university-a four years' course following a matriculation standard approximating the high school grade XII pass-being accepted in lieu of some departmental examinations.

Technical Education in Nova Scotia.-The Nova Scotia Technical College, established in 1907 at Halifax, is affliated to the universities of the Atlantic provinces, which have agreed to teach the first two years of the course, leaving only the last two years, which require the more expensive equipment, for the provincial institution. The three buildings, with their laboratories and apparatus, cost about $\$ 300,000$; they provide facilities for scientific research and professional training in civil, mining, mechanical, chemical and electrical engineering, architecture, navigation, etc. The principal of the college is also director of technical education for the province. Coal mining and engineering schools are provided at the greater industrial centres; and local evening technical schools are established in the most populous centres, covering a large variety of subjects. A Correspondence Teaching Department has been organized in connection with the college.

New Brunswick.-The public school course of the province leads up to, and is completed in the University of New Brunswick, which is supported by government grants, fees from students and the income from endowments. It is situated at Fredericton. The senate, its governing body, is composed of fourteen members, nine of whom, including the president and chancellor, are appointed by the Lieutenant-Governor in Council; four are elected by the associated alumni of the university, and one is elected by the Educational Institute of New Brunswick. The president and chancellor are permanent members of the senate; the others hold office, some for two and others for three years. The Chief Superintendent of Education is ex-officio president of the senate of the university. The chancellor of the university is the chairman of the faculty, and the administrator of the affairs of the university. He is appointed by, the Lieutenant-Governor in Council. The senate of the university appoints the professors and other officers, and fixes their salaries. The

## HIGHER EDUCATION IN CANADA.

university provides a four years' course for degrees in Arts and in Science. Students of both sexes are admitted to the Arts course on equal terms. The matriculation or entrance examinations may be written either at the departmental examinations held under the Board of Education in July, or at the opening of the university in September. The student making the highest standing in any county, in the July examination, receives the scholarship of $\$ 60$ for that county.

Quebec.-There are three universities in the province of Quebec, viz., McGill University, Montreal; Laval University, Quebec; and the University of Bishop's College, Lennoxville. McGill University, founded originally as McGill College and named after its founder, the Hon. James McGill, who died in 1813, was incorporated by Royal Charter in 1821 and received an amended charter in 1852. English, non-sectarian and national rather than provincial in scope, it is affiliated to the universities of Oxford, Cambridge and Dublin, and to it are affiliated seven Canadian colleges, including five colleges in the province and the Vancouver and Victoria Colleges in British Columbia. The Macdonald Agricultural College at Ste. Anne de Bellevue is incorporated with this university and is under the control of its governors. Laval University, French and Roman Catholic, was founded in 1852 and has a branch at Montreal. It is under the direction of a Superior Council composed of the Roman Catholic Archbishops and Bishops of the province. To it are affiliated surveying, polytechnic, veterinary, dental and forestry schools; also the School of Higher Commercial Studies at Montreal and the Agricultural Institute of Oka. The University of Bishop's College is under the direction of the Church of England in Canada.

Technical and Agricultural Instruction in Quebec.-The institutions for technical instruction include the Science Department of the McGill University, the Polytechnic School affiliated to Laval University and the Commercial and Technical High School at Montreal for day and evening classes. In 1907 a School of Higher Commercial Studies (Ecole des Hautes Etudes Commerciales) was established at Montreal by Act of the Legislature. It provides courses in the principles of banking, administration and political economy, and is at present the only institution in Canada possessing a special Chair of Statistics. The majority of the students are French-Canadian Roman Catholics, and the Quebec Government has recently placed the institution under the charge of Laval University. There are four institutions in'the province for the teaching of agriculture, including a Dairy School at St. Hyacinthe, the Agricultural Institute of Oka, the Agricultural School at Ste. Anne de la Pocatière and the Macdonald College at Ste. Anne de Bellevue. The latter, founded, erected, equipped and endowed by the late Sir William Macdonald of Montreal at a cost of nearly $\$ 7,000,000$, is organized in three Departments: (1) the school of agriculture; (2) the school for teachers and (3) the school of household science. The school of agriculture combines theoretical and practical instruction with research work. The ordinary courses extend over two years for a Diploma in Agriculture and over four years for the degree of Bachelor of Science in Agriculture (B.S.A.).

Ontario.-Provision for higher education is made by universities
and colleges with varying religious affiliations in different parts of the province; but the University of Toronto is the only university supported directly by the province. In 1887 it became a federation, comprising the university itself as undenominational and various other colleges and universities, including the University College, St. Michael's College (Roman Catholic), University of Trinity College and Wycliffe College (Church of England), Victoria University (Methodist), and Knox College (Presbyterian). The following colleges are affiliated to the University, their students obtaining their degrees therefrom: Royal College of Dental Surgeons, Toronto; College of Pharmacy, Toronto; Ontario Agricultural College, Guelph; Veterinary College, Toronto; Toronto Conservatory of Music, Toronto College of Music, Hamilton Conservatory of Music. The governing bodies of the University consist of (1) the board of governors administering the property; (2) the senate controlling the academic side and (3) the caput dealing with discipline. Convocation consists of all the graduates of the university and of federated universities. The universities in other parts of the province, which are not federated with or affiliated to the Toronto University, include Queen's University at Kingston, and the McMaster University at Toronto (Baptist). There are also a number of institutions for special training, including the Royal Military College at Kingston (an institution of the Dominion Government); the Western University, London (Medicine and Arts); the College of Art, Toronto; Conservatories of Music, Ottawa and London.

Manitoba.-The University, situated at Winnipeg, is the oldest university in the West. It was established in 1877, and affiliated to it are seven colleges, three of which were already in existence when the University was founded. These are St. Boniface, the chief Roman Catholic college in the West, dating from the beginning of the nineteenth century; St. John's, the Church of England college, re-organized in 1866; Manitoba College, organized by the Presbyterian Church in 1871; the Medical College, affiliated in 1882; Wesley College, supported by the Methodist Church, affiliated in 1888; the College of Pharmacy, affiliated in 1902 and since merged in the University Faculty as a department of pharmacy; the Manitoba Agricultural College, affiliated from 1907 to 1912 and again from 1916 onwards, and the Manitoba Law School, established under the joint auspices of the University and the Manitoba Law School in 1914. The University has an endowment of 150,000 acres of land. The property is being sold in parcels from time to time, and the proceeds are invested in trust. The income, which is largely supplemented by grants from the Provincial Government, enables the University to provide higher education at moderate cost. Instruction is given in arts, science, divinity (in affiliated colleges), medicine, law, the various branches of engineering, and also in pharmacy. Extension work is carried on throughout the province, and lecturers from the University give courses in their various subjects. This work has proved very popular in the past, and steps are being taken to enlarge its scope. There were in 1916-17 some 600 students in the University taking work in arts, science, engineering, medicine, law, pharmacy and agriculture. The medical students have ample opportunities for clinical work in the

## HIGHER EDUCATION IN CANADA

hospitals of Winnipeg. The course in medicine extends over five years. Enlistments of undergraduates in 1915-16 totalled 250 or above, or over 30 p.c. of the total male enrolment of that year.

Agricultural Education in Manitoba.-The courses given in agriculture in several of the high schools have already been mentioned (see page 136), but the institution which has the work of agricultural education chiefly in hand is the Manitoba Agricultural College. This institution, which was opened at Winnipeg in 1906, has been moved to new buildings on the banks of the Red river. The work of the college falls into three divisions-agriculture proper, home economics and extension work. There are two courses in agriculture - the diploma course, extending over three winters of five months each, and the degree course, extending over five years. The diploma course is designed to meet the requirements of the lad who will in due course work on a farm. To enter, he must be over sixteen years of age, have spent at least two summers on a farm doing practical work, and have a sufficiently good English education to derive benefit from the lectures. Students who have obtained a diploma at the end of the three years' course may proceed to study for the B.S.A. degree. This course is meant for those who will take up the bigher branches of agriculture, or who desire to investigate certain agricultural problems, or become teachers, lecturers, superintendents or inspectors.

In addition there are house-keeping courses for young women; lecturers are sent out from the college to address agricultural societies and farmers' institutes, to act as judges at shows and to organize farm and seed competitions. Special short winter courses for farmers are also given at the college.

Saskatchewan.-A Saskatchewan University has been established under the provisions of the University Act, 1907 (Saskatchewan R. S. 1909, c. 98). The University is situated at Saskatoon upon a site of 1,333 acres, and has been furnished with buildings and equipment costing over a million dollars. Emmanuel College was formerly in Prince Albert, and was chartered under the name of the University of Saskatchewan. It was transferred to Saskatoon and devoted itself to theological studies, but still retained its charter rights. The charter was amended in 1915, and the name changed to the University of Emmanuel College. It exercises the right to confer degrees in divinity. Its right in that respect is the same as that of Wycliffe or Knox, although it has charter rights which would enable it to do work in other faculties than divinity.

Another theological college, viz., the Presbyterian College at Saskatoon, does work similar to Emmanuel College. The College of Agriculture at Saskatoon is part of the University, and is as closely related to the other parts of the University as are Law, Engineering and Arts.

Alberta.-The University of Alberta was established at Edmonton under the provisions of the University Act ( 1 Geo. V, 1910, c. 7). Various colleges and professional societies in the province are affiliated
to the University. It is the only degree-conferring educational institution in the province, with the exception of the theological colleges which confer honorary degrees in theology. The Institute of Technology and Art is established at Calgary as a provincial institution. Its object is to promote technical education generally and to provide for leadership in this field. During the continuance of the war, the Institute is devoting itself to the training in the day-time of returned soldiers. Civilian classes are carried on by evening classes and correspondence.

British Columbia.-A provincial University, located in the vicinity of Vancouver, completes the work begun in the public and high schools. It undertakes to furmish instruction in the various branches of a liberal education, and in the technical branches that have a bearing upon the life and industries of the province. The Provincial Legislature has set apart $2,000,000$ acres of land for endowment; but, as up to the present no revenue has been received from this source, the institution is being maintained by sums from the provincial treasury.

## EDUCATION STATISTICS OF CANADA.

There being at present no effective co-ordination of education statistics it is difficult to construct comparative tables for Canada. In the first place, the year to which the statistics relate differs according to province. Thus the school year ended June 30 is adopted for statistical purposes by Prince Edward Island, New Brunswick, Quebec, Manitoba and British Columbia; the education year for Nova Scotia ends on July 31; and the calendar year ended December 31 is selected by Ontario, Saskatchewan and Alberta.

Statistics of Public Schools.-In the tables numbered 1 to 8 an attempt is, however, made to bring together by provinces (1) the number of elementary schools, teachers and pupils, with the average attendance of the pupils; (2) the number of teachers and pupils in normal and model schools for the training of teachers; (3) statistics of secondary schools so far as they are separately given; (4) the amount of public receipts and expenditure for education under the school law of each province and (5) the average annual salaries of teachers by provinces.

In Table 1 the number of schools, teachers and pupils in the three Atlantic provinces (Prince Edward Island, Nova Scotia and New Brunswick) includes both elementary and secondary schools or grades; in Nova Scotia the term "school" has a technical signification, being applied to a class with one teacher, irrespective of the number of classes in a school building. In Quebec and Ontario the statistics in Table 1 apply only to elementary schools; but again in the Prairie Provinces and in British Columbia no line is drawn between the elementary and secondary grades. In Manitoba the sex of the pupils is not separately distinguished. Statistics of secondary education are only separately available for Quebec and Ontario. They are given in Tables 3 and 4. The academies of Quebec are generally similar to the collegiate institutes and high schools in Ontario, and the Quebec model schools are intermediate between the elementary school and the academy.

## EDUCATION STATISTICS OF CANADA

Growth of Expenditure on Public Education.-Probably the most remarkable feature of these statistics is the extraordinary growth during the present century of the expenditure upon public education. In 1901, the first year of the century, the total expenditure for the purposes of public education in Canada was $\$ 11,589,410$; in 1915, the latest year for which complete figures for all the provinces are available, it was $\$ 55,807,318$, an increase of $\$ 44,217,908$, or 382 p.c.

Statistics of Higher Education. - In Tables 9-14 are presented statistical particulars relating to the universities and colleges of Canada which are summarized from information furnished by each of the institutions mentioned. Tables 9 and 12 give the dates of foundation, the affiliation, the faculties and degrees; Tables 10 and 13, the number of teaching staff and students; and Tables 11 and 14, statistics of property, income and expenditure. For seventeen of the universities in Table 11 the total value of the endowments is $\$ 20,949,946$, and for eighteen of the universities the total value of property in land and buildings amounts to $\$ 27,445,452$. For the twenty universities the total income amounts to $\$ 3,424,681$, of which $\$ 804,256$ are derived from investments, $\$ 1,421,379$ from government grants, $\$ 756,476$ from fees and $\$ 442,570$ from other sources. The total expenditure of the same universities amounts to $\$ 3,401,884$.
1.-Number of Schools, Teachers and Pupils in Canada by Provinces, 1901-1916.

Pringe Edward Island (Year ended June 30).

| Year. | Schools | Teachers. |  |  | Pupils enrolled. |  |  | Average Attendance of pupils. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female | Total. | Boys. | Girls. | Total. | No. | $\left\lvert\, \begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}\right.$ |
| 1901. | 474 | 299 | 290 | 589 | 11,319 | 9,460 | 20,779 | 12,330 | 50.34 |
| 1902. | 474 | 203 | 295 | 588 | 11,271 | 9,532 | 20,803 | 12,88 | 61.93 |
| 1903... | 480 | 274 | 298 | 572 | 10,845 | 9,111 | 19,956 | 12,112 | 60.69 |
| 1904... | 480 | 268 | 294 | 562 | 10,259 | 8,772 | 19,031 | 11,722 | 61.59 |
| 1905. | 475 | 246 | 324 | 570 | 10,427 | 8,845 | 19,272 | 11,627 | 60.33 |
| 1906. | 478 | 246 | 327 | 573 | 10,196 | 8,790 | 18,986 | 11,903 | 62.69 |
| 1907.. | 479 | 227 | 345 | 572 | 10,213 | 8,823 | 19,036 | 11,543 | 60.63 |
| 1908. | 476 | 205 | 375 | 580 | 9,449 | 8,563 | 18,012 | 11,647 | 64.66 |
| 1909. | 479 | 200 | 395 | 595 | 9,578 | 8,495 | 18,073 | 11,543 | 63.86 |
| 1910. | 478 | 188 | 403 | 591 | 9,573 | 8,359 | 17,932 | 11,632 | 64.86 |
| 1911. | 478 | 178 | 413 | 591 | 9,152 | 8,245 | 17,397 | 10,511 | 60.40 |
| 1912. | 474 | 162 | 428 | 590 | 8,995 | 8,083 | 17,078 | 10,916 | 63.91 |
| 1913 | 475 | 161 | 422 | 583 | 9,186 | 8,369 | 17,555 | 11,003 | 62.67 |
| 1914.. | 474 | 162 | 426 | 588 | 9,514 | 8,553 | 18,069 | 11,170 | 61.81 |
| 1915. | 477 | 152 | 434 | 586 | 9,714 | 8,688 | 18,402 | 11,694 | 63.54 |
| 1916. | 476 | 138 | 457 | 595 | 9,565 | 8,797 | 18,362 | 11,347 | 61.79 |

## EDUCATION

## 1.-Number of Schools, Teachers and Pupils in Canada by Provinces, 1901-1916-con.

Nova Scotia (Year ended July 31).

| Year. | Schools | Teachers. |  |  | Pupils enrolled. |  |  | Average Attendance of pupils. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female | Total. | Boys. | Girls. | Total. | No. | $\begin{gathered} \text { Per } \\ \text { cent. } \end{gathered}$ |
| 1901. | 2,387 | 540 | 1,952 | 2,492 | 49,768 | 48,642 | 98,410 | 53,643 | 54.5 |
| 1902. | 2,394 | 485 | 2,007 | 2,492 | 50,247 | 48,812 | 99,059 | 55,438 | 55.9 |
| 1903. | 2,395 | 441 | 2,053 | 2,494 | 49,789 | 48,979 | 98,768 | 55,213 | 55.9 |
| 1904. | 2,331 | 388 | 2,053 | 2,441 | 48,536 | 48,350 | 96,886 | 54,000 | 55.8 |
| 1905. | 2,429 | 386 | 2,180 | 2,566 | 50,465 | 49,787 | 100,252 | 56,342 | 56.3 |
| 1906. | 2,446 | 366 | 2,212 | 2,578 | 50,198 | 50,134 | 100,332 | 59,165 | 58.9 |
| 1907 | 2,465 | 354 | 2,272 | 2,626 | 49,849 | 50,158 | 100,007 | 57,173 | 57.1 |
| 1908. | 2,516 | 355 | 2,309 | 2,664 | 49,906 | 50,199 | 100,105 | 58,343 | 58.2 |
| 1909. | 2,577 | 352 | 2,342 | 2,694 | 50,758 | 50,922 | 101,680 | 61,787 | 60.7 |
| 1910. | 2,579 | 339 | 2,384 | 2,723 | 50,918 | 51,117 | 102,035 | 65,630 | 64.3 |
| 1911. | 2,639 | 331 | 2,468 | 2,799 | 50,985 | 51,925 | 102,910 | 61,250 | 59.5 |
| 1912. | 2,662 | 293 | 2,511 | 2,804 | 51,498 | 52,486 | 103,984 | 63,640 | 61.2 |
| 1913. | 2,692 | 278 | 2,583 | 2,861 | 52,105 | 53,164 | 105,269 | 65,686 | 62.4 |
| 1914.. | 2,724 | 272 | 2,620 | 2,892 | 52,656 | 53,695 | 106,351 | 66,599 | 62.6 |
| 1915. | 2,795 | 256 | 2,689 | 2,945 | 53,649 | 54,119 | 107,768 | 70,361 | 65.3 |
| 1916.. | 2,837 | 246 | 2,773 | 3,019 | 53,944 | 55,245 | 109,189 | 69,227 | 63.4 |

New Brunswick (Year ended June 30).
(For second term ended June 30.)

| 1901. | 1,741 | 353 | 1,488 | 1,841 | 30,870 | 29,550 | 60,420 | 37,717\|58.34 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1902. | 1,736 | 348 | 1,477 | 1,825 | 30,767 | 29,710 | 60,477 | 38,736 59.62 |
| 1903. | 1,726 | 341 | 1,474 | 1,815 | 30,172 | 29,141 | 59,313 | 37,552 58.79 |
| 1904. | 1,722 | 313 | 1,503 | 1,816 | 29,892 | 28,867 | 58,759 | 36,920 58.50 |
| 1905. | 1,750 | 304 | 1,562 | 1,866 | 30,854 | 29,546 | 60,400 | 35,675 59.60 |
| 1906. | 1,762 | 302 | 1,577 | 1,879 | 30,913 | 29,768 | 60,681 | 37,540 61.86 |
| 1907. | 1,766 | 253 | 1,621 | 1,874 | 30,289 | 29,262 | 59,551 | 35,367 59.38 |
| 1908. | 1,767 | 259 | 1,602 | 1,861 | 30,600 | 29,795 | 60,395 | 36,972 61.22 |
| 1909. | 1,854 | 251 | 1,691 | 1,942 | 31,489 | 30,448 | 61,937 | 38,731 62.53 |
| 1910. | 1,860 | 233 | 1,741 | 1,974 | 31,933 | 31,061 | 62,994 | 39,822 63.21 |
| 1911. | 1,885 | 221 | 1,754 | 1,975 | 31,871 | 31,202 | 63,073 | 39,215 62.17 |
| 1912. | 1,906 | 201 | 1,811 | 2,012 | 32,062 | 31,502 | 63,564 | 40,612 63.89 |
| 1913. | 1,897 | 193 | 1,809 | 2,002 | 31,924 | 31,656 | 63,580 | 41,276 64.91 |
| 1914. | 1,922 | 201 | 1,831 | 2,032 | 32,244 | 32,066 | 64,310 | 40,882 63.57 |
| 1915. | 1,964 | 184 | 1,922 | 2,106 | 33,437 | 33,068 | 66,505 | 44,683 67.18 |
| 1916. | F 1,996 | 196 | 1,965 | 2,161 | 33,089 | 33,549 | 66,548 | 43,914 65.98 |

Quebed (Year ended June 30).

| 1901. . | 5,2 | 185 | 5,9 | 6,0 | 99,440 | 101,6 | 201,1 | 138,787\|69.01 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1902. | 5,298 | 127 | 5,935 | 6,062 | 100,332 | 102,63 | 202,966 | 140,00568.98 |
| 1903. | 5,379 | 196 | 6,105 | 6,301 | 101,532 | 103,525 | 205,057 | 143,044 69.76 |
| 1904. | 5,461 | 114 | 6,248 | 6,362 | 100,456 | 105,681 | 206,137 | 145,063 70.37 |
| 1905. | 5,517 | 128 | 6,334 | 6,462 | 101,777 | 107,936 | 209,713 | 151,15672.08 |
| 1906. | 5,573 | 150 | 6,423 | 6,573 | 102,358 | 108,044 | 210,402 | 154,022 73.20 |
| 1907. | 5,592 | 160 | 6,479 | 6,639 | 101,981 | 107,899 | 209,880 | 152,76472.79 |
| 1908. | 5,594 | 183 | 6,485 | 6,668 | 102,556 | 107,987 | 210,543 | 153,16272.75 |
| 1909. | 5,648 | 169 | 6,601 | 6,770 | 106,011 | 110,781 | 216,792 | 160,09673.85 |
| 1910. | 5,720 | 172 | 6,729 | 6,901 | 106,862 | 112,052 | 218,914 | 162,928 74.42 |
| 191 | 5,905 | 203 | 6,931 | 7,134 | 111,458 | 114,980 | 226,438 | 167,16873.82 |
| 191 | 5,789 | 207 | 7,001 | 7,208 | 111,887 | 117,347 | 229,234 | 171,816 74.95 |
| 1913. | 5,827 | 213 | 7,182 | 7,395 | 129,052 | 105,208 | 234,260 | 176,438 75.32 |
| 1914. | 5,947 | 232 | 7,523 | 7,755 | 119,244 | 125,363 | 244,607 | 185.10275.67 |
|  | 5,998 | 267 | 7,715 | 7,982 | 122,730 | 128,762 | 251,492 | 195,473\|77.73 |

CANADA.

## 1901-1916-con. <br> Ontario (Year ended December 31).


[Manitoba (Year ended June 30).
Norr.-The Manitoba school year from 1901 to 1911 ended December 31st.
Owing to $a$ change in the date of the school year no report was issued for 1912.


[^9]





## EDUCATION

1.-Number of Schools, Teachers and Pupils in Canada by Provinces, 1901-1916-concluded.
Alberta (Year edded December 31).

| Year. | Schools | Teachers. |  |  | Pupils Enrolled. |  |  | Average Attendance of pupils. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female | Total. | Boys. | Girls. | Total. | No. | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ |
| 1906. | 570 | 280 | 644 | 924 | 14,701 | 14,083 | 28,784 | 14,782 | 51.00 |
| 1907 | 694 | 318 | 892 | 1,210 | 17,707 | 16,631 | 34,338 | 17,310 | 54.00 |
| 1908. | 851 | 435 | 1,033 | 1,468 | 19,516 | 20,137 | 39,653 | 18,923 | 48.00 |
| 1909. | 970 | 570 | 1,245 | 1,815 | 23,701 | 22,347 | 46,048 | 22,225 | 48.24 |
| 1910. | 1,195 | 716 | 1,501 | 2,217 | 28,406 | 26,901 | 55,307 | 29,611 | 53.54 |
| 1911.. | 1,392 | 867 | 1,784 | 2,651 | 31,753 | 29,907 | 61,660 | 32,556 | 52.08 |
| 1912. | 1,600 | 956 | 2,098 | 3,054 | 36,717 | 34,327 | 71,044 | 39,226 | 55.21 |
| 1913.. | 1,705 | 980 | 2,314 | 3,294 | 41,449 | 38,460 | 79,908 | 45,888 | 57.41 |
| 1914.. | 2,027 | 1,375 | 2,603 | 3,978 | 46,769 | 43,141 | 89,910 | 54,582 | 60.71 |
| 1915.. | 2,138 | 1,418 | 2,800 | 4,218 | 50,140 | 47,146 | 97,286 | 61,112 | 62.81 |
| 1916.... | 2,1701 | 1:355 | 3,252 | 4,607) | 50,375 | 48,826 | 99,201 | 60,271 | 60.75 |


| Britibe Columbia (Year ended Jume 30). |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1901. | 313 | 185 | 343 | 5281 | 11,854 | 11,177 | 23,031 | 14,962\|64.96 |
| 1902. | 330 | 194 | 355 | 549 | 11,941 | 11,176 | 23,117 | 15,244 65.94 |
| 1903. | 338 | 189 | 391 | 580 | 12,243 | 11,400 | 23,643 | 16,000 67.67 |
| 1904. | 339 | 182 | 413 | 595 | 12,949 | 11,857 | 24,806 | 16,386 66.06 |
| 1905. | 348 | 177 | 452 | 629 | 13,671 | 12,593 | 26,264 | 18,037 68.67 |
| 1906. | 361 | 176 | 477 | 653 | 14,051 | 13,235 | 27,286 | 18,886 69.21 |
| 1907 | 376 | 163 | 530 | 693 | 14,815 | 13,869 | 28,684 | 19,483 69.18 |
| 1908. | 399 | 181 | 576 | 757 | 16,498 | 15,255 | 31,753 | 22,349 70.38 |
| 1909. | 429 | 213 | 628. | 841 | 17,770 | 16,519 | 34,289 | 24,221 70.64 |
| 1910. | 476 | 231 | 727 | 958 | 19,432. | 18,197 | 37,629 | 26,874 71.42 |
| 1911. | 510 | 249 | 843 | 1,092. | 22,222 | 20,735 | 42,957 | 30,984 72.13 |
| 1912. | 550 | 256 | 1,004 | 1,260 | 24,761 | 23,056 | 47,817 | 35,739 74.74 |
| 1913. | 614 | 307 | 1,179 | 1,486 | 28,312 | 26,392 | 54,704 | 40,963 74.88 |
| 1914. | 682 | 394 | 1,339 | 1,733 | 30,476 | 28,474 | 58,950 | 46,555 78.97 |
| 1915. | 730 | 412 | 1,403 | 1,815 | 31,215 | 29,137 | 60,352 | 49,162 81.46 |
| 1916. | 770 | 416 | 1,486 | 1,902 | 30,614 | 29,186 | 59,800 | 47,054 78.69 |

Summary for Canada ( 1901 to 1915).

| 1901 | 17, | 4,617 |  |  | 439,738 | 498,687 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1902 | 17, | 4,370 | 18, | 22, |  |  |  | 552,093 60.37 |
| 03 | 18, | 4,229 | 19,0 | 23,312 | 485 |  |  | 560,668 61.31 |
| 190 | 18,179 | 4,022 | 19,52 | 23,548 | 4*9,6 | 420,562 | 908,814 | 55 |
| 1905. | 18,501 | 3,788 | 20,226 | 24,014 | 436,220 | 426,175 | 925,682 | 570,738 |
| 1906. | 20,150 | 4,542 | 22,061 | 26,603 | 469,029 | 457,709 | 990,861 | 614,267 6 |
| 1907. | 20,684 | 8,858 | 22,134 | 27,457 | 474,102 | 463,28 | 1,004,480 | 617,263 6 |
| 1908 | 21,361 | 4,058 | 28,561 | 28,766 | 486,599 | 474,160 | 1,031,799 | 640,358 |
| 1909. | 22,134 | 5,098 | 24,789 | 29,887 | 502,609 | 486,481 | 1,062,134 | 662,771 6 |
| 1910. | 22,855 | 5,270 | 26,058 | 31,328 | 515,611 | 502,809 | 1,094,167 | 693,471 63 |
| 1911 | 23,676 | 5,515 | 27,628 | 33,143 | 550,514 | 514,456 | 1,125,798 | 706,672 62.77 |
| 191 | 21,877 | 4,831 | 26,221 | 31,052 | 546,602 | 593,025 | 1,079, | 701,441 64.97 |
| 1913. | 24,871 | 5,645 | 30,267. | 35,912 | 589,115 | 645,51 | 1,218 | 789, 741164.82 |
| 19 | 26,0 | 6,290 | 31,599 | 37,889 | 601,141 | 585,958 | 1,281,04 | 852,333 66.53 |
|  | 26,796 | 6,58 | 32,8 | 39,4 | 621,0 | 605,10 | 1,327,12 | 907,619168.39 |

Note.-From 1901 to 1905 , inclusive, the Summary for Canada comprised the beven provinces of Prince Edward Isiand, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba and British Columbia. The two provinces of Saskatchewan and Alberta were formed in 1905, and from 1906 anl the nine provinces 8 re included, with the exception of Manitoba for 1912, when no Education Report was issued by that province. In 1907 and 1908 the sex of the teachers in Saskatchewan was not given, and in Manitoba the sex of the pupils wes not given for any of the years. In the Summary, therefore, these defects are indicated by printing the totala in italics.

## EDUCATION STATISTICS OF CANADA

2.-Normal and Model Schools in Nova Scotia, New Brunswick, Quebec, Ontario and Manitoba, 1901-1916.

Nova Scotta.
Number of Pupils in the Provincial Normal College.

| Year. | No. of <br> Pupils. | Year. | No. of <br> Pupils. | Year. | No. of <br> Pupils. | Year. | No. of <br> Pupils. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1901. | 240 | 1905 | 148 | 1909 | 215 | 1913 | 302 |
| 1902. | 182 | 1906 | 154 | 1910 | 260 | 1914 | 318 |
| 1903. | 145 | 1907 | 142 | 1911 | 268 | 1915 | 355 |
| $1904 . . .$. | 191 | 1908 | 161 | 1912 | 293 | 1916 | 388 |

New Bronswick.
Number of Teachers and Pupils in the Normal School and Model Depariment.

| Year. | Teachers. | Pupils in Normal School. |  |  | Pupils in Model Depart-ment. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Total. | Male. | Female. | Total. |
| 1901. | 11 | 41 | 155 | 196 | 81 | 111 | 192 |
| 1902. | 14 | 68 | 201 | 269 | 72 | 118 | 190 |
| 1903. | 16 | 35 | 189 | 224 | 73 | 104 | 177 |
| 1904. | 19 | 35 | 253 | 288 | 74 | 102 | 176 |
| 1905. | - | 54 | 231 | 285 | 86 | 104 | 190 |
| 1906. | 16 | 44 | 263 | 307 | 85 | 95 | 180 |
| 1907. | 18 | 45 | 315 | 360 | 74 | 91 | 165 |
| 1908. | 18 | 35 | 299 | 334 | 90 | 92 | 182 |
| 1909. | 18 | 53 | 290 | 343 | 93 | 94 | 187 |
| 1910.. | 15 | 63 | 295 | 358 | 91 | 100 | 191 |
| 1911.: | 16 | 46 | 324 | 370 | 88 | 99 | 187 |
| 1912. | 16 | 46 | 330 | 376 | 91 | 100 | 191 |
| 1913. | 18 | 53 | 305 | 358 | 92 | 98 | 190 |
| 1914. | 16 | 45 | 312 | 357 | 88 | 99 | 187 |
| 1915. | 16 | 52 | 298 | 351 | 101 | 88 | 189 |
| 1916........ | 19 | 45 | 327 | 372 | 85 | 93 | 178 |

Quebec.
Number of Teachers and Pupils in Normal Schools, and Schools annexed to Normal Schools.
NORMAL SChOOLS, 1901-1915.

| Year. | Schools. | Teachers. |  |  | Pupils enrolled. |  |  | $\left\lvert\, \begin{gathered} \text { Aver- } \\ \text { age } \\ \text { atten- } \\ \text { dance. } \end{gathered}\right.$ | Per cent. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | $\begin{gathered} \text { He- } \\ \text { male. } \end{gathered}$ | Total. | Boys. | Gixls. | Total. |  |  |
| 1901. | 5 | 31 | 27 | 58 | 97 | 256 | 353 | 345 | 97.73 |
| 1902.. | 5 | 31 | 30 | 61 | 130 | 290 | 420 | 415 | 98.81 |
| 1903.. | 5 | 31 | 30 | 61 | 138 | 322 | 460 | 455 | 98.91 |
| 1904.. | 5 | 30 | 31 | 61 | 151 | 241 | 392 | 388 | 98.98 |
| 1905. | 5 | 32 | 30 | 62 | 142 | 274 | 416 | 410 | 98.56 |
| 1906. | 5 | 35 | 27 | 62 | 143 | 280 | 423 | 420 | 99.29 |
| 1907.. | 6 | 34 | 38 | 72 | 159 | 308 | 467 | 462 | 98.93 |
| 1908. | 7 | 39 | 27 | 66 | 165 | 361 | 526 | 524 | 99.62 |
| 1909.. | 10 | 58 | 59 | 117 | 182 | 533 | 715 | 710 | 99.30 |
| 1910. | 11 | 53 | 75 | 128 | 177 | 610 | 787 | 780 | 99.11 |
| 1911. | 11 | 50 | 79 | 129 | 174 | ${ }_{666}$ | 840 | 835 | 99.40 |
| 1912. | 11 | 43 | 77 | 120 | 160 | 676 | 836 | - |  |
| 1913. | 13 | 50 | 86 | 136 | 175 | 913 | 1,058 | - | - |
| 1914.... | 14 | 48 | 98 | 146 | 189 | 1,081 | 1,270 | - | - |
| 1915..... | 14 | 54 | 131 | 185 | 191 | 1.121 | 1,312 | - | - |

## EDUCATION

2.-Normal and Model Schools in Nova Scotia, New Brunswick, Quebec, Ontario and Manitoba, 1901-1916-concluded.

Ontahio.
Number of Teachers, Students and Pupils in Provincial Normal and Normal Model Schools.

| Year. | Provincial Normal. |  | Year. | Normal Model. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Teachers. | Students. |  | Teachers. ${ }^{1}$ | Pupils. |
|  | No. | No. |  | No. | No. |
| 1901. | 14 | 613 | 1901 | 28 | 921 |
| 1902. | 16 | 619 | 1902 | 31 | 958 |
| 1903.. | 25 | 586 | 1903 | 36 | 1,067 |
| 1904. | 25 | 304 | 1904 | 36 | , 982 |
| 1905. | 27 | 306 | 1905 | 36 | 1,023 |
| 1906.. | 27 | 345 | 1906 | 36 | 990 |
| 1907-8. | 35 | 428 | 1907 | 38 | 979 |
| 1908-9. | 62 | 1,149 | 1908 | 37 | 925 |
| 1909-10. | 68 | 1,235 | 1909 | 37 | 903 |
| 1910-11. | 68 | 1,266 | 1910 | 38 | 952 |
| 1911-12. | 69 | 1,064 | 1911 | 38 | 916 |
| 1912-13. | 69 | 986 | 1912 | 38 | 914 |
| 1913-14. | - 70 | 1,201 | 1913 | 38 | 959 |
| 1914-15. | ! 71 | 1,160 | 1914 | 38 | 978 |
| 1915-16. . | 77 | 1,609 | 1915 | 40 | 962 |
| 1916-17 | .i 78 | 1,293 | 1916 | 43 | 971 |

Includes Kindergarten.
Manitoba.
Number of Teachers and Students in Normal Schools.

| Year. | Teachers. |  | Students at |  | Year. | Teachers. |  | Students at |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Pro- } \\ \text { vin- } \\ \text { cial } \\ \text { Normal. } \end{gathered}$ | Local | 2ad class sessions. | 3rd class sessions. |  | $\begin{gathered} \text { Pro- } \\ \text { vin- } \\ \text { cial } \\ \text { Normal. } \end{gathered}$ | Local Normal. | 2nd class sessions. | 3rd class sessions. |
| 1901. | 7 | 13 | 90 | 161 | 1909. | 5 | 10 | 136 | 312 |
| 1902. | 7 | 14 | 86 | 234 | 1910. | 5 | 10 | 122 | 381 |
| 1903. | 7 | 14 | 82 | 237 | 1911. | 6 | 11 | 126 | 502 |
| 1904. | 7 | 14 | 129 | 261 | 1912. | School | year | chang |  |
| 1905. | 8 | 18 | 171 | 326 | 1913. | 6 | 11 | 139 | 390 |
| 1906. | 6 | 14 | 148 | 328 | 1914. | 6 | 10 | 180 | 401 |
| 1907 | 5 | 11 | 128 | 278 | 1915. | 6 | 14 | 206 | 466 |
| 1908. | 5 | 10 | 131 | 279 | 1916. | 14 | 12 | 331 | 409 |

Note.-The above figures are also included with the public schools in Table 1.

## EDUCATION STATISTICS OF CANADA

## 3.-Number of Teachers and Pupils in Medel Schools, Academies and Roman Catholic Classical Colleges in Quebec, 1901-1915.

Model Schools.

| Year, | Schools | Teachers. |  |  | Pupils enrolled. |  |  | Average attendance. | Per cent. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female | Total. | Boys. | Girls. | Total. |  |  |
| 1901. | 557 | 655 | 1,800 | 2,455 | 39,260 | 41,979 | 81,239 | 65,872 | 81.09 |
| 1902. | 568 | 612 | 1,923 | 2,535 | 39,816 | 42,286 | 82,102 | 66,109 | 80.52 |
| 1903. | 555 | 618 | 1,805 | 2,423 | 40,587 | 41,205 | 81,792 | 66,327 | 81.10 |
| 1904. | 572 | 673 | 1,824 | 2,497 | 43,055 | 41,712 | 84,767 | 68,349 | 80.63 |
| 1905. | 587 | 690 | 1,876 | 2,56\% | 44,120 | 41,654 | 85,774 | 69,640 | 81.19 |
| 1906. | 598 | 709 | 1,907 | 2,616 | 46,227 | 42,611 | 88,838 | 72,732 | 81.87 |
| 1907. | 627 | 753 | 2,045 | 2,798 | 47,307 | 45,609 | 92,916 | 75,433 | 81.18 |
| 1908. | 640 | 767 | 2,147 | 2,914 | 48,831 | 48,201 | 97,032 | 70,226 | 81.65 |
| 1909. | 660 | 750 | 2,216 | 2,966 | 50,064 | 48,574 | 98,638 | 81,038 | 82.16 |
| 1910. | 661 | 801 | 2,187 | 2,988 | 51,165 | 49,327 | 100,492 | 82,514 | 82.11 |
| 1911. | 671 | 851 | 2,335 | 3,186 | 53,175 | 53,211 | 106,386 | 86,758 | 81.55 |
| 1912. | 683 | 913 | 2,314 | 3,227 | 55,108 | 52,667 | 107,775 | 88,301 | 81.93 |
| 1913. | 698 | 912 | 2,345 | 3,257 | 56,109 | 53,544 | 109,653 | 89,777 | 81.88 |
| 1914. | 718 | 904 | 2,517 | 3,421 | 59,019 | 55,719 | 114,738 | 94,255 | 82.15 |
| 1915. | 721 | 809 | 2,547 | 3,356 | 56,146 | 53,686 | 109,832 | 91,910 | 83.68 |

Academies.

| 1901. | 168 | 428 | 1,213 | 1,641 | 15,101 | 17,417 | 32,518 | 27.596184 .87 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1902. | 166 | 497 | 1,225 | 1,722 | 16,156 | 20,064 | 36,220 | 30,81085.12 |
| 1903. | 178 | 513 | 1,316 | 1,829 | 16,868 | 22,466 | 39,334 | 33,75285.81 |
| 1904. | 179 | 517 | 1,361 | 1,878 | 16,503 | 22,259 | 38,762 | 32,907/84.90 |
| 1905. | 184 | 523 | 1,397 | 1,920 | 17,085 | 23,196 | 40,281 | 34,62485.96 |
| 1906. | 193 | 566 | 1,449 | 2,015 | 18,382 | 24,186 | 42,568 | 36,357 85.41 |
| 1907 | 198 | 607 | 1,526 | 2,133 | 20,905 | 23,913 | 44,818 | 38,313 85.49 |
| 1908. | 201 | 632 | 1,560 | 2,192 | 20,084 | 25,285 | 45,369 | 38,631 85.15 |
| 1909. | 217 | 686 | 1,709 | 2,395 | 23,071 | 28,511 | 51,582 | 44,595 86.45 |
| 1910. | 236 | 735 | 1,756 | 2,491 | 24,404 | 30,737 | 55,141 | 47,953 86.31 |
| 1911. | 223 | 734 | 1,838 | 2,572 | 24,483 | 31,816 | 56,299 | 47,752 84.82 |
| 1912. | 248 | 758 | 2,017 | 2,775 | 26,268 | 36,759 | 63,027 | $54,40386.31$ |
| 1913. | 273 | 827 | 2,122 | 2,949 | 28,078 | 39,793, | 67,871 | 58.232:85.79 |
| 1914. | 296 | 916 | 2,227 | 3,143 | 32,674 | 43,876 | 76,550 | $65,19085.16$ |
| 1915. .. | 321. | 1,104 | 2,350 | 3,454 | 38,784 | 47,979 | 86,763 | 73,514\|84.47 |

Roman Cathonc Classical Colleges.

| Year. | Number of |  |  | Average Attendance. | Year. | Number of |  |  | Average attendance. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Colleges. | Professors. | Pupits enrolled. |  |  | Colleges. | Professors. | Pupils enroiled. |  |
| 1901.. | 19 | 549 | 5,915 | 5,468 | 1909. | 18 | 609 | 6,397 | 5,872 |
| t902. | 19 | 562 | 6,096 | 5,698 | 1910. | 19 | 642 | 6,599 | 6,053 |
| 1903. | 19 | 559 | 6,174 | 5,694 | 1911. | 19 | 642 | 7,140 | 6,521 |
| 1904. | 19 | 590 | 6,265 | 5,758 | 1912. | 21 | 662 | 7,818 | 7,280 |
| 1905. | 19 | 621 | 6,269 | 5,772 | 1913. | 21 | 687 | 8,189 | 7,677 |
| 1906. | 19 | 621 | 6,318 | 5,895 | 1914. | 21 | 726 | 8,444 | 7,841 |
| 1907. | 19 | 624 | 6,268 | 5,796 | 1915. | 21 | 754 | 8,251 | 7,664 |
| 1908. | 19 | 624 | 6,274 | 5,709 |  |  |  |  |  |

## EDUCATION

4.-Number of Teachers and Pupils in Collegiate Institutes and High Schools in Ontario, 1901-1916.

|  | Schools. No. | Teachers <br> No. | Pupils enrolled. |  |  | Average attendance. | Per cent. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year. |  |  | Boys. No. | Girls. No. | Total. No. |  |  |
| 1901. | 131 | 579 | 10,869 | 11,654 | 22,523 | 13,224 | 58.71 |
| 1902. | 134 | 593 | 11,629 | 12,843 | 24,472 | 14,430 | 58.97 |
| 1903. | 135 | 619 | 11,988 | 13,734 | 25,722 | 15,317 | 59.55 |
| 1904. | 138 | 661 | 12,718 | 14,991 | 27,703 | 16,730 | 60.38 |
| 1905. | 140 | 689 | 13,035 | 15,626 | 28,661 | 17,567 | 61.29 |
| 1906. | 142 | 719 | 13,336 | 16,056 | 29,392 | 18,078 | 61.50 |
| 1907 | 143 | 750 | 13,799 | 16,532 | 30,331 | 18,485 | 60.94 |
| 1908. | 145 | 795 | 14,731 | 17,181 | 31,912 | 19,862 | 62.23 |
| 1909. | 145 | 820 | 15,776 | 17,325 | 33,101 | 20,791 | 62.81 |
| 1910. | 145 | 853 | 15,196 | 17,416 | 32,612 | 20,389 | 62.52 |
| 1911. | 148 | 898 | 14,679 | 17,548 | 32,227 | 20,177 | 62.60 |
| 1912. | 148 | 917 | 14,846 | 17,427 | 32,273 | 20,268 | 62.80 |
| 1913. | 161 | 970 | 15,489 | 18,257 | 33,746 | 21,448 | 63.55 |
| 1914. | 160 | 1,023 | 17,001 | 19,465 | 36,466 | 23,360 | 64.06 |
| 1915.. | 160 | 1,020 | 17.705 | 20,721 | 38,426 | 24,825 | 64.60 |
| 1916. | 161 | 1,038 | 17,029 | 21,781 | 38,810 | 23,750 | 61.22 |

5.-Number of Teachers and Pupils in Continuation Schools in Ontario, 1911-1916. Note.-Previously to 1911 the statistics of these Junior High Schools are included with the Elementary Schools.

| Year. | Schools. | Teachers | Pupils enrolled. |  |  | Average attendance. | Per cent. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Boys. | Girls. | Total. |  |  |
| 1911. | 129 | 218 | 2,394 | 3,359 | 5,753 | 3,487 | 60.61 |
| 1912. | 138 | 226 | 2,499 | 3,595 | 6,094 | 3,777 | 61.97 |
| 1913. | 125 | 218 | 2,229 | 3,315 | 5,544 | 3,386 | 61.07 |
| 1914. | 131 | 237 | 2,474 | 3,595 | 6,069 | 3,812 | 62.81 |
| 1915. | 132 | 238 | 2,803 | 3,997 | 6,800 | 4,274 | 62.85 |
| 1916-17 | 132 | 234 | 1,979 | 3.103 | 5,082 | 3,729 | 73.37 |

6.--Number of Teachers and Pudils in High Schools in British Columbia. 1901-1916.

| Year. | Schools. No. | $\begin{gathered} \text { Teachers } \\ \text { No. } \end{gathered}$ | Pupils enrolled. |  |  | Average attendance. | Per cent. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Boys. No. | $\begin{aligned} & \text { Girls. } \\ & \text { No. } \end{aligned}$ | Total. No. |  |  |
| 1901. | 5 | 15 | 215 | 369 | 584 | 373 | 63.87 |
| 1902. | 7 | 21 | 313 | 471 | 784 | 564 | 71.94 |
| 1903. | 8 | 27 | 316 | 540 | 856 | 627 | 73.25 |
| 1904. | 10 | 29 | 381 | 600 | 981 | 685 | 69.83 |
| 1905. | 12 | 34 | 433. | 657 | 1,090 | 834 | 76.51 |
| 1906. | 13 | 37 | 473 | 763 | 1,236 | 923 | 74.68 |
| 1907 | 15 | 42 | 532 | 823 | 1,355 | 976 | 72.03 |
| 1908. | 16 | 49. | ${ }_{813}$ | 857 | 1,470 | 1,124 | 76.46 |
| 1909.. | 18 | 59 | 812 | ${ }^{997}$ | 1,809 | 1,441 | 79.66 |
| 1910.. | 21 | 66 | 919 | 1,122 | 2,041 | 1,549 | 75.89 |
| 1911. | 23 | 71 | 940 | 1,048 | 1,988 | 1,533 | 77.11 |
| 1912. | 24 | 77 | 973 | 1,178 | 2,151 | 1,645 | 76.48 |
| 1913. | 30 | 96 | 1,232 | 1,448 | 2,680 | 2,109 | 78.69 |
| 1914.. | 34 | 110 | 1,414 | 1,593 | 3,007 3,912 | $\stackrel{2,535}{3,332}$ | 84.30 85.17 |
| 1915.. | 37 | 132 | 1,844 | 2,068 2.510 | 3,912 4,770 | 3,332 3,816 | 85.17 80.00 |
| 1916.. | 40 | 162 | 2,260 | 2.510 | 4,770 | 3,816 | 80.00 |

EDUCATION STATISTICS OF CANADA

## 7.-Receipts and Expenditure for Public Education in Canada by Provinces, 1901-1916.

Prince Edward Island.

| Year. | Government Grant. | Local Assessment. | Total. | Year. | Government Grant. | Local Assessment. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | 8 |  |  | + | \$ |
| 1901. | 128,288 | 36,647 | 164,985 | 1009 | 123, 179 | 54,027 | 183,206 |
| 1902. | 127,495 | 38,827 | 166,322 | 1910. | 127,548 | 53,924 | 181,472 |
| 1903. | 123,919 | 42,698 | 166,617 | 1911. | 123,438 | 54,738 | 181,176 |
| 1904. | 121,696 | 47,069 | 168,765 | $1912{ }^{2}$ | 179,956 | 81,683 | 261,641 |
| 1905. | 122,897 | 45,695 | 168,592 | 1913. | 150,732 | 56,874 | 207,606 |
| $1906^{1}$. | 91,946 | 34,763 | 126,709 | 1914. | 156,503 | 61.490 | 217.993 |
| 1907 | 123,898 | 46,429 | 170,327 | 1915. | 168,413 | 91.258 | 259,671 |
| 1908 | 127,002 | 49,874 | 176,866 | 1916. | 173,962 | 70,610 | 244,572 |

${ }^{1}$ Nine months. ${ }^{2}$ Eighteen months.
Nova Scotta.

${ }^{1}$ Not including $\$ 44,592$ for technical education.
New Bronswick.


## EDUCATION

7.-Receipts and Expenditure for Public Education in Canada by Provinces, 1901.1916-cod.

Quebec.

| Year. | Government Grants to |  | Local Expenditure for |  | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Elementary Scbools. | Other Schools. | Elementary Schools. | Superior <br> Schools. |  |
| 1901. | 235,000 | 218,950 | 1,688,743 | 1,311,061 | 3,453,754 |
| 1902.. | 235,000 | 325,450 | 1,770,906 | 1,280,203 | 3,611,559 |
| 1903. | 235,000 | 248,964 | 1,935,113 | 1,298,961 | 3,718,038 |
| 1904. | 235,000 | 234,280 | 2,005,542 | 1,341,573 | 3,816,395 |
| 1905. | 235,000 | 245,760 | 2,199,371 | 1,404,387 | 4,084,518 |
| 1906. | 285,000 | 251,150 | 2,374,657 | 1,427,745 | 4,338,552 |
| 1907 | 285,000 | 334,850 | 2,532,900 | 1,517,841 | 4,670,591 |
| 1908. | 335,000 | 348,350 | 2,870,244 | 1,595,293 | 5,148,887 |
| 1909. | 386,000 | 451,450 | 3,031,072 | 1,649,344 | 5,517,866 |
| 1910. | 418,000 | 490,391 | 3,494,499 | 1,807,640 | 6,210,530 |
| 1911. | 462,572 | 602,657 | 3,702,297 | 2,026,807 | 6,794,333 |
| 1912. | 532,000 | 670,029 | $4,188,225$ | 2,024,215 | 7,414,469 |
| 1913. | 655,823 | 752,593 | 4,188,225 | 2,024,215 | 7,623,856 |
| 1914. | 658,306 | 1,065,803 | 5,797,799 | 1,375,080 | 8,896,988 |
| 1915.. | 629,000 | 1,153,417 | 5,993,837 | 3,687,369 | 11,463,623 |
| 1916. | 629,000 | 1,253,838 | - | - | - |

Ontario (Elementary Schools).

|  | Receipts. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year. | Government Grants. | Local <br> Assessments. | Clergy Reserve Fund and other sources. | Total. |
|  | $\$$ | * | \$ | 8 |
| 1901 | 377,308 | 3,784,070 | 1,468,678 | 5,630,056 |
| 1902 | 383,666. | 3,959,912 | 1,422,924 | 5,766,502 |
| 1903 | 390,156 | 4,263,893 | 1,406,957 | 6,061,006 |
| 1904 | 405,362 | 4,464,227 | 1,600,982 | 6,470,571 |
| 1905 | 414,004 | 4,928,790 | 1,886,400 | 7,229,194 |
| 1906 . | 509,795 | 5,529,496 | 1,883,394 | 7,922,685 |
| 1907. | 655,239 | 6,146,825 | 2,455,864 | 9,257,928 |
| 1908. | 770,426 | 6,581,232 | 2,620,523 | 9,972,181 |
| 1909 . | 810,595 | 6,574,372 | 3,013,501 | 10,398,468 |
| 1910. | 805,635 | 7,334,458 | 3,573,507 | 11,713,600 |
| 1911 | 892,377 | 7,826,083 | 3,778,183 | 12,496,643 |
| 1912 . | 842,278 | 9,478,887 | 3,936,887 | 14,258,052 |
| 1913 | 778,150 | 9,856,380 | 4,025,284 | 14,659,814 |
| 1914. | 760,845 | 12,608,865 | 4,069,565 | 17,439,275 |
| 1915 | 849,872 | 11,810,023 | 4,089,210 | 16,749,105 |
| 1916 | 831,988 | 11,010,356 | 4,237,738 | 16,080,082 |

## EDUCATION STATISTICS OF CANADA

7.-Receipts and Expenditure for Public Education in Canada by Provinces, 1901-1916-con.

Ontario (Elementary Schools)--con.
Expenditure.

| Year | Teachers' Salaries. | Sites and building Schoolhouses. | Maps, apparatus, prizes, etc. | Rent, repairs, fuel and other Expenses. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\delta$ | \$ | \$ | \$ | \$ |
| 1901. | 3,055,321 | 531,072 | 81,685 | 1,052,232 | 4,720,310 |
| 1902. | 3,198,132 | 432,753 | 86,723 | 1,107,552 | 4,825,160 |
| 1903. | 3,309,993 | 428,817 | 74,486 | 1,264,573. | 5,077,869 |
| 1904. | 3,473,710 | 578,656 | 87,997 | 1,319,130 | 5,459,493 |
| 1905. | 3,669,230 | 959,137 | 98,209 | 1,434,670 | 6,161,236 |
| 1906. | 3,880,548 | 854,452 | 108,547 | 1,559,659 | 6,403,206 |
| 1907. | 4,389,524 | 1,220,820 | 213,096 | 1,732,739 | 7,556,179 |
| 1908.. | 4,643,571 | 1,419,754 | 139,330 | 1,741,171 | 7,943,826 |
| 1909. | 5,008,542 | 1,264,989 | 136,627 | 1,731,265 | 8,141,423 |
| 1910. | 5,310,038 | 2,140,200 | 131,171 | 1,761,792 | 9,343,102 |
| 1911.. | 5,610,213 | 2,164,459 | 139,228 | 1,990,383 | 9,904,284 |
| 1912. | 6,109,547 | 2,777,960 | 167,755 | 2,218,698 | 11,273,900 |
| 1913. | 6,648,255 | 2,869,830 | 149,167 | 2,658,655 | 12,325,907 |
| 1914. | 7,209,034 | 4,626,030 | 167,283 | 2,854,621 | 14,850,968 |
| 1915. | 7,614,110 | 3,561,951 | 177,038 | 2,914,377 | 14,267,476 |
| 1916. | 7,929,490 | 2,232,110 | 192,212 | 2,998,093 | 13,351,905 |

Manitoba.

| Year. | Receipts. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Legislative grant. | Municipal taxes. | Debentures. | Promissory notes. | Sundries. | Balance from previous years. | Total. |
|  | $\leqslant$ | \$ | * | 5 | \$ | $\$$ | \$ |
| 1907 | 242,383 | 1,223,336 | 315,271 | 802,574 | 141,452 | 115,677 | 2,840,694 |
| 1908. | 267,645 | 1,475,473 | 285,091 | 777,417 | 424,656 | 111,741 | 3,342,033 |
| 1909. | 282,200 | 1,539,047 | 356,392 | 905,747 | 274,803 | 119,970 | 3,478,729 |
| 1910 | 296,115 | 1,682,238 | 425,320 | 1,336,370 | 281,988 | 162,736 | 4,184,768 |
| 191. | 325,410 | 1,847,380 | 1,318,068 | 1,275,239 | 76,172 | 399,539 | 5,241,808 |
| 1913. | 351,745 | 2,198,459 | -387,457 | 1,960,215 | 213,283 | 302,407 | 5,013,566 |
| 1914. | 390,582 | 2,673,449 | 1,545,042 | 396,459 | 150,429 | 518,387 | 7,674,549 |
| 1915. | 468,335 | 3,047,670 | 1,738,92B | 2,071,397 | 122,974 | 466,837 | 7,916,139 |
| 1916. | 503,774 | 3,296,667 | 344,673 | 2,080,204 | 239,176 | 609,982 | 7,074,477 |

EDUCATION
7.-Receipts and Expenditure for Public Education in Canada, by Provinces, 1901-1916--con.

Manitoba-con.

| Year, | Expenditure. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Teachers' Salarie8. | Building, etc. | Fuel. | Repairs and caretaking. | Salary of Sec.-Treas. |
|  | \$ | \$ | \% | \$ | $\$$ |
| 1907 | 1,009,224 | 460,260 | 79,903 | 126,216 | 23,420 |
| 1908. | 1,103,990 | 582,034 | 89,756 | 126,952 | 25,650 |
| 1909. | 1,203,232 | 641,900 | 80,921 | 132,421 | 26,174 |
| 1910. | 1,327,010 | 830,432 | 87,002 | 148,932 | 28,689 |
| 1911. | 1,452,630 | 1,199,288 | 109,299 | 167,734 | 29,218. |
| 1913. | 1,734,854 | 1,420,882 | 99,918 | 132,222 | 32,493. |
| 1914. | 1,861,809 | 1,426,758 | 146,064 | 242,270 | 37,684 |
| 1915. | 2,666,440 | 1,358,533 | 110,049 | 379,318 | 65,025 |
| 1916. | 2,195,226 | 823,266 | 165,697 | 358,315 | 41,530 |
| Year. | Principal of Debentures | Interest on Debentures. | Promissory notes. | Sundries and transportation. | Total. |
|  | \$ | \$ | \$ | \$ | \$ |
| 1907 | 81,795 | 80,392 | 667,791 | 200,856 | 2,729,917 |
| 1908. | 190,893 | 99,246 | 869,334 | 141,905 | 3,229,767 |
| 1909. | 111,295 | 244,596 | 757,200 | 137,770 | 3,337,500 |
| 1910. | 269,660 | 127,589 | 1,013,076 | 168,281 | 4,000,671 |
| 1911. | 131,975 | 144,735 | 1,590,565 | 199,446 | 5,023,891 |
| 1913. | 294,030 | 96.979 | \$38,163 | 370,757 | 5,036,795 |
| 1914. | 230,523 | 270,392 | 1,412,515 | 471,105 | 6,079,720 |
| 1915. | 184,911 | 344,476 | 2,260,906 | 347,242 | 7,116,808 |
| 1916. | 194,257 | 409,193 | 2,132,286 | 338,459 | 6,658,230 |

Note.-For a summary of the principal items of Receipts and Expenditure from 1901 to 1906, see Year Book of 1915, page 128 . From 1907 the items are given 10 greater detail, as above. Owing to change of year, no figures were published for 1912.

EDUCATION STATISTICS OF CANADA.

## 7.-Receipts and Expenditure for Public Education in Canada by Provinces, 1901-1916-con.

Saskatcaeman.

|  | Year. | Receipts. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Government Grants. | Local Assessments. | Proceeds of Debentures. | Borrowed by Note. | Total. |
|  |  | \$ | $\$$ | \$ | \$ | \$ |
| 1906. |  | 174,218 | 602,624 | 360,206 | 298,686 | 1,465,361 |
| 1907. |  | 218,385 | 707,835 | 507,006 | 474,324 | 1.957,472 |
| 1908. |  | 402,028 | 992,157 | 651,828 | 507,522 | 2,783,153 |
| 1909. |  | 513,604 | 1,249,192 | 584,873 | 667,549 | 3,192,271 |
| 1910. |  | 557,299 | 1,369,531 | 524,741 | 921,841 | 3,672,582 |
| 1911. |  | 555,438 | 1,519,528 | 659,270 | 1,204,322 | 4,029,792 |
| 1912. |  | 622,088 | 1,929,345 | 1,430,603 | 1,936,450 | 6,030,613 |
| 1913.. |  | 722,002 | 2,913,135 | 2,075,375 | 2,470,834 | 8,360,421 |
| 1914.. | . | 867,590 | 4,451,326 | 1,057,587 | 2,002,997 | 8,536,577 |
| 1915.. |  | 980,296 | 3,997,392 | 1,009,025 |  | 8,428,493 |

Expenditure,

| Year. | Teachers' Salaries. | Offials' Salaries. | Paid on Debentures. | Paid on Notes (renewals and interest). | School buildings and repairs. | Caretaking and fuel. | Total Expenditure. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 1906. | 471,736 | 29,076 | 113,958 | 303,739 | 339,933 | 47,251 | 1,448,915 |
| 1907.. | 585,594 | 44,047 | 149,301 | 423,717 | 530,050 | 84,585 | 2,000,675 |
| 1908. | 831,842 | 59,106 | 207,780 | 608,515 | 577,925 | 95,762 | 2,679,373 |
| 1909. | 1,044,011 | 73,098 | 317,173 | 700,483 | 519,302 | 130,558 | 3,032,999 |
| 1910.. | 1,208,651 | 83,635 | 379,695 | 877,978 | 627,740 | 144,206 | 3,655,428 |
| 1911.. | 1,298,925 | 84,603 | 369,951 | 1,071,783 | 619,601 | 172,993 | 3,989,036 |
| 1912.. | 1,596,616 | 94,358 | 455,949 | 1,820,705 | 1,149,986 | 202,531 | 5,931,844 |
| 1913. | 2,059,456 | 130,728 | 678,430 | 2,605,280 | 1,898,101 | 294,710 | 8,327,178 |
| 1914.. | 2,588,669 | 169,491 | 975,508 | 2,317,158 | 1,429,173 | 369,802 | $8,588,462$ |
| 1915.. | 2,817,412 |  |  | - | 1,253,187 |  | 8,163,887 |

## EDUCATION

## 7.-Receipts and Expenditure for Public Education in Canada by Provinces,

 1901-1916-concluded.Alberta.

| Year. | Receipts. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Government Grants | Local Assessments. | Proceeds of Debentures. | Borrowed by Note. | Total. |
| 1906. | 142.836 | 416,344 | 97,158 | ${ }^{8}$ | \$ |
| 1907 | 192,768 |  | 297,158 | 292,786 | 1,289,921 |
| 1908. | 2207712 | 917.515 | 746,431 | 431,561 | 1,776,703 |
| 1909. | 307,186 | 961,959 | 992,518 | ${ }_{535} 539896$ | 2,548,617 |
| 1910. | 301,239 | 1,278,013 | 673,333 | 848,625 | 3,187,365 |
| 1911. | 432,877 | 1,575,412 | 1,481,173 | 1,461,208 | 5,071,033 |
| 1912. | 414,116 | 1,793,480. | 1,491,498 | 2,665,068 | 6,626,918 |
| 1913.. | 461,289 | 2,901,214 | 3,497,863 | 1,959,495 | 9,048,511 |
| 1914. | 507,682 | 3,028,776 | 966,350 | 2,771,380 | 7,553,512 |
| 1915. | 540,235 | 3,733,323 | 951,205 | 2,473,976 | 7,957,604 |
| 1916.............. | 600,085 | 3,749,007. | 155,883 | 1,105,538 | 6,767,383 |

Expenditure.

| Year. | Teachers Salaries. | Official glaries. | Paid on Debentures. | Paid on Notes (renewals and interest). | Schools building and repairs. | Careand fuel. | Total Expenditure. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 386 | 3 | 1 - | 208 | 74 | \$ | ${ }^{\$}$ |
| 1900. | 386,40 | 3, 5 |  | 208,984 | 274,525 | 40,729 | 1,259,107 |
| 1907. | 497, ${ }^{\text {¢ }}$ |  | $\therefore 1,488$ | 295,517 | 486,824 | 58,451 | 1,793,953 |
| 1903. | 503,22\% | 39.5 | 307,775 | - 39,459 | 607,635 | $73,1{ }^{1} 1$ | 2,393,682 |
| 1909. | 758,816 | 52,8\% | -3,isE | 574,725 | 638,065 | 96,795 | 2,735,858 |
| 1910. | 608,04E | 6 | 547,220 | 653,987 | 862,290 | 111,517 | 3,562,394 |
| $1.11 ?$ | - , $1 \cdot 4,584$ | 8, 40 \% | 408,442 | 1,309,134 | 1,223,142 | 157,034 | 5,025,773 |
| 1912. | 1,41-,201 | 114,392 | 162, 006 | 2,021,030 | 1,526,001 | 181,449 | 6,667,282 |
| 1913. | 1.67: 59 C | 180,165 | 594. 51 | 3,160,030 | 1,816,203 | 233,668 | 8,684,186 |
| 1914. | 2,050,69 | 17C,453 | 815,062 | 2,350,462 | 1,324,470. | 267,64소 | 7,834,891 |
| 1915. | 2,244,964 | - 4,816 | 1,065,437 | 2,731,279 | 443,641 | 275,273 | 7,965,470 |
| 1916. | 2,421,404 | 230,931 | 956,563 | 1,266,884 | 325,297 | 236,939 | 6,121,614 |

British Cojcmbla.

| Year. | Provincial Government. | Cities, Municipalities, Rural and Assisted Schools. | Total. | Year. | Provincial Governments. | Cities, <br> Municipal- <br> ities, <br> Rural and <br> Assisted <br> Schools. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 350,532 | $\stackrel{5}{182,160}$ | 532,692 | 1909. | 626,074 | \$21,626 | $1,547,760$ |
| 1902. | 438,086 | 150,482 | 588,568 | 1910. | 818,576 | 1,098,660 | 1,917,236 |
| 1903. | 473,802 | 130,556 | 604,358 | 1911. | 1,001,808 | 1,639,714 | 2,641,522 |
| 1904. | 453,313 | 144,451 | 597,764 | 1912. | 1,151,715 | 2,730,773 | 3,882,488 |
| 1905. | 479,158 | 249,891 | 729,049 | 1913. | 1,663,003 | 2,995,892 | 4,658,895 |
| 1906. | 444,543 | 244,198 | 688,741 | 1914. | 1,885,654 | 2,749,223 | 4,634,877 |
| 1907.. | 474,608 | 390,163 | 864,771 | 1915.. | 1,607,651 | 2,309,795 | 3,917,446 |
| 1908. | 544,672 | 675,838 | 1,220,510 | 1916. | 1,591,322 | 1,625,028 | 3,216,350 |

## EDUCATION STATISTICS OF CANADA

## 8.-Average Annual Salaries of Teachers by Provinces, 1915-1918.


${ }^{1}$ According to regulations, a teacher, though holding a first class license, can draw first class pay only if be be a principal of a first class school, or a viceprincipal of a school of six or more departments. All other first class teachers receive only second class pay. This arrangement lowers considerably the average salaries of teachers of the highest class.
${ }^{2}$ In Quebec teachers are described as "Jay teachers with diploma."

## EDUCATION

9.-Universittes of Canada: Foundation, Affliation, Faculties and Degrees.

| Name and Address, | Date of |  | Affiliationto otherUniversities. | Faculties. | Degrees. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Original Foundation. | Present Charter. |  |  |  |
| University of King's College, Windsor, N.S. | 1789 | 1802 | Oxford and Cambridge. | Arts, Law, Science, Divinity. | $\begin{gathered} \text { B.A., M.A., B.Sc., } \\ \text { D.Sc., M.Sc., } \\ \text { B.C.L. D.C.L., } \\ \text { B.D., D.D. } \end{gathered}$ |
| Dalhousie University, Halifax, N.S. | 1818 | 1863 | Oxford and Cambridge. | Arts andScience, Law, Medicine and Dentistry. | $\begin{aligned} & \text { B.A., M.A., B.Sc., } \\ & \text { L. Mus., M.Sc., } \\ & \text { B.Mus., Phm.B., } \\ & \text { LL.B., M.D. } \\ & \text { C.M., D.D.S., } \\ & \text { LL.D. (Hon.). } \end{aligned}$ |
| Acadia Eniversity, Wolfville, N.S. <br>  | 1838 | 1840 | Oxford, Dalhousie and McGill,Nova Scotia Technical. | Arts, Divinity, Law, Science, Applied Science, Literature. | B.A., B.Sc., B.Th. and M.A. |
| University of St. Francis Xavier, Antigonish, N.S. | 1855 | 1909 | Technical. | Arts, Science, Engineering, Law. | $\begin{aligned} & \text { B.A., M.A., B.Sc. } \\ & \text { LL. D. } \end{aligned}$ |
| University of New Brunswick, Fredericton, N .B. | 1800 | 1860 | $\begin{aligned} & \text { Oxford, Cam- } \\ & \text { bridge, Dub- } \\ & \text { lin, MeGill. } \end{aligned}$ | Arts, Applied Science, Partial Course in Law. | B.A., M.A., B.Sc., in Civit Engineering, Electrical Engineering or Forestry, D.Se. |
| Mount Allison University. Sackville, N.B | 1858 | 1886-1913 | Dalhousie, Oxford and Cambridge. | Arts, Theology, Engineering. | $\begin{aligned} & \text { B.A., M.A., B.Sc., } \\ & \text { B.D. } \end{aligned}$ |
| University of St. Joseph's College, St. Joseph, N.B. | 1864 | 1898 | Oxford. | Arts, Science. | $\begin{aligned} & \text { B.A., B.S. B.L. } \\ & \text { B.C.S., M.A. } \end{aligned}$ |
| McGill University, Montreal, Que. | 1821 | 1852 | Acadia, Mt. Allison, St, Francois- Xavier,Al- berta are affiliated to McGill in the Fa- culty of Applied Science. | Arts, Applied Science, Law, Medicine, Agriculture. | B.A.M.A., B.C.L., D.C.L., LL.D., B. Sc.' D.S.S., B.M.S., M.S., C.M.Mus., C.M., B.S.A., M.Se.; B.Arch., Ph.D. |
| University of Bishop's College, Lennorville, Que. | 1843 | 1853 | Oxford and Cambridge. | Arts, Divinity, Medicine and Law. | B.A., M.A., B.D., D.D., D.C.L., Doc., L.S.T. |
| Laval University, Quebec, Que. | 1852 | 1852 | - | Theology, Law, Medicine, Arts. | $\begin{aligned} & \text { M.A., B.A., B.S., } \\ & \text { B.L., Ph.D., } \\ & \text { Ph.L. Ph.B. } \\ & \text { M.D.,M.B.LL. B., } \\ & \text { LL.L., EL.D., } \\ & \text { D.B.B.L.,D.D., } \\ & \text { C.L.B., C.L.L., } \end{aligned}$ |
| Laval University, Montreal, Que. | 1878 | 1852 | - | Theology, Law, Medicine, Arts. | Bachelor, Licenciate, Doctor. |

STATISTICS OF UNIVERSITIES OF CANADA
9.-Universities of Canada: Foundation, Affiliation, Faculties and Degreesconcluded.

| Name and Address | Date of |  | $\begin{gathered} \text { Affiliation } \\ \text { to other } \\ \text { Universities. } \end{gathered}$ | Fraculties. | Degrees. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Original Foundation. | Present Charter. |  |  |  |
| University of Toronto, Toronto, Ont. | 1827 | Act <br> 1906 | Oxford,Cambridge and Dublin. | Arts, Medicine, Applied Science, Engineering Agriculture, Forestry, Education, House hold Science. |  |
| Victoria Univer* sity, Toronto, | 1836 | 1836 | Toronto. | Arts and Theo- logy. | B.D., D.D. |
| University of Trinity College, Toronte, Ont. | 1851 | 1852 | Toronto. | $\begin{aligned} & \text { Arts and Divin- } \\ & \text { ity. } \end{aligned}$ | L.Th., B.D., D.D. |
| Westera University, London, Ont. | 1878 | 1908 | - | $\left\|\begin{array}{cc} \text { Arts, } & \text { Medicine } \\ \text { and } \\ \text { Heablith, Music. } \end{array}\right\|$ | B.A., M.A., M.D., LL.D., D. Sc., D.P.H., Mus.Bach. |
| Queen's University, Kingston, Ont. | 1841 | 1841 | - | Arts, Science. Medicine, Education, Theology. | B.A., M.A., B.Sc., <br> D.Sc.,M.Sc.,M.D., <br> M.B., L.L.D., <br> B.D., D.D., <br> B. Pæd. D. Pæd. |
| University of Ot taws, Ottama, Ont. | 1849 | 1866 | - | Theology, Philosophy, Law, Arts and Commercial. | $\begin{aligned} & \text { LL.D., D.D... } \\ & \text { B. Ph., D.Ph., } \\ & \text { B.A.,M.A. } \end{aligned}$ |
| McMaster University, Toronte, Ont. | 1857 | 1887 | - | Arts, Theology. | $\begin{aligned} & \text { B.A., M.A., B.Se., } \\ & \text { B.Sc. (Agr.), } \\ & \text { B.Th., B.D. } \end{aligned}$ |
| University of Manitoba, Winnipeg, Man. | 1877 | 1877 | - | Arts, Science, Law, Medicine, Engineering, Architecture, Pharmacy, Agriculture. | B.A.'M.A.. B.Sc., M.D.'. C.M.' B.C.E., B.E.E., M.C.E., M.E.E., B.M.E., B.Arch., Ph.B., B.S.A., LL.B., LL.D. |
| University of Saskatchewan, Saskatoon, Sask. | 1907 | 1007 | Oxford. | Arts, Science, Law, Agriculture, Engineering, Pharmacy. | $\begin{aligned} & \text { B.A.,B.Sc.,B.S.A., } \\ & \text { B.E., LL.B., } \\ & \text { M.A., M.Sc. } \end{aligned}$ |
| University of Alberta, Edmonton, Alta, <br> University of | 1906 | 1910 | Oxford, McGill and Toronto. | Arts \& Sciences, Agriculture, Medicine, Law, Schools of Pharmacy and Accountancy. | B.A., B.Sc., M.A., B.S.A., M.Se., LLL.B., Phm.B., B.D., LL.D. |
| niversity of British Columbia, Vancouver, B.C. | 1907 | 1908 | - | Arts, Applied <br> Science and Agriculture. | B.A. B.Sc. |

EDUCATION
10.-Universities of Canada: Number of Teaching Staff and Students, 1915-16.

| Name and Address. | Number of Teaching Staff. |  |  | Number of Students. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| University of King's College, Windsor, N.S. | 13 | 1 | 14 | 51 | 6 | 57 |
| Dalhousie University, Halifax, N.S. | 80 | - | 80 | 248 | 91 | 339 |
| Acadia University, Wolfville, N.S. | 18 | 1 | 19 | 70 | 50 | 120 |
| University of St. Francis Xavier, Antigonish, N.S. | 20 | - | 20 | 202 | 40 | 242 |
| University of New Brunswick, Fredericton, N.B. | 11 | - | 11 | 94 | 22 | 116 |
| Mount Allison University, Sackville, N.B. | 24 | - | 24 | 117 | 84 | 201 |
| University of St. Joseph's College, St. Joseph, N.B. | 30 | - | 30 | 344 | - | 344 |
| McGill University,Montreal, Que. | 247 | 7 | 254 | 1,096 | 237 | 1,333 |
| University of Bishop's College, Lennoxville, Que.. | 9 | - | 9 | 43 | 10 | 53 |
| Laval University, Quebec, Que. | 140 | - | 140 | 1,189 | - | 1,189 |
| Laval University, Montreal, Que. | 281 | 23 | 304 | 2,430 | 884 | 3,314 |
| University of Toronto, Toronto, Ont. | 376 | 22 | 398 | 2,328 | 1,540 | 3,868 |
| VictoriaUniversity,Toronto, Ont. | 27 | - | 27 | 239 | 167 | 406 |
| University of TrinityCollege, Toronto, Ont. | 18 | 4 | 22 | 49 | 47 | 96 |
| Queen's University, Kingston, Ont. | 126 | - | 126 | 1,006 | 287 | 1,293. |
| Western University, London, Ont... | 78 | 1 | 791 | 103 | 34 | 137 |
| University of Ottawa, Ottawa, Ont. | 47 | - | 47 | 730 | - | 730 |
| McMaster Lniversity, Toronto, Ont.. | 21 | - | 21 | 211 | 54 | 265 |
| University of Manitoba, Winnipeg, Man. | 50 | 1 | 51 | 521 | 178 | 699 |
| University of Saskatchewan, Saskatoon, Sask. | 49 | 5 | 54 | 241 | 48 | 289 |
| University of Alberta, Edmonton, Alta. | 40 | 2 | 42 | 361 | 57 | 418 |
| University of British Colunbia, Vancouver, B.C.. | 37 | 1 | 38 | 190 | 178 | 368 |

${ }^{1}$ Teaching stati employed full time 27 , part time 52.
11.-Universities of Canada: Financial Statistics, 1915-16.


## EDUCATION

12.-Colleges of Canada: Foundation, Affliation, Faculties and Degrees.


> STATISTICS OF COLLEGES OF CANADA
12.-Colleges of Canada: Foundation, Affliation, Faculties and Degrees-coo.

| Name and Address | Date of |  | University Affiliation. | Faculties. | Degrees. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Original <br> Foundation. | Present $]$ Charter. |  |  |  |
| Montreal Diocesan Theological College, Montreal, Que. | 1873 | 1879 | McGill. | Divinity. | B.D., D.D. |
| Wesleyan Theological College, Montral, Que. | 1872 | 1879 | McGill. | Theology. | B.D., S.T.D., D.D. |
| Wycliffe College, Toronto, Ont. | 1879 | 1916 | Toronto. | Theology. | L.Th., B.D., D.D. |
| Knox College, Toronto, Ont. | 1843 | 1858 | Toronto. | Theology. | B.D., D.D. |
| St. Michael's College, Toronto, Ont. | 1852 | - | Toronto | Arts. | B.A., M.A., Ph.D. ${ }^{\text {( }}$ |
| Ontario Agriculteral College, Guelph, Ont. | 1874 | 1874 | Toronto. | Agricultural, Domestic Science, Manual Training. | B.S.A. |
| Ontario College of Art, ${ }^{2}$ Toronto, Ont. | 1912 | 1912 | - | - - | Diploma. |
| Ontario College of Pharmacy, Toronto, Ont. | 1871 | 1884 | Toronto. | Pharmacy. | 3 |
| Royal College of Dental Surgeons of Ontario, Toronto, Ont. | 1868 | 1911 | Toronto. | Dentistry | L.D.S. ${ }^{4}$ |
| OntarioVeterinary College, onto, Ont. | 1862 | Taken over by Government in 1908. | Toronto. | Veterinary, | V.S.* |
| Waterloo College, Lutheran TheologicalSeminary, Waterloo, Ont. | 1911 | 1912 | $\sim$ | Arts, Theology. | B.A., M.A. |
| Huron College, London, Ont. | 1863 | 1863 | Western University. | Theology. | Diploma with title L.Th. ${ }^{6}$ |
| St. Jerome's College, Kitchener, Ont. | 1864 | 1866 | - | Arts, Scholastic Philosophy. | - |

${ }^{1}$ Degrees conferred by the Toronto University. ${ }^{2}$ Succeeding Ontario School of Art founded in 1876. ${ }^{3}$ The University of Toronto grants the degree Phm. B. ${ }^{*}$ The Degree of D.D.S. is conferred by the University of Toronto. 'The degrees of B.V.Sc. and D.V.Sc. are conferred by the University of Toronto. 'Degrees in Arte and Theology are conferred by the Western University.

EDUCATION
12.-Colleges of Canada: Foundation, Affiliation, Faculties and Degrees-concluded.

| Name and Address | Date of |  | University Affiliation. | Faculties. | Degrees. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Original <br> Foundation. | Present Charter. |  |  |  |
| Royal Military College, Kingston, Ont. | 1875 | - | - | -- | Diploma and Diploma withHonours. |
| Albert College, | 1857 | 1884- | Toronto and Victoria. McMaster. | - | M.L.A., M.E.L. |
| Belleville, Ont. <br> Brandon College, | 1899 |  |  |  |  |
| Brandon, Man. |  | - |  | Academic, Business, Mu sic. | $\begin{aligned} & \text { B.A. by McMaster, } \\ & \text { University. } \end{aligned}$ |
| The Manitoba Law School, Winniper, Man. | 1914 | - | Manitoba. | Law. | LL.B. by University. |
| Wesley College, Winnipeg, Man. | 1877 | 1877 | Manitoba. | Arts, Theology Matriculation. Agriculture, Home Economics | B.D., D.D. ${ }^{1}$ |
| Manitoba Agricaltural College, Winnipeg, Man. | 1903 | - | Manitoba. |  | B.S.A. |
| St. John's College, | 1866 | - | Manitoba. | - | B.D. |
| Manitoba Medical | 1883 | 1884 |  | Medicine. | M.D., M.C. |
| College, Winnipeg, Man. |  |  | Manitoba. |  |  |
| Jon Bjarnason Academy, Winnipeg, Man. | 1913 | 1915 | - | - |  |
| Emmanuel College, | 1879 | 1883 | Saskatchewan. | Divinity. | L.Th., B.D., D.D. |
| Saskatoon, Sask. Presbyterian | 1911 |  |  | Divinity | B.D., D.D. |
| Theological College, Saskatoon, Sask. |  | -- | Saskatchewan. |  |  |
| St. Chad's College, | 1907 | - | Saskatchewan. <br> Toronto | Divinity. | - |
| Regina, Sask. |  |  |  |  | Diplomas. |
| $\begin{aligned} & \text { Columbia Metho- } \\ & \text { distCollege,New } \\ & \text { Westminster, } \\ & \text { B.C. } \end{aligned}$ | 1892 | 1893 | Toronto. | Academic, Music, Business. |  |
| Edmonton Jesuit College, Edmonton, Alberta. | 1913 | 1913 | - | Preparatory Commercial, Classical. | D |
| RobertsonCollege, Edmonton (South) Alberta. | 1910 | 1916 | Alberta. | Theology. | D.D. |
| Alberta College, Edmonton, Alberta. | 1903 | 1911 | Alberta. | Academic, Commercial, Music. <br> Technical Courses. | Diplomas. |
| Institute of Technology and Art, Calgary, Alberta. | 1916 | - | - |  |  |

${ }^{1}$ The degree of B.A. is conferred by the University of Manitoba.

STATISTICS OF COLLEGES OF CANADA
13.-Colleges of Canada: Number of Teaching Staff and Stadents.

| Name and Address. | Number of Teaching Staff. |  |  | Number of Students. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Prince of Wales College, Charlottetown, P.E.I. | 7 | 2 | 9 | 91 | 190 | 280 |
| Presbyterian College, Halifax, N.S... | 5 | - | 5 | 16 | - | 16 |
| College of Sainte-Amne, Church Point, N.S. | 21 | - | 21 | 195 | - | 195 |
| Technical College, Halifax, N.S. | 7 | - | 7 | 40 | - | 40 |
| Agricultural College, Truro, N.S.. | 19 | 1 | 20 | 50 | 4 | $54{ }^{1}$ |
| Royal Naval College, Halifax, N.S... | 9 | - | 9 | 26 | - | 26 |
| Holy Heart Theological College, Halifax, N.S. | 8 | - | 8 | 46 | - | 46 |
| St. Mary's College, Halifax, N.S... | 10 | - | 10 | 100 | - | 100 |
| Macdonald College, St. Anne de Bellevue, Que. | 40 | 20 | 60 | 70 | 220 | 290 |
| Ecole Dea Hautes Etudes Commerciales, Montreal, Que.... | 21 | - | 21 | 85 | - | 85 |
| Stanstead Wesleyan College, Stanstead, Que. | 6 | 12 | 18 | 151 | 154 | 305 |
| Presbyterian College, Montreal, Que. | 4 | - | 4 | 27 | - | $27^{*}$ |
| Congregational College of Canada, Montreal, Que. | 3 | - | 3 | 21 | - | $\because 21$ |
| Montreal Diocesan TheologicalCollege, Montreal,Que. | 5 | - | 5 | 29 | - | $\because 29$ |
| Wesleyan Theological College, Montreal, Que. | 5 | - | 5 | 65 | - | 65 |
| Wycliffe College, Toronto, Ont... | 7 | 1 | 8 | 45 | - | 45 |
| Knox College, Toronto, Ont. | 8 | - | 8 | 52 | 26 | 78 |
| St. Michael's College, Torronto, Ont. . | 18 | 11 | 29 | 226 | 65 | ${ }^{291}$ |
| Ontario Agricultural College, Guelph, Ont.... | 45 | 9 | 54 | 958 | 150 | 1,108 |
| Ontario College of Art, Toronto, Ont. | 9 | 6 | 15 | 65 | 320 | 385 |

EDUCATION
13.-Colleges of Canada: Number of Teaching Staff and Students-concluded.

| Name and Address. | Number of Teaching Staff. |  |  | Number of Students. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. |
| Royal College of Dental Surgeons of Ontario, Toronto, Ont. | 37 | - | 37 | 321 | 1 | 322 |
| Ontario Veterinary College, Toronto, Ont. | 20 | - | 20 | 189 | - | 189 |
| Waterloo College, Lutheran and Theological Seminary, Waterloo, Ont. | 7 | 1 | 8 | 25 | 1 | 26 |
| Huron College, London, Ont. St. Jerome's College, Kitchener, Ont. | 15 | 1 - | 7 15 | 26 115 | - | 26 115 |
| Royal Military College, Kingston, Ont. | 18 | - | 18 | 142 | - | 142 |
| Albert College, Belleville, Ont... | 4 | 10 | 14 | 75 | 52 | 127 |
| Brandon College, Brandon, Man. | 10 | 7 | 17 | 88 | 147 | 235 |
| The Mantoba Law Scbool, Winnipeg, Man | 12 | - | 12 | 130 | 8 | 138 |
| Wesley College, Winnipeg, Man. | 17 | 2 | 19 | 216 | 63 | 279 |
| Maniteba Agricultural Cellege, Winnipeg, Man. . | 30 | 6 | 36 | 253 | 105 | 3581 |
| St. John's College, Winnipeg, Man | 9 | - | 9 | 144 | 12 | 156 |
| Manitoba Medical College, Winnipeg, Man. | 40 | - | 40 | 117 | 8 | 125 |
| Jon Bjarnason Academy, Winnipeg, Man. | 2 | 1 | 3 | 19 | 12 | 31 |
| Emmanuel College, Saskatoon, Sask. | 4 | - | 4 | 12 | - | 12 |
| Presbyterian Theological College, Saskatoon, Sask. | 2 | - | 2 | 22 | - | 22 |
| St. Chad's College, Regina, Sask. | 5 | - | 5 | 7 | $\cdots$ | 7 |
| Edmonton Jexuit College, Edmonton, Alberta... | 3 | $\sim$ | 3 | 27 | - | 27 |
| Robertson College, Edmonton (South) Alberta. | 14 | - | 14 | 110 | - | 110 |
| Alberta College, Edmonton (North), Alberta. | 10 | 15 | 25 | 500 | 600 | 1,100 |
| Institute of Technology and Art, Calgary, Alberta... | 16 | 2 | 18 | 319 | 106 | 425 |
| Columbian Methodist College, New Westminster, B.C..... | 4 | 11 | 15 | 28 | 63 | 91 |

[^10]14.-Colleges of Canada: Financial Statistics, 1916.

| Name and Address. | Value of Endowments. | Value of Land and Buildings. | Sources of Income. |  |  |  |  | Expenditure. | $\begin{aligned} & \infty \\ & H \\ & \text { H } \\ & \text { H } \\ & \text { H } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Investments. | Government Grants. | Fees. | Other Sources. | Total <br> Income. |  |  |
|  | 8 | \$ | 8 | \$ | \$ | \% | \$ | \$ | $\stackrel{\rightharpoonup}{0}$ |
| Prince of Wales College, Charlottetown, P.E.I | - | 200,000 | - | 20,000 | 1,200 | - | - | - | 7 |
| Presbyterian College, Halifax, N.S.... | 195,000 | 250,000 | 6,985 | - | - | 9,725 | 10,710 | 18,000 | 0 |
| College of Saint-Anne, Church Point, N.S. | - | 90,000 | - | - | 18,000 | 2,000 | 20,000 | 21,500 | $\bigcirc$ |
| Technical College, Halifax, N.S. | - | 400,000 | - | 25,000 | - | - | 25,000 | 25,000 |  |
| Agricultural College, Truro, N.S. | - | 270,000 | - | 54,638 | - | - | 54,638 | 54,638 | E |
| Royal Naval College, Halifax, N.S. | - | - | - | - | 1,300 | - | - | 78,229 |  |
| Holy Heart Theological College, Halifax, N.S. | - | 100,000 | - | - | 6,200 | 1,500 | 7,700 | 8,500 | \% |
| St. Mary's College, Halifax, N.S. | - | 100,000 | - | - | 9,700 | 5,000 | 14,700 | 15,000 |  |
| Macdonald College, St. Anne de Bellevue, Que.. | 3,000,000 | 3,000,000 | 150,000 | 25,000 | 10,000 | 29,000 | 214,000 | 210,000 | -1 |
| Ecole des Hates Etudes Commerciales, Montreal, Que... | - | 739,150 | - | 50,000 | 3,699 | - | 53,699 | 53,563 | 3 |
| Stanstead Wesleyan College, Stanstead, Que. . | 121,440 | 100,000 | 6,582 | 600 | 28,931 | 1,003 | 37,116 | 36,320 | 0 |
| Presbyterian College, Montreal, Que. | 390,257 ${ }^{1}$ | 170,010 | 19,4의) | - | 20 | 7,818 | 27,318 | 25,300 | 5 |
| Congregational College of Canada, Montreal, Que. | 118,000 | 200,000 | 6,000 | - | $\cdots$ | 4,000 | 10,000 | 10,000 |  |

${ }^{1}$ Includes Scholarships amounting to $\$ 27,842$.
14.-Colleges of Camada; Financial Statistics, 1916--con.

| Name and Address. | value of Endowments. | Value of Land and Buildings. | Sources of lncome. |  |  |  |  | Expenditure. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Investments. | Government Grante. | Fees. | Other Sources. | Total Income. |  |
|  | \% | \$ | \$ | * | \$ | \$ | \$ | \$ |
| Montreal Diocesan Theological College, Montreal, Que. | 190,000 | 106,000 | 9,600 | - | 3,473 | 4,927 | 18,000 | 18,000 |
| Wesleyan Theological College, Montreal, Que. | 127,128 | 250,000 | 8,200 | - | 1,257 | 8,383 | 17,840 | 17,053 |
| Wycliffe College, Toronto, Ont... . | 250,000 | 230,000 | 14,000 | - | 6,000 | 19,000 | 39,000 | 39,000 |
| Knox College, Toronto, Ont. | 446,000 | 700,000 | 24,629 | - | 160 | 16,371 | 41,160 | 39,802 |
| St. Michael's College, Toronto, Ont.... | - | - | - | - | 11,640 | 8,000 | 19,640 | 23,000 |
| Ontario Agricultural College, Guelph, Ont. | - | 1,500,000 | - | 300,000 | 1 | 1 | 300,000 | 300,000 |
| Ontario College of Art, Toronto, Ont. | - | 5,000 | - | 6,500 | 4,000 | 3,000 | 13,500 | 13,500 |
| Royal College of Dental Surgeons of Ontario, Toronto, Ont. | - | 200,000 | - | - | 40,000 | 14,000 | 54,000 | 50,000 |
| Ontario Veterinary College, Toronto, Ont. | - | 350,000 | - | $\cdots$ | - | - | - | 23,063 |
| Waterloo College, Lutheran and Theological Seminary, Waterloo, Ont.... |  | 50,000 |  | - | 750 | 5,300 | 6,050 | 5,600 |
| Huron College, London, Ont. | '91,807 | 36,637 | 4,829 | - | 1,316 | 3,377 | 9,522 | 8,117 |
| St. Jerome's College, Kitchener, Ont. . | - | 110,000 | - | - | 18,000 | 2,000 | 20,000 | 18,500 |
| Royal Military College, Kingston, Ont. . | - |  | - | 160,000 | 11,000 | 25,000 | 196,000 | 135,000 |

${ }^{1}$ Returned to Government as Revenue $(\$ 90,000)$.
14.-Colleges of Canada: Financial Statistics, 1916-concluded.

${ }^{1}$ Figures of $1915 . \quad{ }^{2}$ Including equipment yalued at $\$ 15,000$.

## V.-CLIMATE AND METEOROLOGY.

## THE WEATHER OF CANADA DURING THE YEAR 1916.

Information farnished by the Dominion Meteorological Service, Toronto.

Jandary.
Temperature.-The most remarkable feature of the weather of the first month of the year was the extreme cold experienced in British Columbia and the greater portion of the Prairie Provinces. In the lower Fraser valley and on Vancouver 1sland the mean temperature of the month ranged $8^{\prime \prime}$ to $16^{\circ}$ lower than the normal January temperature, and over the remainder of the province was from $12^{\circ}$ to $25^{\circ}$ below the normal. In Alberta the negative departures from normal ranged between $9^{\prime \prime}$ and $30^{\circ}$; in Saskatchewan from $10^{\circ}$ to $18^{\circ}$. In Manitoba, the mean of the month was from $9^{\circ}$ to $12^{\circ}$ lower than the normal in the Souris and Assiniboine basins, but over the remainder of the settled areas of the province the defect was smaller. Conditions similar to those in Manitoba obtained in the Kenora and Rainy river districts, but over the remainder of Ontario the month was considerably warmer than usual, the excess over the normal mean ranging from $3^{\circ}$ to $11^{0}$ in the region lying between the Ottawa river and the Great Lakes. In Quebec and the Maritime Provinces, generally, mean temperatures were somewhat higher than normal. In the Mackenzie river basin and the Yukon extreme cold prevailed.

Precipitation.-Precipitation was much lighter than normal in British Columbia and the Maritime Provinces, but elsewhere in Canada was unusually heavy-at some places in the Prairie Provinees amounting to four times the normal amount. On the prairie the precipitation was wholly snow, but in Ontario and the Maritime Provinces it was partly rain. In southern Ontario the precipitation was for the most part rain.

Winds and Bright Sunshine.-High winds and gales occurred frequently from the Great Lakes to the Gułf. The prevailing direction of the wind was southwest in Ontario and Quebec and northwest in the Maritime Provinces. The amount of bright sunshine was in excess of normal from the Pacific coast to the Rocky Mountains; thence to the Atlantic it was less than normal, considerably so in Saskatchewan.

Frbritary.
Temperatare. - In February the temperature remained below the normal in British Columbia, but to a much less marked extent, while the Prairie Provinces experienced a temperature for the most part higher than the normal. From the Lake of the Woods to the Atlantic, negative departures from the normal obtained generally the greatest exceeding $S^{6}$ and occurring in Quebec. In the Prairie Province the change from extreme cold to mild weather occurred very abruptly on the affernoon of the 13th.

Precipitation.-The distribuition of precipitation was very irregular during this month. especially in British Columbia and the Prairie Provinces, some districts reporting a large cxeess and others an equally large defect. In Ontario, Quebec and the Maritime Provinces, however, there was more uniformity, nearly all districts reporting a deficiency.

Winds and Bright Sunshine.-Over the greater part of the Dominion the prevailing direction of the wind was westerly. Gales and high winds were less irequent in Ontario than was the case in January, but occurred on several days in the Maritime Provinces and Quebec. The duration of bright sunshine was considerably above normal in British Columbia, northern Saskatchewan, eastern Manitoba, and was either normal or slightly less eisewhere.

March.
Temperature.-In the basins of the Athabasca, Peace and Mackenzie rivers, over the greater part of Manitoba, and from the Lake of the Woods to the Atlantic, the mean temperature was less than the normal by from $3^{0}$ to $12^{\circ}$, the greatest negative departures occurring in the vicinity of Fort MacMurray and of Abitibi Post, respectively. In Saskatchewan, Alberta, and British Columbia, there were large areas with temperatures from $3^{\circ}$ to $6^{\circ}$ higher than normal. These areas comprised the basins of the North and South Saskatchewan rivers with their

## WEATHER OF CANADA DURING 1916

tributaries and head waters, and the basin of the Fraser river from its headwaters to the confluence with the Thompson. The temperature in the lower Fraser valley, as well as on Vancouver Island, differed little from normal.

Precipitation.-Precipitation was much greater than the normal from the Pacific coast to the Red river of Manitoba, and to a smaller degree in Ontario and Nova Scotia. In Quebec and New Brunswick there was a deficiency.

Winds and Bright Sunshine.-The prevailing directions of the wind were northeast and northwest. High winds and gales were prevalent in Quebec and the Maritime Provinces, while in Ontario gales occurred on one to four days and high winds frequently. In British Columbia the duration of bright sunshine was markedly in defect of normal, while in Ontario and Quebec it was still more markedly in excess.

## Aphil.

Temperature.- In the thickly populated regions of Canada the mean temperature was for the most part normal or a little lower, but the scattered stations in the thinly settled regions of the north reported temperatures which indicated that the higher latitudes had experienced an excess of $3^{\prime \prime}$ to $8^{\prime \prime}$ or more.

Precipitation.-Precipitation was generally well in excess of normal in British Columbia. Alberta, Saskatchewan, Ontario and Prince Edward lsland, but was deficient elsewhere.

Winds and Bright Sunshine.-High winds prevailed for an average of ten days throughout the Dominion, and gales for three days. Nearly all stations in Canada reported bright sunshine somewhat less that normal.

## May.

Temperature.-In the basin of the Mackenzie river, in the Yukon and on the north shore of the Gulf, there was a positive departure from normal temperature (at Fort Norman on the Mackenzie of $10^{\circ}$ ), but elsewhere in Canada the temperature was below the no:mal, by from $2^{\circ}$ to $6^{\circ}$ in Britisb Columbia and the Prairie Provinces and the region north of Lake Superior, and by $1^{0}$ to $3^{0}$ in the remaining portion.

Precipitation-Except in the West Kootenay and the Illecillewaet-North Columbia districts there was a deficiency of precipitation in British Columbia, amounting to from one quarter to one half of the normal amount. Over the greater part of Manitoba, the basin of the North Saskatchewan river in Alberta, southern Algoma, Timiskaming, the counties of the lower St. Lawrence and the Maritime Provinces, there was also a deficiency, which in the majority of the districts enumerated amounted to about thirty p.c. of the normal. In Nanitoba, however, the deficiency was small. In the basin of the North Saskatchewan from Battleford to the confluence of the branches, the precipitation was very heavy. In Ontario from the Georgian bay eastward and southward, and in Quebee except in the counties of the Lower St. Lawrence and Gulf, there was an excess over the normal precipitation, which in some distriets was doubled.

Winds and Bright Sunshine.--The prevailing direction of the wind in British Columbia was southeasterly or easterly, with high winds or gales on ten days. From the Rocky Mountains to Port Arthur the general direction was northwest, with gales on two days and strong winds on ten. Elsewhere the general direotion Was more variable with locality, but there was a dominating westerly component in the best agricultural districts. From Port Arthur to the Atlantic, gales or strong winds occurred on fifteen days, except in Quebec, where gales occurred on six days and strong winds on fifteen. In Saskatchewan, Manitoba, Ontario and Quebec, the duration of bright sunshine was in defect of normal by about forty hours, while on Vancouver Island and in southern British Columbia there was a small excess.

## June.

Temperature. - Nowhere except in southern Ontario did the mean temperature differ much from normal. In the peninsula between the Great Lakes and in the eastern counties the deficiency amounted generally to about $6^{\circ}$, with a range between $1^{\circ}$ and $10^{\circ}$ In the areas west of Port Arthur under cultivation the temparature was either normal or from $1^{6}$ to $3^{\circ}$ below. In the basins of the Markenzie river and the Cpper Fraser river there was a slight excess over normal, as was the case also in the region of Lake St. John, the basin of the Peribonka, and the district of I, ake Mistassini, in Quebec.

## CLIMATE AND METEOROLOGY

Precipitation.-The rainfall of June, which is a critical factor in the production of wheat in the Prairie Provinces, was uniformly sufficient in those provinces and in many districts was heavy. In few districts were there less than two inches of rain and in many more than four inches fell. There were frequent thunderstorms and some hail. In the Fraser river and coast districts of British Columbia the rainfall was less than normal, but in the interior valleys there was a general excess amounting to from twenty to forty p.e. of the normal. In Ontario and the Maritime Provi.ces, and Quebec, except the northern districts, the rainfall was also in excess. The excess in many parts of Ontario was equivalent to fifty p.c. of the normal June rainfall, and in the Maritime Provinces except Prince Edward Island to thirty p.e.

Winds and Bright Sunshine.-Gales occurred on two days in Alberta and Saskatchewan and none in Manitoba, but strong winds occurred in these three provinces on ten days. In Ontario strong winds prevailed on six days, while one or two gales occurred locally. In Quebec there were strong winds on thirteen days and gales on from one to six. In the Maritime Provinces there were Iocal gales and strong winds, generally, on six days. The duration of bright sunshine did not differ much from the normal fom the Pacific to the second principal meridian, but thence eastward there was a very considerable deficiency. The prevailing direction of the wind was northwest in the Prairie Provinces, variable in Ontario and Quebec, and southwest in the Maritime Provinces.

## July.

Temperature.-From northeastern Alberta to the bay of Fundy the mean temperature was well above the normal by from $2^{\circ}$ to $9^{\circ}$. In Nova Scotia and Prince Edward Island the negative departures were small, but in British Columbia they ranged from $2^{0}$ to $7^{0}$. In Ontario this was one of the warmest months on record.

Precipitation.-The rainfall was very heavy from the Pacifie to central Manitoba. In many districts the normal precipitation was doubled or tripled. In the basin of the Red river in Manitoba there was a small deficiency, and in the region of Ontario lying between the Great Lakes and the Ottawa river there was a general and very large deficiency. Along the middle St. Lawrence mearly the normal amount fell, but elsewhere in Quebec only two thirds, or less, of the normal rainfall was recorded. New Brunswick and Prince Edward Island reported an excess of about one third and Nova Scotia a small deficiency.

Winds and Bright Sunshine.-High winds and local gales in the Prairie Provinces caused some mechanical injury to the grain. No gales occurred in Ontario, but were recorded on from one to three days in Quebec and the Maritime Provinces with strong winds on ten days. In Alberta the northwesterly winds were dominant, but in Saskatchewan, Manitoba, Quebec and the Maritime Provinces, the greatest mileage was from the southwest. In Ontario the direction of greatest mileage varied considerably with the district. In southwestern British Columbia there was a very marked deficiency of bright sumshine and a less marked but still large excess in Ontario. In the Prairie Provinces there was a general but small excess.

## Adgust.

Temperature. - In Manitoba the mean temperature exceeded the normal by $2^{0}$ to $5^{\circ}$ and in Ontario from $3^{\circ}$ to $8^{\circ}$, except in the Thunder bay district where the positive differences were smaller or vanished. In that region of Quebec in which lie Lakes Abitibi, Mistassini, and St. John, the normal was exceeded by more than $6^{7}$ and over the remainder of the province by from $3^{\circ}$ to $6^{\circ}$. In the Maritime Provinces the differences from normal ranged hetween $2^{\circ}$ and $4^{0}$, the negative values occurring in Nova Scotia. In a small portion of southeastern Saskatchewan, and in Alberta about the headwaters of the Red Deer and of the North Saskatchewan, the differences were similar to those obtaining in Manitoba. In British Columbia there were positive differences in the valleys of the Lower Fraser, the Similkameen, Okanagan (southern portion), part of the valley of the South Thompson, and the Illecillewaet. Over the remainder of the province the temperature ranged from normal to $3^{0}$ below, as far north as the Great Forks of the Fraser, near Prince George, beyond which to Atlin Lake and the Liard river there was a small excess. In the region of Athabaska lake and Fort Vermilion there was a negative difference of $4^{0}$ which diminished eastwards till it vanished at Fort Churchill.

## WEATHER OF CANADA DURING 1916

Precipitation.-In most parts of the Dominion there was a very considerable deficiency of rainfall, which in British Columbia amouted from twenty p.c. to eighty p.c. of the normal Angust total; in the Dauphin district of Manitoba to sixty p.c. and from Algoma to the Atlantic to from thirty to seventy p.c. In Alberta the rainfall was heavy, except on the Athabaska and Peace river basins. In the basin of the North Saskatchewan, in the province of the same name, the normal precipitation was more than doubled. Elsewhere in Saskatchewan there was a defieiency. In southern Manitoba the rainfall was either normal or somewhat less. Thunderstorms occurred frequently in the Prairie Provinces and were attonded locally by severe hailstorms which did severe damage in limited areas.

Winds and Bright Sunshine.-Strong winds which attained to the foroe of a gale on from one to four days did some mechanical injury to the grain crops. There were no gales in Ontario, but in Quebec and the Maritime Provinces one to six were recorded. The prevailing directions of the wind, were northwest and southwest, which were equally prevalent in western Canada while in the Maritime Provinces the southwest predominated. There was a considerable excess of bright sunshine in all parts of the Dominion, exeept in Alberta and northern Sasiatchewan.

## September.

Temperature.-In the populated areas of Canada the differences from normal temperature were small, except in the district of Kenora, where there was a negative difference of $4^{9}$. In the region of Lake Athabaska and near the beadwaters of the Peace river there was a difference above normal of 4 .

Precipitation.-The rainfall remained below normal by a considerable amount in British Columbia, most of sotrthern Ontario, New Brunswick, Nova Scotia, Prince Edward Island and the district of the Forks of the Saskatchewan river in Saskatchewan. In portions of Manitoba there was also a deficiency, but to a lesser extent. About the fifteenth and towards the close of the month, there were light local snowialls in the Prairie Provinces.

Winds and Bright Sunshine.-In the western provinces the general direction of the wind was northwest, as it was also in the Lake Superior districts of Ontario, but elsewhere from Ontario to the Maritime Provinces southwest winds largely predominated, with strong winds on eleven days and gales locally on from one to two days in Ontario and one to seven days in the Maritime Provinces. Victoria, in British Columbia, reported a large excess of bright sunshine, while Haileybury, in northern Ontario, registered a still larger defect, but other sunshine stations reported much smaller differences from normal.

October.
Temperature.-From Lake Superior to the Atlantic ocean and over the greater part of British Columbia, the differences from normal temperature were small, but in the Prairie Provinces and the Lake Superior districts of Ontario there were negative departures of from $3^{\circ}$ to $6^{6}$.

Precipitation.-In British Columbia the precipitation remained largely in defect of normal, but over the remainder of the Dominion, generally, there was an excess, which was great in many parts of the Prairie Provinces, some districts receiving three times the normal ameunt. The precipitation was partly rain and partly snow.

Winds and Bright Sunshine.-Strong winds and gales seldom occurred in British Columbia, Alberta and Saskatchewan, but were of frequent occurrence from Manitoba to the Maritime Provinces, the strongest winds being northwest or southwest in most instances. In British Columbia and those regions of Ontario and Quebec which lie near the confluence of the Ottawa and St. Lawrence rivers, there was a considerable excess of bright sunsbine, while in northern Ontario, Manitoba, Saskatchewan and northern Alberta there was a considerable deficiency.

## November.

Temperature,-In British Columbia the mean temperature was considerably below normal, except in the regions north of the Great Forks of the Fraser. The negative differences obtamed in northern Grtario, also, imereasing nortbward on the James bay slope, while only ch the small strip bordering Lakes Erie and Ontario were the temperstures in that province either normal or higher. In

## CLIMATE AND METEOROLOGY

Alberta and Saskatchewan and Manitoba the excess over normal temperature was considerable, especially in the region north of Prince Albert. In the Maritime Provinces and the settled regions of Quebec there was a general but not large defect.

Precipitation.-Over the greatest past of the Dominion the precipitation was considerably less than normal; in a few sections it was only slightly less than normal, and only in western and northwestern Quebec was there any considerable excess.

Winds and Bright Sunshine.-ln Quebec and eastern Ontario the prevailing direction of the wind was southwest, while over the remainder of the Dominion west and northwest largely predominated, except in British Columbia where the greatest mileage was easterly. In British Columbia there were gales ou six days and strong winds on three days. In the Prairie Provinces there were gales on one or two days and strong winds on eight days. In Ontario there were gales on one to four days and strong winds on ten days. In Quebec and the Maritime Provinces there were gales on seven days and strong winds on eleven days. In British Columbia, northern Alberta, Manitobs, southern and eastern Ontario, there was a large excess of bright sumshine, especially large in British Columbia. In all other parts of the country there was also an excess, but very small.

## December.

Temperature.-The mean temperature of the month was decidediy below normal from Lake Superior westward to the Pacific coast, negative departures of $12^{\circ}$ to $15^{\circ}$ being recorded in northern Alberta and the northern interior districts of British Columbia. In Ontario there was also a negative departure but small, while from the Ottawa valley eastward departures were positive and increased to $6^{\circ}$ on the eastern shores of New Brunswick and Cape Breton.

Precipitation.--Precipitation was considerably above normal in the Maritime Provinces and eastern Quebec, wbile in other parts of the Dominion with some local exceptions, the normal amount was not recorded.

Winds and Bright Sunshine.-There was a beavy westerly gale in Ontario on the fifth and sixth, while in the Maritime Provinces and Quebec there was an unusually heavy wind movement. In southern Ontario and western Quebec, Vancouver Island, southern Alberta and Manitoba the duration of bright sunshine was from ten to forty hours in excess of normal, while in the Maritime Provinces there were equally large deficiencies.

## Temperature and Precipitation.

Temperature.-At the stations of the Dominion Meteorological Service the bighest and lowest temperature in each 24 hours, termed respectively the maximum and the minimum, are recorded by self-registering thermometers. For any month the sum of the daily maxima, divided by the number of days of the month, is the mean maximum temperature of that month. The mean minimum temperature is obtained in a similar manner The half sum of the mean maximum and the mean minimum is called the mean temperature. The averages of these results for any particular month over a period of years are the average means for that period and are used as normal means or temperatures of reference. The highest and lowest temperatures recorded during the whole period of years are termed the extreme maximum and extreme minimum respectively. These latter figures are of course to be regarded as extraordinary, the more unlikely to recur the longer the period from which they have been derived. Temperatures below zeno have the minus sign (-) prefixed.

Precipitation.-Under the collective term "precipitation" is inciuded all moisture which has been precipitated from the atmosphere upon the earth: rain, snow, hail, sleet, etc. The amount of moisture is conveniently measured by determining the depth to which it has accumulated upon an impervious surface, and is always expressed in inches of depth. The total depth of snow is tabulated separately, but is added to the depth of rain after division by ten. An extended series of experiments in melting and measuring snow having been coilated, the rule was deduced that a given fall of snow will, in melting, diminish on the average to onetenth of its original depth. This rule is used in praetice. All solid torms of precipitation other than snow are included in the tables as rain.


Nore.-The twelve rectangles in each of the figures represent, respectively, the precipitation of the twelve months of the year, beginning in each case with January. The stippled rectangles represent the growing season.

## CLIMATE AND METEOROLOGY

1.-Temperature of the year 1916 at Representative Stations, compared with Normal Annual Averages for the period 1888 to 1907.


## PRECIPITATION

## 2.-Precipitation of the year 1916 at Representative Stations, compared with Normal Annual Averages for the period 1888 to 1907.

Precipitation in inches.

| Station. | 1916. |  |  | Normal (1888-1907). |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rain. | Snow. | Total. | Rain. | Snow. | Total. |
| British Columbia- |  |  |  |  |  |  |
| Victoria. | 21.64 | 78.2 | 29.46 | 31.41 | 11.6 | 32.57 |
| Vancouver.... | 48.03 | 80.5 | 56.08 | 57.88 | 23.2 | 60.20 |
| Kamloops. | 6.57 | 32.7 | 9.84 | 8.00 | 26.2 | 10.62 |
| Alberta- |  |  |  |  |  |  |
| Calgary. | 9.37 | 46.3 | 14.00 | 11.70 | 46.0 | 16.30 |
| Edmonton..... | 15.33 | 57.1 | 21.04 | 14.18 | 40.2 | 18.20 |
| Saskatchewar- |  |  |  |  |  |  |
| Battleford... | 15.46 | 22.5 | 17.71 | 11.05 | 27.4 | 13.79 |
| Prince Albert. | 15.89 | 36.3 | 19.52 | 11.62 | 49.8 | 16.60 |
| Qu'Appelle. | 18.50 | 80.4 | 26.54 | 13.44 | 54.0 | 18.84 |
| Manitoba- |  |  |  |  |  |  |
| Minnedosa. .. | 14.36 | 61.1 | 20.47 | 12.79 | 45.7 | 17.36 |
| Winnipeg. | 15.54 | 86.5 | 24.19 | 15.62 | 51.9 | 30.81 |
| Ontario- |  |  |  |  |  |  |
| Port Arthur. | 24.21 | 51.4 | 29.35 | 19.01 | 44.5 | 23.46 |
| White River. | 16.48 | 116.2 | 28.10 | 17.36 | 93.5 | 26.71 |
| Parry Sound... | 33.15 | 150.0 | 48.15 | 29.38 | 115.6 | 40.94 |
| Southampton. .. | 30.25 | 131.2 | 43.37 | 21.64 | 116.0 | 33.24 |
| Toronto. | 25.24 | 67.3 | 31.97 | 25.28 | 61.0 | 31.38 |
| Kingston. .. | 31.54 | 58.8 | 3742 | 24.01 | 74.8 | 31.49 |
| Stonecliff... | 24.07 | 67.4 | 30.81 | 21.69 | 82.6 | 29.95 |
| Ottawa. .. | 27.13 | 119.6 | 39.09 | 24.70 | 87.0 | 33.40 |
| Quebec- |  |  |  |  |  |  |
| Montreal. | 28.98 | 98.3 | 38.81 | 29.37 | 122.7 | 41.64 |
| Quebec. | 33.63 | 91.0 | 42.73 | 27.17 | 132.9 | 40.46 |
| Sherbrooke.... | 26.83 | 111.0 | 37.93 | $\bigcirc$ | - | $\stackrel{-}{7}$ |
| Father Point. | 21.25 | 117.1 | 32.96 | 23.21 | 109.6 | 34.17 |
| New Brunswick- |  |  |  |  |  |  |
| Chatham. | 31.11 | 94.9 | 40.60 | 27.65 | 119.9 | 39.64 |
| Fredericton. | 26.20 | 95.9 | 35.79 | 33.73 | 104.6 | 44.19 |
| St. John.. | 28.17 | 99.9 | 38.16 | 36.68 | 84.3 | 45.11 |
| Nova Scotia- |  |  |  |  |  |  |
| Yarmouth. | 31.27 | 117.2 | 42.99 | 42.46 | 84.2 | 50.88 |
| Halifax... | 36.37 | 91.9 | 45.56 | 49.43 | 76.7 | 57.10 |
| Sydney... | 34.34 | 108.5 | 45.19 | 41.10 | 92.8 | 50.38 |
| Prince Edward Islan Charlottetown... | 25.08 | 92.4 | 34.27 | 29.97 | 101.8 | 40.15 |

## VI.--PRODUCTION.

In this section are included the statistics of agriculture, forestry, fisheries, minerals and manufactures.

## AGRICULTURE.

Correction of Estimates by Census Returns.-Previous estimates of the areas and yields of the field crops of Canada for the years 1915 and 1916 have been corrected to agree with the finally ascertained results of the Census of the Prairie Provinces, taken in June, 1916. These results indicate that the estimates of areas sown to the principal grain crops for the harvest of 1915, as compiled from the reports of correspondents. were considerably below the census returns as compiled from the individual schedules filled up for every farm. Thus, in 1915, the census returns showed, for the three Prairie Provinces, 13,867,715 acres of wheat instead of $11,744,700 ; 6,480,681$ acres of oats instead of $6,290,000$ and $1,171,082$ acres of barley instead of 962,000 . For flax the area was 457.759 acres instead of 801,000 acres. Similarly, in 1916, the censils returns are for wheat $14,362,809$ acres instead of $9,068,200$; for oats $7,359.487$ acres instead of $5,673,000$; for barley $1,391,296$ acres instead of 898,500 ano for flax 652,781 acres instead of 705,000 acres, the area in the case of flax being less for both years. The increases shown were largely in the more recently settled districts where the system of reporting by correspondents is necessarily less fully developed.

Season of 1916.-The prospects for a favourable grain harvest were good up to the end of July, and from the beginning of the cropreporting season in May up to that time, the monthly figures representing the condition of spring wheat in Saskatchewan and Alberta were over 90 p.c. of the standard, whilst in Manitoba they were above 90 for May and June and 84 for July. But during August a severe outbreak of rust spread rapidly into Canada from the northern States across the border. The Census and Statistics Office ciop correspondents reported on August 31 that the grain crops in Manitoba and Saskatchewan had been so seriously affected by rust and hot winds during August that large areas sown would either fail to produce any crop at all, or would have to be cu! green. whilst the yield of grain from producing areas would be very low, both in quantity and grade. These statements were fully borne out by the numerical expression given to the facts, and for Manitoba, where the attacks of rust were of the greatest and most widespread severity, the average condition of spring wheat on August 31 was down to 37 p.e. of the standard-the lowest percentage on record since the crop-reporting system was started in 1908,--and in Saskatchewan and Alberta the averages were 61 and 78, respectively The consequence was that the average yield per acre of spring wheat in Manitoba was only 108 bushels, as compared with $24 \frac{3}{7}$ bushels in 1915; in Saskatchewan the yield per acre was $16 \frac{1}{3}$ bushels against 25 bushels and in Alberta 25 bushels against 31 bushels.

Average Yields per Acre of Grain Crops.-For the whole of the Dominicn, the average yields per aere of the principal grain crops for 1916 were, in bushels, as follow: the yields of 1915 and 1914 being placed within brackets for comparison: Fall wheat, $21 \frac{1}{2}$ ( $28 \frac{1}{2}$ and $21 \frac{1}{2}$ );

## AGRICULTURE.

spring wheat, $16 \frac{3}{4}$ (26 and 15); all wheat, 17 (26 and $15 \frac{1}{2}$ ); oats, $37 \frac{1}{4}$ ( $40 \frac{1}{4}$ and 31 ); barley, $23 \frac{3}{4}$ ( $31 \frac{1}{2}$ and $24 \frac{1}{4}$ ); rye, $19 \frac{1}{4}$ ( $20 \frac{1}{2}$ and 18 ); peas, $14 \frac{1}{2}$ ( $17 \frac{3}{4}$ and $17 \frac{1}{2}$ ) ; beans, $12 \frac{3}{4}$ ( $16 \frac{3}{4}$ and $18 \frac{1}{4}$ ); buckwheat, $17 \frac{1}{2}$ ( 23 and $24 \frac{1}{4}$ ) ; mixed grains, $25 \frac{3}{4}$ ( $37 \frac{1}{2}$ and $35 \frac{1}{4}$ ) ; flaxseed, $12 \frac{1}{2}$ ( 13 and $6 \frac{1}{2}$ ): corn for husking, $36 \frac{1}{4}$ ( $56 \frac{3}{4}$ and $54 \frac{1}{2}$ ). For wheat, oats, rye and flaxseed these average yields, although inferior to the excellent returns of 1915, were higher than those of 1914 , which was a year of low yields due to drought. For barley, peas, beans, buckwheat, mixed grains and corn for husking, the average yields were lower than in either of the two previous years.

Total Areas and Yields cf Grain Crops.- The total harvested areas and the total production of the principal grain crops in Canada for 1915 and 1916, as corrected by the census returns of 1916, are estimated therefore as follows: Wheat $262,781,000$ bushels from $15,369,709$ acres, compared with $393,542,600$ bushels from $15,109,415$ acres in 1915 ; oats $410,211,000$ bushels from $10,996,487$ acres, compared with $464,954,400$ bushels from $11,555,681$ acres and barley $42,770,000$ bushels from $1,802,996$ acres, compared with $54,017,100$ bushels from 1,718,432 acres. For other crops the estimated total production in 1916 was as follows: rye $2,876,400$ bushels from 148,404 acres; flaxseed $8,259,800$ bushels from 657,781 acres; peas $2,218,100$ bushels from 151,790 acres; beans 412,600 bushels from 32,500 acres; buckwheat $5,976,000$ bushels from 341,500 acres; mixed grains $10,584,800$ bushels from 412,670 acres and corn for husking $6,282,000$ bushels from 173,000 acres.

Root and Fodder Crops.- The yield of hay and clover in 1916 was the record one of $14,527,000$ tons, an average of 1.86 ton per acre, which is the highest yield on record for this crop in Canada. The average value per ton was $\$ 1160$, as compared with $\$ 14.37$ in 1915. Potatoes were again upon the whole a poor crop, this result being due to unfavourable conditions in Quebee and Ontario, where the average yield per acre was for Quebec, 131 bushels, as compared with $149 \cdot 66$ bushels in 1915, and for Ontario, 61 bushels, as compared with 92.66 bushels. The total estimated production of potatoes in Canada was $63,297,000$ bushels, as compared with $60,353,000$ bushels in 1915 and $85,672,000$ bushels, the record crop of 1914 . In the Maritime Provinces the potato yield was good, being 206 bushels per acre for Prince Edward Island, 201 bushels per acre for Nova Scotia and 192 bushels per acre for New Brunswick. The average price per bushel for potatoes was 81 cents for Canada, 52 cents for Prince Edward Island, 69 cents for Nova Scotia, 84 cents for New Brunswick, 97 cents for Quebec and $\$ 1.28$ for Ontario. Fair yields of potatoes were recorded for the Prairie Provinces, the averages being between 147 and 164 bushels, with prices of 61 and 62 cents per bushel in Manitoba and Saskatchewan and 53 cents in Alberta. In British Columbia the average yield per acre was 189 bushels and the price 70 cents per bushel. The total yield of turnips and other roots was placed at $36,921,100$ bushels, as compared with $60,175,000$ bushels in 1915. Of fodder corn, the total yield was $1,907,800$ tons, against $3,382,770$ tons in 1915. Alfalfa produced 286,750 tons, compared with 260,970 tons in 1915, and sugar beets 71,000 tons against 141,000 tons.

## PRODUCTION

Quality of Grain Crops.-The quality of the grain crops of 1916, as determined by the average weight in lb. per measured bushel, was as follows: Fall wheat, 59.52 lb .; spring wheat, 56.51 lb .; all wheat, 5710 lb .; oats, $33 \cdot 86 \mathrm{lb}$.; barley, $45 \cdot 66 \mathrm{lb}$.; rye, 54.95 lb ., peas, 59.88 lb .; beans, 60 lb .; buckwheat, 46.35 lb. ; mixed grains, 43.13 lb .; flax, 55 lb ., and corn for husking 56.51 lb . For wheat and oats these weights per measured bushel are lower than in any previous year on record.

Average Values per Bushel of Grain Crops.-Offsetting the low yields and grades was the increase in the average prices of grain received by farmers in 1916. These prices are considerably higher than those of 1915, and are even higher than the prices which ruled in 1914 after the outbreak of the war. The average prices per bushel received by farmers for the grain products of 1916 work out as follows: Fall wheat, $\$ 1.54$ against 90 cents in 1915; spring wheat, $\$ 1.29$ against 91 cents; all wheat, $\$ 1.31$ against 91 cents; oats, 51 cents against 36 cents; barley, 82 cents against 52 cents; rye, $\$ 1.11$ against 77 cents; flaxseed, $\$ 2.04$ against $\$ 1.51$; peas, $\$ 2.22$ against $\$ 1.65$; beans, $\$ 5.40$ against $\$ 3.05$; buckwheat, $\$ 107$ against 73 cents; mixed grains, 88 cents against 57 cents and corn for husking, $\$ 1.07$ against 71 cents.

Total Values of Field Crops.-The total farm values of the principal grain crops of 1916 are estimated as follows, the values of wheat, oats, barley, rye and flaxseed being based upon the final returns of the Census of 1916, and the corresponding values of 1915 are given in brackets for wheat, oats and barley: Wheat, $\$ 344,096,400$ ( $\$ 356,816,900$ ) ; oats, $\$ 210,957,500$ ( $\$ 171,009,100$ ); barley, $\$ 35,024,000$ ( $\$ 27,985,800$ ) ; rye, $\$ 3,196,000$; peas, $\$ 4,919,000$; beans, $\$ 2,228,000$; buckwheat, $\$ 6,375,000$; mixed grains, $\$ 9,300,900$; flaxseed, $\$ 16,889,900$ and corn for husking, $\$ 6,747,000$. Including the root and fodder crops, the total value of the field crops of Canada in 1916 is estimated at $\$ 886,494,900$, as compared with $\$ 825,370,600$, the revised estimate of 1915. The totals comprise grain crops, $\$ 639,733,700$, compared with $\$ 601,093,300$ in 1915; potatoes and sugar beets $\$ 51,422,300$, compared with $\$ 37,235,300$, and fodder crops, $\$ 195,338,900$, compared with $\$ 187,042,000$. The total of $\$ 886,494,900$ for 1916 is higher than in any previous year.

Grain Harvest in the Prairie Provinces.-In the three Prairie Provinces of Manitoba, Saskatchewan and Alberta, the production of wheat in 1916 was estimated at $242,314,000$ bushels, as compared with $360,187,000$ bushels in 1915; of oats at $313,916,000$ bushels, compared with $279,692,000$ bushels; of barley at $33,419,000$ bushels, compared with $36,003,000$ bushels; and of flax at $8,212,500$ bushels, compared with $6,045,000$ bushels. The estimated wheat production of 1916 in Manitoba was $29,667,000$ bushels from 2,727,725 acres; in Saskatchewan 147,559,000 bushels from 9,032,109 acres and in Alberta 65,088,000 bushels from 2,604,975 acres.

Field Crops of 1915 and 1916 by Provinces.-Table 1 gives for Canada and the provinces the estimates of the area, yield, quality and value of the principal field crops in 1916, as compared with 1915. Table 2 shows the total acreage and estimated production of wheat, oats, barley and flaxseed in the three Prairie Provinces for the years 1915 and 1916, the areas being those of the Census of 1916. Table 3 shows

## AGRICULTURE

for Canada and by provinces the total estimated areas and values of field crops for each of the years 1911 to 1916. For 1916 the total area under feld erops is placed at $38,930,333$ acres, as compared with $39,140,460$ in 1915 and $33,436,675$ in 1914.
1.-Area, Yield, Quality and Value of principal Field Crops in Canada, 1915 and 1916.

| Crops. |  | Area. | Yield per acre. | Total yield. | Weight per measured bushel | $\begin{gathered} \text { Aver- } \\ \text { age } \\ \text { price } \\ \text { per } \\ \text { bushel } \end{gathered}$ | Total value. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CanadaFall wh |  | aeres. | bush. | bush. | lb. |  | \$ |
|  | . 1915 | 1,030,581 | 28.45 | 29,320,600 | 59.71 | 0.90 | 27,149,700 |
|  | 1916 | 818,264 | 21.50 . | 17,590,000 | 59.52 | 1.54 | 27,118,300 |
| Spring wheat. . | 1915 | 14,078,834 | 25.87 | 364,222,000 | 60.31 | 0.91 | 329,667,200 |
|  | 1916 | 14,551,445 | 16.85 | 245,191,000 | 56.51 | 1.28 | 316,978, 100 |
| All wheat. | . 1915 | 15,109,415 | 26.05 | 393,542,600 | 60.19 | 0.91 | 359,816.900 |
|  | 1916 | 15,369,709 | 17.10 | 262,781,000 | 57.10 | 1.31 | 344,096,409 |
| Oats. | . 1915 | 11,555,681 | 40.24 | 464,954,400 | 36.61 | 0.36 | 171,009,100 |
|  | 1916 | 10,996,487 | 37.30 | 410,211,000 | 33.86 | 0.51 | 210,957,500 |
| Barley | . 1915 | 1,718,432 | 31.51 | 54,017,100 | 35.33 | 0.52 | 27,985,800 |
|  | 1916 | 1,802,996 | 23.72 | 42,770,000 | 45.66 | 0.8 ? | 35,024,000 |
| Rye. | . 1915 | 121,677 | 20.43 | 2,486,200 | 56.32 | 0.77 | 1,921,900 |
|  | 1916 | 148,404 | 19.38 | 2,876,400 | 54.95 | 1.11 | 3,196,000 |
| Peas. | . 1915 | 196,065 | 17.67 | 3,464,250 | 60.74 | 1.65 | 5,724,100 |
|  | 1916 | 151,790 | 14.50 | 2,218,100 | 59.88 | 2.22 | 4,919,000 |
| Beans. | . 1915 | 43,310 | 16.70 | 723,400 | 59.61 | 3.05 | 2.206 .800 |
|  | 1916 | 32,500 | 12.70 | 412,600 | 60.00 | 5.40 | 2,228,000 |
| Buckwheat. | . 1915 | 343,800 | 22.88 | 7,865,900 | 48.02 | 0.75 | 5,913,000 |
|  | 1916 | 341,500 | 17.50 | 5,976,000 | 46.35 | 1.07 | 6,375,000 |
| Mixed grains. | . 1915 | 467,00] | 37.51 | 17,517,600 | 44.98 | 0.57 | 10,062,300 |
|  | 1916 | 412,676 | 25.75 | 10,584,800 | 43.13 | 0.88 | 9,300,900 |
| Flax. | 1915. | 463,359 | 13.19 | 6,114,000 | 55.28 | 1.51 | 9,210,400 |
|  | 1916 | 657,781 | 12.56 | 8,259,800 | 54.99 | 2.04 | 16,889,900 |
| Corn for husking | . 1915 | 253,300 | 56.72 | 14,368,000 | 56.32 | 0.71 | 10,243,000 |
|  | 1916 | 173,000 | 36.25 | 6,282,000 | 56.51 | 1.07 | 6,747,000 |
| Potatoes. | . 1915 | 485,777 | 124.24 | 60,353,000 | - | 0.60 | 36,459,800 |
|  | 1916 | 472,992 | 133.82 | 63,297,000 | - | 0.81 | 50,982,300 |
| Turnips, mangolds, |  |  |  |  |  |  |  |
| ete. | ${ }_{1916}$ | 151,690 141 | 284.25 | 30,175,000 | - | 0.24 0.39 | $14,588,700$ $14,329,000$ |
|  |  | 1,83 |  | 3,021,100 |  | per |  |
| Hay and clover. |  |  | tons. | tons. |  | ton. |  |
|  | . 1915 | 7,776,905 | 1.36 | 10,612,000 | - | 14.37 | 152,531,600 |
|  | 1916 | 7,821,257 | 1.86 | 14,527,000 | - | 11.60 | 168,547,900 |
| Fodder corn. | . 1915 | 332,469 | 10.17 | 3,382,770 | - | 4.91 | 16,612,600 |
|  | 1916 | 293,0E8 | 6.65 | 1,907,800 | - | 4.92 | 9,396,000 |
| Sugar beets. | . 1915 | 18,000 | 7.88 | 141,000 | - | 5.50 | 775,500 |
|  | 1916 | 15,000 | 4.75 | 71,000 | - | 6.20 | 440,000 |
| Alfalfa. | . 1915 | 98,488 | 2.65 | 260,970 | - | 12.68 | 3,309,100 |
|  | 1916 | 99.350 | 2.91 | 286,750 | - | 10.69 | 3,066,000 |

## PRODUCTION

1. Area, Yield, Quality and Value of principal Field Crops in Canada, 1915 and 1916-ron.

| Crops. |  | Area. | Yield per acre. | Total yield. | Weight per measured bushel | $\left\lvert\, \begin{gathered} \text { Aver- } \\ \text { age } \\ \text { price } \\ \text { per } \\ \text { bushel } \end{gathered}\right.$ | Total value. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prince Edward I.- |  | acres. | bush. | bush. | Ib. | \$ | * |
| Spring wheat. | . 1915 | 34,400 | 19.00 | 653,600 | 59.05 | 1.08 | 705,800 |
|  | 1916 | 34,500 | 16.75 | 578,000 | 58.79 | 1.52 | 879,000 |
| Oats. | . 1915 | 196,000 | 34.86 | 6,832,500 | 36.70 | 0.45 | 3,074,600 |
|  | 1916 | 199,009 | 37.25 | 7,413,000 | 36.93 | 0.61 | 4,522,000 |
| Barley | . 1915 | 3.700 | 28.88 | 106,800 | 48.83 | 0.71 | 75,800 |
|  | 1916 | 3,600 | 29.25 | 105,000 | 47.40 | 0.95 | 100,000 |
| Peas. | . 1915 | 70 | 15.75 | 1,100 | 61.67 | 2.33 | 2,500 |
|  | 1916 | 60 | 22.25 | 1,300 | 59.71 | 2.19 | 2,800 |
| Buckwheat. | ${ }^{1915}$ | 2,600 | 29.00 | 75,400 | 48.15 | 0.75 | 5¢,500 |
|  | 1916 | 2,500 | 27.25 | 68,000 | 49.10 | 1.00 | 68,000 |
| Mixed grains. | . 1915 | 8,000 | 38.65 | 309,200 | 43.00 | 0.55 | 170,000 |
|  | 1916 | 8,000 | 41.25 | 330,000 | 47.60 | 0.75 | 248,000 |
| Potatoes. | . 1915 | T ${ }^{\text {F }} 31,000$ | 114.78 | 3,558,000 | - | 0.46 | 1,637,000 |
|  | 1916 | It 31.000 | 206.00 | 6,386,000 | - | 0.52 | 3,321,000 |
| Turnips, mangolds, etc. | . 1915 |  | 44946 | 3,551,000 | - | 0.26 | 923,000 |
|  | 1916 | - 718,000 | 477.00 | 3,816,000 | - | 0.28 . | 1,008,000 |
|  |  |  |  |  |  | per |  |
|  |  |  | tons. | tons. |  | ton. |  |
| Hay and clover. | . 1915 | If 198,000 | 1.77 | 351,000 | - | 12.18 | 4,275,000 |
|  | 1916 | 199,000 | 1.70 | 338,000 | - | 11.56 | 3,907,000 |
| Fodder corn. | . 1915 | 260 | 13.00 | 3,400 | - | 3.00 | 10,200 |
|  | 1916 | 250 | 13.00 | 3,300 | - | 2.50 | 8,300 |
| Nova ScetiaSpring wheat |  |  | bush. | bush. |  | per |  |
|  | . 1915 | 13,300 | 18.57 | 247.000 | 59.26 | 1.21 | 298,700 |
|  | 1916 | 13,400 | 19.50 | 261,000 | 59.95 | 1.70 | 444,000 |
| Oats. | . 1915 | 112,000 | 31.14 | 3,487,700 | 34.18 | 0.59 | 2,057,700 |
|  | 1916 | 116,000 | 34.75 | 4,031,000 | 34.19 | 0.71 | 2,562,000 |
| Barley. | . 1915 | 4,900 | 26.20 | 128,400 | 48.39 | 0.80 | 102,700 |
|  | 1916 | 4,700 | 26.25 | 123,000 | 48.58 | 0.99 | 122,000 |
| Rye. | . 1915 | 300 | 15.00 | 4,500 | 56.00 | 1.08 | 4,900 |
|  | 1916 | 320 | 17.00 | 5,400 | 56.00 | 1.25 | 6,800 |
| Peas. | . 1915 | 190 | 18.66 | 3,550 | 59.00 | 2.01 | 7,100 |
|  | 1916 | 180 | 17.75 | 3,200 | 59.80 | 2.73 | 8,700 |
| Beans.... | . 1915 | 840 | 17.50 | 14,700 | 59.83 | 3.87 | 56,800 |
|  | .1916 | 850 | 16.25 | 13,800 | 60.00 | 5.62 | 78,000 |
| Buckwheat. | . 1915 | 10,200 | 21.72 | 221,500 | 4745 | 0.72 | 159,5¢0 |
|  | 1916 | 10,000 | 24.50 | 245,000 | 46.97 | 0.84 | 206,000 |

## AGRICULTURE

1. Area, Yield, Quality and Value of principal Field Crops in Canada, 1915 and 1916-con.


PRODUCTION
1.-Area, Yield, Quality and Value of principal Field Crops in Canada 1915 and 1916-con.

| Crops. |  | Area. | Yield. per acre. | Total yield. | Weight per measured bush. | Average price per bush. | Total value. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quebec - |  | acres | bush. | bush. | lb. | \$ | \$ |
| Spring wheat. | . 1915 | 71,000 | 19.88 | 1,411,000 | 59.62 | 1.34 | 1,891,000 |
|  | 1916 | 64,000 | 15.00 | 960,000 | 57.71 | 1.86 | 1,786,000 |
| Oats. | . 1915 | 1,400,000 | 30.13 | 42,182,000 | 36.92 | 0.55 | 23,200,000 |
|  | 1916 | 1,073,000 | 22.75 | 24,411,000 | 33.55 | 0.77 | 18,796,000 |
| Barley | . 1915 | 85,000 | 26.53 | 2,255,000 | 48.79 | 0.86 | 1,939,000 |
|  | 1916 | 72,800 | 20.00 | 1,456,000 | 46.67 | 1.15 | 1,674,000 |
| Rye. | . 1915 | 8,700 | 16.71 | 145,000 | 55.90 | 1.12 | 162,000 |
|  | 1916 | 8,300 | 14.25 | 118,000 | 53.97 | 1.40 | 165,000 |
| Peas. | . 1915 | 24,400 | 16.56 | 404,000 | 61.14 | 2.47 | 998,000 |
|  | 1916 | 21,600 | 14.00 | 302,000 | 59.95 | 3.22 | 972,000 |
| Beans. | . 1915 | 4,700 | 21.89 | 103,000 | 59.38 | 3.17 | 327,000 |
|  | 1918 | 4,400 | 1775 | 78,000 | 60.18 | 5.56 | 434,000 |
| Buckwheat. | . 1915 | 104,000 | 24.69 | 2,568,000 | 48.17 | 0.84 | 2,157,000 |
|  | 1916 | 101,000 | 19.00 | 1,919,000 | 46.35 | 1.21 | 2,322,000 |
| Mixed grains | . 1915 | 101,000 | 29.67 | 2,997,000 | 45.44 | 0.73 | 2,188,000 |
|  | 1916 | 91,000 | 20.25 | 1,843,000 | 44.04 | 0.99 | 1,825,000 |
| Flax. | . 1915 | 600 | 11.89 | 7,000 | 54.16 | 2.18 | 15,000 |
|  | 1916 | 500 | 10.50 | 5,300 | 54.50 | 2.50 - | 13,300 |
| Corn for husking | . 1915 | 16,300 | 31.17 | 508,000 | 56.85 | 1.12 | 569,000 |
|  | 1916 | 13,000 | 24.75 | 322,000 | 56.18 | 1.52 | 489,000 |
| Potatoes. | . 1915 | 117,000 | 149.66 | 17,510,000 | - | 0.55 | 9,631,000 |
|  | 1916 | 112,000 | 131.00 | 14,672,000 | - | 0.97 | 14,232,000 |
| Turnips, mangolds, etc. |  |  |  |  |  |  |  |
|  | ${ }^{1916}$ | $\begin{aligned} & 10,200 \\ & 10,000 \end{aligned}$ | 308.25 265.00 | $\begin{aligned} & 3,144,000 \\ & 2,650,000 \end{aligned}$ | - | 0.48 | 1,1272,000 |
|  |  |  |  |  |  | per |  |
| Hay and clover. |  |  | tons. | tons. |  | ton. |  |
|  | . 1915 | 2,922,000 | 1.26 | 3,682,000 | - | 15.89 | 58,507,000 |
|  | 1916 | 2,985,000 | 1.75 | 6,224,000 | - | 11.00 | 57,464,000 |
| Fodder corn. | 1915 | 34,000 | 8.61 | 293,000. | - | 6.39 | 1,872,000 |
|  | 1916 | 31,000 | 8.00 | 248,000 | - | 5.75 | 1,426,000 |
| Alfalia. | . 1915 | 2,860 | 2.84 | 8,100 | - | 11.78 | 95,000 |
|  | 1916 | 2,600 | 2.65 | 7,000 | - | 9.50 | 67,000 |

AGRICULTURE.
1.-Area, Yield, Quality and Value of principal Field Crops in Canada, 1915 and 1916-con.

| Crops. |  | Area. | Yield per acre. | Total yield. | Weight рет measured bush. | Average price per bush. | Total value. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OntarioFall wheat |  | acres. | bush. | bush. | lb . | $\stackrel{3}{ }$ | 1 |
|  | . 1915 | ¢72,000 | 28.34 | 27,546,000 | 59.41 | 0.93 | 25,618,000 |
|  | 1916 | 774,800 | 21.25 | 16,465,000 | 59.42 | 1.55 | 25,521,000 |
| Spring wheat. | . 1915 | 121,000 | 22,36 | 2,706,000 | 59.41 | 0.96 | 2,598,000 |
|  | 1916 | 90,200 | 16.25 | 1,466,000 | 57.80 | 1.55 | 2,272,000 |
| All wheat. | . 1915 | 1,093,000 | 27.67 | 30,252,000 | 59.41 | 0.93 | 28,216,000 |
|  | 1916 | 865,000 | 20.73 | 17,931,000 | 58.79 | 1.55 | 27,793,000 |
| Oats. | . 1915 | 3,095,000 | 39.68 | 122,810,000 | 34.67 | 0.39 | 47,896,000 |
|  | 1916 | 1,991,000 | 25.50 | 50,771,000 | 30.30 | 0.64 | 32,493,000 |
| Barley | . 1915 | 449,000 | 34.23 | 15,369,000 | 47.83 | 0.56 | 8,607,000 |
|  | 1916 | 326,000 | 23.00 | 7,498,000 | 44.94 | 0.99 | 7,422,000 |
| Rye. | . 1915 | 78,000 | 19.88 | 1,551,000 | 56.89 | 0.79 | 1,225,000 |
|  | 1916 | 69,000 | 17.50 | 1,208,000 | 55.20 | 1.17 | 1,413,000 |
| Peas. | 1915 | 169,000 | 1779 | 3,007,000 | 59.86 | 1.54 | 4,631,000 |
|  | 1916 | 126,000 | 14.25 | 1,796,000 | 59.71 | 2.06 | 3,700,000 |
| Beans. | . 1915 | 37,500 | 16.00 | 600,000 | 59.76 | 3.05 | 1,800,000 |
|  | 1916 | 27,000 | 11.75 | 317,000 | 59.72 | 5.34 | 1,693,000 |
| Buckwheat. | . 1915 | 169,000 | 21.81 | 3,686,000 | 48.21 | 0.70 | 2,580,000 |
|  | 1916 | 175,000 | 14.50 | 2,538,000 | 45.80 | 1.09 | 2,766,000 |
| Mixed grains. | . 1915 | 3-15,000 | 39.91 | 13,769,000 | 44.76 | 0.54 | 7,435,000 |
|  | 1916 | 286,000 | 26.00 | 7,436,000 | 40.77 | 0.89 | 6,618,000 |
| Flax. | . 1915 | 5,000 | 12.38 | 62,000 | 50.78 | 1.72 | 107,000 |
|  | 1916 | 4,500 | 9.25 | 42,000 | 57.17 | 2.78 | 117,000 |
| Corn for husking | . 1915 | 237,000 | 58.48 | 13,860,000 | 55.75 | 0.69 | 9,674,000 |
|  | 1916 | 160,000 | 37.25 | 5,960,000 | 57.18 | 1.05 | 6,258,000 |
| Potatces. | . 1915 | 155,000 | 92.66 | 14,362,000 | - | 0.76 | 10,915,000 |
|  | 1916 | 133,000 | 61.00 | 8,113,000 | - | 1.28 | 10,385,000 |
| Turnips, mangolds, <br> etc .1915 |  |  |  |  |  |  |  |
|  |  | 112,000 | 394.42 | 44,175,000 | - | 0.21 | $9,277,000$ $\mathbf{7} 368,000$ |
|  | 1916 | 97,000 | 211.00 | 20,467,000 | - | 0.36 | 7,368,000 |
|  |  |  |  |  |  | per |  |
| Hay and clover.. | 1915 |  | tons. | tons. ${ }_{4,068,000}$ |  | ton. |  |
|  | 1916 | $3,059,000$ | 2.00 | 6,118,000 | - | 11.90 | 72,804,000 |
| Fodder corn. | . 1915 | 287,000 | 10.63 | 3,051,000 | - | 4.76 | 14,523,000 |
|  | 1916 | 248,000 | 6.50 | 1,612,000 | - | 4.80 | 7.738,000 |
| Sugar beets. | . 1915 | 18,000 | 7.83 | 141,0C0 | - | 5.50 | 775,500 |
|  | 1916 | 15,000 | 4.75 | 71,000 | - | 6.20 | 440,000 |
| Aifalfa. | . 1915 | 60,000 | 2.72 | 163,000 | - | 13.41 | 2,186,000 |
|  | 1916 | 56,000 | 3.00 | 168,000 | -- | 9.75 | 1,638,000 |

PRODUCTION
1.-Area, Yield, Quality and Value of principal Field Crops in Canada, 1915 and 1916-con.

| Crops. |  | Area. | Yield per acre. | Total yield. | $\begin{gathered} \text { Weight } \\ \text { per } \\ \text { meas- } \\ \text { ured } \\ \text { bushel } \end{gathered}$ | $\begin{gathered} \text { Avera } \\ \text { age } \\ \text { price } \\ \text { per } \\ \text { bushel } \end{gathered}$ | Total balue. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | acres. | bush | bush. | lb. | \$ | 5 |
|  |  |  |  |  |  |  |  |
| Fall wheat. | . 1915 | $\begin{gathered} 2,75 \\ 3,829 \end{gathered}$ | 23.29 | 63,000 | 61.33 | 0.90 | 56,40085,400 |
|  | 1916 |  | 15.93 | 61,000 |  | 1.40 |  |
| Spring wheat. | . 1915 | $\begin{aligned} & 2,797,719 \\ & 2,721,896 \end{aligned}$ | 24.76 | 69,274,000 | 61.18 | 0.90 | 62,606,500 |
|  | 1916 |  | 10.88 | 29,606,000 | 51.22 | 1.23 | 36,415,400 |
| All wheat. | 1915 | $\begin{aligned} & 2,800,424 \\ & 2,725,725 \end{aligned}$ | $\begin{aligned} & 24.76 \\ & 10.88 \end{aligned}$ | 69,337,000 | 61.18 | $\begin{aligned} & 0.90 \\ & 1.23 \end{aligned}$ | 62,662.900 |
|  | 1916 |  |  | 29,667,000 |  |  | 36,500,800 |
| Oats. | . 1915 | $\begin{aligned} & 1,317,365 \\ & 1,443,599 \end{aligned}$ | $\begin{aligned} & 38.52 \\ & 33.55 \end{aligned}$ | 50,750,000 | $\begin{aligned} & 36.36 \\ & 33.05 \end{aligned}$ | 0.35 | 17,912,800 |
|  | 1916 |  |  | 48,439,000 |  | 0.49 |  |
| Barley | . 1915 | $\begin{aligned} & 567,080 \\ & 687,503 \end{aligned}$ | $\begin{aligned} & 29.38 \\ & 19.97 \end{aligned}$ | $\begin{aligned} & 16,658,000 \\ & 13,729,000 \end{aligned}$ | $\begin{aligned} & 4770 \\ & 42.78 \end{aligned}$ | 0.510.80 | $\begin{array}{r} 8,420,400 \\ 10,983,200 \end{array}$ |
|  | 1916 |  |  |  |  |  |  |
| Rye. | 1915 | $\begin{aligned} & 11,507 \\ & 30,050 \end{aligned}$ | $\begin{aligned} & 18.08 \\ & 18.54 \end{aligned}$ | $\begin{aligned} & 208,000 \\ & 557,000 \end{aligned}$ | $\begin{aligned} & 57.55 \\ & 56.50 \end{aligned}$ | $\begin{aligned} & 0.80 \\ & 1.06 \end{aligned}$ | $\begin{aligned} & 167,100 \\ & 590,400 \end{aligned}$ |
|  | 1916 |  |  |  |  |  |  |
| Mixed grains. | . 1915 | $\begin{array}{r} 659 \\ 1,400 \end{array}$ | $\begin{aligned} & 33.38 \\ & 32.25 \end{aligned}$ | $\begin{aligned} & 22,000 \\ & 45,000 \end{aligned}$ | $\begin{aligned} & 43.00 \\ & 42.00 \end{aligned}$ | $0.48$ | $\begin{aligned} & 10,600 \\ & 20,300 \end{aligned}$ |
|  | 1916 |  |  |  |  | 0.45 |  |
| Flax. | . 1915 | $\begin{aligned} & 14,505 \\ & 15,684 \end{aligned}$ | $\begin{array}{r} 8.27 \\ 13.38 \end{array}$ | $\begin{aligned} & 120,000 \\ & 210,000 \end{aligned}$ | 55.00 | 1.61 | 193,300447,300 |
|  | 1916 |  |  |  |  | 2.13 |  |
| Potatoes. | . 1915 | $\begin{aligned} & 29,878 \\ & 31,987 \end{aligned}$ | $\begin{array}{r} 85.85 \\ 147.22 \end{array}$ | $\begin{aligned} & 2,565,000 \\ & 4,709,000 \end{aligned}$ | - | $\begin{aligned} & 0.64 \\ & 0.61 \end{aligned}$ | $\begin{aligned} & 1,636,100 \\ & 2,872,500 \end{aligned}$ |
|  | 1916 |  |  |  |  |  |  |
| Turnips, mangolds, |  | $\stackrel{\text { 2,658 }}{3,118}$ | 250.19 |  |  |  |  |
| etc... | . 1915 |  |  | 665,000 | - | - 0.42 | $\begin{aligned} & 282,500 \\ & 221,500 \end{aligned}$ |
|  | 1916 |  | 145.00 | 452,000 |  | 0.49 per |  |
|  |  |  | tons. | tons. |  | ton. |  |
| Hay and clover | . 1915 | $\begin{aligned} & 88,478 \\ & 77,642 \end{aligned}$ | 1.021.83 | $\begin{array}{r} 90,000 \\ 142,000 \end{array}$ | - | 9.43 | $\begin{array}{r} 848,500 \\ 1,107,600 \end{array}$ |
|  | 1916 |  |  |  |  | 7.80 |  |
| Fodder corn. | . 1915 | $\begin{aligned} & 7,591 \\ & 9,830 \end{aligned}$ | $\begin{aligned} & 2.63 \\ & 2.75 \end{aligned}$ | $\begin{aligned} & 20,000 \\ & 27,000 \end{aligned}$ | - | 6.184.67 | $\begin{aligned} & 123,600 \\ & 126,000 \end{aligned}$ |
|  | 1916 |  |  |  |  |  |  |
| Alfalfa. | . 1915 | $\begin{aligned} & 3,671 \\ & 4,422 \end{aligned}$ | $\begin{aligned} & 1.36 \\ & 2.75 \end{aligned}$ | $\begin{array}{r} 5,000 \\ 12,200 \end{array}$ | - | $\begin{aligned} & 12.30 \\ & 11.83 \end{aligned}$ | $\begin{array}{r} 61,000 \\ 144,300 \end{array}$ |
|  | 1916 |  |  |  |  |  |  |
| Saskatchewan- |  | $\begin{array}{r} 9,968 \\ 15,258 \end{array}$ | bush. | bush. | 59.50 | per | $\begin{array}{r} 240,900 \\ 456,800 \end{array}$ |
|  |  |  |  |  |  |  |  |
| Fall wheat. | . 1915 |  | 26.28 | 262,000 |  | 0.92 |  |
|  | 1916 |  | 21.24 | 324,000 |  | 1.41 |  |
| Spring wheat. | . 1915 | $\begin{aligned} & 8,919,292 \\ & 9,016,851 \end{aligned}$ | $\begin{gathered} 25.12 \\ 16.33 \end{gathered}$ | $\begin{aligned} & 224,050,000 \\ & 147,235,000 \end{aligned}$ | $\begin{aligned} & 60.75 \\ & 55.18 \end{aligned}$ | $\begin{aligned} & 0.91 \\ & 1.28 \end{aligned}$ | $\begin{aligned} & 203,647,100 \\ & 188,460.800 \end{aligned}$ |
|  | 1916 |  |  |  |  |  |  |
| All wheat. | . 1915 | $\begin{aligned} & 8,929,260 \\ & 9,032,109 \end{aligned}$ | $\begin{aligned} & 25.12 \\ & 16.34 \end{aligned}$ | $\left\|\begin{array}{l} 224,312,000 \\ 147,559,000 \end{array}\right\|$ | $55 \cdot \overline{27}$ | $\begin{aligned} & 0.91 \\ & 1.28 \end{aligned}$ | $\begin{aligned} & 203,888,000 \\ & 188.917,600 \end{aligned}$ |
|  | 1916 |  |  |  |  |  |  |

AGRICULTURE.
1.-Area, Yield, Quality and Value of principal Field Crops in Canada, 1915 and 1916-con.

| Crops. |  | Area. | Yield per acre. | Total yield. | Weight per meas- ured bushel | $\left\lvert\, \begin{gathered} \text { Aver- } \\ \text { age } \\ \text { price } \\ \text { per } \\ \text { bushel } \end{gathered}\right.$ | Total value. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Saskatchewan-con. |  | acres. | bush. | bush. | lb. | \$ | \$ |
| Oats. | . 1915 | 3,336,245 | 43.48 | 145,066,000 | 37.48 | 0.32 | 46,125,700 |
|  | 1916 | 3,791,807 | 43.06 | 163,278,000 | 35.76 | 0.46 | 75,107,900 |
| Barley | . 1915 | 299,993, | 31.74 | 9,523,000 | 47.54 | 0.40 | 4,391,300 |
|  | 1916 | 367,205 | 27.00 | 9,916,000 | 46.02 | 0.77 | 7,635,300 |
| Rye. . | . 1915 | 7,207 | 28.17 | 203,000 | 5517 | 0.64 | 130,500 |
|  | 1916 | 22,759 | 24.08 | 548,000 | 55.91 | 1.10 | 602,800 |
| Peas. | . 1915 | 525 | 15.48 | 8,100 | 61.00 | 172 | 13,900 |
|  | 1916 | 1,600 | 32.50 | 52,000 | 60.00 | 2.25 | 117,000 |
| Mixed grains. | . 1915 | 2,372 | 25.30 | 60,000 | 48.33 | 0.68 | 41,600 |
|  | 1916 | 14,150 | 35.00 | 495,300 | 40.00 | 0.48 | 227,800 |
| Flax. | . 1915 | 395,254 | 13.30 | 5,255,000 | 55.89 | 1.51 | 7,928,400 |
|  | 1916 | 542,034 | 12.35 | 6,692,000 | 55.28 | 2.23 | 14,923,200 |
| Potatoes. | . 1915 | 34,885 | 110.28 | 3,847,009 | - | 0.68 | 2,626,900 |
|  | 1916 | 46,989 | 155.76 | 7,319,000 | - | 0.62 | 4,537,800 |
| Turnips, mangolds, etc. 1915 |  |  |  |  |  |  |  |
|  |  | 1,621 | 232.93 | 290,000 410,000 | - | 0.31 0.57 | 91,200 233,700 |
|  |  |  |  |  |  | per |  |
| Hay and clove |  |  | tons. | tons. |  | ton. |  |
|  | . 1915 | 25,113 | 1.39 | 35,000 | - | 8.39 | 293.500 |
|  | 1916 | 25,154 | 2.35 | 59,000 | - | 5.85 | 345,200 |
| Fodder corn. | . 1915 | 1,877 | 2.40 | 4,500 | - | 6.49 | 29,200 |
|  | 1916 | 2,253 | 2.60 | 5,900 | - | 6.00 | 35,400 |
| Alfalia. | . 1915 | 2,620 | 1.83 | 4,80c | - | 9.48 | 45,500 |
|  | 1916 | 3,086 | 2.85 | 8,800 | - | 10.25 | 90,200 |
| Alberta- |  |  |  |  |  | per |  |
|  |  |  | bush. | bush. |  | bush. |  |
| Fall wheat. | . 1915 | 39,908 | 31.30 | 1,249,000 | 61.32 | 0.84 | 1,051,900 |
|  | 1916 | 18,177 | 30.20 | 549,000 | 61.19 | 1.39 | 763,100 |
| Spring wheat | . 1915 | 2,098,123 | 31.12 | 65,289,000 | 61.57 | 0.88 | 57,273,700 |
|  | 1916 | 2,586,798 | 24.95 | 64,539,000 | 58.00 | 1.33 | 85,836,900 |
| All wheat. | . 1915 | 2,138,031 | 31.12 | 66,538,000 | 61.52 | 0.88 | 58,325,600 |
|  | 1916 | 2,604,975 | 24.90 | 65,088,000 | 58.45 | 1.33 | 86,600,000 |
| Oats. | . 1915 | 1,827,07] | 45.91 | 83,876,000 | 39.76 | 0.31 | 25,532,900 |
|  | 1916 | 2,124,081 | 48.11 | 102,199,000 | 37.36 | 0.46 | 47,011,506 |
| Barley. . | . 1915 | 304,000 | 32.31 | 9,822,000 | 49.57 | 0.44 | 4,340,400 |
|  | 1916 | 336,586 | 29.04 | 9,774,000 | 46.18 | 0.71 | 6,939.500 |

## PRODUCTION

1.-Area, Yield, Quality and Value of principal Field Crops in Canada, 1915 and 1916-con.

| Crops. |  | Area. | Yield per aere. | Total yield. | Weight per meas- ured bushel | $\left\lvert\, \begin{gathered} \text { Aver- } \\ \text { age } \\ \text { price } \\ \text { per } \\ \text { bushel } \end{gathered}\right.$ | Total value. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alberta-con. |  | acres. | bush. | bush. | lb. | 5 | * |
| Rye. | 1915 | 15,963 | 23.47 | 374,726 | 56.63 | 0.62 | 232,400 |
|  | 1916 | 17,975 | 24.49 | 440,000 | 53.71 | 0.95 | 418,000 |
| Peas. | 1915 | 160 | 20.00 | 3,200 | 62.00 | 2.09 | 6,700 |
|  | 1916 | 650 | 20.00 | 13,600 | 57.50 | 2.25 | 29,300 |
| Mixed grains. | 1915 | 2,370 | 37.13 . | 88,000 | 47.20 | 0.52 | 45,700 |
|  | 1916 | 4,550 | 30.00 | 136,500 | 36.00 | 0.35 | 47,800 |
| Flax. | 1915 | 48,000 | 13.96 | 670,000 | 56.37 | 1.44 | 966,700 |
|  | 1916 | 95,063 | 13.79 | 1,316,500 | 55.91 | 1.06 | 1,389,100 |
| Potatoes. | 1915 | 28,314 | 142.12 | 4,024,00c | - | 0.44 | 1,779,806 |
|  | 1916 | 29,216 | 163.71 | 4,783,000 | - | 0.53 | 2,535,000 |
| Turnips, mangolds, 1915 |  |  |  |  |  |  |  |
|  | 1916 | 1,700 | 279.41 | 397,000 475,000 | - | ${ }_{0}^{0.291}$ | 116,000 289,800 |
|  |  |  |  |  |  | per |  |
| Hay and clover |  |  | tons. | tons. |  |  |  |
|  | 1815 | 187,404 | 1.31 | 246,000 | - | 7.60 | 1,870,606 |
|  | 1916 | 173,461 | 1.93 | 334,000 | - | 8.62 | 2,879,100 |
| Fodder corn. | . 1915 | 701 | 3.42 | 2,400 | - | 6.13 | 14,700 |
|  | 1916 | 675 | 2.56 | 1,700 | - | 9.00 | 15,300 |
| Alfalfa. | . 1915 | 17,207 | 2.15 | 37,000 | - | 7.64 | 282,700 |
|  | 1916 | 20,612 | 2.65 | 54,600 | - | 10.70 | 584,290 |
| British Columbia- |  |  |  |  |  | per |  |
|  |  |  | bush. | bush. |  | bush. |  |
| Fall wheat. | . 1915 | 6,000 | 33.44 | 200,600 | 60.46 | 0.91 | 182,500 |
|  | 1916 | 6,200 | 30.75 | 191,000 | 61.00 | 1.53 | 292,000 |
| Spring wheat. | . 1915 | 10,000 | 32.43 | 324,400 | 58.40 | 0.96 | 311,400 |
|  | 1916 | 9,800 | 31.00 | 304,000 | 59.55 | 1.54 | 468,000 |
| AII wheat. | . 1915 | 16,000 | 32.80 | 525,040 | 59.32 | 0.94 | 483,900 |
|  | 1916 | 16,000 | 30.94 | 495,000 | 60:16 | 1.54 | 760,000 |
| Oats. | . 1915 | 71,000 | 61.84 | 4,390,600 | 36.28 | 0.49 | 2,151,400 |
|  | 1916 | 60,000 | 60.50 | 3,630,000 | 37.15 | 0.64 | 2,323,000 |
| Barley | . 1915 | 2,650 | 40.36 | 106,900 | 49.89 | 0.64 | 68,400 |
|  | 1916 | 2,700 | 45.75 | 124,000 | 47.60 | 0.83 | 103,000 |
| Peas. | . 1915 | 1,300 | 29.75 | 38,700 | 60.00 | 1.24 | 48,000 |
|  | 1916 | 1,300 | 33.75 | 44,000 | 61.20 | 1.67 | 73,000 |
| Mixed grains | . 1915 | 2,600 | 40.00 | 104,000 | - - | 0.50 | 52,000 |
|  | 1916 | 2,600 | 50.00 | 130,000 | 52.00 | 1.25 | 163,000 |

## AGRICULTURE

1.-Area, Yield, Quality and Value of principal Field Crops in Canada, 1915 and 1916--concluded.

| Crops. | Area. | Yield per acre. | Total yield. | Weight per measured bushel | Average price per bushel | Total value. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| British Columbia-con. | acres. | bush. | bush. | lb. | \$ | \$ |
| Potatoes. . 1915 | $\begin{aligned} & 16,000 \\ & 15,300 \end{aligned}$ | 247.28 | $\begin{aligned} & 3,956,000 \\ & 2,892,000 \end{aligned}$ | - | $\begin{aligned} & 0.45 \\ & 0.70 \end{aligned}$ | $\begin{aligned} & 1.780,000 \\ & 2.024,000 \end{aligned}$ |
| 1916 |  | $\begin{aligned} & 189.00 \\ & 455.61 \\ & 500.00 \end{aligned}$ |  |  |  |  |
| Turnips, mangolds, etc.1915 <br>  <br>  <br> 1916 | $\begin{array}{r} 10,000 \\ 3,800 \\ 3,700 \end{array}$ |  | $\begin{aligned} & 1,731,000 \\ & 1,850,000 \end{aligned}$ | - | 0.390.50 | $\begin{aligned} & 675,000 \\ & 925,000 \end{aligned}$ |
|  |  |  |  |  |  |  |
|  |  | tons. | tons. |  | per |  |
| Hay and elover... 1915 | $\begin{aligned} & 167,000 \\ & 175,000 \end{aligned}$ | 2.34 | 391,000 | - | 14.57 | $\begin{aligned} & 5.697,000 \\ & 8,289,000 \end{aligned}$ |
| Hay and cover 1910 |  | 2.67 | 467,000 |  | 1775 |  |
| Fodder corn. | 430 12.62 <br> 450 10.00 |  | $\begin{aligned} & 5,400 \\ & 4,500 \end{aligned}$ | - | $\begin{aligned} & 4.00 \\ & 7.00 \end{aligned}$ | $\begin{aligned} & 22,000 \\ & 32,000 \end{aligned}$ |
|  |  |  |  |  |  |  |  |
| Alfalia. | 12,100 | 3.52 | 43,000 | - | 14.84 | 638,000 |
|  | 12,600 | 2.88 | 36,000 | - | 15.00 | 540.000 |

2. Areas and Yields of Wheat, Oats, Barley and Flaxseed in the three Prairie Provinces, 1915 and 1916.

| Provinces. | 1915. | 1916. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: |
| Prairie Provinces- | acres. | acres. | bush. | bush. |
| Wheat. | 13,867,715 | 14,362,809 | 360,187,000 | 242,314,000 |
| Oats. | 6,480,681 | 7,359,487 | 279,692,000 | 313,916,000 |
| Barley | 1,171,082 | 1,391,296 | 36,003,000 | 33,419,000 |
| Flax. | 457,759 | 652,781 | 6,045,000 | 8,212,500 |
| Manitoba- |  |  |  |  |
| Wheat. | 2,800,424 | 2,725,725 | 69,337,000 | 29,667,000 |
| Oats. | 1,317,365 | 1,443,599 | 50,750,000 | 48,439,000 |
| Barley. | 567,080 | 687,503 | 16,658,000 | 13,729,000 |
| Flax. | 14,505 | 15,684 | 120,000 | 210,000 |
| Saskatchewan - |  |  |  |  |
| Wheat. | 8,929,260 | 9,032,109 | 224,312,000 | 147.559,000 |
| Oats. | 3,336,245 | 3,791,807 | 145,066,000 | 163:278,000 |
| Barley | 299,993 | 367,207 | 9,523,000 | 9.916,000 |
| Flax. | 395,254 | 542,034 | 5,255,000 | 6,692,000 |
| Alberta- |  |  |  |  |
| Wheat. | 2,138,031 | 2,604,975 | 66,538,000 | 65,088,000 |
| Oats. | 1,827,071 | 2,124,081 | 83,876,000 | 102,199,000 |
| Barley | 1,304,009 | -336,586 | 9,822,000 | 9,774,000 |
| Flax. | 48,090 | 95,063 | 670,000 | 1,310,500 |

PRODUCTION

## 3. Total Areas and Values of Field Crops in Canada, 1911-1916.

AREAS.


Farm Live Stock.-Table 4 gives the estimated numbers of each description of farm live stock (horres, cattle, sheep and swine) for the years 1912 to 1917 In this table the figures for 1917 for the provinces of Quebee, Saskatchewan, Alberta and British Columbia are as collected in June, 1917; but for the other provinces the figures are as estimated from the reports of correspondents on the basis of the census. For 1916, the figures for the three Prairie Provinces are those of the recently issued Reports on the Census of 1916, whilst for the other provinces they are estimated from the reports of correspondents. For each of the years 1912 to 1915 the figures represent for all provinces estimates based on the reports of correspondents.

Values of Farm Live Stock and of Wool.-Table 5 shows the average values per head of farm animals, as estimated from the reports of correspondents of the Census and Statistics Office for the year 1916, as compared with the years 1908, 1909, 1910, 1914 and 1915. Horses and cattle other than milch cows are divided according to age, and the unit value for swine is 100 lb . live weight. The table gives also an estimate of the value per lb. of unwashed and washed wool.

The average value of horses in 1916 was about the same as in 1915, but milch cows, other cattle, sheep and swine showed a substantial increase and returned values that were higher than in any year since these records began to be collected in 1909. Horses three years old and over averaged for Canada $\$ 160$ as against $\$ 160$ in 1915 , milch cows were $\$ 70$ as compared with $\$ 62$, cattle between one year old and

## AGRICULTURE

three years averaged $\$ 43$ against $\$ 38$, sheep averaged $\$ 1048$ against $\$ 7.96$ and swine $\$ 1198$ per 100 lb . live weight as against $\$ 8.58$. The average value of wool attained a record of 37 cents per lb . for unwashed and 50 cents per lb. for washed wool. Using the numbers of live stock as estimated for 1916, and the average values of December, 1916, as returned in January, 1917, the total estimated value of the farm animals of Canada for 1916 , as shown in Table 6, was $\$ 903,685,700$, as compared with $\$ 749,640,000$ in 1915, the values of each description being as follows: Horses $\$ 418,684,300$ as against $\$ 373,381,000$ in 1915; milch cows $\$ 198,896,300$ as against $\$ 163,919,000$; other horned cattle $\$ 204,-$ 476,900 as against $\$ 152,461,000$; sheep $\$ 20,927,200$ as against $\$ 16,226$,000 and swine $\$ 60,701,000$ as against $\$ 43,653,000$.

## 4.-Numbers of Farm Live Stock by Provinces, 1912-1917.



## PRODUCTION

4.-Numbers of Farm Live Stock by Provinces, 1912-1917-concluded.

| Live Stock. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quebec- | No. | No. | No. | No. | No. | No. |
| Horses. | 367,402 | 369,974 | 372,009 | 372,567 | 332,628 | 379,276 |
| Milch cows. | 755,770 | 761,816 | 733,476. | 720,420 | 639,805 | 911,023 |
| Other cattle | 695,906 | 693,540 | 625,958 | 612,500 | 535,693 | 958,010 |
| Sheep.... | 620,881 | 602,751 | 571,287 | 554,491 | 497,711 | 849,148 |
| Swine.... | 747,254 | 661,768 | 634,569 | 632,729. | 531,303 | 712,087 |
| Ontario- |  |  |  |  |  |  |
| Horses...... | 805,271 | 902,628 | 904,975 | 903,527 | 896,208 | 887,246 |
| Milch cows. | 1,033,392 | 1,141,071 | 1,085,843 | 1,077,808 | 1,082,119 | 1,082,119 |
| Other cattle.. | 1,380,890 | 1,460,015 | 970,445 | 935,606 | 901,924 | 865,847 |
| Sheep...... | -677,462 | 705,848 | 640,416 | 611,789 | 589,581 | 595,477 |
| Swine..... | 1,693,594 | 1,652,440 | 1,553,624 | 1,469,573 | 1,404,618 | 1,236,064 |
| Manitoba- |  |  |  |  |  |  |
| Horses... | 293,776 | 304,088 | 316,707 | 317,847 | 324,175 | 324,175 |
| Milch cows. | 148,471 | 152,792 | 156,306 | 157,494 | 196,288 | 202,177 |
| Other cattle. | 267,130 | 256,926 | 251,996 | 246,603 | 357,870 | 357,870 |
| Sheep..... | 40,800 | 42,840 | 45,303 | 50,880 | 76,750 | 80,588 |
| Swine...... | 183,370 | 184,745 | 186,276 | 163,308 | 205,898 | 175,013 |
| Saskatchewan- |  |  |  |  |  |  |
| Horses.... | 551,645 | 580,386 | 609,521 | 630,062 | 841,907 | 880,301 |
| Milch cows. | 184,896 | 194,843 | 204,624 | 211,684 | 322,185 | 354,403 |
| Other cattle.. | 461,244 | 468,255 | 474,436 | 543,609 | 689,208 | 856,687 |
| Sheep..... | 114,810 | 115,568 | 126,027 | 133,311 | 124,237 | 127,892 |
| Swine..... | 344,298 | 386,784 | 454,703 | 411,324 | 530,727 | 573,938 |
| Alberta- |  |  |  |  |  |  |
| Horses... | 451,573 | 484,809 | 519,424 | 544,772 | 634,188 | 718,317 |
| Milch cows..... | 157,922 | 168,376 | 179,068 | 183,974 | 277,324 | 325,861 |
| Other cattle.... | 587,307 | 610,917 | 633,032 | 660,000 | 882,766 | 1,209,433 |
| Sheep...... | 135,075 | 178,015 | 211,001 | 238,579 | 292,620 | 276,966 |
| Swine...... | 278,747 | 350,692 | 397,123 | 229,696 | B03,554 | 730,237 |
| British Columbia- |  |  |  |  |  |  |
| Horses. | 59,735 | 60,518 | 60,705 | 61,355 | 61,312 | 55,124 |
| Milch cows... | 34,011 | 35,599 | 35,702 | 37,944 | 39,318 | 49,005 |
| Other cattle. | 101,021 | 100,183 | 99,091 | 100,439 | 103,101 | 191,338 |
| Sheep..... | 40,702 | 45,000 | 45,000 | 46,404 | 48,269 | 43,858 |
| Swine...... | 32,485 | 34,541 | 39,031 | 38,543 | 37,829 | 37,688 |

## A GRICULTURE

5.-Average Values of Farm Animals and of Wool, as estimated by Correspondents, 1909, 1910, 1914, 1915 and 1916.

| Provinces. | Horses. |  |  | Miloh cows. | Other botned cattle |  |  | Swine per 100 lb. live weight. | Sheep | Wool per lb. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 1 year | 1 year to under 3 years | 3 <br> years and over |  | Under 1 year | $\begin{gathered} 1 \\ \text { year } \\ \text { to } \\ \text { ander } \\ 3 \\ \text { yeats } \end{gathered}$ | 3 <br> years <br> and <br> over |  |  | $\begin{gathered} \text { Un- } \\ \text { wasbed } \end{gathered}$ | Washed |
|  | $\$$ | \% | \$ | \$ | \$ | 3 | \$ | \$ 0 | \$ 0. | \$ 0. | 84 |
| Cenada. . . . . . . . . . 1909 | 49 | 106 | 150 | 36 | 10 | 23 | 33 | 7.90 | 5.89 | 0.17 | 0.24 |
| 1910 | 54 | 119 | 171 | 42 | 12 | 26 | 30 | 7.85 | 6.30 | 0.18 | 0.24 |
| 1914 | 5 | 114 | 165 | 57 | 16 | 37 | 54 | 7.24 | 7.07 | 0.19 | 0.26 |
| 1915 | 54 | 111 | 160 | 62 | 17 | 38 | 55 | 8.58 | 7.96 | 0.28 | 0.38 |
| 1916 | 54 | 109 | 160 | 70 | 20 | 43 | 63 | 11.98 | 10.48 | 0.37 | 0.50 |
| P.E. Island., . . . . . 1909 | 34 | 87 | 126 | 31 | 8 | 19 | 28 | 7.33 | 4.55 | 0.16 | 0.22 |
| 1910 | 44 | 102 | 140 | 32 | 8 | 19 | 28 | 6.70 | 5.82 | 0.17 | 0.24 |
| 1914 | 46 | 95 | 143 | 39 | 11 | 23 | 35 | 7.14 | 6.05 | 0.21 | 0.27 |
| 1975 | 42 | 82 | 136 | 42 | 11 | 25 | 37 | 8.02 | 6.97 | 0.32 | 0.10 |
| 1916 | 37 | 76 | 112 | 52 | 14 | 31 | 46 | 12.27 | 9.13 | 0.37 | 0.47 |
| Nova Seotia. . . . . . 1909 | 40 | 90 | 133 | 38 | 9 | 23 | 37 | 7.26 | 4.18 | 0.19 | 0.24 |
| 1910 | $4 \hat{0}$ | 95 | 145 | 37 | 9 | 24 | 40 | 7.25 | 4.48 | 0.20 | 0.25 |
| 1914 | 53 | 116 | 166 | 40 | 10 | 25 | 42 | 7.75 | 4.70 | 0.21 | 0.26 |
| 1915 | 53 | 108 | 167 | 45 | 11 | 28 | 44 | 7.84 | 5.28 | 0.31 | 0.40 |
| 1916 | 50 | 90 | 150 | 53 | 13 | 33 | 54 | 10.77 | 6.55 | 0.39 | 0.49 |
| N. Bruaswick. . . . . 1909 | 40 | 90 | 137 | 29 | 8 | 18 | 28 | 7.36 | 4.22 | 0.18 | 0.24 |
| , 1910 | 50 | 112 | 157 | 33 | 8 | 19 | 31 | 7.05 | 4.60 | 0.18 | 0.23 |
| 1914 | 54 | 123 | 183 | 49 | 11 | 24 | 38 | 8.16 | 4.63 | 0.22 | 0.28 |
| 1915 | 59 | 127 | 182 | 40 | 11 | 25 | 37 | 8.17 | 5.25 | 0.30 | 0.40 |
| 1918 | 55 | 113 | 169 | 48 | 13 | 28 | 44 | 11.63 | 6.49 | 0.36 | 0.48 |
| Quebec. . . . . . . . . . . 1908 | 41 | 98 | 145 | 33 | 8 | 19 | 28 | 9.62 | 5.47 | 0.21 | 0.29 |
| (1910 | 46 | 103 | 155 | 89 | 9 | 21 | 82 | 8.78 | 5.72 | 0.21 | 0.29 |
| 1914 | 49 | 107 | 164 | 47 | 11 | 27 | 41 | 8.91 | 6.60 | 0.23 | 0.30 |
| 1915 | 48 | 104 | 159 | 51 | 12 | 28 | 42 | 9.81 | 7.48 | 0.33 | 0.43 |
| 1916 | 49 | 105 | 155 | 62 | 16 | 35 | 52 | 14.28 | 10.73 | 0.44 | 0.58 |
| Oetario. . . . . . . . . . . 1909 | 53 | 110 | 144 | 40 | 12 | 26 | 38 | 7.33 | 6.63 | 0.14 | 0.20 |
| 1910 | 60 | 127 | 174 | 48 | 14 | 31 | 46 | 7.30 | 7.00 | 0.14 | 0.20 |
| 1914 | 54 | 111 | 152 | 64 | 20 | 48 | 62 | 7.74 | 8.70 | 0.19 | 0.25 |
| 1915 | 51 | 102 | 142 | 70 | 20 | 45 | 64 | 8.90 | 10.03 | 0.26 | 0.33 |
| 1916 | 52 | 105 | 151 | 76 | 23 | 51 | 71 | 12.06 | 12.81 | 0.34 | 0.44 |
| Manjtobs.......... 1909 | 63 | 132 | 187 | 34 | 10 | 21 | 30 | 7.00 | 7.08 | 0.09 | 0.14 |
| 1910 | 68 | 146 | 207 | 40 | 11 | 24 | 36 | 6.50 | 6.50 | 0.10 | 0.13 |
| 1914 | 61 | 126 | 176 | 62 | 17 | 38 | 56 | 6.28 | 8.76 | 6. 14 | 0.18 |
| 1915 | 63 | 124 | 178 | 65 | 18 | 41 | 60 | 7.75 | 8.56 | 0.21 | 0.29 |
| 1916 | 61 | 123 | 171 | 74 | 21 | 47 | 67 | 10.83 | 11.57 | 0.31 | 0.37 |
| Saskatchewan. . . . 1909 | 58 | 123 | 180 | 38 | 11 | 25 | 40 | 6.86 | 7.01 | 0.10 | 0.13 |
| Sasatehem. . . 1910 | 50 | 137 | 200 | 41 | 12 | 27 | 40 | 7.50 | 7.00 | 0.09 | 0.14 |
| 1914 | 83 | 133 | 187 | 68 | 18 | 41 | 61 | 5.74 | 7.08 | 0.15 | 0.20 |
| 1913 | 84 | 132 | 150 | 69 | 20 | 44 | 62 | 8.26 | 7.97 | 0.20 | 0.24 |
| 1916 | 65 | 133 | 188 | 73 | 22 | 47 | 67 | 10.20 | 9.94 | 0.28 | 0.33 |
| Alberta.... . . . . . . 1909 | 47 | 97 | 150 | 35 | 11 | 23 | 33 | 7.20 | 6.80 | 0.12 | 0.18 |
| 1910 | 51 | 108 | 164 | 39 | 12 | 25 | 38 | 7.60 | 6.30 | 0.11 | 0.18 |
| 1914 | 45 47 | 81 | 137 | 66 | 21 | 42 | 61 | 5.98 | 6.96 | 0.14 | 0.18 |
| 1915 | 47 51 | 97 108 | 142 | 69 | 22 | 45 | 64 | 7.70 | 7.57 | 0.23 | 0.25 |
| 1916 | $5!$ | 102 | 151 | 77 | 27 | 51 | 73 | 1104 | 9.82 | 0.28 | 0.37 |
| British Colambia. . 1909 | 44 | 111 | 165 | 51 | 12 | 26 | 38 | 7.50 | 6.72 | 0.10 | 0.15 |
| 1910 | 63 | 144 | 225 | 57 | 18 | 28 | 43 | - ${ }^{-}$ | - | 0.10 | 0.15 |
| 1914 | 46 | 83 | 162 | 89 | 22 | 48 | 73 | 8.00 | 8.33 | 0.16 | 0.16 |
| 1915 | 42 48 | 838 | 136 | 91 | 21 | 48 | 67 | 9.09 | 7.86 | 0.18 | 0.20 |
| 1916 | 48 | 87 | 144 | 90 | 24 | 48 | 72 | 12.89 | 10.67 | 0.29 | 0.45 |

## PRODUCTION

6.-Numbers in June and Values in December of Farm Live Stock in Canada, as estimated by Correspondents, 1915 and 1916.

| Farm animals. | 1915. | 1916. | 1915, | 1916. | 1915. | 1816. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \% | Ne. | No. | \$ per | per | \$ | $\leqslant$ |
| Capada- |  |  |  |  |  |  |
| Horsee.. | 2,908,096 | 3,258,342 | 124,50 | 128.56 | 373 , 381.000 | 418.684,300 |
| Milch cowt. | 2,686,846 | 2,833,433 | 61.50 | 70.20 | 163,919,000 | 198,896,300 |
| Other cattle | 3,399,155 | 3,700,718 | 44.85 | 54.37 | 152,481,000 | 204,476,900 |
| Sheep. | 2,038,662 | 2,022,941 | 8.00 | 10.34 | 16,226,006 | 20,927,200 |
| Prince Edward Ielend- |  |  |  |  |  |  |
| Horses. | 36,898 | 38,562 | 108.00 | 87.00 | 3,911,000 | 3,255,090 |
| Milich cowa. | 47,043 | 48,032 | 41.50 | 52.00 | 1,962,904 | 2,394,000 |
| Other cattle. | 59.503 | 57,260 | 27.50 | 34.50 | 1,636,400 | 1,975,000 |
| Sheep. | 88,640 | 88,797 | 7.00 | 9.00 | 606,006 | 799,000 |
| Swine. | 40,792 | 38,300 | 12.50 | 20.00 | 510,00C | 766,000 |
| Nova Scotia- |  |  |  |  |  |  |
| Horses. . | 63,244 | 64,193 | 120.50 | 108.00 | 7,621,006 | 6,033,000 |
| Milch cowt | 128,814 | 130,141 | 44.50 | 53.00 | 5,732,000 | 6,897,000 |
| Other cattl | 144,458 | 140.673 | 32.00 | 37.50 | 4.622,000 | 5,275,000 |
| Sheep | 2055.542 | 200,979 | 5.30 | 6.50 | 1,130,000 | 1,306,000 |
| Swite. | 53,402 | 51,928 | 18,00 | 18.00 | 961,0008 | 935,060 |
| New Brunswick- |  |  |  |  |  |  |
| Horseb.. | 65,827 | 65,189 | 137.00 | 128.50 | 9,018,000 | 8,244,000 |
| Mileb cows. | 101.685 | 100,221 | 40.00 | 48.50 | 4,067,000 | 4,881,000 |
| Other catt | 96,437 | 92,223 | 28.00 | 33.00 | 2,706,000 | 3,043,000 |
| Sheep. | 111.026 | 105,997 | 5.00 | 6.50 | 555,000 | 689,000 |
| Swine, | 72,533 | 70,683 | 17.50 | 17.00 | 1,268,00 | 1,202,000 |
| Quebec- |  |  |  |  |  |  |
| Horsem. | 372.567 | 332,628 | 112.00 | 115.00 | 41,728,00c | 38,252, 6.00 |
| Mileh cows. | 720.420 | 639,805 | 50.50 | 62.00 | 36,381,006 | 30,668,030 |
| Otber cattle | 612500 | 535,693 | 40.50 | 50.50 | 24,806,, 000 | 27,052,090 |
| Sheep. | 554,491 | 497,71! | 7.55 | 10.50 | 4,159,000 | 5,226,000 |
| Swine. | 632,728 | 531,303 | 14.50 | 17.00 | 9,175,006 | 9,032,000 |
| Ontario- |  |  |  |  |  |  |
| Horselm. | 903,527 | \$96,208 | 120.00 | 12500 | 108,423,000 | 112,026,000 |
| Milch cows. | 1,077,808 | 1,082,119 | 69.50 | 76.00 | 74,908.000 | $82,241,000$ |
| Other cattle | 935,606 | 901,924 | 47.50 | 65.00 | 44,441,000 | 58,625,000 |
| Sheep. | 611,789 | 589,581 | 10.00 | 12.50 | B,118,000 | 7,370,000 |
| Swide. | 1,469,573 | 1,404,618 | 14.00 | 18.00 | 20,574,000 | $25.283,000$ |
| Manitoba- |  |  |  |  |  |  |
| Horses... | 317,847 | 324,175 | 133.00 | 128.00 | 42,274,000 | 41,494,400 |
| Milch cows | 157,494 | 196,288 | 85.00 | 73.50 | 10,237,000 | 14,427,000 |
| Other cattle | 246,603 | 357,870 | 44.00 | 31.00 | 10,531,000 | 18,251,400 |
| Sheep. | 50,830 | 76,750 | 8.50 | $\underline{11.50}$ | 432,000 | 882,690 |
| Swine. | 163,308 | 205.898 | 14.56 | 17.00 | $2,3688,000$ | 3,500,200 |
| Saskatchemsin- |  |  |  |  |  |  |
| Horses. | 630,082 | 841,20] | 147.00 | 148.50 | 92,619,000 | 125,021,200 |
| Mileb cows, | 211,684 | 322,185 | 69.60 | 72.50 | 14,608,000 | 23,358,400 |
| Other cattie | 543,669 | 689,208 | 48.00 | 51.00 | 26,093,000 | 35,140,600 |
| Sheep. | 133,311, | 124,237 | 8.00 | 13.00 | 1,068,000 | 1,242,400 |
| Swine. | 411,324 | 530,725 | 13.00 | 17.00 | 5,347,000 | 9,022,400 |
| Alberta- |  |  |  |  |  |  |
| Horgee | 544,772 | 634,188 | 113.00 | 121.00 | 81,569,000 | 76,736,700 |
| Milch cown | 183,974 | 277,324 | 68.50 | 77.00 | 12,602,000 | 21,353,900 |
| Other cat | 660,000 | 882.766 | 48.00 | 56.00 | 32,340,000 | 49,434,900 |
| Steep. | ${ }^{2388} 5789$ | 292,620 | 7.60 | 10.00 | 1,789,000 | $2,926,200$ $10,260,400$ |
| Swine. | 229,696 | 603,554 | 12.50 | 17.00 | 2,871,000 | 10,260,400 |
| British Columbia- |  |  |  |  |  |  |
| Horsea...... | 61,355 | 61,312 | 101.50 | 108.00 | 6,228,000 | $6,622,009$ |
| Other cowt | 87.944 | 39,318, | 90.50 49.50 | 95.00 | 4,972,000 | 5,671,000 |
| Sheag... | 48,404 | 16,269 | 8.00 | 10.50 | 371.000 | 486,000 |
| 8 Wing | 35,543 | 37,829 | 15.00 | 18.50 | 578,000 | 700,000 |

## AGRICULTURE

Values of Farm Land.-Table 7 shows the average values per acre of occupied farm lands in Canada, as estimated by correspondents in each of years 1908, 1909, 1910, 1914, 1915 and 1916. For the whole of Canada the average value of farm land held for agricultural purposes, whether improved or unimproved, and including the value of dwelling houses, farms, stables and other farm buildings, was approximately $\$ 41$ per acre, as compared with $\$ 40$ last year. The average values by provinces are as follows: Prince Edward Island $\$ 39$; Nova Scotia $\$ 33$ 6; New Brunswick \$29.4; Quebec $\$ 52$; Ontario $\$ 52.5$; Manitoba $\$ 32$; Saskatchewan \$23; Alberta $\$ 22$; British Columbia \$118.5. In the last-named province the higher average is due to orcharding and fruit growing.
7.-Average Values per acre of Occupied Farm Lands in Canada, as estimated by Correspondents, 1908, 1509, 1910, 1914, 1915 and 1916.

| Provinces. | 1908. | 1909. | 1910. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\$$ | 8 | $\$$ | $\leqslant$ | \$ | \$ |
| Canada. | 35.70 | 38.60 | 38.45 | 38.41 | 39.70 | 40.95 |
| Prince Edward Island.... | 33.70 | 32.07 | 31.24 | 38.65 | 37.64 | 39.13 |
| Nova Scotir. . ... | 25.00 | 30.50 | 24.72 | 27.98 | 28.00 | 33.67 |
| New Brunswick. ... | 21.40 | 23.77 | 18.50 | 25.61 | 22.48 | 29.45 |
| Quebec. | 41.90 | 43.37 | 42.50 | 47.00 | 51.36 | 52.13 |
| Ontario. | 47.30 | 50.22 | 48.00 | 54.45 | 52.49 | 52.59 |
| Manitoba. | 27.30 | 28.94 | 28.67 | 31.67 | 30.36 | 32.03 |
| Saskatchewan. | 20.40 | 21.54 | 22.00 | 23.82 | 24.20 | 23.07 |
| Alberta. | 18.20 | 20.46 | 24.00 | 21.03 | 23.15 | 22.18 |
| British Columbia.... ... | 76.10 | 73.44 | 74.00 | 150.00 | 125.00 | 118.51 |

Wages of Farm Help in Canada.-The average wages paid for farm help during 1916 reached a higher level than in any previous year for which returns have been collected. As shown by Table 8 the wages per month during the summer, including board, for the whole of the Dominion, averaged $\$ 43.23$ for male and $\$ 22.46$ for female help, as compared with $\$ 37.10$ and $\$ 20.20$ in 1915 . For the year 1916, including board, the wages averaged $\$ 397$ for males and $\$ 228$ for females, as compared with $\$ 341$ and $\$ 200$ in 1915. The average value of board per month was returned as $\$ 17$ for males and $\$ 13$ for females, the corresponding figures of 1915 being $\$ 14.57$ and $\$ 11.45$. By provinces the average wages per month for males and females respectively in the summer season, including board, were as follows: Prince Edward Island $\$ 31.35$ and $\$ 17.81$; Nova Scotia $\$ 38.77$ and $\$ 19.11$; New Brunswick $\$ 35.74$ and $\$ 16.66$; Quebec $\$ 40.79$ and $\$ 19.70$; Ontario $\$ 3941$ and $\$ 20.58$; Manitoba $\$ 48.37$ and $\$ 26.97$; Saskatchewan $\$ 48.55$ and $\$ 25.66$; Alberta $\$ 52.28$ and $\$ 29.12$; British Columbia $\$ 49.86$ and $\$ 28.66$.

## PRODUCTION

8.-Average Wages of Farm Help in Canada as estimated by Correspondents, 1909, 1910, 1914, 1915 and 1916.

| Provinces. |  | Per month in summer season, including board. |  | Per year, including board. |  | Average value of board per month. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Males. | Females. | Males. | Females. | Males. | Females. |
| Canada. | .1909 | \$ 33.69 | $\begin{array}{lc} 8 & \mathrm{c} . \\ 19.08 \end{array}$ | $\begin{gathered} 8 \\ \hline 36.29 \end{gathered}$ | $\stackrel{8}{8} \mathrm{c}$ c. | \$ 10.00 | \$ 8.00 |
|  | 1910 | 35.15 | 20.70 | 347.70 | 209.69 | 12.49 | 9.56 |
|  | 1914 | 35.55 | 18.81 | 323.30 | 189.35 | 14.27 | 11.24 |
|  | 1915 | 37.10 | 20.20 | 341.00 | 200.00 | 14.57 | 11.45 |
|  | 1916 | 43.23 | 22.46 | 396.88 | 227.86 | 16.90 | 13.06 |
| P. E. Island... | . 1909 | 25.27 | 13.87 | 226.47 | 144.27 | 8.00 | 6.00 |
|  | 1910 | 26.60 | 15.00 | 244.89 | 149.25 | 10.15 | 7.60 |
|  | 1914 | 24.71 | 13.48 | 220.93 | 135.89 | 10.12 | 7.62 |
|  | 1915 | 26.67 | 14.59 | 237.52 | 136.80 | 10.28 | 9.44 |
|  | 1916 | 31.35 | 17.81 | 301.35 | 166.79 | 12.63 | 9.22 |
| Nove Scotia. | . 1909 | 31.20 | 15.00 | 310.85 | 165.13 | 10.00 | 7.00 |
|  | 1910 | 33.70 | 16.90 | 321.30 | 175.60 | 11.50 | 7.90 |
|  | 1914 | 31.20 | 14.80 | 301.00 | 155.47 | 11.48 | 8.11 |
|  | 1915 | 32.95 | 15.85 | 309.78 | 168.81 | 11.66 | 8.36 |
|  | 1916 | 38.77 | 19.11 | 364.91 | 194.88 | 15.84 | 11.29 |
| New Brunswick... | 1909 | 32.59 | 16.02 | 239.55 | 172.13 | 10.00 | 8.00 |
|  | 1910 | 33.90 | 16.70 | 289.40 | 151.65 | 11.25 | 7.50 |
|  | 1914 | 31.93 | 15.10 | 301.55 | 164.79 | 11.23 | 7.76 |
|  | 1915 | 33.73 | 16.11 | 307.96 | 153.44 | 14.17 | 8.48 |
|  | 1916 | 35.74 | 16.66 | 328.02 | 163.91 | 13.58 | 9.61 |
| Quebec.. | . 1909 | 33.33 | 16.75 | 330.97 | 176.89 | 10.00 | 8.00 |
|  | 1910 | 36.40 | 18.98 | 313.41 | 177.94 | 11.56 | 8.00 |
|  | 1914 | 33.56 | 15.65 | 296.35 | 152.38 | 13.29 | 9.37 |
|  | 1915 | 33.08 | 16.44 | 301.00 | 159.00 | 13.37 | 9.60 |
|  | 1916 | 40.79 | 1970 | 370.92 | 195.79 | 15.7 | 10.95 |
| Ontario. | . 1909 | 31.52 | 18.22 | 331.56 | 203.37 | 10.00 | 8.00 |
|  | 1910 | 31.40 | 20.10 | 335.84 | 211.10 | 12.00 | 9.60 |
|  | 1914 | 32.09 | 16.67 | 297.29 | 172.00 | 13.09 | 10.43 |
|  | 1915 | 31.09 | 17.12 | 304.00 | 179.00 | 13.30 | 10.58 |
|  | 1916 | 39.41 | 20.58 | 360.43 | 205.81 | 16.43 | 12.59 |
| Manitoba. | . 1909 | 35.95 | 23.97 | 365.55 | 261.84 | 11.00 | 9.00 |
|  | 1910 | 40.00 | 25.00 | 400.00 | 282.00 | 14.70 | 11.30 |
|  | 1914 | 39.13 | 22.35 | 364.41 | 225.61 | 15.49 | 12.98 |
|  | 1915 | 45.18 | 27.29 | 390.47 | 244.79 | 15.21 | 12.75 |
|  | 1916 | 48.37 | 26.97 | 454.29 | 283.16 | 18.14 | 14.61 |
| Saskatchewan. | . 1909 | 38.30 | 24.23 | 389.90 | 263.86 | 16.00 | 10.00 |
|  | 1910 | 40.00 | 24.50 | 402.50 | 263.60 | 14.00 | 13.00 |
|  | 1914 | 40.51 | 22.96 | 365.90 | 234.93 | 16.50 | 13.96 |
|  | 1915 | 42.22 | 23.81 | 386.06 | 240.90 | 16.78 | 13.97 |
|  | 1916 | 48.55 | 25.66 | 433.58 | 278.10 | 18.19 | 15.33 |
| Alberta. | . 1909 | 40.08 | 26.16 | 421.62 | 285.12 | 15.00 | 12.00 |
|  | 1910 | 40.00 | 27.50 | 416.00 | 300.00 | 16.70 | 13.90 |
|  | 1914 | 40.26 | 23.63 | 364.80 | 236.32 | 16.36 | 13.91 |
|  | 1915 | 44.02 | 24.25 | 404.00 | 253.00 | 16.94 | 14.17 |
|  | 1916. | 52.28 | 29.12 | 501.27 | 299.21 | 19.52 | 16.39 |
| British Columbia | . 1909 | 45.50 | 25.27 | 428.33 | 265.00 | 15.00 | 10.00 |
|  | 1910 | 57.40 | 38.00 | 450.72 | 324 | 20.00 | 17.00 |
|  | 1914 | 47.85 | 31.18 | 459.72 | 324.44 | 21.40 | 17.58 16.00 |
|  | 1915 | 49.37 | 31.21 | 463.04 | 286.68 | 19.15 | 16.00 18.38 |
|  | 1916 | 49.86 | 28.66 | 542.91 | 325.09 | 21.86 | 18.38 |

AGRICULTURE.
Creameries and Cheese Factories, 1915 and 1916.-A report issued in 1917 by the Census and Statistics Office shows that the total number of creameries and factories operating in 1916 was 3,446 , including 993 creameries, 1,813 cheese factories, 624 combined factories (butter and cheese) and 16 condensed milk factories. The total number of patrons (i.e., dairy farmers contributing milk or cream) in 1916 was 221,192 . The total deliveries in 1916 of milk amounted to $2,600,542,987$ lb. and of cream to $157,620,636 \mathrm{lb}$. The two chief dairying provinces of the Dominion are Ontario and Quebec. Both manufacture cheese and butter; in Ontario more cheese is made than butter; in Quebec more butter is made than cheese. In Ontario the total number of establishments operating in 1916 was 1,165 and the patrons numbered 87,325 , whilst in Quebec the establishments numbered 1,984 and the patrons 79,145 ; so that the average number of patrons per establishment was 75 in Ontario and 40 in Quebec.

Production of Creamery Butter.-The total production of creamery butter in Canada in 1916, as shown in Table 9, was returned as 82,564 ,130 lb . of the value of $\$ 26,966,355$, as compared with $83,991,453 \mathrm{lb}$. of the value of $\$ 24,385,052$ in 1915 . Comparing the relative production of the provinces the production in 1916 was highest in Quebec with $34,323,275 \mathrm{lb}$. of the value of $\$ 11,516,148$, as compared with $24,680,109$ lb. of the value of $\$ 8,031,997$ in Ontario. These two provinces together produce about 70 p.c. of the total creamery butter of Canada. Of the other provinces the production and value of creamery butter in 1916 were in relative order as follows: Alberta $8,521,784 \mathrm{lb}$., value $\$ 2,619,248$; Manitoba 6,574,510 lb., value $\$ 2,038,109$; Saskatchewan 4,310,669 lb., value $\$ 1,338,180$; Nova Scotia $1,586,679 \mathrm{lb}$. value $\$ 505,000$; British Columbia $1,243,292 \mathrm{lb}$., value $\$ 497,316$; New Brunswick $709,932 \mathrm{lb}$., value $\$ 236,193$; and Prince Edward Island $613,880 \mathrm{lb}$., value $\$ 184,164$. The average price per lb. of creamery butter for all Canada worked out to 33 cents in 1916, as compared with 30 cents in 1915. By provinces in 1916 the highest price was in British Columbia, 42 cents, and the lowest in Prince Edward Island, 30 cents. In the other provinces the price per 1b. for 1916 was as follows: Nova Scotia 32 cents; New Brunswick 33 cents; Quebec 34 cents; Ontario 33 cents; the Prairie Provinces 31 cents.

Production of Factory Cheese. - Table 9 shows also that the total production of factory cheese in 1916 was $192,968,597 \mathrm{lb}$. of the value of $\$ 35,512,622$, as compared with $183,887,837 \mathrm{lb}$. of the value of $\$ 27,097,176$ in 1915. By provinces the lead in production is taken by Ontario with a total quantity in 1916 of $126,015,870 \mathrm{lb}$. of the value of $\$ 23,312,935$, Quebec being second with $61,906,750 \mathrm{lb}$. of the value of $\$ 11,245,104$. These two provinces together account for 98 p.c. of the total production of factory cheese. The production and value of factory cheese in the other provinces in 1916 were as follows: Prince Edward Island 2,121,736 Ib., value \$409,495; New Brunswick 1,185,664 lb., value $\$ 210,693$; Manitoba, $880,728 \mathrm{lb}$., value $\$ 158,931$; Alberta $\mathbf{7 4 5 , 1 2 2} \mathrm{lb}$., value $\$ 154,453$; Nova Scotia $94,727 \mathrm{lb}$., value $\$ 17,051$;

## 9.-Production of Creamery Butter and Factory Cheese by Quantities and Values, 1915 and 1916.

Butter.


## AGRICULTURE

and British Columbia $18,000 \mathrm{lb}$., value $\$ 3,960$. The average price per lb. of factory cheese for all Canada worked out to 21 cents in 1916, as compared with 17 cents in 1915. In 1916 the average price was highest in British Columbia, 25 cents. In Quebec and Ontario the average price was 18 cents and in Alberta it was 21 cents.

Comparative Statistics of Creamery Butter and Factory Cheese.In Table 10 the production and value of creamery butter and factory cheese for all Canada is compared for the years 1900, 1907, 1910, 1915 and 1916; for 1900 and 1910 the figures shown are those of the decennial census; for 1907 they are those of the special postal census of that year and for 1915 and 1916 they are taken from the report of the Census and Statistics Office, mentioned above.

## 10.-Production and Value of Creamery Butter and Factory Cheese, 1900-07-10-15-16.

|  | Year. | $\begin{aligned} & \text { Estab- } \\ & \text { lish- } \\ & \text { ments. } \end{aligned}$ | Creamery Butter. |  | Factory Cheese. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | No. | $l \mathrm{l}$. | \$ | lb. | \$ |
| 1900. |  | 3,576 | 36,066,739 | 7,240,972 | 220,833,269 | 22,221,430 |
| 1907. |  | 3,515 | 45,930,294 | 10,949,062 | 204,788,583 | 23,597,639 |
| 1910. | $\ldots$ | 3,625 | 64,698,165 | 15,645,845 | 199,904,205 | 21,587,124 |
| 1915. |  | 3,513 | 83,991,453 | 24,385,052 | 183,887,837 | 27,097,177 |
| 1916. |  | 3,446 | 82,564,130 | 26,966,357 | 192,968,597 | 35,512,622 |

Estimated Total Dairy Production of Canada.-These statistics relate solely to the production of butter in creameries and of cheese in factories. They do not include butter made on the farm, which is sold under the general term of "dairy butter" and which constitutes the larger proportion of the total production. Nor do they include the small proportion of home-made cheese. There are no annual statistics of the production of home-made butter and cheese; but the Census of 1911 showed that in 1910 the total production of home-made butter was $137,110,200 \mathrm{lb}$., or 68 p.c. of the total butter production, viz., $201,808,365 \mathrm{lb}$., and that for cheese in the same year the home-made product amounted to $1,371,092 \mathrm{lb}$., or 0.7 p.c. of the total cheese production of $201,275,297 \mathrm{lb}$.

Under these conditions the total dairying output of Canada in other than census years can only be a matter of approximate calculation, based on the estimated number of milch cows, the factory production of butter and cheese and the exports and imports of all dairy products. In 1915 the estimated number of milch cows in Canada was $2,666,846$ and in 1916 it was $2,608,345$. ${ }^{1}$ In 1911 the Census showed that the average production of milk per cow was $3,805 \mathrm{lb}$., or, at the rate of 10 lb .
${ }^{1}$ As originally estimated. The number has been corrected to $2,833,433$ to correspond with the census returns as in Tables 4 and 6.

## PRODUCTION

per gallon, $380 \frac{1}{2}$ gallons. This average, applied to the two years 1915 and 1916, shows a total milk production in the former year of $10,147,-$ $349,000 \mathrm{lb}$. and in the latter year of $9,924,752,700 \mathrm{lb}$. Assuming that (1) the estimates of the number of milch cows in Canada and (2) the average milk production per cow are approximately correct, the total production of milk and its distribution in the form of dairying products for each of the two years 1915 and 1916, may be calculated as in Table 11.
11.-Estimated Yield of Milk and Distribution of Dairy Products, 1915 and 1916.

Expressed in lb. of milk (" 000 " omitted).

| Items. |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |

In Table $\mathbf{1 1}$ the quantities are expressed in terms of milk by weight. Butter, cheese, cream and condensed milk or cream have been converted into lb. of milk by the application in each case of recognized average formulæ. The quantities of home-made butter and cheese have been estimated on the census basis that 68 p.c. of the total represents homemade butter and that 1 p.c. of the total represents home-made cheese.

Estimated Consumption of Whole Milk.-After adding to the estimated production the imports of condensed milk, milk, cream, butter
and cheese, and taking also into account the exports of milk and cream for the calendar years 1915 and 1916, there is a surplus for 1915 of $2,051,876,000 \mathrm{lb}$. and for 1916 of $1,791,091,000 \mathrm{lb}$. Estimating the population of Canada to be for both years eight millions, and that on the average 10 lb . of milk equals one gallon, the results obtained indicate an average per capita consumption of whole milk of 25.65 imperial gallons per annum, or 0.56 pint per diem in 1915 and 22.40 gallons per annum or 0.49 pint per diem in 1916. Thus, the calculations made from the available data tend to show that the daily consumption of whole milk in Canada is about half a pint for each person. This ration includes also ice cream, a certain unknown quantity of milk used for calf rearing and milk used for all other purposes apart from those indicated in Table 11.

In this general connection it is of interest to compare these estimates of the whole milk consumption in Canada with those of the United States and of the United Kingdom. In the United States the average consumption was placed at 25 imperial gallons per annum, or 0.56 pint per diem in 1900-a figure exactly equivalent to that of Canada as now given for 1915-and in the United Kingdom an estimate of 1904 placed the per capita consumption at 15 gallons per annum, or 0.33 pint per diem. ${ }^{1}$ For 1915 the average per capita consumption of whole milk in the United States is estimated at 0.60 pint. There is little doubt that the larger per capita consumption of milk on this side of the Atlantic is due to the greater partiality for ice cream. The average milk consumption on farms in the United States is estimated at 576 pints per capita per annum, which represents a daily individual average consumption of a pint and a half. Investigations show a daily consumption in the large cities of between six and seven tenths of a pint per capita. ${ }^{2}$ Mr. Ernest Kelly, of the Dairy Division of the United States Bureau of Animal Industry, in a letter dated August 30, 1917, states that he has estimated from available figures that about $36,274,-$ $480,140 \mathrm{lb}$. of milk are used annually in the Uaited States as market milk or cream, and that this would give a yearly per capita consumption for the whole country of about 363 lb ., equal to 336 pints per capita per annum, or about nine-tenths of a pint per diem.

## $\rightarrow$

Cold Storage of Perishable Products.-Under the Cold Storage Act, 1907 (6-7 Edw. VII, e. 6), subsidies are granted by the Dominion Government towards the construction and equipment of cold storage warehouses open to the public, the Act and regulations made thereunder being administered by the Department of Agriculture. ${ }^{3}$ Table 12 gives a list of the cold storage warehouses in Canada, with refrigerated space amounting to $24,013,797$ cubic feet, of which $4,257,932$ cubic feet apply to warehouses subsidized under the Act.

[^11]PRODUCTION
12.-Cold Storage Warehouses in Canada, 1917.
(A) Subsidized Puelic Warehouses.

| Name. | Place. | Refrigerated Space. | Principal Articles Stored. |
| :---: | :---: | :---: | :---: |
| Prince Edward IslandIsland Cold Storage Co. | Charlottetown. | Cubic Feet. $150,000$ | General. |
| Nova Scotia- |  |  |  |
| Lockport Cold Storage Co. | Lockport. | 59,940 | Fish and General. |
| North Atlantic Fisheries | Port Hawkesbury | 338,550 | Fish and General. |
| New BrunswickCold Storage, Ltd |  |  |  |
| Cold Storage, Ltd. | Woodstock. | 37,161 | General. |
| Storage Co. | St. John. | 744,000 | General. |
| Quebec- |  |  |  |
| Dominion Fish \& Fruit Co. | Quebec. | 225,000 | Genersl. |
| J. H. Sansregret. | Joliette.. | 23,394 | General. |
| Ontario- |  |  |  |
| Algoma Produce Co. | Sault Ste Marie.. | 55,806 | General. |
| Brantford Cold Storage Co. | Brantford.... | 36,000 | General. |
| Chatham Fruit Growers' |  |  |  |
| Association. | Chatham. | 50,000 | Fruitand General. |
| Gumns, Ltd. | Harriston... | 57,069 66,000 | General |
| Lemon Bros. <br> Chatham Packing Co. | Owen Sound. | 66,000 |  |
| Ltd., successors to |  |  |  |
| $\text { toir } \mathrm{Co} .$ | Chatham. | 275,340 | MeatandGeneral. |
| Scott \& Hogg. .: | Peterborough. | 90,000 | General. |
| The Whyte Packing Co. Ltd. | Brockville. | 106,000 | General. |
| St. Thomas Cold Storage Co. | St. Thomas. | 174,141 | MeatandGeneral. |
| The J. D. Moore Co.. | St. Mary's. | 105,000 | General. |
| Whyte Packing Co.. | Mitchell. | 306,000 | General. |
| Morrisburg Cold Storage, R. H. Ashton. . | Morrisburg, Ont.. | 45,000 |  |
| Windsor Ice \& Coal Co. | Windsor | 67,300 | General Storage. |
| ManitobaBrandon Creamery \& Supply Co.. .. | Brandon | 27,500 | General. |
| Saskatchewan- |  |  |  |
| Regina C. S. \& Forwarding Co.. | Regina. ... | 100,672 | General. |
| Moosejaw Cold Storage | Moosejaw.... | 189,764 | General. |
| Metropolitan Cold Stor- | Vonda. | 24,000 | General. |

12.-Cold Storage Warehouses in Canada, 1917-con.
(A) Subsidized Public Warehóuses-con.

(B) Non-Subsldized.

| Nova Scotia- <br> ${ }^{*}$ Canso Cold Storage Co. <br> *The Halifax Cold Storage Co. <br> Loggie Bros... | Canso. <br> Halifax. <br> Mulgrave. |  | 62,000 80,000 $x$ | Fish only. <br> Fish and General Fish. |
| :---: | :---: | :---: | :---: | :---: |
| New BrunswickThe Sussex Packing Co., Ltd. | Sussex. |  | 82,800 | Meat. |
| Quebec- |  |  |  |  |
| Matthews Blackwell Co. Ltd. | Hull... |  | 151,000 | Meat. |
| *Canada Cold ${ }^{\text {c }}$ Storage |  |  | , |  |
| Co. | Montreal. |  | 762,000 | General. |
| Co. . . . . . | Montreal. |  | 700,000 | Dairy Produce. |
| *Gunn, Langlois \& Co. | Montreal. |  | 400,000 | General. |
| *The Gould Cold Storage Co. | Montreal. |  | 500,000 | General. |
| *Matthews Blackweil Co. Ltd. | Montreal. |  | 200,000 | MeatandGeneral. |
| *Lovell \& Christmas. | Montreal. |  | 460,000 | Dairy Produce. |
| The Wm. Davies Co., |  |  | \{ 225,950\} |  |
| Ltd. | Montreal. |  | Freezer Space | Meat. |
|  | Montreal. |  | 75,000 | Meat. |
| Montreal Abattoirs, Ltd | Montreal. |  | 270,000 | Meat. |
| Montreal Abattoirs, Ltd | Montreal. |  | 203,976 | Meat. |
| Sociéte S.P.A. | Montreal. |  | 11,000 | Meat. |
| Gordon-Ironside \& Fares Co. | Montreal. |  | 19,600 | Meat. |
| Swift Canadian Co., |  |  | 47,100 |  |
| Lasterman Packing i | Montreal. |  | \{Freezer Space \} | Meat |
| Provision Co. | Montreal. |  | 35,000 | Meat. |
| *Alex. Ames \& Sons. | Sherbrooke |  | 110,000 | General. |

## PRODUCTION

12.-Cold Storage Warehouses in Canada, 1917-con.
(B) Non-Subsidized-con.

| Name. | Place. | Refrigerated Space. | Principal Articles Stored. |
| :---: | :---: | :---: | :---: |
| Ontario- |  | Cubic Feet. |  |
| Matthews Blackwell Co. Ltd. | Brantford.... | 250,000 | Meat. |
| Collingwood Packing | Brantiord.... | 250,000 | Meat. |
|  | Collingwood. | 160,000 | Meat. |
| *Long Bros. ${ }^{\text {a }}$ | Collingwood. | 36,000 | General. |
| TheWm. Ryan Co., Ltd. | Fergus. .. | 30,000 | Meat. |
| The Wm. Davies Co., | Harriston | 82,504 | Mest. |
| *Fearman Cold Storage do | Harriston. | (Freezer Space) | Meat. |
| Warehousing Co. | Hamilton. | 155,200 | MeatandGeneral. |
| Armour \& Company | Hamilton. | 570,809 | Meat. |
| Ingersoll Packing Co. | Ingersoll.... | 550,000 | Meat and Dairy Products. |
| *The London Cold Stor- $\quad$ - |  |  |  |
| age \& Warehousing Co. | London. | 400,000 | General. |
| Dominion Abattoirs |  | 400,00 | Gener |
| Ltd. ${ }^{\text {a }}$ | London. | $x$ | Meat. |
| * MeDougall Bros. | Owen Sound. | 66,400 | General. |
| *Ottawa Cold Stores. ${ }^{\text {a }}$ | Ottawa. | 129,000 | General. |
| Matthews Blackwell Co. Ltd. | Peterboro. | 175,000 | Meat. |
| Whyte Packing Co. | Stratford. | 200,000 | Meat. |
| ${ }^{*} \mathrm{~J}, \mathrm{~B} . \mathrm{Jackson} . .$. | Simcoe. | 36,000 | General. |
| *The Grimsby Pre-Cooling \& Experimental Warehouse. <br> (Dominion Government) | Grimsby... | 40,000 | Fruit. |
| *St. Catharines Cold Storage Co. | St. Catharines. | 20,000 | Fruit. |
| Morgan Cold Storage. . . | Delhi... | 24,000 | Egge. |
| Gordon-Ironside \& Fares Co. | Port Arthur.. . | 48,000 | Meat. |
| Gordon-Ironside \& Fares |  |  |  |
| Co. | Fort William.. | 81,000 | Meat. |
| Gallagher, Holman \& Lafrance. . | Fort William. | 9,200 | Meat |
| Swift Canadian Co.,Ltd. | Fort William.. | 36,576) | Meat. |
| Swift Canadian Co.,Ltd. | West Toronto. | Freezer Space | MeatandGeneral. |
|  |  | Freezer Space $\}$ | Meatand General. |
| Gunds, Limited. | West Toronto. | 175,000 | Meat. |
| Gunns, Limited. | Toronto. | 30,000 | Eggs and Butter. |
| Gunns, Limited. | Toronto. | 70,000 | Eggs, Butter and Poultry. |
| *Mannings Cold Storage Co. | Toronto. | 300,000 | General. |
| *Public Cold Storage \& Warehousing Co. | Toronto. | 768,000 | General. |

Note-Those against which an asterisk (*) is placed are Public Warehouse日.

AGRICULTURE
12.-Cold Storage Warehouses in Canada, 1917-con.
(B) Non-Subsidzem-con.

| Name. | Place. | Refrigerated Space. | Principal Articles Stored. |
| :---: | :---: | :---: | :---: |
| Ontari |  |  |  |
| We Wm. Davies Co., |  | 244,436 | Meat. |
| Itd. | Toronto. | \{Freezer Space $\}$ | , |
| Mathews Blackwell Co. | Toronto. | 362,000 | Meat. |
| The Harris Abattoir Co. Ltd. | Toronto. | 422,400 | Meat and General. |
| The Harris Abattoir Co. |  |  |  |
| Ltd.. ${ }_{\text {a }}$ | Toronto. | 384,000 | Meat and General. |
| *Munieipal Abattoir. | Toronto. | 155,904 | Meat and General. |
| W. Wight \& Co. Litd. | Toronto. | $x$ 40,000 | Meat. ${ }_{\text {Gereral }}$ Produce. |
| The James Fish Co.. | Toronto. | 40,000 | Fish. |
| The Doyle Fish Co.. | Toronto. | 25,000 | Fish. |
| Marshalls Limited. | Toronto. | 40,000 | General Produce. |
| J. J. Fee... | Toronto. | 30,000 | General Produce. |
| W T. McDonald. | Toronto. | 25,000 | General Produce. |
| Manitoba- |  |  |  |
| *Manitoba Cold Storage Co... | Winnipeg. | 1,500,000 | General. |
| Swift Canadian Co., Ltd. | Winnipeg. | \{ 87,520\} | Meat. |
|  |  | Freezer Space |  |
| Swift Canadian Co.,Ltd. | Winnipeg. | $\left\{\begin{array}{r} 71,867 \\ \text { Freezer Space } \end{array}\right\}$ | Meat. |
| Gordon-Ironside \& Fares Co. | Winnipeg. | 417,000 | Meat. |
| Gallagher, Holman \& Lafrance. | Winnipeg. | 151,810 | Meat. |
| Western Packing Co.. | Winnipeg. | 48,000 | Meat. |
| The Wm. Davies Co., |  | \{ 84,000\} | Meat. |
| Ltd. ${ }^{\text {L }}$ - | Winnipeg. | (Freezer Space ${ }^{\text {a }}$ | Fish |
| The W. J. Guest Fish Co. | Winnipeg. | 30,000 | Fish. |
| A. McDonald Co. Ltd. | Winnipeg. Winnipeg. | $\underset{\boldsymbol{x}}{67,200}$ | Produce. <br> Fish. |
| Saskatchewan- |  |  |  |
| Gordon-Ironside \& Fares Co. | Moosejaw.. | 600,000 | Meat. |
| Gordon-Ironside \& |  |  |  |
| Fares Co. | Saskatoon. | 60,000 | Meat. |
| Gordon-Ironside \& Fares Co. | Regina. | 75,000 | Meat. |
| Regina Storage \& Forwarding Co. | Regina. |  |  |
| Northern Packing Co... | Prince Albert. | 42,352 | Meat and General Storage. |
| Alberta- |  | \{reezer ${ }^{33,457}$ \} |  |
| Swift Canadian Co., Ltd. P Burns \& Co., Ltd. . | Calgary Calgary | (Freezer Space $1,337,414\}$ | Meat. <br> Meat and General. |

Note-Those against which an asterisk (*) is placed are Public Warehouses.

## PRODUCTION

12.-Cold Storage Warehouses in Canada, 1917-moncluded.
(B) Non-Subsipazqi-concluded.


Note.-Those against which an asterisk (*) is placed are Public Warehouses.

## AGRICULTURE

Production of Flax Fibre in Ontario, 1916.-According to information furnished by the Economic Fibre Production Division of the Dominion Experimental Farms, the area under flax grown for fibre in Ontario during 1916 was 5,200 acres. From this area were produced 300 tons of dressed flax fibre valued at $\$ 600$ per ton, or $\$ 180,000 ; 75$ tons of fine tow valued at $\$ 200$ per ton, or $\$ 15,000 ; 100$ tons of upholsterers' tow valued at $\$ 50$ per ton, or $\$ 5,000$, and 25,000 bushels of flaxseed valued at $\$ 3$ per bushel or $\$ 75,000$. In addition about 800 tons of flax straw, valued at $\$ 15$ per ton, or $\$ 12,000$, were held over. The crop of flax fibre produced in Ontario during 1916 was the poorest on record, late sowing and subsequent dry weather being responsible. About 20 p.e. of the flax fibre produced in Ontario is consumed at home; 20 p.c. is exported to Ireland and the balance to the United States. All the surplus flasseed not needed for re-sowing in Ontario, and which was of good quality, was exported to Ireland. This amounted to some 10,000 bushels. There are small areas of flax grown for fibre in parts of Quebec and New Brunswick, but the production in Canada outside of Ontario is negligible. ${ }^{1}$

Tobacco.-The Tobacco Division of the Dominion Experimental Farms reported that the season of 1916 in Canada was not favourable for the growing of the tobacco plant as a whole, the summer being rather cool. The acreage was greatly curtailed owing to a very cold and wet June, which prevented the farmers in many instances from preparing the fields for the tobacco. In Ontario the average yield was greatly reduced owing to the larger acreage planted in flue-cured tobaceo, which, as a rule, yields much less than $1,000 \mathrm{lb}$. to the acre, while the Burley yields from 1,200 to $1,500 \mathrm{lb}$. The acreage and yield of tobacco in Quebec and Ontario for the season of 1916, as compared with 1914 and 1915, were estimated as in Table 13.
13.-Estimated Areas and Yields of Tobacco in Canada, 1914-1916.

| Provinces. | 1914. | 1815. | 1916. | 1914. | 1915. | 1916. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quebec. Ontario | $\begin{aligned} & \text { acres. } \\ & 4,750 \\ & 5,000 \end{aligned}$ | acres. 4.500 9,000 | acres. 2,933 2,958 | $\begin{gathered} \mathrm{lb} . \\ 5,000,000 \\ 5,000,000 \end{gathered}$ | $\begin{gathered} \text { lb. } \\ 4,050,000 \\ 4,950,000 \end{gathered}$ | $\begin{gathered} \text { lb. } \\ 3,000,000 \\ 2,943,000 \end{gathered}$ | lb. per acre. 950 1,200 | lb. per acre. 900 1,000 | lb. per acre. 1,023 1,000 |
| Total.... | 9,750 | 13,500 | 5,891 | 10,000,000 | 8,000,000 | 5,943,000 | 1,128 | 1,000 | 1,000 |

Agricultural Instruction Act.-Under the Agricultural Instruction Act, 1913 ( $3 \mathrm{Geo} . \mathrm{V}$, c. 5), appropriations are annually payable by the Dominion Government to each of the Provincial Governments of Canada for the encouragement of agriculture "through education, instruction and demonstration carried on along lines well devised and of a continuous nature" and for the purpose of assisting in the work of veterinary colleges established in the provinces. The provincial allocation of the

[^12]payments under this Act for the four years 1914-15 to 1917-18 are shown in Table 14. A report on the Agricultural Instruction Act for the year 1915-16, dated December 31, 1916, was published as Sessional Paper, No. 15c, 1917
14.-Allocation of Payments to Provincial Governments under the Agricultural Instruction Act, 1914-15-1917-18.

| Provinces. | 1914-15. | 1915-16. | 1916-17 | 1917-18. |
| :---: | :---: | :---: | :---: | :---: |
| Prince Edward Island. | 27,832.81 | 29,138.28 | 30,443.75 | ${ }_{31,749.22}^{8}$ |
| Nova Scotia... | 61,144.45 | 68,001.87 | 74,859.28 | 81,716.69 |
| New Brunswick. | 49,407. 20 | 54,308.40 | 59,209.60 | 64,110.80 |
| Quebec... | 187,409.16 | 215,310.70 | 243,212.23 | 271,113.76 |
| Ontario. | 230,868.83 | 266,013.64 | 301,158.45 | 336,303.26 |
| Manitoba. | 58,075.45 | 64,421 . 31 | 70,767.21 | 77,113.11 |
| Saskatchewan. | 61,152.31 | 68,011.04 | 74,869.76 | 81,728.48 |
| Alberta. | 51,310.41 | 56,5\%8.82 | 61,747.22 | 66,965.62 |
| British Columbia | 52,799.38 | 38,265.94 | 63,732.50 | 69,199.06 |
| Veterinary Colleges. | 20,000.00 | 20,000.00 | $20,000.00$ | 20,000.00 |
| Totals. | $800,000.00$ | 900,000.00 | 1,000,000.00 | 1,100,000.00 |

Stocks of Grain in Canada.--In 1915 and 1916 inquiries were instituted by the Census and Statistics Office, in co-operation with the Grain Inspection Division of the Department of Trade and Commerce, for the purpose of determining as nearly as possible the total quantity of wheat in Canada at a given time, the date being fixed for February 8 in 1915 and for Mareh 31 in 1916. A similar inquiry. carried out for March 31. 1917, but extended to include oats, barley and flax as well as wheat, was conducted by means of schedules issued by the Census and Statistiss Office to the managers of elevator, flour mill and railway companies, requesting the actual quantities of wheat, wheat flour, oats, oatmeal, rolled oats, barley meal, flax and linseed meal on hand or in transit on the morning of Saturday, March 31, 1917 The quantities of grain in the terminal elevators at Fort William and Port Arthur and in the interior terminal elevators of the Dominion Government at Calgary, Moosejaw, Saskatoon and Vancouver and of the Canadian Pacific Railway at Transcona, were furnished by the Board of Grain Commissioners for Canada. The grain in the eastern public elevators was ascertained. partly from schedules returned direct and partly from the returns published by the Grain Inspection Division of the Department of Trade and Commerce in the Weekly Bulletin of April 9, 1917 For the quantity of grain estimated to be in farmers' hands on March 31, use was made of the replies to the annual schedule addressed to the erop-reporting correspondents of the Census and Statistics Office.

In Table 15 the results are given of the compilation of the returns received for wheat, and wheat flour expressed as wheat, as compared with the results of the similar inquiry of March 31, 1916. In these tables the data respecting grain in farmers' bands on March 31, 1916 and 1917, have been corrected to correspond with the results of the Censu* of the Prairie Provinces, taken in 1916.
15.-Stocks of Wheat in Canada on March 31, 1916 and 1917.

| Wheat in- | $\begin{gathered} \text { March 31, } \\ 1916 . \end{gathered}$ | $\begin{gathered} \text { March } 31, \\ 1917 . \end{gathered}$ |
| :---: | :---: | :---: |
|  | bushels. | bushels. |
| Terminal elevators. | 25,528,440 | 22,827,186 |
| Hospital elevators. | 534,876 | 1,614,613 |
|  | 2,447,386 | 89,245 |
| Interior terminal elevators of the Dominion Gov-ernment:- |  |  |
| Calgary | 629,956 | 948,087 |
| Moosejaw. | 2,820,523 | 1,843,987 |
| Saskatoon. | 1,632,692 | 1,632,915 |
|  |  | 3,237 |
| Interior terminal elevator of the C.P.R. at Transcona. | 633,327 | -40,016 |
| Public elevators. | 3,326,417 | 2,516,461 |
| Country elevators. | 43,996,131 | 30,549,209 |
| Flour mills... | 5,277,196 | 4,884,825 |
| Transit by rail. | 23,369,809 | 12,862,356 |
| Farmers' hands. | 92.072,000 | 34,938,000 |
| Totals. . . | 202,268,753 | 135,450,137 |

Adopting the simpler classification of elevators, flour mills, in transit by rail and in farmers' hands, the results of the inquiry for each of the three years 1915, 1916 and 1917, in respect of wheat are as shown in Table 16.

> 16.-Stocks of Wheat in Canada on February 8, 1915, and on March $$
31,1916 \text { and } 1917 .
$$

| Description. | $\begin{gathered} \text { February } 8 \text {, } \\ 1915 . \end{gathered}$ | $\begin{gathered} \text { March } 31, \\ 1916 . \end{gathered}$ | $\underset{1917}{\text { March }} 31,$ |
| :---: | :---: | :---: | :---: |
|  | bushels. | bushels. | bushels. |
| Elevators. | 30,843,877 | 81,549,748 | 62,764,956 |
| Flour mills. | 6,160,840 | 5,277,196 | 4,884,825 |
| In transit by rail. | 13,013,628 | 23,369,809 | 12,862,356 |
| In farmers' hands. . | 29,554,000 | 92,072,000 | 54,938,000 |
| Totals. | 79,572,345 | 202,268,753 | 135,450,137 |

For oats, barley and flax, including quantities of oatmeal, rolled oats, barley meal and linseed meal, expressed as grain, the quantities returned as in Canada on March 31, 1917, were as in Table 17

PRODUCTION
17.-Stocks of Oats, Bariey and Flax in Canada on March 31, 1917.

| Grain in- | Oats. | Barley. | Flax. |
| :---: | :---: | :---: | :---: |
|  | bushels. | bushels. | bushels. |
| Terminal elevators | 10,092,265 | 1,281,042 | 1,601,705 |
| Hospital elevators. | 454,942 | 19,174 | 5,500 |
| Winter storage in vessels | 101,331 | - | - |
| Interior terminal elevators of the Dominion Government- |  |  |  |
| Calgary | 1,254,259 | 114,727 | 13,649 |
| Moosejaw | 705,937 | 22,834 | 101,965 |
| Saskatoon. | 569,343 | 29,487 | 121,812 |
| Vancouver. $\dot{\text { V }} \dot{\sim}$ | 56,719 | - | - |
| Interior terminal elevator of the C.P.R. at Transcona.. | 108,426 | - ${ }^{-}$ |  |
| Public elevators. | 5,335,350 | 197,062 | - |
| Country elevators | 17,357,846 | 1,682,570. | 2,024,195 |
| Flour mills | 1,104,981 | 85,922 | 62,444 |
| Transit by rail | 10,279,581 | 879,460 | 318,004 |
| Farmers' hands. | 162,389,000 | 10,997,000 | 1,638,000 |
| Total | 209,809,930 | 15,309,284 | 5,887,274 |
| Recapitulation. |  |  |  |
| Elevators.. | 36,036,418 | 3,346,896 | 3,868,826 |
| Flour mills. | 1,104,931 | 85,928 | 62,444 |
| In transit by rail. . | 10,279,581 | 879,480- | 318,004 |
| In farmers' hands. | 162,389,000 | 10,997,000 | 1,638,000 |
| Totals. . . . . . | 209,809,980 | 15,309,284 | 5,887,274 |

The compilation of the returns actually received from elevators, flour mills, railway companies and crop correspondents shows that on March 31, 1917, the quantity in Canada of wheat, and wheat flour expressed as wheat, was in round figures $135,450,000$ bushels, as compared with 202,269,000 bushels on March 31st, 1916, and $79,600,000$ bushels on February 8, 1915. The total for 1917 includes $67,650,000$ bushels in the elevators, flour mills and in winter storage in vessels, $54,938,000$ bushels in farmers' hands and $12,862,000$ bushels in transit by rail. Of oats, including oat products expressed as oats, the total quantity in Canada on March 31, 1917, was about $209,800,000$ bushels, comprising $37,100,000$ bushels in elevators and flour mills, $162,400,000$ bushels in farmers' hands and $10,300,000$ bushels in transit by rail. Of barley the total quantity in Canada on March 31, 1917, was about $15,309,000$ bushels, of which $3,433,000$ bushels were in elevators, etc., $10,997,000$ bushels in farmers' hands and 879,000 bushels in transit by rail. Of flaxseed the total quantity in Canada on March 31, 1917, was $5,887,000$ bushels, including $3,931,000$ bushels in elevators and mills, 318,000 bushels in transit and $1,638,000$ bushels in farmers' hands.

Prices of Canadian Agricultural Produce.-Tables 18-28 consist of records of average prices of Canadian agricultural produce. Tables 18-22, furnished by the Board of Grain Commissioners for Canada, show the weekly range of the prices of different grades of wheat, bartey oats and flax at Winnipeg and Fort William; these prices are for the

## Average Monthly Prices per bushel of Canadian Wheat, Barley, Oats and Flax, 1915 and 1916.



The horizontal lines indicate prices from 40 cents to $\$ 2.70$. The two higher black wheat curves indicate the average monthly prices per bushel of Wheat (a) at Winnipeg and Fort William (No. 1 Nor.) and (b) at Mark Lane, London, England, the lower red curve of Barley at Winnipeg and Fort William (No. 3, C.W.), the two lower black curves of Oats (a) at Winnipeg and Fort William (No. 2, C.W.) and (b) at Mark Lane, London, England, and the higher red curve of Flax (No. 1, N.W.C.) at Winnipeg and Fort William. (Wheat 60, Barley 48, Oats 34 and Flax 56 lb . per bushel.)

## AGRICULTURE

weeks ended Saturday. Table 23 gives the prices quoted for Cenedian wheat, wheat flour and oats in British markets. The prices are compiled from the Market Supplements of the Mark Lane Express, London, England, and represent the range a.t the weekly Monday market. Tables 25 and 27 give the prices in British markets of Canedian bacon, hams and cheese; they are taken from the official returns of the English and Scottish Boards of Agriculture and represent, not the range, but the first and second qualities respectively. For the purposes of these tables the English currency, weights and measures have been converted into Canadian equivalent denominations. Tables 19, 22, 24, 26 and 28, have been constructed from previous weekly records in recent editions of the Year Book for the purpose of comparing the average monthly prices of agricultural produce during the past three or four years. Tables 19 and 22 give these prices for the three years 1914-16 in respect of wheat, barley, oats and flex at Winnipeg and Fort Williem and Tables 24, 26 end 28 give the prices in British markets of Cane.dien produce (wheat, flour, orts, bacon, hams and cheese) for the four years 1913-16. The dizgram frecing page 217 illustrates the monthly price movement of whee.t, barley, oats and flox during the two years 1915 and 1916.

## 18.-Weekty Range of Prices of Wheat at Winnipeg and Fort William, 1916.

(Per bushel of 60 lb .)


## PRODUCTION

18.-Weekly Range of Prices of Wheat at Winnipeg and Fort William, 1916-concluded.
(Per bushel of 60 lb .)


## AGRICULTURE．

19．－Monthly Range of Average Prices of Wheat at Winnipeg and Fort William， 1914－1916．
（Per bushel of 60 lb ．）

| Date． | No． 1. | No． 2. | No． 3. | No． 4. | No． 5. | No． 6. | Feed． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Averages for－ | \＄c．\＄c． | \＄c．\＄c． | \＄c．\＄c． | \＄c．\＄c． | \＄c．\＄c． | \＄c．\＄c． | \＄c．\＄c |
| January ．．． 1914 | $0.84 \frac{7}{8}-0.85{ }^{\frac{3}{4}}$ | 0．823 $-0.83 \frac{3}{4}$ | $0.80-0.81 \frac{1}{8}$ | $0.74 \frac{7}{6}-0.76$ | 0．68\％$-0.69 \frac{1}{6}$ | 0．64 ${ }^{2}-0.64 \frac{3}{6}$ | $0.58{ }^{\frac{3}{4}-0.59 \frac{3}{2}}$ |
| $4 . . .1915$ | $1.32 \frac{3}{4}-1.39$ | $1.30 \frac{1}{4}-1.36$ | 1．26 $\frac{1}{2}-1.33 \frac{1}{2}$ | 1．231 ${ }^{\frac{1}{3}-1.29 \frac{3}{2}}$ | $1.19 \frac{1}{16}-1.25 \frac{1}{2}$ | $1.14 \frac{1}{2}-1.21 \frac{3}{3}$ | $1.10 \frac{1}{2}-1.16 \frac{1}{2}$ |
| ．．．． 1916 | $1.17 \frac{7}{8}-1.21 \frac{3}{10}$ | 1．15 ${ }^{\frac{1}{4}-1.19 \frac{1}{5}}$ | 1．11 $\frac{5}{5}-1.16 \frac{1}{3}$ | $1.07 \frac{3}{4}-1.12$ | C． $999^{\frac{3}{4}}-1.04 \frac{3}{5}$ | $0.90 \frac{7}{\frac{7}{0}}-0.95 \frac{1}{8}$ | C． $81{ }^{\frac{1}{4}}-0.86 \frac{7}{8}$ |
| February．． 1914 | $0.88 \frac{1}{4}-0.89 \frac{1}{2}$ | $0.86 \frac{1}{2}-0.87 \frac{3}{4}$ | $0.84 \frac{3}{4}-0.86$ | $0.80 \frac{5}{5}-0.81 \frac{7}{8}$ | $0.73-0.74 \frac{3}{6}$ | $0.68-0.69 \frac{1}{2}$ | $0.62 \frac{5}{8}-0.63 \frac{3}{4}$ |
| « ．．． 1915 | $1.45-1.55 \frac{1}{\frac{1}{4}}$ | $1.477^{\frac{7}{8}-1.53 \frac{1}{2}}$ | $1.45-1.56$ | $1.41-1.45 \frac{1}{4}$ | $1.37-1.41 \frac{1}{2}$ | 1．32 ${ }^{\frac{3}{4}-1.37 \frac{1}{2}}$ | $1.31 \frac{1}{6}-1.32 \frac{7}{5}$ |
| ．．． 1916 | $1.20 \frac{1}{6}-1.25 \frac{1}{4}$ | $1.17 \frac{5}{\frac{5}{8}-1.22 \frac{7}{8}}$ | $1.15-1.20^{\frac{1}{4}}$ | 1．11 $\frac{1}{8}-1.16 \frac{3}{8}$ | $1.03 \frac{7}{8}-1.08 \frac{7}{8}$ | $0.97 \frac{5}{16}-1.03 \frac{1}{8}$ | $0.91-0.96$ 준 |
| March ．．．． 1914 | $0.90-0.90{ }^{\frac{3}{3}}$ | $0.88 \frac{1}{2}-0.89 \frac{1}{3}$ | 0．863 $-0.87 \frac{7}{8}$ | $0.827-0.83{ }^{\frac{3}{4}}$ | $0.79 \frac{1}{2}-0.80 \frac{1}{4}$ | $0.74 \frac{5}{6}-0.75 \frac{1}{2}$ | $0.69 \frac{1}{4}-0.70 \frac{1}{2}$ |
| « $\quad . . .1915$ | $1.44 \frac{1}{2}-1.51 \frac{1}{6}$ | $1.43 \frac{1}{2}-1.49 \frac{7}{3}$ | $1.40 \frac{1}{\frac{1}{2}-1.46 \frac{3}{4}}$ | $1.35{ }^{\frac{1}{3}-1.413}$ | $1.30 \frac{7}{\frac{7}{4}-1.37 \frac{1}{2}}$ | 1．26\％${ }^{\frac{7}{4}}-1.33 \frac{1}{2}$ | $1.21 \frac{1}{2}-1.28 \frac{3}{3}$ |
| 4 ．．．． 1916 | $1.06 \frac{3}{4}-1.10 \frac{3}{4}$ | $1.04 \frac{1}{6}-1.07 \frac{7}{5}$ | $1.01 \frac{7}{\frac{7}{5}-1.65 \frac{7}{8}}$ | $0.99 \frac{1}{2}-1.02 \frac{3}{3}$ | 0．90 ${ }^{\frac{1}{4}-0.93 \frac{3}{4}}$ |  | 1．21．1．28 |
| April ．．．．． 1914 | $0.88{ }^{\frac{3}{3}}-0.90{ }^{\frac{3}{3}}$ | 0．871 | $0.85 \frac{1}{2}-0.86 \frac{5}{8}$ | 0．823－0．83 ${ }^{\frac{3}{5}}$ | $0.78 \frac{1}{2}-0.79 \frac{5}{6}$ | $0.73 \frac{1}{2}-0.74 \frac{5}{6}$ | $0.68 \frac{1}{2}-0.69 \frac{5}{6}$ |
| ${ }_{4}$ ．．．．． 1915 | $1.51{ }^{\frac{5}{5}-1.56 \frac{1}{4}}$ | $1.49 \frac{3}{4}-1.55 \frac{1}{4}$ | $1.45 \frac{5}{\frac{5}{2}-1.52 \frac{1}{4}}$ | $1.39 \frac{1}{2}-1.49 \frac{1}{\frac{1}{3}}$ | $1.40-1.43 \frac{1}{4}$ | 1．35 ${ }^{\frac{1}{8}-1.39 \frac{1}{2}}$ | 1．27\％${ }^{\text {a }}$－1， 29 |
| ＊．．．．．． 1916 | 1．12 $\frac{1}{2}-1.16 \frac{3}{6}$ | 1．16 ${ }^{\frac{1}{4}-1.14}{ }^{\frac{3}{6}}$ | $1.066^{\frac{1}{7} 0}-1.10 \frac{3}{5}$ | $1.04 \frac{1}{4}-1.08 \frac{1}{\frac{1}{5}}$ | $0.95 \frac{1}{2}-0.99 \frac{1}{2}$ | $0.87 \frac{1}{2}-0.91 \frac{1}{4}$ | $0.82 \frac{1}{2}-0.86 \frac{1}{3}$ |
| May ．．．．．． 1914 | 0．93－0．943 ${ }^{3}$ | $0.91 \frac{1}{3}-0.93 \frac{1}{6}$ | $0.89{ }^{\frac{7}{2}-6.91 \frac{1}{5}}$ | $0.85 \frac{7}{4}-0.87 \frac{2}{3}$ | $0.79 \frac{1}{2}-0.79 \frac{1}{2}$ | $0.74 \frac{1}{4}-0.74 \frac{1}{2}$ | 0．69 ${ }^{\frac{1}{3}-0.69 \frac{1}{2}}$ |
| ＂．．．．． 1915 | $1.57 \frac{4}{5}-1.62$ | 1．54i ${ }^{1} .1 .59 \frac{1}{8}$ | 1．50 $\frac{1}{2}-1.56 \frac{1}{2}$ | 1．41 $\frac{1}{2} .1 .52 \frac{1}{2}$ | 1．414 ${ }^{\frac{1}{5}-1.47 \frac{2}{3}}$ | 1．36 ${ }^{\frac{1}{5}-1.42 \frac{2}{3}}$ | $1.30{ }^{5}-1.36{ }^{\text {咼 }}$ |
| .1916 |  | $1.13 \frac{7}{8}-1.17 \frac{1}{2}$ | $1.09 \frac{7}{\frac{7}{8}-1.12 \frac{7}{8}}$ | $1.05 \frac{3}{-1}-1.08 \frac{1}{8}$ | $0.98 \frac{3}{3}-1.01 \frac{1}{3}$ |  | $0.86 \frac{1}{6}-1.90 \frac{1}{6}$ |
| June ．．．．．． 1914 | $0.91{ }^{\frac{3}{4}-0.93 \frac{7}{8}}$ | $0.90 \frac{1}{2}-0.92 \frac{3}{4}$ | $0.89-0.90 \frac{4}{5}$ | $0.84 \frac{5}{5}-0.8 \mathrm{C}^{\frac{5}{8}}$ | $080 \frac{1}{6}-0.82 \frac{1}{2}$ | $0.751-0.75 \frac{1}{2}$ | $0.70 \frac{1}{6}-0.70 \frac{1}{2}$ |
| ＂．．．．．． 1915 | 1．21 ${ }^{\frac{1}{2}-1.31 \frac{1}{4}}$ | $1.21{ }^{\text {b }}$－1．32 | $1.18{ }^{1}-1.24 \frac{3}{3}$ | 1．13 ${ }^{\frac{1}{3}-1.19 \frac{3}{1}}$ | 1．06 ${ }^{5}-1.16 \frac{1}{1}$ | $1.01 \frac{3}{\frac{3}{4}-1.09 \frac{2}{3}}$ | 1．143－1．23 ${ }^{2}$ |
| ．．．．．． 1916 | $1.09 \frac{1}{2}-1.12 \frac{1}{4}$ | $1.08 \frac{3}{3}-1.11_{10} \frac{1}{0}$ | $1.04 \frac{1}{3}-1.06 \frac{5}{8}$ | 0．99 ${ }^{\frac{1}{2}-1.01 \frac{1}{4}}$ | 0．93－0．95⿺⿱土龰 | $0.88 \frac{7}{\frac{7}{4}-0.91 \frac{1}{2}}$ | C． $82 \frac{3}{4}-0.86 \frac{1}{3}$ |
| July ．．．．．． 1914 | $0.89-0.96 \frac{7}{\frac{2}{4}}$ | $0.87 \frac{1}{8}-0.89$ | $0.85 \frac{1}{3}-0.86{ }^{\frac{2}{5}}$ | 0．80즤－ $0.83 \frac{1}{3}$ | － 18 | － | －－ |
| « ．．．．．． 1915 | $1.30{ }^{\frac{3}{4}-1.37 \frac{3}{5}}$ | $1.27 \frac{1}{5}-1.34 \frac{1}{2}$ | $1.23{ }^{1}-1.30$ | $1.14 \frac{1}{3}-1.22{ }^{\frac{1}{4}}$ | $\rightarrow 1.18$ |  |  |
| ．．．．．． 1916 | $1.14 \frac{1}{5}-1.17 \frac{1}{5}$ | 1．12 $\frac{3}{4}-1.16$ | 1．09 $\frac{1}{\frac{1}{2}-1.12 \frac{1}{2}}$ | $1.64 \frac{1}{\frac{2}{5}-1.07 \frac{3}{3}}$ | 0．98 ${ }^{\frac{1}{2}-0.99 \frac{1}{4}}$ | $0.95-0.94 \frac{1}{2}$ | $0.888 \frac{5}{8}-0.89 \frac{5}{6}$ |
| August ．．． 1914 | 1．013－1．10 ${ }^{\frac{1}{2}}$ | $0.99 \frac{1}{3}-1.08 \frac{1}{3}$ | 0．943 ${ }^{\frac{3}{5}-1.037}$ | $0.90 \frac{7}{8}-0.93 \frac{1}{2}$ | $0.91 \frac{3}{4}-0.93 \frac{1}{2}$ | － | －－ |
| 4 $\quad . . .1915$ | $1.14 \frac{1}{2}-1.18 \frac{3}{4}$ | $1.11{ }^{\frac{7}{8}-1.21 \frac{1}{2}}$ | $1.18-1.27$ | $1.133^{\frac{2}{3}-1.18 \frac{1}{4}}$ | 1．04 ${ }^{\frac{1}{2}-1.10}$ | $1.00-1.00$ |  |
| 4 ．．．． 1916 | $1.41 \frac{1}{2}-1.42$ | 1．39 ${ }^{\frac{1}{6}-1.49 \frac{3}{4}}$ | 1．34 $\frac{1}{2}-1.45 \frac{1}{8}$ | $1.29 \frac{1}{\frac{1}{8}-1.39 \frac{7}{8}}$ | $1.23 \frac{3}{4}-1.34 \frac{1}{4}$ | $1.15-1.23 \frac{1}{4}$ | $1.09 \frac{1}{3}-1.17 \frac{1}{2}$ |
| September ． 1914 | 1．097－1．15 ${ }^{\frac{1}{8}}$ | $1.06{ }^{3}-1.12 \frac{1}{6}$ | $1.03-1.68 \frac{1}{2}$ | $0.97 \frac{1}{2}-1.02 \frac{1}{3}$ | $0.90 \frac{3}{3}-0.95 \frac{1}{2}$ | $0.87 \frac{1}{3}-0.84 \frac{3}{6}$ | $0.78 \frac{1}{4}-0.79 \frac{3}{8}$ |
| $4 \quad .1915$ | $0.91 \frac{7}{8}-0.95 \frac{3}{4}$ | 0．90－0．93 $\frac{5}{6}$ | $0.87 \frac{1}{2}-0.90 \frac{3}{4}$ | $0.81 \frac{1}{2}-0.84 \frac{1}{2}$ | $0.77 \frac{1}{2}-0.79 \frac{1}{2}$ |  |  |
| ＂． 1916 | 1．57 ${ }^{\frac{3}{8}-1.62 \frac{3}{3}}$ | $1.55 \frac{2}{3}-1.60 \frac{1}{10}$ | $1.52-1.56 \frac{2}{8}$ | $1.44{ }_{1}^{\frac{1}{7}{ }^{7}-1.50 \frac{1}{5}}$ | $1.37 \frac{3}{3}-1.43 \frac{3}{10}$ | 1．21 ${ }^{\frac{1}{2}-1.26 \frac{1}{2}}$ | $1.05-1.12 \frac{1}{2}$ |
| October．．． 1914 | $1.10-1.13 \frac{1}{2}$ | 1．06\％$\frac{1}{2}$－1．09 $\frac{7}{8}$ | 1．017 ${ }^{\frac{7}{8}-1.04 \frac{7}{8}}$ | $0.95 \frac{3}{3}-0.99$ | $0.91-0.94 \frac{1}{3}$ | $0.86 \frac{1}{2}-0.89 \frac{4}{5}$ | $0.81 \frac{1}{7}-0.85 \frac{1}{2}$ |
| $\text { .... } 1915$ | 0．94 ${ }^{\frac{1}{2}-0.99 \frac{3}{3}}$ | $0.92{ }^{\frac{1}{4}-0.96 \frac{1}{3}}$ | $0.89 \frac{1}{5}-0.94 \frac{1}{5}$ | $0.85 \frac{1}{3}-0.89$ | $0.79 \frac{1}{4}-0.85 \frac{1}{3}$ | $0.74 \frac{3}{3}-0.79 \frac{1}{2}$ | $0.69 \frac{3}{4}-0.74 \frac{2}{3}$ |
| ．．． 1916 | 1．683 ${ }^{\frac{3}{4}-1.76 \frac{1}{2}}$ | 1．65 $\frac{3}{3}-1.76 \frac{1}{2}$ | 1．60 ${ }^{\frac{3}{4}-1.68 \frac{1}{2}}$ | $1.51-1.58 \frac{3}{4}$ | $1.41{ }^{\frac{7}{8}-1.48 \frac{3}{3}}$ | $1.31 \frac{1}{2}-1.37 \frac{5}{8}$ | $1.08 \frac{3}{4}-1.17 \frac{1}{2}$ |
| November ． 1914 | $1.17 \frac{2}{\frac{2}{5}-1.20 \frac{2}{5}}$ | 1．14 ${ }^{\frac{3}{8}-1.17 \frac{3}{2}}$ | $1.09 \frac{3}{\frac{3}{4}-1.12 \frac{5}{8}}$ | $1.04 \frac{3}{4}-1.07 \frac{3}{4}$ | 1．006 $\frac{1}{5}-1.02 \frac{3}{4}$ | $0.95-0.98 \frac{1}{6}$ | $0.90 \frac{3}{4}-0.94$ |
| ＊． 1915 | $1.01 \frac{1}{4}-1.04 \frac{1}{2}$ | $0.98 \frac{3}{4}-1.01 \frac{3}{4}$ | $0.94 \frac{3}{6}-0.97 \frac{1}{3}$ | $0.89{ }_{\frac{1}{4}-0.92}$ | $0.83-\mathrm{C} .84 \frac{1}{4}$ | 0．77 ${ }^{\frac{3}{4}-0.79 \frac{1}{5}}$ | $6.73-0.74{ }^{5}$ |
| ． 1916 | 1．89 $\frac{3}{8}-1.98 \frac{7}{\frac{7}{8}}$ | $1.85 \frac{1}{2}-1.93 \frac{5}{6}$ | $1.86 \frac{3}{4}-1.89 \frac{7}{8}$ | $1.68 \frac{1}{16}-1.75 \frac{1}{2}$ | 1．52 ${ }_{\frac{1}{3}-1.62 \frac{3}{8}}$ | $1.39 \frac{3}{4}-1.39 \frac{1}{2}$ | $1.12 \frac{1}{5}-1.14 \frac{3}{12}$ |
| December． 1914 | 1．171 ${ }^{\frac{1}{2}-1.19 \frac{1}{2}}$ | 1．14 ${ }^{\frac{1}{2}-1.16 \frac{3}{2}}$ | $1.09{ }^{\frac{5}{8}-1.117}$ | $1.05 \frac{7}{5}-1.07 \frac{7}{\frac{7}{6}}$ | $1.00 \frac{3}{4}-1.03 \frac{3}{3}$ | $0.96 \frac{3}{4}-0.98 \frac{1}{8}$ | $0.92-0.94$ |
| $.1915$ | $1.06 \frac{2}{2}-1.12$ | $1.04 \frac{1}{8}-1.09$ | $1.00 \frac{1}{8}-1.05 \frac{1}{4}$ | $0.96-1.02 \frac{1}{6}$ | 0.9 （ $\frac{1}{4}-0.9 e^{\frac{3}{3}}$ | $0.84 \frac{7}{8}-$ | $0.75 \frac{1}{3}$ |
| ＊． 1916 | 1．70 ${ }^{\text {g }}-1.82$ | $1.67 \frac{3}{3}-1.79 \frac{20}{20}$ | $1.62 \frac{3}{20}-1.73 \frac{7}{10}$ | $1.48 \frac{1}{5}-1.61 \frac{1}{5}$ | $1.24 \frac{1}{5}-1.35 \frac{\frac{3}{4}}{}$ | $0.93 \frac{1}{3}-.102 \frac{3}{3}$ | O．82 $\frac{2}{5}-0.90 \frac{3}{5}$ |

## PRODUCTION

20.-Weekly Range of Prices of Oats at Winnipeg and Fort William, 1916.


## AGRIGULTURE

20.-Weekly Range of Prices of Oats at Winnipeg and Fort William, 1916. -concluded.

| Date. | No. 2 C.W. | No. 3 C.W. | No. 1 Feed Ex. | No. 1 Feed. | No. 2 Feed. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1916. | \$c. 1 c. | \$ c. | \$ c. c. | \$ c. 8 c. | \$ c. \% c. |
| September 2. | 0.49120 .501 | $0.49-0.488$ | $0.49-0.49 \%$ | 0.48 - 0.481 |  |
| = 8 8. | $0.51{ }^{1}-0.518$ 0.492 .0 .501 | 0.501-0.50 | 0.501-0.50 | 0.492-0.50\% | $0.49{ }^{2}-0.50$ $0.47{ }^{\frac{1}{4}-0.483}$ |
| 23. | $0.50{ }^{1}$ | 0.49740 .458 | 0.48120.0.53 | 0.4882 | 0.48 ${ }^{\text {d }}$-0.52\% |
| 30. | 0.58 -0.54 | 0.52\%-0.54i | 0.528-0.54 | $0.52-0.53 \frac{1}{2}$ | $0.51{ }^{\frac{18}{4}-0.53}$ |
| Average. | $0.51-0.527$ | 0.50-0.515 | 0.4912 .512 | 0.493-0.5013 | $0.59-0.50 \frac{1}{2}$ |
| Ootober | 0.53 ${ }^{2}$ - $0.55 \frac{3}{2}$ | 0.53-0.54 | $0.53-0.545$ | 0.523-0.54 | 0.52t-0.54 |
| $=14$ | $0.522^{\frac{2}{2}-0.554}$ | $0.51{ }^{\frac{1}{2}-0.54}$ | $0.51{ }^{\frac{7}{4}-0.54 \%}$ | $0.500^{\frac{2}{2}-0.54 \frac{1}{4}}$ | $0.50{ }^{2}-0.54$ |
|  | 0.52-0.561 | $0.50 \frac{1}{2}-0.55 \frac{1}{1}$ | $0.50 \pm-0.55$ | $0.50 t^{-0.54 i}$ | $0.49 \mathrm{i}-0.54{ }^{3}$ |
|  | 0.58-0.611 | 0.56 ${ }^{\text {d }}$-0.0.60 | 0.562-0.58 | 0.56t-0.59t | $0.55{ }^{\text {a }}$-0.60t |
| Average. | 0.547-0.57련 | $0.53-0.56 \frac{1}{2}$ | $0.53-0.561$ | 0.52-0.55 ${ }^{\frac{7}{4}}$ | 0.52-0.55 ${ }^{\text {\% }}$ |
| November 4 | 0.58-0.032 | $0.561-0.581$ | $0.58 \pm-0.58 \pm$ | $0.56-0.58$ | 0.553-0.573 |
|  | $0.61{ }^{5}-0.673$ | $0.59 \mathrm{j}-0.66$ | $0.58 \pm-0.66$ | 0.59580 .654 | $0.59 \mathrm{y}-0.65$ |
| 18. | $0.65{ }^{-0.67 t}$ | $0.633^{-0.661}$ | $0.633^{3}-0.661$ | $0.63-0.65 \frac{1}{8}$ | $0.622^{2}-0.651$ |
|  | 0.6382-0.66t | $0.62 \pm 0.65$ | $0.62 \frac{1}{2} 0.65$ | $0.61{ }^{\text {a }}$-0.64 ${ }^{\text {a }}$ | $0.61-0.631$ |
| Average... | $0.623^{-0.66}$ | $0.60 \frac{1}{3} 0.64$ | $0.60 \frac{1}{2} 0.64$ | 0.602-0.643 | 0.591-0.6\% |
| December 2. | 0.588-0.62 ${ }^{2}$ | 0.561-0.614 | $0.587-0.611$ | $0.56{ }^{2}-0.603$ | 0.553 -0.591 |
|  | $0.57-0.592$ | $0.543^{3}-0.57$ | $0.54-3.58$ | $0.54 \frac{1}{6}-0.56 \frac{1}{6}$ | $0.52 \mathrm{i}-0.54{ }^{2}$ |
| 16 | $0.50{ }^{5}-0.56$ | $0.476-0.531$ | $0.477^{-6.531}$ | 0.4575 | 0.448 |
|  | 0.51-0.54 | 0.488-0.511 | $0.48 \pm-0.51$ 1 | $0.463-0.49{ }^{2}$ | 0.458. |
|  |  | $0.50 .0 .22^{2}$ | 0.50 .0 .52 |  | $0.48 i$ |
| Averase. | 0.54-0.57\% | 0.572-0.553 |  | 0.502-0.553 | 0.495-0.54! |

## 21.-Weekly Range of Prices of Barley and Flax at Winnipeg and Fort Willian, 1916.



## PRODUCTION

## 21.-Weekly Range of Prices of Barley and Flax at Winnipeg and Fort William, 1916-concluded.



AGRICULTURE

22．－Monthly Range of Average Prices of Barley，Oats and Flax at Winnipeg and Fort William，1914－1916．

| Date． | Barley （per bushel of 48 lb ．）． | Onts（per bushel of 34 lb ．）． |  |  |  | Flat（per buabel of $56 \mathbf{1 b}$ ．）． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { No. } 2 \\ & \text { C.W. } \end{aligned}$ | $\begin{aligned} & \text { No. } 3 \\ & \text { C.W. } \end{aligned}$ | No． 1 Feed． | No． 2 Feed． | $\begin{aligned} & \text { No. } 1 \\ & \text { N.W.C. } \end{aligned}$ | $\begin{aligned} & \text { No. } 2 \\ & \text { C.W. } \end{aligned}$ | $\begin{aligned} & \text { No. } 3 \\ & \text { C.W. } \end{aligned}$ |
| $\begin{gathered} \text { Averages } \\ \text { or- } \end{gathered}$ | se. c. |  |  |  | c． | c．\％c． | c．\＄e． | \＄c．\＄c． |
| $\begin{array}{r} \text { Jan .... } 19440 \\ \times \quad \text {. } 19150 \\ \times 19160 \end{array}$ | 0．38－0．413 | 0．32t－0．83t 0 | $0.311-0.31{ }^{3}$ | 0．31－0．81 | ． 0040.302 | 1．251－1．27i | 1．221－1．243 |  |
|  | $0.71 \frac{1}{4}-0.75 \frac{3}{2}$ | $0.573^{2}-0.601$ | $0.55 \frac{3}{2} 0.577$ | 0．54－0． 56 | $0.531-0.55$ | 1.51 －1．62 | $1.48 \frac{1}{3} 1.59$ | － |
|  | 0．63 $-0.68 \frac{1}{2}$ | $0.42-0.44$ | 0．39t－0．41 | $0.381-0.40{ }^{\text {a }}$ | $0.37 \frac{1}{2}-0.39 \frac{1}{2}$ | $2.01 \frac{1}{10} 2.10$ | 1．99 r \％－2．07 | －－ |
| $\begin{gathered} \text { Feb. } 191490 \\ \ldots \ldots 19150 \\ \ldots .19160 \end{gathered}$ | 0．392－0．434 | 0．335－0．342 | $0.331-0.33 \frac{5}{4}$ | $0.327-0.333$ | 0．32t－0．322 | 1.2973 | 1．263－1．283 | 1．132－1．18 |
|  | 0．80－0．79 | $0.64-0.65{ }^{\frac{7}{7}}$ | $0.6140 .62{ }^{2}$ | $0.61-0.60$ | $0.59{ }^{1}-0.593$ | $1.60{ }^{1}-1.624$ | 1．574－1．592 |  |
|  | 0．65 ${ }^{\frac{2}{6}-0.67 \frac{3}{8}}$ | $0.42{ }_{1}^{1}$ | 0．398－0．41妾 | 0．383－0．40 ${ }^{3}$ | 0．37t－0．391 | 2．04 ${ }^{3}-2.09$ | 2．01－2．06 | －－ |
|  | 0．432－0．453 | $0.34{ }^{3}-0.34{ }^{\frac{3}{4}}$ | 0．342－0．34 | $0.34-0.343$ | 0．33 3 － 0.337 | 1．343 1.1 .372 | 1．321－1．34\％ | 1． $19-1.223$ |
|  | 0．754－0．73 | $0.60{ }^{2}-0.38$ | 0．584 0.60 |  | 0．56！-0.59 | t． 66 －1．73 | 1． $631-1.70$ |  |
|  | 0．591－0．594 | 0．884－0．812 | 0．37 ${ }^{2}-0.391$ | 0．36－0．372 | $0.85 \frac{1}{2}-0.37$ | $1.993-2.04{ }^{\text {a }}$ | 1．968－2．02 | $\cdots$ |
| $\begin{gathered} \text { April... } 1914 \\ \text { a } 191510 \\ \text { a } \quad .19160 \end{gathered}$ |  | 0．342－0．35 | 0．33－ 0.34 | $0.33-0.33{ }^{\text {a }}$ | 0．321－0．32 | 1．34t－1．37 | 1．311－1．34 | 1．221－1．25t |
|  | 0．74t－0．75t | $0.68+0.641$ | $0.588^{2}-0.614$ | 0．59－0．609 | 0．58－0．591 | 1．771－1．775 |  | － |
|  | $0.59\}^{0}-\mathrm{i} 8{ }_{10}^{7}$ | 6．435－0．44t | 0．41t－0．42t | 0．39t－0．41 | $0.394-0.41$ | 1．863 $-1.90 \frac{1}{2}$ | 1．80웅－1．88\％ | － |
| $\begin{array}{r} \text { May } . .39410 \\ * \quad .191510 \end{array}$ | 0．432－0．483 | 0．372－0．373 | 0．357－0．363 | $0.351-0.353$ | 0．34 ${ }^{1}-0.357$ | 1．353－1．37 | 1．323－1．34 | 1．224－1．24 |
|  | 0． $11-0.72$ | $0.621+0.63{ }^{\text {a }}$ | $0.591-9.612$ | 0.58 \％ 0.60 | $0.57{ }^{\text {a }}$ | 1.75 | $1.724-1.76 \frac{2}{2}$ |  |
|  | 0．669－0．68 | 0．46t－0．47t | 0．55－0．46 | 0．44t－0．45t | $0.43-0.44$ | 1．66t－1．73］ | 1．624－1．70 | －－ |
| June．．． 19140$\ldots .1915$$\ldots .1916$ | 0．471－0．533 | 0．3885－0．392 | 0．381－0．387 | 0．37t ${ }^{\text {a }} 0.38$ | 0．374－0．38 | 1.387 .1 .40 | 1．357－1．37 | －－ |
|  | 9． $711-0.727$ | $0.536-0.56$ | 0．512－0．55 | －${ }^{\text {a }}$ | － | 1.52 2 1.591 | 1．49－1．561 | －－ |
|  | $0.65 \frac{7}{4}-0.67 \frac{}{3}$ | 0．45i－0．475 | 0．44 -0.46 | 0．43：${ }^{\frac{3}{2}}-0.45$ | 0．417－0．43 | 1 574 －1．61 ${ }^{\frac{1}{8}}$ | 1．541－1．588 | －－ |
| $\begin{gathered} \text { July } . .191410 \\ * \quad \ldots 19150 \\ \ldots .19160^{\circ} \end{gathered}$ | 0．461－0．522 |  | 0．873－0．38 | 0．361－0．37 | 0．365－0．37 | 1．40t－1．451 | 1．371－1．432 | $1.26-1.33$ |
|  | 0.693 －0．71 | $0.59-0.61 \times$ | $0.56{ }^{3}-0.58{ }^{2}$ | $0.54 \frac{1}{2}-0.57{ }^{2}$ | 9．5312－c．56 | $1.46-1.51 .15$ | 1．423 1.48 2 |  |
|  | $0.29{ }^{1} 50.73{ }^{5}$ | $0.44 t-0.45 t$ | $0.44-0.45$ | $0.433^{2}-0.445$ | $0.42-0.43$ | $1.66 \frac{1}{3}-1.72 \frac{1}{4}$ | 1．63－1 $69{ }^{\text {a }}$ | －－ |
|  | $0.511_{5}^{2}-0.57 z^{3}$ | 9． 448 －0． 44 d | $0.43 \frac{1}{2}-0.46$ | $0.42-0.43{ }^{3}$ | 0．42－0．441 | 1．367－1．462 | 1．34－1－1．43 ${ }^{\frac{1}{4}}$ | 1．31－1．52 |
|  | 0．571－0．81 | 6．504－0．54 | 0．492 $0.50 .53 \frac{1}{2}$ | $0.474-0.52 \mathrm{R}$ | $0.451-0.49$ | $1.38-1.45 \frac{1}{2}$ | $1.35{ }^{2}-1.42 \frac{1}{4}$ | 1．31－1．32 |
|  | 0．76i－6．82 | $0.48-0.50{ }^{2}$ | 0．47t－0．492 | $0.36-0.48 \frac{1}{1}$ | $0.45 \frac{1}{2}-0.48 \frac{1}{2}$ | 1．87\％ | 1．85i－1．93 ${ }^{\text {a }}$ | －－ |
|  |  |  |  |  | 0．46혹－0．50 | 1．281－1．314 | 1．258－1．28\％ | －－ |
|  | $0.50 \mathrm{t}-52$ | $0$ | $0_{00}^{25}-0.37$ | $\begin{aligned} & 0.345 \\ & 0.35 \end{aligned}$ | 0．331－0．35 | 1．41 $1.1 .46 \frac{1}{2}$ | t．38－1．433 |  |
|  | $0.85{ }_{10}^{7}{ }^{\frac{7}{6}-0.88 \frac{1}{5}}$ | $0.51-0.522^{1}$ | 0．50－0．51 | $0.494-0.50 \frac{1}{2}$ | 0．59－0．502 | 1.87 t－1．96 | 1．84矢－1．981 | －－ |
| $\begin{array}{r} \text { Oct } \ldots .1914 \\ \times \ldots .195 \\ \ldots .1916 \end{array}$ | 0． 578 － $0.67 \frac{1}{2}$ |  | 0．48㐌－0．50 | $0.48-0.49$ | $0.47-0.48$ | 1．104－1．144 | 1．091－1．13 | －－ |
|  | 6．573－0．61 | $0.400_{1}^{1}-c .43$ | （0．384－0．413 | 0.364 －0．391 | $(357-0.388$ | 1．59－1．65 | 1．56\％－1．64 | －－ |
|  | 0．983－1．022 | C． 54 \％－8．573 ${ }^{\text {a }}$ | 0．53－0．562 | 0．52－0．55 ${ }^{\text {a }}$ | $0.52{ }^{-0.55}$ | 2．30\％－2．39\} | $2.27 \frac{1}{5}-2.38$. | －$\quad$ |
| $\begin{gathered} \text { Nov...1914 } \\ \text { s. 1914 } \\ \text { a. 1916 } \end{gathered}$ | 0．605－9 67\％ | 0．545－0．55？ | 0．52－0．531 | 0．51－0．52\％ | $0.50-0.52$ | 1．205－1．28 | 1．175－1．24娄 | － |
|  | $0.65{ }^{2}-0.67{ }^{\text {a }}$ | $0.40 \frac{7}{-0.424}$ | 0．38 ${ }^{2}-6.40 \frac{1}{2}$ | $0.37-0.38$ | $0.361-0.37{ }^{\text {a }}$ | $1.76-1.831$ | 1．73－1．80t |  |
|  | $1.08-1.13 \frac{1}{2}$ | 0.63 \％－0．66 | 0．601－0．64 | 0．60\％－0．84t | 0．592－0．63 | $2.50 \frac{1}{2}-265 \frac{1}{2}$ | 2．47t－2．62 ${ }^{\text {d }}$ | －－ |
| Dec．． 1914$\ldots 1915$$\ldots 1916$ | 0．55z－0．64 | 0．523－0．533 | C．49i－0．50t |  |  |  |  |  |
|  | $\left\{\begin{array}{l} 0.65 \\ 0.0 .674 \end{array}\right.$ | $\left[\begin{array}{ll} 0.391-0.40 \\ 0 . \end{array}\right.$ | 0.369 | 9．34i $-0.37 \frac{1}{2}$ | 0.338 | 1．813－1．85 | $\left\{\begin{array}{l} 1.244-1.28 t \\ 1.78 ;-1.82 \end{array}\right.$ |  |
|  | 0．983－1．042 | 0．54it－0．572 | （0．51 $5-0.55$ | $0.50\}-0.55\}$ | 0．498－0．54 ${ }^{\frac{3}{4}}$ | 2．54 ${ }^{\text {a }}$－2．6．60 | 2．512－2．57 |  |

## PRODUOTION

23.-Prices in British Markets of Canadian Wheat, Wheat Flour and Oats, 1916.


## A GRICULTURE

23．－Prices in British Markets of Canadian Wheat，Wheat Flour and Oats，1916－concluded．

| Date． | Whirat（per bushel of 60 lb ．）． |  |  |  | Wheat Flour（per 280 lb ．）． |  |  |  | Oяts． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Best <br> Hard． | No． 1. | No． 2. | No． 3. | Canadian good． | Canadian 1st bakers． | Canadian common． | Canadian soft winter． | （Per bush． of 34 lb ．）． |
|  | 8 c .8 c ． | \＄c．\＄c． | 8 c .8 c ． | \＄c．\＄c． | \＄c．\＄c． | \＄c．\＄c． | \＄c． 8 c ． | \＄c．\＄c． | \＄c．\＄c． |
| October $2 .$. | －－ | 2．152 ${ }^{2}$－2．182 ${ }^{\frac{1}{2}}$ | $2.12 \frac{1}{1}-2.15 \frac{1}{2}$ |  | 12．65－12．89 | 12．41－12．65 | 11．66－11．91 | 11.66 －12．15 | $0.901^{-0.93}$ $0.943^{-0.97}$ |
| －9 <br> $<$ | － | $2.21{ }^{2}{ }^{2}-2.24 \frac{1}{2}$ |  |  | $\begin{array}{ll}12.14 & -13.38 \\ 13.38 & -13.62\end{array}$ | $\begin{array}{lll}12.89 & -13.14 \\ 13.14 & -13.38\end{array}$ | 12.15 <br> 12.42 <br> 12.41 <br> 125 | 12.15 <br> $12.41-12.65$ <br> 12.89 | $0.94 \chi^{-0.97}$ $0.982-1.01$ |
| － $23 .$. | －－ | $2.331-2.36^{\frac{1}{4}}$ | $2.30 \frac{1}{4}-2.33 \frac{1}{4}$ | $2.27 \frac{1}{4}-2.30 \frac{1}{4}$ | 13．62－13．86 | 13．38－13．62 | 12．65－12．89 | 12．65－13．14 | 0．984－1．01 |
| $30 .$. | －－ | $2.39 \frac{1}{2}-2.42 \frac{1}{2}$ | 2．36i $-2.39 \frac{1}{4}$ |  | 13．62－13．86 | 13．38－13．62 | 12．65－12．89 | 12．65－13．14 | 1．033－1．061 |
| Average．． | －－ | 2．27！－2．30t | 2．24．9－2．27t | 2．22 $2.2 .28:$ | $13.28\}-13.46\}$ | 13．04－13．283 | 12．303－12．55 | 12．308－12．79？ | 0．97－0．991 |
| Nov．6．． | －－ | $2.56-2.59$ | 2．531 -2.56 | 2．501－2．531 | 14．84－15．09 | －－ | －－ | －－ |  |
| － 13. | －－ | $2.44 \frac{1}{1}-2.47 \frac{1}{1}$ | $2.41 \frac{1}{2}-2.44 \frac{1}{4}$ | 2．38 ${ }^{1}-2.41 \frac{1}{1}$ | 15．09－15．33 | － | －14 | 13.87 －14 | $1.11 \frac{1}{\delta}-1.13 \frac{1}{2}$ |
| 27. | －－ | 2.473 －2．503 | $2.14 \frac{1}{2}-2.47 \frac{1}{1}$ | 2．411 ${ }^{1}-2.44{ }^{2}$ | 15．57－15．81 | $\begin{array}{lll}14.84 & -15.09 \\ 14.84 & -15.09\end{array}$ | 14.60 <br> $14.36-14.84$ | $\begin{array}{lll}13.87 & -14.11 \\ 13.63 & -13.87\end{array}$ | $\left\lvert\, \begin{aligned} & 19-1.11 \\ & 1 \end{aligned}\right.$ |
| Average．．． |  | $88_{10}^{70} 2.51 \frac{7}{10}$ | 2．45 ${ }^{\frac{1}{4}-2.48{ }_{1}{ }^{2} \text { ？}}$ | 2A23－2．45 | $15.26 \frac{3}{2}-15.51$ | 14．84－15．09 | 14．48－14．72 | 13．75－13．39 | 1．15 ${ }^{\text {－1．17 }}$ |
| Dee． 4. | － | $2.53 \mathrm{z}-2.64$ | $2.50 \frac{1}{6}-2.531$ | 2．47d－2．50 | 15．33－15．52 | 14．60－14．84 | 14．36－14．60 | 13．63－13．87 | 1．31\％${ }^{1} 1.344$ |
| －11． | － | 2.56 －2．673 | $2.53 \mathrm{f}-2.56$ | $2.50 \frac{1}{5}-2.53$ | 15．33－15．52 | 14．60－14．84 | $14.36-14.60$ | 13．63－13．87 | 1．31\％ $1.34{ }^{\text {a }}$ |
| 18．． | － | $2.62-2.73{ }^{\frac{2}{4}}$ | $2.59-2.62$ |  | 15．33－15．52 | 14．60－14．84 | 14．36－14．60 | 13．63－13．87 | 1．37－1．397 |
| 25．． | － | 2．676－2．76 ${ }^{\text {c }}$ | 2.671 －2．67\％ | 2．62－2．64］ | 15．33－15．52 | 14．60－14．81 | 14．36－14．60 | 13．63－13．87 | 1．37－1．391 |
| Average． | －－ | 2．59\％－2．78 $\frac{3}{2}$ | $2.57 \frac{1}{3}-2.59 \frac{3}{6}$ | 2．53t－2．56 | 15．33－15．52 | 14．60－14．84 | 14．36－14．60 | 13．63－13．87 | 1．34⿳亠口冋木年．37 |

24．－Monthly Range of Average Prices in British Markets of Canadian Wheat，Wheat Flour， and Oats，1913－1916．

| Date， | Wheat（per bushel of 60 lb ．）． |  |  |  | Wheat Flour（per 280 lb ．）． |  |  |  | $\frac{\text { OATs．}}{$ er bushel  <br>  of  $34 \mathrm{lb} .$} |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No． 1. | No． 2. | No． 3. | No． 4. | Manitoba Patents． | Manitoba Straights． | Manitoba 1st bakers． | Manitoba 2nd bakers |  |
|  | \＄c． | 8 c. | \＄c． | c． | \＄c．\＄c． | \＄c．\＄c． | \＄c．\＄c． | \＄ | o． |
| Jan．．．． 1913 | 1． $12-1.15$ | ${ }_{1}^{1.09-1.12}$ | 1．06－1．07 | 1．04－1．05 | 6．97－7．06 | 6．81－6．87 | 506 |  | $0.54-0.57$ |
| ${ }_{\text {« }}$ ．．． 191914 | $1.06-1.07$ | 1．03－1．04 | $1.00-1.02$ | $0.94-0.97$ | 6．38－6．51 | $6.20-6.27$ | 5．96－6．02 | 5．47－5．53 | $0.49-0.52$ |
| ．． 1915 |  | 1．69 ${ }^{1.9}$ |  | $1.63-1.633_{8}^{7}$ | $9.91-10.15$ | $9.67-9.91$ | $9.43-9.65$ | 9．19－9．43 |  |
| Feb ．．． 1912 | 1．15－1．17 | 1．13－1．15 | $1.09-1.10$ | 1．06－1．08 | 7．12－ 7.18 | 6．94－ 7.00 |  |  | $0.54-0.571$ |
| ． 1914 | $1.06-1.07$ | $1.04-1.05$ |  | 881－1．001 | 6．51－6－63 | 6．27－6．35 | 6．02－6．14 | 5．53－5．66 | 0．49－0．52 |
| $\begin{gathered} \cdots 1915 \\ \cdots 1916 \end{gathered}$ | 1．985－2．011 | 1．955－1．981． | 1．93 ${ }^{\frac{3}{3}-1.953}$ | $1.88 \frac{1}{4}-1.90 \frac{1}{6}$ | 11．00－11．24 | 10．76－11．00 | 10．51－10．76 | $10.27-10.51$ | $10.8750 .90 \frac{1}{3}$ |
| ．． 1916 | $2.133^{\frac{2}{2}-2.154}$ | $2.10 \frac{3}{8}-2.12 \frac{1}{3}$ | 2．073－2．085 |  |  |  |  |  | $0.90-0.91$ |
| March．． 1913 | 1．15－1．17 | 1．12－1．13 | $1.09-1.10$ |  |  | 6．69－6．83 | －－ |  | 0．53－0．55 |
| ＂． 1914 | 1．11－1．12 | $1.08-1.09$ | 1．06－1．08 |  | 6．76－6．88 | 6．52－6．64 | 6．28－6．40 | 5．79－5．91 | $0.52-0.54$ |
| ．． 1915 | 1．981－2．013 ${ }^{\frac{1}{2}}$ | $1.95 \frac{1}{2}-1.98 \frac{1}{2}$ $2.02^{7}-2.04$ | $\begin{aligned} & 1.92 \frac{1}{2}-1.95 \frac{1}{2} \\ & 199 \\ & \hline 10 \end{aligned}$ | $1.92-1.93 \frac{1}{2}$ | 11．23－11．48 | 11．00－11．23 | 10．74－10．99 | 10．50－10．73娄 | 0．86\％$-0.88{ }^{\text {a }}$ |
|  | $2.05 \frac{3}{4}-2.07 \frac{1}{4}$ | $2.02{ }_{3}^{7}-2.044$ | $1.99 \frac{5}{6}-2.00 \frac{2}{3}$ |  |  |  |  |  | 0．9032－0．93 |
| April．．． 1913 | $1.15-1.16$ | $1.12-1.13$ | 1．21－1．22 | $1.19-1.20$ | 6．83－6．95 | 6．59－6．71 | －－ |  | $0.52-0.54$ |
| ．．． 1914 | $1.07-1.09$ | 1．06－1．07 | $1.05-1.06$ |  | 6．69－6．81 | 6．28－6．57 | $6.20-6.33$ | $5.72-5.84$ | 0．52－0．54 |
| ．．． 1915 | 1.975 －2．005 | 1．945－1．975 | $1.91{ }^{3}-1.94 \frac{1}{6}$ | 1．897－1．91 | 11．36－11．60 | 11．12－11．36 | 10．88－11．12 | 10．63－10．88 | $0.88-0.901$ |
| ．．． 1916 | $1.92{ }^{\frac{3}{2}}-1.94 \frac{1}{4}$ | $1.91-1.93 \frac{1}{2}$ | 1．88－1．90 | $1.85 \frac{1}{8}-1.87 \frac{3}{4}$ |  |  |  |  | 0．855 ${ }^{\frac{8}{8}-0.89 \frac{1}{2}}$ |
| May．．． 1913 | $1.20-1.21$ | 1．18－1．19 | 1．14－1．15 | $1.11-1.12$ | 6．95－7．08 | 6．71－6．83 | －－ |  | $0.52-0.55$ |
| ${ }^{4}$ a $\quad .1914$ | $\begin{aligned} & 1.08-1.09 \\ & 2 \end{aligned}$ | $1.07-1.08$ | $1.04-1.05$ | －$\overline{1}^{-1.0}$ | 6．68－6．80 | 6．44－6．56 | 6．19－6．32 | 5．70－5．83 | 0．50 0.0 .52 |
| ${ }^{4} \times 1915$ | $2.12 \frac{1}{2}-2.15 \frac{1}{2}$ | $2.09 \frac{1}{1}-2.12 \frac{1}{3}$ | $2.06 \frac{1}{2}-2.09 \frac{1}{2}$ | $2.01-2.05 \frac{2}{5}$ | 12．10－12．35 | 11．86－12．10 | 11．61－11．86 | $1137-11.61$ | $0.89-0.91 \frac{13}{3}$ |
| 1916 | $1.84 \frac{3}{10}-1.87$ | 1．81 ${ }^{3}-1.84$ | $\mid 1.78 ;-1.81$ |  |  |  |  |  | 0．931－0．96 |
| June．．．． 1913 | $1.16-1.18$ | $1.13-1.15$ | 1．10－1．12 | 1．05－1．07 | 6．87－7．00 | 6．63－6．75 |  |  | 0．52－0．57 |
| a ．．．． 1914 | $\begin{aligned} & 1.10-1.11 \\ & 1 \end{aligned}$ | $1.08-1.09$ |  | $1.05-1.06$ | 6．69－6．81 | 6．45－6．57 | 6．20－6．33 | 5．72－5．84 | $0.49-0.52$ |
| $\therefore \quad \ldots .1915$ | $\begin{aligned} & 1.82 \frac{1}{2}-1.84 \\ & 1.58 \\ & \hline \end{aligned}$ | 1$1.79 \frac{1}{2}-1.82$ <br> 1.55 <br> $10-1.58$ |  | $1.788^{1}-1.81$ | 11．20－11．46 | 10．97－11．21 | 10．73－10．97 | 10．29－10．53 | $0.88-0.90 \frac{1}{1}$ |
| 19 | 1．58－1．62 |  | 1．56\％$-1.58{ }^{\text {g }}$ |  |  |  | 10．512－10．752 |  | 0．90－0．911 |

## PRODUCTION

24．－Monthly Range of Average Prices in British Markets of Canadian Wheat，Wheat Flour， and Oats，1913－1916．－concluded．

| Date． | Wheat（per bushel of 60 lb ．）． |  |  |  | Wheat Flour（per 280 lb ．）． |  |  |  | $\frac{\text { OAts. }}{\begin{array}{c} \text { Per bushel } \\ \text { cf } 34 \mathrm{lb} . \end{array}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No． 1. | No． 2. | No． 3. | No． 4. | Manitoba Patents | Manitoba Straights | Manitoba 1st bakers． | Manitoba 2nd bakers． |  |
|  | 8 c | \＄c． | \＄c．\＄c． | \＄ | \＄c．\＄c． | \＄ | \＄c．\＄c． |  | \＄c．\＄c． |
| July ．．． 1913 | 1．16－1．18 | $1.13{ }^{1}-1.14$ | 1．09－1．10 | $1.02-1.04$ | 6．89－7．02 | 6．65－6．77 | 6．04－6．10 | 5．74－5．86 | 0．52－0．56 |
| ${ }^{4}$ a ${ }^{\text {a }}$ ． 191915 | 1．10 1.1 .11 | 1．07－1．08 | 1．05－1．06 | 1．04－1．05 | 6．57－6．69 | 6．33－6．45 | 6．08－6．20 | $5.59-5.72$ | $0.50-0.51$ |
| ＊ | $1.71-1.74$ $1.62-1.65$ | 1．68 -1.71 | 1．65－1．68 | $1.71 \frac{3}{4}-1.74$ | 10．54－10．78 | 10．30－10．54 | 10．06－10．30 | $9.86-10.09$ | 0．891－0．913 |
| ＊．．．． 1916 | $1.62-1.65$ | $1.62-1.64{ }^{\frac{7}{6}}$ | $1.68-1.70{ }^{\text {P }}$ |  |  |  | 10．23－10．45 |  | 0．87－0．89 |
| Aug．．． 1913 | 1．12－1．14 | $1.10-1.11$ | 1．05－1．07 | 0．99－1．00 | 6．87－6．90 | 6．63－6．75 | $6.02 * 6.08$ | 5．72－5．84 | 0．52－0．54 |
| ＊．．．． 1914 | $1.35-1.38$ | $1.32-1.34$ | 1．30－1．32 | 1．27－1．30 | 7．91－8．09 | 7．67－7．85 | 7．42－7．61 | $7.31-7.24$ | $0.79-0.82$ |
| $\ldots 1915$ | 1．763 1.7938 | 1．73－1．763 | 1，703 $1.73{ }^{\text {a }}$ | $1.64 \frac{1}{4}-1.67 \frac{1}{4}$ | 10．67－10．91 | 10．43－10．67 | 10．19－10．43 | －－ |  |
| $.1916$ | 2．05 $\frac{1}{2}-2.09 \frac{3}{4}$ | 2．02⿳亠丷厂彡－2．05 ${ }^{\frac{1}{2}}$ | $1.97{ }^{3}-2.00 \frac{3}{3}$ |  |  | －－ | 11．73－11．972 |  | 0．8931－0．92 |
| Sept．．． 1913 | 1．13－1．14 | 1．10－1．11 | 1．06－1．07 | 1．02－1．03 | 6．74－6．86 | 6．50－6．62 | 5．97－6．04 | 5．58－5．78 | $0.50-0.53$ |
| ． 1914 | 1．42－1．44 | $1.38-1.39$ | 1．37－1．38 |  | 8．94－9．19 | 8．70－8．94 | 8．46－8．70 | $8.21-8.46$ | 0．83－0．86 |
| ． 1915 | 1．753－1．781 | $1.76 \frac{1}{1}-1.79$ | $1.72 \frac{1}{2}-1.75 \frac{1}{2}$ | 1．6312 $-1.66 \frac{1}{2}$ | 10．20－10．39 | 9．97－10．12 | 9．62－9．86 | 9．31－9．52 |  |
| ． 1916 | 2．151－2．19 | 2．121－2．15 ${ }^{\frac{1}{4}}$ |  |  |  |  | $12.40 \frac{1}{2}-12.65$ |  | $0.90 \frac{1}{2}-0.93$ |
| Oct．．．． 1913 | $1.07-1.09$ | 1．04－1．06 | 1．02－1．04 | 0．97－1．00 | 6．60－6．68 | 6．38－6．44 | 6．04－6．11 | 5．58－5．68 | $0.48-0.51$ |
| 1914 | 1．37－1．39 | $1.35-1.37$ | 1．32－1．34 | 1．30－1．32 | 8．64－8．88 | 8．39－8．64 | 8．15－8．39 | $7.91-8.15$ | $0.79-0.83$ |
| 1915 | 1．75 ${ }^{\frac{1}{2}-1.783}$ |  |  |  | 10．33－10．57 | 10．21－10．27 | 9．73－9．98 | 9．49－9．73 | 0．77－0．81 |
| 1916 | 2．27\％－2．309 | $2.24{ }_{1}$ | $2.22{ }^{\frac{1}{4}-2.283}$ |  |  |  | 13．04－13．285 |  | $0.97-0.99$ |
| Nov ． 1913 | 1．04－1．06 | 1．01－1．04 | 0．98－1．01 | 0．95－0．98 | 6．59－6．65 | 6．35－6．41 | 6．10－6．16 | 5．61－5．67 | 0．48－0．51 |
| ＂．．． 1914 | 1．45－1．48 | 1．42－1．45 | $1.40-1.42$ | 1．34－1．35 | 8．88－9．12 | 8．64－8．88 | 8．39－8．64 | $8.15-8.39$ | 0．78－0．81 |
| ．． 1915 | $1.78 \frac{1}{2}-1.80$ | $1.75 \frac{3}{\frac{3}{2}-1.77 \frac{1}{6}}$ | 1．72 ${ }^{4}-1.74 \frac{1}{6}$ | $1.68-1.68{ }^{3}$ | 10．81－11．06 | 10．69－10．75 | 10．21－10．45 | 9．98－10．20 | 0．82 ${ }^{\frac{1}{8}-0.84 \frac{1}{2}}$ |
| ．． 1916 |  | $2.45{ }^{3}-2.488_{10}^{\circ}$ | 2．423－2．45 ${ }^{\frac{3}{8}}$ |  |  | －－ | 14．84－15．09 |  | 1．15 $1.17 \frac{1}{3}$ |
| Dec．．． 1913 | 1．06－1．08 | 1．02－1．04 | 0．99－1．02 | 0．96－0．99 | 6．58－6．64 | 6．34－6．40 | 6．09－6．15 | $5.60-5.67$ | 0．49－0．52 |
| ${ }^{2}$ ．．．．． 1914 | $1.50-1.51$ | 1.47 －1．49 | 1．44－1．46 | $1.42-1.43$ | 8．94－9．18 | 8．70－8．94 | 8．45－8．70 | 8．21－8．45 | $0.75-0.78$ |
| ＊．．．．1915 |  |  | 1．743－1．78 | $1.71{ }^{3}-1.72!$ $2.533^{\frac{1}{2}-2.56}$ | －－ | － | 4．60－14．84 |  | $\begin{aligned} & 0.77 \frac{1}{2}=0.80^{2} \\ & 134 \frac{1}{2} \end{aligned}$ |

## 25．－Prices in British Markets of Canadian Bacon and Hams， 1916. （Per cwt．of 100 lb ．）

Bacon．


## AGRICULTURE

25.-Prices in British Markets of Canadian Bacon and Hams, 1916-con.
(Per cwt. of 100 lb .)
Bacon.


## PRODUCTION.

25.-Prices in British Markets of Canadian Bacon and Hams, 1916-concluded.
(Per cwt. of 100 lb .)
Long Cut Hams.


## 26.-Monthly Range of Average Prices in British Markets of Canadian Bacon and Hams.

(Per cwt. of 100 lb .)
Bacon.


## AGRICULTURE

26. Monthly Range of Average Prices in British Martets of Canadian Bacon and Hams, 1913-1916-concluded.
(Per ewt. of 100 lb .)
Bacon.


## Long Cur Hams.



## PRODUCTIのN

26.-Monthly Range of Average Prices in British Markets of Canadian Bacon and Hams, 1913-1916--coneluded.
(Per cwt. of 100 lb .)
Long Cut Hams.

| Date. |  | Bristol. | Liverpool. | London. | Glasgow. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| July | 1913 | $\begin{gathered} \$ \mathrm{c} . \$ \mathrm{c} . \\ 20.04-19.74 \end{gathered}$ | $\begin{gathered} \$ \mathrm{c} . \mathrm{s}^{2} \mathrm{c} . \\ 19.87-19.08 \end{gathered}$ | $\begin{gathered} 8 \mathrm{c} .{ }_{20}^{8} \mathrm{c} . \\ 20.31-19.74 \end{gathered}$ |  |  |
|  | . 1914 | 17.81-16.95 | 17.34-16.47 | 17.60-16.64 | - |  |
| * | 1915 | 18.97-18.08 | 18.64-15.56 | 18.09-17.11 | - |  |
| - | 1916 | 21.77-20.95 | 21.66-20.88 | 21.61-20.88 | - | - |
| August. | . 1913 | 20.83-20.11 | 20.44-19.67 | 20.72-20.33 | - | - |
|  | . 1914 | 21.10-20.29 | 20.26-19.27 | 19.34-17.93 | - |  |
| * | 1915 | 18.47-17.49 | 18.24-15.75 | 17.60-16.30 | - |  |
|  | 1916 | 22.63-21.75 |  | 23.15-22.28 | - | - |
| September | 1913 | 19.95-19.30 | 19.35-15.99 | 19.42-19.45 | - | - |
| ${ }^{\text {a }}$ | . 1914 | 19.43-18.69 | 18.47-17.75 | 18.82-17.99 | - |  |
| ${ }^{*}$ | ${ }_{1916}$ | 18.33-17.16 | 18.21-16.03 | 18.08-16.86 |  |  |
| October | 1913 | 18.43-17.82 | 16.94-15.90 | 17.74-17.17 | 17.03-1 |  |
|  | 1914 | 17.38-16.62 | 16.19-15.34 | 16.89-16.13 |  |  |
| * | 1915 | 19.18-17.76 | 19.18-17.11 | 19.40-18.36 | - |  |
| November. | . 1913 | 17.38-16.95 | 16.84-15.21 | 17.49-17.06 | 16.54-1 |  |
| * | 1914 | 16.35-15.32 | 16.19-15.35 | 16.30-15.59 | 16.5 |  |
| * . | 1915 | 20.14-18.90 | 20.18-18.46 | 21.27-20.11 | - |  |
| December. |  | 17.64-17.21 | 17.17-15.21 | 17. 72-17.21 |  |  |
|  | . 1914 | 16.95-16.08 | 16.82-16.08 | 16.86-16.12 | - |  |
| * | . 1915 | 16.05-16.08 | -10.08 | 22.10-21.62 | - | - |
| * . | . 1916 | - - | - - | - - | - | - |

27.-Prices in British Markets of Canadian Cheese, 1916.
(Per cwt. of 100 lb .)

| Date. | Bristol. | Liverpool. | London. | Glasgow. | Date. | Bristol. | Liverpool. | London. | Glasgow. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\left\lvert\, \begin{gathered} 8 \\ 20.66-20.00 \end{gathered}\right.$ | $\left\|\begin{array}{l} 8 \text { c. } \\ 20.66-20.00 \end{array}\right\|$ | $\begin{array}{ccc} \$ & \text { c. } & \text { c. } \\ 20.88 & 20.44 \end{array}$ | $\begin{aligned} & \$ \mathrm{c} . \\ & 21.22 \end{aligned}$ | July 5 | $\left\|\begin{array}{c} 8 \mathrm{c} . \\ 20.88-20.44 \end{array}\right\|$ | $\begin{array}{lll} 8 & \text { c. } \\ 20.88 & \text { c. } \\ \hline \end{array}$ | $\left\|\begin{array}{ccc} 8 & \text { c. } & \$ \\ 21.22-20.44 \end{array}\right\|$ | $\begin{aligned} & \$ \mathrm{c} . \\ & 19.56-19.13 \end{aligned}$ |
| - 12 | 20.88-20.44 | 20.88-20.22 | 21.22-20.88 | 21.00-20.88 |  | 20.44-19.78 | 20.22-19.78 | 20.44-20.00 | 19.13-18.69 |
| 19 | 21.22-20.88 | 21.66-20.88 | 21.66-21.22 | 22.10 |  | 19.56-19.13 | 19.24-18.80 | 18.69-17.81 | 18.47-18.24 |
| 26 | 21.88-21.22 | 21.8821 .00 | 22.10-21.44 | 22.10 |  | 20.22-19.56 | 19.78-19.13 | 19.56-19.13 |  |
| Average | 21.16-20.64 | 21.27-20.53 | 21.47-21.00 | 21.61-20.88 | Average | 20.27-19.75 | 20.03-19.48 | 19.98-19.35 | 19.05-18.69 |
|  | 21.88-21.22 | 22.10-21.00 | 21.66-21.22 | $22.54-22.10$ |  |  |  |  |  |
|  | 22.10-21.22 | 22.10-21.60 | 21.66-21.22 |  | A | 20.22-19.56 | 19.67-19.02 | 20.00-19.13 |  |
|  | $\left\lvert\, \begin{aligned} & 22.10-21.22 \\ & 21.88-21.00 \end{aligned}\right.$ | 21.88-21.00 | 21.66-21.22 | 2 |  | 20.44-19.78 | 20.44-19.78 | 20.88-20.44 | 20.22-20.00 |
| Average | 21.99-21.17 | 21.9 | 21 |  |  | 20.88-20.22 | 20.88-20.22 | 20.88-20.22 | 20.88-20.44 |
| M | 21.66-20.88 | 21.88-21.00 | 21.66-21.22 | 22 |  | 20.22-19.56 | 19. | 20. | 0 |
|  | 22.10-21.22 | $22.00-21.00$ | 21.66-21.22 | 22.10-21.8 | Average | 20.44-19.78 | 20.22-19.56 | 20.53-19.87 | 21.32-20.94 |
|  | 22.32-21.44 | 22.44-21.55 | 22.54-22.10 | 22.54-22.32 |  |  |  |  |  |
|  | 22.76-21.88 | 22.76-22.10 | 22.98-22.32 | 22.76-22.54 |  |  |  |  |  |
|  | 22.76-21.88 | 23.09-22.32 | 23.20-22.54 |  | Sept. ${ }^{6}$ | 22.76-22.10 | 22.98-22.32 | 22.54-22.10 | 22.98-22.54 |
| Average | 22.32-21.46 | 22.44-21.60 | 22.41-21.88 | 22.41-22.10 |  | 23.20-22.54 | $\begin{array}{\|l\|} 23.31-22.65 \\ 23.31-22.76 \end{array}$ | 22.98-25.54 | ${ }_{23.42-22.98}^{22.98}$ |
|  | 23.20-22.32 | 22.98-22.32 | 23.42-22.98 | 22.76-22.54 |  | 23.42-22.76 | 23.64-22.98 | 23.42-22.98 | 23.64-23.42 |
|  | 23.20-22.32 | 22.98-22.32 | 23.42-22.98 |  | Average | 23.20-22.54 | 23.31-22.68 | 23.03-23.35 | 23.25-22.98 |
| 26 | $\left\{\begin{array}{l} 23.42-22.76 \\ 23.64-22.98 \end{array}\right.$ |  |  |  |  |  |  |  |  |
| Average | 23.37-22.60 | 23.04-22.43 | 23.53-23.09 | 22.93-22.54 |  | 23.86-23.20 | 23.97-23.31 | 23.64-22.98 | 24.29-23.86 |
| M | 23.86-23.42 | 23.75-23.20 | 24.29-23.86 | 23.64 |  | 24.29-23.64 | 24.29-23.64 $24.84-24.29$ | 24.73-23.86 | ${ }_{24.73-24.51}^{24.5}$ |
|  | $\begin{aligned} & 24.51-24.08 \\ & 25.17-24.73 \end{aligned}$ | $\left\|\begin{array}{l} 23.97-23.53 \\ 24.19-23.75 \end{array}\right\|$ | $\left\|\begin{array}{c} 25.17-24.73 \\ 25 \end{array}\right\|$ | $\begin{aligned} & 24.29 \\ & 25.17 \end{aligned}$ |  | 24.73-24.29 | 24.73-24.29 | 24.73-24.29 | 25.17-24.95 |
|  | 25.17-24.73 | 24.19-23.75 | $\left\|\begin{array}{\|c\|} 25.27-24.73 \\ 25.17-24.73 \end{array}\right\|$ | 25.17 | Average | 24.40-23.80 | 24.46-23.88 | 24.99-23.85 | 24.67-24.42 |
| 31 | 24.73-24.29 | 24.29-23.86 | 23.42-22.98 | 24.73 |  |  |  |  |  |
| Average | 24.69-24.25 | 24.10-23.64 | 24.66-24.21 | 24.60 | Nov. | 24.95-24.51 | 25.28-24.19 | 24.29-24.51 | 24.95 |
|  | 23.85-23.42 | 21.88 | 22.98-22. | 20.88 |  | 25.17-24.73 | 25.94-24.84 | 27.17-24.73 | $25.83-25.61$ |
|  | 22.54-22.10 | 21.66-21.00 | 22.98-22.10 | 20.88 |  | 26.05-25.17 | 26.72-25.39 | 26.50-25.61 | $26.05-25.61$ |
| 21 | 21.88-21.44 | 21.44-20.77 | 22.98-22.10 | $\|20.88-20.44\|$ |  | 26.72-26.27 | $\left.\left.\right\|_{28.04-26.23} ^{27.27-26.16}\right\|_{2}$ | $\begin{aligned} & 27.38-26.50 \\ & 27.82-26.94 \end{aligned}$ |  |
| $28$ | 21.22-20.88 | 21.22-20.44 | 22.10-21.22 | $\left\|\begin{array}{c} 19.56-19.13 \\ 20.55-19.78 \end{array}\right\|$ | - $\begin{array}{r}\text { Average } \\ \\ \\ \\ \hline\end{array}$ | 27. | 28.04-26.83 | 27.82-26.94 | -61-25.61 |

## AGRICULTURE

28.-Average Monthly Prices of Canadian Cheese in British Markets, 1913-1916. (Per cwt. of 100 lb .)


World's Production of Cereals and Potatoes.-Table 29, which is compiled from the Bulletin of Agricultural and Commercial Statistics of the International Agricultural Institute, with metric weights and measures converted into Canadian equivalents, shows the areas and yields of wheat, rye, barley, oats, corn and potatoes in principal countries of the world for the years 1915 and 1916 in the northern hemisphere and for the years 1915-16 and 1916-17 in the southern hemisphere (Uruguay, Argentina, Australia and New Zealand). The table also includes, for purposes of comparison, the average acreages and yields for the five years 1909-1913 (1909-10-1913-14 for the southern hemisphere) and the areas and yields of 1916 in the form of percentages of 1915 (1915-16) and of the five-year averages. Owing to the war,

## PRODUCTION

the table does not include data of Belgium, Serbia, and Russia in Asia, nor of the hostile powers (Germany, Austria-Hungary, Bulgaria and Turkey). For European Russia the data relate to forty-eight governments.

For wheat the data comprise twenty-four countries which in 1916 produced a total of $2,852,317,000$ bushels from $225,181,000$ acres, as compared with $3,783,437,000$ bushels from $247,121,000$ acres in 1915 and with $3,014,601,000$ bushels from $221,694,000$ acres, the quinquennial average. As compared with 1915 the area under wheat in 1916 was 8.9 p.c. less, whilst it is 1.3 p.c. more than the average; the yield however in 1916 was 24.6 p.c. less than that of 1915 and 5.6 p.c. less than the average. The average yield per acre for all twenty-four countries was over $2 \frac{1}{2}$ bushels less than in 1915 and was nearly one bushel less than the quinquennial average.

In the case of rye the total production in 1916 of fourteen countries was $1,011,036,000$ bushels from $68,331,000$ acres, as compared with $1,068,775,000$ bushels from $71,026,000$ acres in 1915 and with $907,831,000$ bushels from $69,784,000$ acres the five-year average. The area of 1916 is less than that of 1915 and than that of the average by 3.8 and 2.1 p.c. respectively, whilst the total yield is 5.4 p.c. less than that of 1915 and 11.3 p.c. above the average. The average yield per acre is about a quarter of a bushel less than in 1915 and 1.8 bushel above the average.

The total production in twenty-one countries of barley was $1,095,-$ 420,000 bushels from $53,349,000$ acres, as compared with $1,194,153,000$ bushels from $54,289,000$ acres in 1915 and 1,084,466,000 bushels from $53,511,000$ acres, the five-year average. In area the crop of 1916 was 1.7 p.c. below 1915 and 0.3 p.c. below the average, whilst in yield the percentage was 8.3 p.c. below 1915 but 11 p.c. above the average. The yield per acre in 1916, viz., $20 \frac{1}{2}$ bushels, was about $1 \frac{1}{2}$ bushel below 1915 but about a quarter of a bushel above the average.

Oats, in twenty-two countries, gave a total production in 1916 of $3,204,662,000$ bushels from $114,393,000$ acres as against $3,645,984,000$ bushels from 112,614,000 acres in 1915 and $3,087,628,000$ bushels from $108,493,000$ acres the quinquennial average. The figures for 1916 represent as to area percentages of 1.8 above 1915 and 56 above the average and as to yield 11.2 below 1915 and 4 p.c. above average. The yield per acre for all these countries was 28 bushels in 1916, or about $4 \frac{1}{4}$ bushels below 1915, and about half a bushel below the average.

Corn, in eleven countries gave a total yield in 1916 of 2,908,823,000 bushels from $131,131,000$ acres, as compared with $3,548,642,000$ bushels from $132,923,000$ acres in 1915 and with $3,304,339,000$ bushels from $129,805,000$ acres the five-year average. In 1916 the acreage was 1.4 p.c. below that of 1915 and 1 p.c. above the average, whilst the yield was 17 p.c. below 1915 and 12 p.c. below average. The average yield per acre was 22.46 bushels in 1916, or $4 \frac{1}{4}$ bushels less than in 1915 and 3 bushels less than the quinquennial average. Of potatoes the yield in 1916 for nine countries was $1,055,367,000$ bushels from $9,762,000$ acres, as compared with $1,218,792,000$ bushels from 10,080,000 acres in 1915 and $1,344,894,000$ bushels from $10,437,000$ acres the five-year average. The acreage in 1916 was 3.2 p.c. below 1915 and 6.5 p.c. below average; the yield was 13.4 below 1915 and 21.5 p.c. below the average, the yield per acre in 1916 being 108.11 bushels or nearly 15 bushels below 1915 and nearly 21 bushels below the five-year average.
29.-World's Acreage and Production of Cereala and of Potatoes, 1915-16.

| Comntries. | 1915. | 1916. | $\begin{gathered} \text { Five years' } \\ \text { average } \\ 1009-13 . \end{gathered}$ | $\begin{gathered} \text { P.e. } \\ \text { oI } \\ \text { 1015. } \end{gathered}$ | $\begin{gathered} \text { P.c. } \\ \text { of } \\ \text { average } \end{gathered}$ | 1915. | 1016. | Five years' averege 1909-1913. | $\begin{gathered} \text { P.o, } \\ \text { of } \\ 1915 . \end{gathered}$ | $\left\|\begin{array}{c} \text { P.c. } \\ \text { of } \\ \text { average } \end{array}\right\|$ | 1015. | 1916. | Five years average 1909. 1013. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 0: 00 \\ & \text { acree. } \end{aligned}$ | $\begin{gathered} 000 \\ \text { acros. } \end{gathered}$ | $\begin{aligned} & 000 \\ & \text { acrea. } \end{aligned}$ | p.e. | p.e. | $\begin{gathered} 000 \\ \text { bush. } \end{gathered}$ | $\begin{gathered} 000 \\ \text { bush. } \end{gathered}$ | 000 bush. | p.e. | p.c. | bush. per aere. | bush. per acre. | bush. per acre. |
| WheatDemmark. | 164 |  | 113 | 92.0 | 133.2 | 7,983 | 6,026 | 5,344 | 75.5 | 112.8 | $48.62$ | $89.85$ | 47.14 |
| Spain..... | 10.037 | 10,149 | 0,547 | 104.1 | 106.3 | 139,209 | 152,330 | 130,447 | 109.4 | 1168 | 13.88 | 15.02 | 13.68 |
| Frabce. | 13,564 | 12,856 | 16.160 | 84.8 | 79.6 | 222,778 | 214,622 | 317.639 | 86.3 | 67.6 | 16.80 | 16.65 | 19.83 |
| England and Wales | 2,170 | 1,912 | 1,787 | 88.1 | 107.0 | 67.718 | 55,540 | 55,770. | 82.0 | 99.6 | 31.23 | 29.00 | 31.23 |
| Scotland. | 77 | 63 | 57 | 82.3 | 111.4 | 2,950 | 2,285 | 2.273 | 76.5 | 99.6 | 38.66 | 35.84 | 40.15 |
| Ireland. . | 87 | 76 | 43 | 88.3 | 177.6 | 3,238 | 2,827 | 1,597 | 87.3 | 177.0 | 37.47 | 37.03 | 37.17 |
| Italy.... | 12,502 | 11,678 | 11,722 | 93.4 | 99.6 | 170,542 | 176.531 | 183,336 | 103.6 | 96.3 | 13.64 | 15.17 | 15.61 |
| Norwsy. | 12 | 14 | 12 | 110.0 | 110.1 | 284 | 305 | 306 | 107.4 | 99.7 | 22.80 | 22.30 | 24.68 |
| Netherlands | 160 | 136 | 138 | 84.6 | Q8.5 | 3,680 | 4,035 | 4,896 | 71.0 | 82.4 | 35.64 | 29.74 | 35.64 |
| Rumania. | 4,706 | 4,844 | 4,576 | 102.8 | 105.8 | 89,787 | 78,521 | 87,793 | 87.5 | 89.4 | 19.08 | 16.21 | 19.18 |
| Ruassia in Earope. | 58,220 | 48,527 | 58,926 | 83.3 | 82.4 | 750.868 | 505,426 | 624.619 | 79.4 | 95.8 | 12.04 | 12.34 | 10.15 |
| Sweden.... | 298 | 307 | 247 | 102.6 | 124.4 | 9, 178 | 8.978 | 10,321 | 97.6 | 87.0 | 30.63. | 29.29 | 41.78 |
| Switzerland. | 114 | 124 | 105 | 109.0 | 118.3 | 3.057 | 3.821 | 3,314 | 96.6 | 115.3 | 34.71 | 30.03 | 31.67 |
| Canadr.... | 14,675 | 15,370 | 9,945 | 104.7 | 154.5 | 426.747 | 262.781 | 197.119 | 61.6 | 133.3 | 20.08 | 17.10 | 19.82 |
| Uníted States | 60,470 | 52,780 | 47,097 | 87.3 | 312.1 | 1,025.818 | 639,806 | 686,701 | 02.4 | 93.2 | 10.95 | 34.80 | 14.57 |
| British India. | 32,475 | 30,143 | 29,218 | 92.8 | 103.2 | 376,730 | 318,005 | 351,766 | 84.4 | 90.4 | 11.60 | 10.50 | 12.04 |
| Japan. | 1,250 | 1,280 | 1,197 | 102.4 | 107.0 | 25,795 | 24,444 | 24,166 | 94.8 | 101.2 | 20.67 | 10.03 | 20.22 |
| Algeria. | 3,209 | 3,218 | 3,494 | 100.3 | 92.1 | 34,655 | 29, 52 | 34.998 | 84.1 | 83.3 | 10.85 | 9.07 | 0.96 |
| Exypt. | 1,582 | 1,447 | 1,314 | 91.5 | 110.2 | 39,148 | 36,544 | 34,814 | 98.3 | 105.0 | 24.68 | 25.28 | 26.47 |
| Tunis.. | 1,112 | 1.482 | 1,310 | 133.3 | 118.2 | 11.023 | 7,105 | 6,224 | 65.0 | 115.1 | 9.96 | 4,91 | 4.76 |
| Argentiua | 16,420 | 18,088 | 10,051 | 98.0 | 100.2 | 172.651 | 70,225 | 147,071 | 40.7 | 47.2 | 10.60 | 4.30 | 9.22 |
| Australia.... | 12,531 | 11,530 | 7,603 | 02.0 | 181.7 | 179,627 | 152,089 | 90.498 | 84.7 | 168.1 | 14.30 | 13.20 | 11.90 |
| New Zeaiand | 329 | 218 | 241 | 66.8 | 00.8 | 7,108 | 5,400 | 7.058 | 76.0 | 764 | 21.60 | 24,70 | 29.30 |
| Urugusy:....... | 950 | 780 | 791 | 82.1 | 08.6 | 9,887 | 5.390 | 6.510 | 54.6 | 82.7 | 1040 | 6.90 | 8.20 |
| Totals and Averagen. | 247,121 | 225,181 | 221,694 | 81.1 | 101.8 | 3,783,437 | 2,852,317 | 3,014,601 | 75.4 | 94.4 | 15.30 | 12.66 | 1360 |
| Rye- |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Denmarik. | 521 | $47 \%$ | 652 | 92.0 | 73.3 | 13,288 | 10.787 | 17,773 | 81.2 | 60.7 | 25.49 | 22.46 | 27.24 |
| Spain. | 1,820 | 1,846 | 1.988 | 101.4 | 02.9 | 26,102 | 28,782 | 27,636 | 110.3 | 104.1 . | 14.34 | 15.61 | 13.86 |
| France. . | 2,309 | 2.275 | 2,961 | 98.5 | 76.8 | 38,149 | 35.889 | 49,025 | 108.3 | 73.2 | 14.34 | 15.77 | 16.57 |
| Ireland. | 7 72 | 7. | 8 | 88.8 | 83.3 | 218 | -192 | 239 | 88.2 | 80.3 | 29.31 | 2900 | 30.11 |
| Italy... | 294 | 285 | 303 | 97.1 | 94.2 | 4,362 | 5.342 | 5,329 | 122.5 | 100.3 | 14.82 | 18.64 | 17.52 |
| Norway.... | 37 | 49 | 37 | 130.0 | 130.9 | 829 | 729 | 973 | 88.0 | 74.9 | 22.15 | 14.88 | 26.13 |
| Netherlands...... | \% 549 | 498 | ${ }_{50}^{557}$ | 90.8 | 89.6 | 13,728 | 12,391 | 16,175 | 90.3 | 75.6 | 25.01 | 24.85 | 29.00 |
| Russia in Europe. | 60.995 | 58,409 | 59,780 | 95.8 | 97.7 | 893,321 | 840,728 | 727,248 | 94.1 | 115.6 | 14.66 | 14.34 | 12.11 |
| Sweden........ | 965 | 913 | 092 | 94.6 | 92.1 | 23,133 | 22,048 | 23,120 | 99.2 | 99.2 | 23.90 | 25.17 | 23.28 |
| Switzerland. | 66 | 71 | 60 | 107.4 | 118.8 | 2,059 | 2,000 | 1,783 | 97.1 | 112.2 | 30.91 | 28.04 | 29.63 |
| Canads. ${ }^{\text {c.t. }}$ | . 132 | 212 | 116 | 189.3 | 182.7 | 2,394 | 2,878 | 2,100 | 120.1 | 136.8 | 21.32 | 13.57 | 18.00 |
| United States. | 3,129 | 3,096 | 2,236 | 98.9 | 188.4 | 54,050 | 47,380 | 34,916 | 87.7 | 135.7 | 17.21 | 15.29 | 15.61 |
| Argenting., | 212 10 | 180 10 | 85 9 | 85.0 | 312.1 | 2,008 | 858 134 | 1,390 | 42.7 | 61.4 | 9.80 | 4.80 13.40 | 16.57 11.95 |
|  | 71,026 | 68.3310 | 69,784 ${ }^{9}$ | 100.0 | 111.8 [ | 1,068,775 | 1,011,036 ${ }^{134}$ | \$07,831 | 100.0 04.6 | 126.2 | $\begin{array}{r}13.40 \\ 15.05 \\ \hline\end{array}$ | 13.40 14.80 | 11.05 13.00 |

29.-World's Acreage and Production of Cereals and of Potatoes, 1915-16-continued.

| Countries. | 1915. | 1916. | $\begin{aligned} & \text { Five years' } \\ & \text { average } \\ & 1909-13 \text {. } \end{aligned}$ | $\begin{gathered} \text { P.c. } \\ \text { of } \\ 1915 . \end{gathered}$ | $\begin{gathered} \text { P.c. } \\ \text { of } \\ \text { average } \end{gathered}$ | 1915. | 1916. | Five years ${ }^{\text {s }}$ average 1909-1913. | $\begin{gathered} \text { P.c. } \\ \text { of } \\ 1915 . \end{gathered}$ | $\begin{gathered} \text { P.c. } \\ \text { of } \\ \text { average } \end{gathered}$ | 1915. | 1916. | Five years' average 1909 - 1913. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 000 \\ & \text { acres. } \end{aligned}$ | $\begin{gathered} 000 \\ \text { acres. } \end{gathered}$ | $\begin{gathered} 000 \\ \text { acres. } \end{gathered}$ | p.c. | p.c. | $\begin{gathered} 000 \\ \text { bush. } \end{gathered}$ | $\begin{gathered} 000 \\ \text { bush. } \end{gathered}$ | $\begin{gathered} 000 \\ \text { bush. } \end{gathered}$ | p.c. | p.c. | bush. per acre. | bush. per acre. | bush. per acre. |
| BarleyDenmark | 644 | 633 | 585 | 98.3 | 108.1 | 28,369 | 24,480 | 24,946 | 86.3 | 98.1 | 44.05 | 38.66 | 42.56 |
| Spain. | 3,786 | 3,886 | 3,510 | 102.6 | 110.7 | 82,764 | 86,864 | 74,696 | 105.0 | 116.3 | 21.93 | 22.30 | 21.19 |
| France. | 1,575 | 1,547 | 1,865 | 98.2 | 82.9 | 31,787 | 39,405 | 48,183 | 124.0 | 81.8 | 20.26 | 25.46 | 25.84 |
| England and Wales. | 1,232 | 1,332 | 1,488 | 108.1 | 89.5 | 37,733 | 43,480 | 50,658 | 115.2 | 85.8 | 30.67 | 32.71 | 34.01 |
| Scotland. ......... | 149 | 170 | 191 | 113.6 | 88.9 | 5,234 | 5,393 | 7,173 | 103.0 | 75.2 | 34.94 | 31.78 | 37.55 |
| Ireland. | 142 | 150 | 166 | 106.0 | 90.7 | 5,885 | 6,537 | 7,510 | 111.1 | 87.1 | 41.64 | 43.49 | 45.35 |
| Italy... | 60 s | 596 | 613 | 98.0 | 97.2 | 11,051 | 10,109 | 10,104 | 91.5 | 100.0 | 18.22 | 16.91 | 16.54 |
| Norway | 89 | 98 | 89 | 110.0 | 110.8 | 2,821 | 3,026 | 3,016 | 107.3 | 100.3 | 31.60 | 30.85 | 34.01 |
| Netherlands | 63 | 60 | 68 | 94.8 | 87.8 | 3,234 | 2,498 | 3,259 | 77.2 | 76.6 | 51.11 | 41.64 | 47.77 |
| Rumania. | 1,371 | 1,454 | 1,319 | 106.0 | 110.2 | 29,031 | 30,038 | 24,988 | 103.5 | 120.2 | 21.18 | 20.63 | 18.96 |
| Russia in Europe | 27,275 | 25,106 | 25,396 | 92.0 | 98.9 | 475,510 | 442,386 | 417,719 | 93.0 | 105.9 | 17.47 | 17.66 | 16.36 |
| Sweden......... | 438 | 421 | 448 | 96.2 | 94.2 | 14,254 | 14,678 | 14,355 | 103.0 | 102.2 | 32.53 | 34.76 | 32.16 |
| Switzerland | 16 | 18 | 13 | 109.2 | 137.8 | 588 | 615 | 441 | 104.7 | 139.6 | 36.62 | 35.13 | 34.57 |
| Canada. | 1,708 | 1,803 | 1,573 | 105.5 | 115.0 | 60,699 | 42,770 | 45,275 | 70.4 | 94.4 | 35.55 | 23.72 | 28.71 |
| United States | 7,148 | 7,674 | 7,620 | 107.4 | 100.7 | 228,846 | 180,923 | 181,877 | 79.1 | 99.5 | 31.97 | 23.61 | 23.79 |
| Japan.... | 3,239 | 3,109 | 3,189 | 96.6 | 97.5 | 100,863 | 99,821 | 97,868 | 99.0 | 102.0 | 31.23 | 32.15 | 30.67 |
| Algeria. | 2,703 | 3.052 | 3,348 | 112.9 | 91.2 | 39,866 | 35,970 | 45,401 | 90.2 | 79.2 | 14.68 | 11.71 | 13.57 |
| Egypt. | 463 | 439 | 398 | 94.9 | 110.3 | 13,747 | 13,184 | 11,761 | 95.9 | 112.1 | 29.74 | 30.11 | 29.55 |
| Tunis. | 1,038 | 1,233 | 1,248 | 118.7 | 98.8 | 11,482 | 6,889 | 7,826 | 60.0 | 88.0 | 10.97 | 5.58 | 6.32 |
| Argentina | - 431 | - 388 | -230 | 90.0 | 168.8 | 6,430 | 2,165 | 4,395 | 33.6 | 49.2 | 14.90 | 5.60 | 19.14 |
| Australia. | 171 | 180 | 154 | 105.8 | 116.9 | 3,959 | 4,189 | 3,021 | 105.8 | 138.7 | 23.20 | 23.20 | 19.62 |
| Totals and averages. | 54,289 | 53,349 | 53,511 | 98.3 | 99.7 | 1,194,153 | 1,095,420 | 1,084,466 | 91.7 | 101.1 | 21.97 | 20.53 | 20.29 |
| Oats- |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Denmark | 1,024 | 1,040 | 1,021 | 101.6 | 101.9 | 49,275 | 48,631 | 50,342 | 98.7 | 96.6 | 48.02 | 46.71 | 49.33 |
| Spain.. | 1,403 | 1,398 | 1,276 | 99.6 | 109.0 | 34,776 | 30,272 | 27,398 | 87.0 | 120.1 | 24.67 | 21.78 | 21.52 |
| France, | 8,062 | 7,796 | 9,801 | 96.7 | 79.6 | 224,521 | 267,664 | 334.382 | 119.2 | 80.0 | 27.82 | 34.38 | 34.11 |
| England and Wales | 2,088 | 2,085 | 2,039 | 99.8 | 102.2 | 95,315 | 96,003 | 91,212 | 100.7 | 95.0 | 45.66 | 45.92 | 44.61 |
| Scotland.......... | ,983 | 991 | , 952 | 100.8 | 104.1 | 44,829 | 41,547 | 41,889 | 92.7 | 99.2 | 45.66 | 41.99 | 44.08 |
| Ireland | 1,039 | 1,072 | 1,049 | 98.4 | 102.2 | 64,568 | 58,685 | 61,336 | 909 | 95.0 | 59.30 | 54.84 | 58.52 |
| Italy.. | 1,208 | 1,103 | 1,253 | 91.3 | 88.0 | 29,594 | 24,543 | 34,772 | 82.9 | 70.9 | 24.40 | 22.30 | 27.82 |
| Norway.... | 270 | 297 | -263 | 110.0 | 112.9 | 11,315 | 10,277 | 11,237 | 90.8 | 91.5 | 41.99 | 34.64 | 42.77 |
| Netherlands | 351 | 343 | 346 | 97.9 | 99.3 | 18,488 | 20,932 | 18,993 | 113.2 | 110.2 | 52.74 | 61.14 | 54.84 |
| Rumania.... | 1,065 | 1,068 | 1,105 | 100.3 | 96.6 | 28,172 | 27,234 | -27,338 | 96.7 | 99.6 | 26.50 | 25.45 | 24.67 |
| Russia in Europe | 35,651 | 35,492 | 36,121 | 99.6 | 98.3 | 854,498 | 818,794 | 782,552 | 95.8 | 104.6 | 23.88 | 23.09 | 21.78 |
| Sweden..... | 1,971 | 1,954 | 1,958 | 99.2 | 99.8 | 85,941 | 87,600 | 79.196 | 101.9 | 110.6 | 43.56 | 44.87 | 40.41 |
| Switzerland..... | 92 | 103 | 81 | 112.1 | 127.8 | 5,278 | 6,348 | 4,503 | 120.3 | 142.1 | 57.20 | 61.40 | 55.63 |

29.-World's Acreage and Production of Cereals and of Potatoes, 1915-16-concluded.


## AGRICULTURAL EXPERIMENT STATIONS OF CANADA.

## dOMINION EXPERIMENTAL FARMS AND STATIONS.

Central and Branch Farms.-Under the Experimental Farm Stations Act, 1886 (R.S. 1906, c. 73), were established a Central Experimental Farm at Ottawa for Ontario and Quebec, and four branch Farms: (1) for the Maritime Provinces at Nappan, Nova Scotia; (2) for Manitoba at Brandon; (3) for the Northwest Territories at Indian Head, Saskatchewan; and (4) for British Columbia at Agassiz. After these five Farms had continued in operation for 20 years, the first steps were taken towards their extension in number by the establishment of new Experimental Stations for Alberta, viz., one at Lethbridge in 1906 and the otber at Lacombe in 1907 Since this date development in the number of the Farms and Stations, and in the work carried on by them, has been rapid and continuous; and every province has now one or more Farms or Stations. ${ }^{1}$ In 1916, including the Central Farm at Ottawa, there are altogether 21 Farms and Stations with an increased acreage over 1915 of 2,213 ( 13 at Cap Rouge, 1,000 at Kapuskasing and 1,200 at Spirit Lake), or a total acreage of 11,148 , as compared with the original five Farms, having a total acreage of 3,472 , as established in 1886. Table 30 shows the present number of Farms and Stations with the acreage of each and the date of establishment.

[^13]$$
\text { 30.-Dominion Experimental Farms and Stations, } 1916 .
$$

| Farm or Station. | Province. | Acreage. | Date established |
| :---: | :---: | :---: | :---: |
| Central Farm, Ottawa. | Ontario. | 467 | 1886 |
| Kapuskasing Station. | Ontario. | 1,000 | 1916 |
| Cbarlottetown Station. | Prince Edward Island. | 100 | 1909 |
| Nappan Farm. | Nova Scotia. | 300 | 1886 |
| Kentville Station. | Nova Scotia. | 294 | 1912 |
| Fredericton Station. | New Brunswick. | 520 | 1912 |
| Ste. Anne de la Pocatière Station... | Quebec. | 340 | 1911 |
| Cap Rouge Station. | Quebec. | 339 | 1911 |
| Lennoxville Station. | Quebee. | 455 | 1914 |
| Spirit Lake Station. | Quebec. | 1,200 | 1916 |
| Brandon Farm. | Manitoba. . | 625 | 1886 |
| Morden Station. | Manitoba.. | 280 | 1915 |
| Indian Head Farm. | Saskatchewan.... | 680 | 1886 |
| Rosthern Station. . | Saskatchewan.... | 650 | 1908 |
| Scott Station. | Saskatchewan.... | 520 | 1910 |
| Lacombe Station. | Alberta... | 850 | 1907 |
| Lethbridge Station.... | Alberta.. | 400 | 1906 |
| Invermere Station. | British Columbia. | 53 | 1912 |
| Summerland Station. | British Columbia. | 550 | 1914 |
| Agassiz Farm.. | British Columbia. | 1,400 | 1886 |
| Sidney Station, Vancouver Island . | British Columbia, ...... | 125 | 1912 |

## AGRICULTURE

Range of Experiments.-Ranging over the whole of the wide fields of agriculture, arboriculture and horticulture, the work of the Farms has included experiments and studies relating to the breeding and feeding of farm live stock, the production of butter and cheese, field crops, natural and artificial fertilizers, cereals, grasses and other forage plants, fruits, vegetables, plants, trees, plant diseases and injurious insects. The Farms are also bureaux of information to which agriculturists resort for the solution of difficulties in farm work. The experiments carried out at the Central and branch Farms and Stations have been fully described in the annual reports of the Director and of his staff.

In addition to the farms and stations included in Table 30 there are seven small substations at Salmon Arm, British Columbia, at Fort Vermilion, Grouard and Beaver Lodge in Alberta, and at Forts Smith, Resolution and Providence, in the Northwest Territories.

Scientific Organization.-The more strictly scientific side of the work is carried on at the Central Experimental Farm at Ottawa, and is organized in thirteen divisions as follows: (1) Field Husbandry; (2) Animal Husbandry; (3) Horticulture; (4) Cereals; (5) Chemistry; (6) Forage Plants; (7) Botany; (8) Poultry; (9) Tobacco; (10) Economic Fibre; (11) Illustration Stations; (12) Apiculture; (13) Extension and Publicity. What was formeriy the Entomological Division became in 1914 the separate Entomological Branch of the Department of Agriculture.

Resalts Achieved.-Only brief mention is possible of the more striking results already achieved, with some indication of the work now being carried on. In the field of general agriculture, the importance of early sowing was demonstrated by a series of experiments which lasted for ten years, 1890-99. Under average seasonal conditions, it is now recognized that seeding sbould be completed as early as possible. As the result of experiments on the branch Farms in the West, the practice of summer fallowing for the conservation of moisture and the destruction of weeds is widely followed in the Prairie Provinces. Fxperiments continued for 18 years, 1893-1910, have shown over large areas in Canada the economic advantage of applying fresh as compared with rotted farmyard manure. They indicated that a given weight of manure taken fresh from the farmyard is equal in cropproducing power to the same weight of rotted manure, and that fresh manure loses in the process of rotting from 50 to 60 per cent of its weight. The great value of clover as a fertilizer when ploughed in has also been demonstrated by continuous experiments lasting from 1894 to 1906. From the establishment of the Farms, free samples of pure seed of new and tested varieties of grain and of potatoes have been annually distributed to farmers throughout Canada, with important results in improving the harvests of the country. In the Cereal Division, notable work has been done in the production of new varieties of grain, especially wheat possessing the qualities of productiveness, an early ripening habit and good baking strength. Varieties of wheat known as Preston, Stanley and Huron are all vigorous and productive, and ripen early; but the variety that has achieved the greatest success is the

## PRODUCTION

Marquis, which is equal to the Red Fife in baking qualities, ripens from five to ten days earlier and is superior in productiveness. It is now rapidly superseding the Red Fife throughout the Northwest.

Other Experiments.-Experiments, carried on over a series of years by the Field Husbandry Division, show the advisability of a rotation which includes a cereal crop, a hay crop (including clover) and a root crop. Experience has also shown that the shorter the rotation the greater are the profits, and that the most profitable rotation is one of three years: corn, or other hoed crop, grain, hay. In the Division of Animal Husbandry, extensive breeding experiments are in progress. It has been found that nothing in this line is more profitable to a farmer than investing in a really good pure-bred sire for the grading up of his cattle, care being taken to adhere to one breed. This is true whether as applied to horses, beef cattle, dairy cattle, sheep or swine. So far as production is concerned, the well graded-up animal has been proved to be just as profitable as the pure-bred. Important work has been done in the demonstration of effectively ventilated stables and cow barms. The Division of Horticulture carries out numerous experiments with apples, plums, cherries, grapes, small fruits and vegetables. Many varieties have in past years been tested, and promising seedlings for different latitudes have been recommended to growers. The object of the experiments with apples has been to obtain, by cross fertilization and selection, new varieties that will stand the severe winters of Quebec, of the more northern parts of Ontario and of the Prairie Provinces; also varieties of better-keeping qualities. Experiments were begun in 1915 to test the possibility of growing root and vegetable seeds in Canada instead of importing them from abroad. So far as they have gone, the experiments have proved successful and are being continued. In the Division of Botany, investigations of the diseases of cultivated plants are carried on at Ottawa and at the field laboratories of St. Catharines, Ont., Fredericton, N.B., and Charlottetown, P.E.I. Reports are made on diseased plant specimens sent in, and advice is given as to remedial measures wherever possible. Weeds are identified and methods of eradication recommended. Wild plants from all parts of Canada are received for identification, and information is furnished as to whether they are edible, medicinal or poisonous. Tests are also made as to the suitability of the climate of Canada for the growth of various plants of economic importance, such as fibre plants (flax, bemp), medicinal plants (opium-poppy, anise, etc.), oil-yielding plants (castor oil, soy bean) and miscellaneous plants (mustard, chicory, etc.). Much has been accomplished in arboriculture not only by the setting apart of 65 acres at the Central Experimental Farm for the testing of trees and shrubs from all parts of the world, but also by the encouragement given to tree-planting in the western provinces.

The Division of Chemistry covers a large field, and the Dominion Chemist, who is also Assistant Director of the Farms, controls a staff of nine fully qualified chemists. Investigations have been conducted to determine the nutritive value of fodder plants-Indian corn, grasses, clovers, etc.--by analyses at different stages of their growth. Canadian grown cereals have been analysed to ascertain their quality and nutritive

## AGRICULTURE

value, and the straw has also been examined to determine its value as fodder. Analyses have been made of soils from different parts of the Dominion, more particularly from the large untilled virgin area of the Northwest. Investigations have been made into the production, fermentation and application of farmyard manures. Many experiments have been conducted to throw light on the factors affecting soil moisture, and means have been suggested whereby the desired conditions of moisture may, to a great extent, be obtained and controlled by cultural operations. The influence of environment on the composition of wheat has been studied since 1905, and the work has now been enlarged, through co-operation with the Dominion Meteorological Service at Toronto, to secure a more comprehensive and detailed study of the relationship between weather conditions and crop growth. Analyses of sugar beets have been useful in demonstrating the suitability of soil and climate at widely different points of the Dominion for the growth of roots of high sugar content and purity. Well waters from farm homesteads have been the subject of special study. Numerous analyses are made in conjunction with problems relating to the land, the crop and the animal which from time to time are submitted by farmers for solution. Analyses are also made of dye stuffs, preservatives, pickling solutions, etc., for the Meat Inspection Division of the Health of Animals Branch of the Department, with a view to the detection of injurious substances. Systematic investigational work with commercial fertilizers is now being carried on at the larger number of the branch Farms and Stations. Owing to the scarcity of potash caused by the European war, the preparation of a nitro-potassic fertilizer by the drying and grinding of seaweed was undertaken at a point on the coast of Nova Scotia. The fertilizing value of the material so prepared is being tested in the field.

The Poultry Division undertakes experiments in the breeding, mating, incubating, brooding, rearing, housing and feeding of farm poultry, in the production of eggs, the preparation of poultry produce for the market and the study of poultry diseases. Demonstrations in poultry keeping are made at Ottawa and at the branch Farms and Stations, these latter being chiefly for the purpose of proving locally that farm poultry rather than the poultry farm is profitable, and for the distribution of improved breeding stock to farmers.

Recent Developments.-Experiments in the growth of tobacco are carried on by an expert from France at Ottawa, assisted by local superintendents at the tobacco stations of St. Jacques l'Achigan, and Farnham, Quebec and Harrow, Ontario. These experiments include the testing of different varieties to suit the Canadian soil and climate, the best means of curing and the preparation of different kinds of tobacco for the market. In 1912 a Division of Forage Plants was established under the direction of a scientific officer from the Plant Breeding Station at Svalöf in Sweden. The Division has for its object improvement in the quality and yield of grasses, clovers, alfalfas and other forage crops grown in Canada. An Economic Fibre Division was established at Ottawa early in 1916 to investigate the possibilities of the flax fibre industry in Canada. A flax mill has been completed at

## PRODUCTION

the Central Farm. During 1916 tests were carried on with flax-pulling machines, as well as in the growing of flax in different parts of the country. Hemp growing is also being tried.

Illustration Stations were started in 1914 by the selection of small areas at different points in Saskatchewan and Alberta, the object being to show to farmers in the districts selected the best cultural and crop methods. Early in 1915 the Illustration Station work inaugurated by the Commission of Conservation was taken over by the Experimental Farms Branch. In 1915 a Division of Extension and Publicity was formed for the purpose of making the work of the Experimental Farms more widely known amongst the farmers of Canada. The Division issues every four months a publication entitled "Seasonable Hints," which gives timely notes and advice to help the farmer in his current work.

## PROVINCIAL AGRICULTURAL EXPERIMENTS.

## Nova Scoma.

College of Agriculture, Truro.-About 400 acres are devoted to general farming and gardening and to investigations, of which the following are some of the more important. Experiments occupying upwards of 70 acres have been laid out to determine and demonstrate over a period of years the returns from all crops from the application of ground limestone. Results to date are to be found in the Annual Report of the Secretary for Agriculture; they indicate marked returns from slover, and almost as marked returns from turnips, but very slight results from other crops. However, at least two rotations (eight years) must pass by before a comprehensive statement can be issued. Club root has been controlled in turnips and in cabbage, in varying degrees, by the application of burnt and ground limestone. Experiments have been conducted in the growing of oats, peas and vetches (now called O. P V.) in comparison with corn for silage purposes, and the results under the climatic conditions in Nova Scotia have proved very satisfactorily in favour of O.P V Fertilizer experiments are being conducted on an extensive scale. The most important is designed to determine the value of acid phosphate, basic slag and bone meal as sources of phosphoric acid. A permanent pasture experiment to be continued over a course of years is giving striking results from the top dressing of pasture land with commercial fertilizer.

Besides carrying on experiments with varieties of oats, wheat, barley, etc., notable results have been obtained by combining strains of these respective varieties. In the stable and piggery, experiments with different feeds and on the cost of producing milk, etc., are being conducted. In the Horticultural Department experiments have been laid out to study the value of ground limestone not only for garden crops but for trees as well; also the control of club root in cabbage, cauliflower, turnips, etc., by the application of crushed and burnt limestone, is being carefully investigated. The influence of various stocks of the apple on the scion is being studied, and collections of the common cherries and plums, formerly cultivated but now growing almost wild, have been made with a view to studying their value for fruiting and as

## AGRICULTURE

hardy stocks. Variety tests in strawberries and various garden crops are being continued, and an experiment has been laid out to show the value of ploughing under clover sod both from the standpoint of increased crop producton and the control of disease. The hill selection of potatoes is being combined with a variety investigation. In the chemical, entomological, and botanical laboratories experiments are being conducted, the more important of which relate to a soil survey of the province, a study of the life history of insects and fungi affecting apple trees and various cultivated plants.

## Quebec.

Macdonald College, Ste. Anne de Bellevue.-The College is situated about 20 miles west of Montreal and is incorporated with McGill Unversity. The College property comprises 786 acres divided as follows: main farm, 584 acres; cereal husbandry plots, 75 acres; poultry department, 17 acres; orchards, 35 acres; vegetable gardens 25 acres; the campus, including driveways, lawns, trees, shrubs, flowerbeds, school garden and recreation fields for students of both sexes, 50 acres. The following is a brief indication of the more important experiments, as to which further information may be obtained from the College report of 1916-17

Animal Husbandry.--In the Animal Husbandry Department some results of special interest were obtained during 1916. Returns from the demonstration sheepflocks show an increased cost of maintenance, the average total cost per breeding ewe being $\$ 3: 97$ per year. The commercial returns per ewe averaged $\$ 10.70$, the fleece value amounting to $\$ 2.40$ of this, and the net profit per ewe was $\$ 6.73$. The self-feeder for swine was introduced, and an experiment on the "Cafeteria" plan proved very suggestive for further work. The hogs fed with the self-feeder were allowed four kinds of meal: shorts, ground corn, tankage, ground oats and barley mixed. These were placed in separate compartments in the feeder, and water was supplied in the regular troughs. The pigs that had access to the feeder made an average daily gain of 1.2 lb ., and for each pound of gain 4.66 lb . of meal were required. Those fed on the same feeds by hand three times a day averaged 1 lb . per day and required 4.99 lb . of meal per pound of gain. Other lots of hogs were allowed different amounts of exercise during development from weaning time. The hogs that were closely confined required more care to keep them clean, but led all others in rate and economy of gain, as the following results show:-

Close confinement-1.1 lb. average daily gain, requiring 3.44 lb . of meal per pound gain.
Limited exercise- 0.95 lb . average daily gain, requiring 3.70 lb . of meal per pound gain.
Large paddock- .92 lb . average daily gain, requiring 3.96 lb . of meal per pound gain.
The dressing percentages of the different lots were in the reverse order, ranging from 74.4 for the large paddock lot to 71.7 for the close confinement lot.

Cereal Husbandry.-The improvement of farm crops by selection and breeding receives close attention. This work is carried on with
all the principal farm crops: oats, wheat, barley, peas, rye, com, root crops, alfalfa, grasses and clovers. One improved variety of corn called "Quebec No. 28 " has been distributed, and has given a good account of itself throughout Quebec and parts of Ontario. It is an exceedingly early, heavy yielding, yellow flint corn that usually ripens in about ninety days. Improved strains of both wheat and oats are being increased for general distribution. Root crop investigations have been carried on for eight years mainly at the College, but also at several points in the province. As a result of the breeding work; improved strains of both mangolds and swede turnips have been secured, and seed has been sold to a number of growers of root seed in Ontario and Quebec. Root seed growing has been given more than usual attention during the past two years, partly on account of the restricted supply of good seed available from Europe, and partly because home grown seed has been found to give such superior results. Much careful work has been done with alfalfa to get definite data as to its value for Quebec. Over two hundred varieties and strains have been thoroughly tested as to hardiness during the past nine years, and less than half a dozen have proved suitable for Quebec conditions. Grimm, Ontario variegated and Baltic are the only varieties that have proved hardy and that may be obtained commercially. The high price asked for the seed of these varieties is such a serious obstacle to their being purchased that for several years experiments in seed growing have been carried on in the department. The results have been gratifying, and indicate that profitable crops of seed of Grimm may be grown in Quebec in most years. It is necessary to sow the seed thinly in rows about thirty inches apart, cultivate to keep clean and to allow the second crop to ripen seed. Seed has also been grown successfully at several points in the province. A number of additional experiments have been started at points in the country and observations have been continued on plots already established. The results show clearly the necessity of using a hardy variety, of draining the land and of using either lime or ground limsstone to correct soil acidity. Experiments with varieties of fodder com are being continued, both on the experimental grounds and at several points in the country, to get accurate data on varieties and rates of planting. The breeding of improved strains of timothy, orchard grass and red clover has now been carried on for five years. Good progress has been made, but no strains are yet available for distribution.

Other Departments. - Numerous other investigations are being carried on in the departments of Poultry, Chemistry, Bacteriology, Horticulture, Biology and Physics.

Oka Agricultural Institute. -This, situated on the Lake of Two Mountains, about 20 miles from Montreal, is one of the oldest experimental farms in Canada. A large number of dairy cattle are kept, and experimental work is carried on with these and with swine, poultry and bees. Horticulture is practised largely; the growth of small fruits is a specialty and the vineyards are celebrated. The famous Oka cheese, made at this Institute, is sold widely in North America. The Institute was affiliated to Laval University, Montreal, March 25, 1908.

## AGRICULTURE.

School of Agriculture, Ste. Anne de la Pocatière.-The school owns more than 500 acres of land. Besides general cultivation a number of experiments are carried on. Thus in 1915 experiments were undertaken with certain forage plants not well known in the district. The seeds were sown on a sandy soil in lots of one-fiftieth of an acre with a cereal (wheat) for cover crop. The following is a list of the grasses sown: Kentucky Blue Grass (Poa pratensis), Tall Oat Grass (Arrhenatherum elatius), Cocksfoot (Dactylis glomerata), Perennial Rye Grass (Lolium perenne), Italian Rye Grass (Lolium multiflorum), Meadow Festuca (Festuca elatior), Sheep's Fescue (Festuca ovina), Red Top (Agrostis stolonifera), Common Agrostis (Agrostis vulgaris), Brome Grass (Bromus inermis). The plants which appeared to be the most robust during the summer of 1916, as well as the earliest, were Cocksfoot and the Tall Oat Grass. Sheep's Fescue also made a thick turf, and appeared to suit admirably sheep pastures on light soil. Alfalfa and sainfoin were also tried. The alfalfa grew vigorously during the first days of spring, the first cut being on May 24 and the second on July 10. The third growth was left as protection during the winter. During 1916 experiments were carried on with root crops; they included 12 varieties of mangolds and half-sugar beets and four varieties of sugar beets. The plots were each one-twentieth of an acre on heavy clay and had been manured in the spring at the rate of 15 to 20 tons of dung per acre. The results gave yields varying from 18 to 34 tons per acre for the mangolds and from 9 to 13 tons per acre for the sugar beets. Experiments were also made with several varieties of swede turnips and of fodder carrots. Satisfactory results have been obtained with the cultivation of beet for seed.

## Ontario.

Ontario Agricultural College and Experimental Farm, Guelph.The College and Experimental Station were established in 1874 to train young farmers in the science and practice of agriculture and to conduct agricultural experiments for the benefit of the province. The land property consists of a little more than 700 acres of average loam soil. The farm property consists of 500 acres, esperimental plots about 100 acres, and campus and woodlots the remainder. The growth of the institution as an educational centre has been very rapid. Academic work at the present time requires the space and equipment of sixteen large buildings for dormitories, class rooms and laboratories. Courses offered include a four year course for the degree of B.S.A., a two year course for the Associate Diploma, short winter courses for farmers and farmers' sons, summer courses for teachers of the province, and domestic science courses at Macdonald Institute. Over seventy-five professors, lecturers, demonstrators and investigators are on the teaching and experimental staff. In 1874 the College opened with 28 students. The total enrolment in long and short courses in the academic year 1914-15 was 1,184 . Since the commencement of the war, the attendance, naturally, has been considerably reduced. The entire plant represents an outlay of about two million dollars. The following is a brief summary of the research and experimental work.

## PRODUCTION

Department of Field Husbandry.-About 75 acres of the College farm at Guelph are set aside for field experiments with farm crops. This area is divided into about 2,500 plots. The experiments include tests with varieties of farm crops, selection of seed, hybridization, dates of seeding, quantities of seed per acre, methods of cultivation, application of fertilizers and manures, the production of grains and grasses in different combinations, etc. The results are issued from time to time in the form of reports, bulletins and newspaper articles. Not only do they furnish real information in regard to methods to be adopted, but the Field Husbandry Department has been successful in originating and introducing good varieties which have been of great value to the crop production of the province. The O.A.C. No. 21 barley has erowded out practically all other varieties until it is now grown in nearly every part of the province. The O.A.C. No. 72 oats are increasing very rapidly and are sure to be worth millions of dollars to Ontario. The O.A.C. No. 3 variety of oats, which is ten days earlier than the O.A.C. No. 72 variety, is especially adapted for mixing with barley when it is desirable to grow the two in combination. The experiments have shown that when the right varieties and the right proportions are used about 200 lb . of increase in grain per acre is obtained as compared with the results from either one grown separately. Other varieties which the College has been instrumental in originating, improving or, in some cases, in simply distributing are the O. A. C. No. 61 spring rye, Petkus winter rye, Rye or Rough buckwheat, Pearce's Improved Tree bean, Canadian Beauty peas, Ontario Variegated alfalfa, Grimm alfalfa, Salzer's North Dakota corn, Wisconsin No. 7 corn, Gold Nugget corn, Davies' Warrior potatoes, Empire State potatoes, Extra Early Eureka potatoes, etc. The experiments in Field Husbandry at Guelph, in association with the co-operative experiments on thousands of farms throughout Ontario conducted through the medium of the Experimental Union, are having great influence on the agriculture of the province.

Animal Husbandry Department.--This department has charge of the farm and all the stock including the dairy herd. Experiments are conducted every year with rations for cattle, sheep and swine. A system of Farm Cost Accounting is used for the purpose of evolving a system which can be applied to farms throughout the province. Each year in October an auction sale of surplus stock is held.

Department of Horticulture.--The work undertaken includes experiments with varieties of fruits, vegetables, shrubs and flowers; studies and research in plant breeding; co-operative experiments in summer pruning, top grafting and root pruning; the testing of Canadian grown vegetable seeds; the preparation of plans for the beautifying of school grounds.

Department of Chemistry.-Experiments in the chemical treatment of various types of soils at several points in the province are carried on. Plots for fertilizer experiments with different crops are maintained at the College and on the light sandy soils of Norfolk county. Varieties of wheat are milled and the flour tested to determine baking qualities. Many samples of soil, water, condiments, stock foods, fertilizers and spray materials are analysed and reported upon.

Dairy Department.-Investigational work in this department relates to soft and fancy cheese, fermented milks, cheddar cheese, home-made-rennet, buttermaking in the creamery and the farm dairy, pasteurization and other experiments with dairy products.

Poultry Department.--Experiments are made in the feeding of laying hens and in fattening, the development of laying strains and the distribution of eggs from these strains throughout the province and with different types of poultry houses for town and farm use.

Department of Physics.-Much research work is being done in soil temperatures, lightning rods, insulating materials, the manufacture of drainage tile, etc. A staff of surveyors is maintained during the summer months to survey farm land for underdrainage, the farmer bearing only part of the surveyor's travelling expenses. The yearly average area surveyed is about 15,000 acres.

Department of Bacteriology.-Researches are made into the bacterial diseases of plants and animals; cultures of legume bacteria are distributed amongst farmers; lactic cultures are prepared for cheese factories and creameries; samples of water, food, etc., are tested for bacterial content.

Department of Entomology.-The insect pests of the province are investigated and means of control determined. Insect specimens and injuries are identified. New spray mixtures are tested.

Department of Botany.-Weeds, weed seeds and fungous diseases are identified, and samples of seed grain, clover, alfalfa and grass seed are examined as to purity. Fungus diseases of Ontario are investigated and means of control determined. Co-operative experiments in weed eradication are carried on.

Department of Apiculture--Various breeds of bees are kept for comparison. Experiments are conducted at the College and co-operatively throughout the province in apiary management. A staff of inspectors visits the apiaries of the province to destroy foul brood and other diseases.

## Manitoba.

College of Agriculture, Winnipeg.-The Field Husbandry experimental work was inaugurated in the spring of 1915. In organizing this branch of the College work it was divided into three divisions: Cereal Crops, Forage Crops and Soil and Crop Management. The work in the Cereal division consi ts of making variety tests and endeavouring to improve the better varieties by selection and hybridization. The object of the Forage Crop division is to secure and improve plants for the production of pasture and winter feed for the live stock. The improvement is being brought about by selection and hybridization. Among the crops that are thus the subject of experiment are alfalfa, red clover, sweet clover, timothy, western rye grass and brome grass. Some work is also under way in the improvement of fodder corn and field roots. The experiments in soil and crop management were outlined to answer the questions that farmers are asking in regard to the management of their soil and crops. It includes in all about 64 experiments and upwards of 1,000 plots. The departments of Botany, Horticulture, Engineering and Animal Husbandry are also doing considerable investigational work.

## PRODUCTION

## Sabkatchewan.

College of Agriculture, Saskatoon.-The College has a farm of 880 acres which is devoted to diversified agriculture. Wheat, oats, barley, peas, flax, corn, roots, western rye grass and alfalfa are produced both as money crops and for the purpose of feeding to stock. Horses, cattle, sheep, swine and poultry are maintained in numbers both for class work and for experimentation. Investigations are being made to ascertain the carrying powers of prairie lands under different crops for the production of meat and milk; in grading up farm flocks from the common range ewes; cheap housing for sheep, swine and poultry; silage production from crops other than com, such as oats, and peas, sweet clover, alfalfa; feeding of steers in the open. Another quarter section has been set aside for investigations in tillage, crop production, crop improvement, variety tests and rotations. Tillage has to do with the preparation of (1) prairie; (2) stubble; (3) summer-fallow. Crop management and variety work includes the trial of every known field crop grown in the West under different conditions and times of planting, tilling and harvesting. Rotations that include 120 annual and perennial crops in every possible combination are under trial. The effects of different artificial fertilizers both singly, in combination with each other and with farmyard manure-green and rotted-are being tried on the maturity, yield and quality of various crops over a series of years. Garden and fruit crops are being introduced for the purpose of testing varieties and methods of management under prairie conditions. The same is being done with trees, shrubs and flowers.

## Alberta.

College of Agriculture, Edmonton South.-A College of Agriculture has been established at the new Unversity of Alberta, Edmonton South. Students completing two years at the Provincial Schools of Agriculture enter the College for a three-years course leading to the degree of Bachelor of the Science of Agriculture. (B.S.A.). At present over 100 acres of land are available for experimental work in cereals, grasses, clovers, hoed crops, small fruits, vegetables and flowers. Work is being started with soils, and an excellent foundation stock has been secured in pure-bred cattle, sheep and hogs.

Experimental Plots and Agricultural Schools.-Experimental work at each of the three provincial Schools of Agriculture at Claresholm, Olds and Vermilion has been carried on by the Department of Agriculture since October, 1914. The schools are attended principally by young men and women who intend to go back to the farm. The following is a description of the work carried on at each School.

Claresholm.-Adjacent to the Agricultural School buildings, on the Demonstration Farm at Claresholm, are twenty acres devoted to experimental work with grains, grasses, fodder crops, field roots, vegetables, small roots, flowers, trees and shrubs. In the grain section, variety tests are made with wheat, oats, barley, peas, flax and rye. Experiments are conducted for the purpose of comparing yield and quality of grain on summer-fallow, corn land, root land, stubbling in, spring and fall ploughing, packing and not packing, harrowing after seeding

## AGRICULTURE

when the grain is up, depths of seeding, rates of seeding, dates of seeding, etc. A system of crop rotation is being worked out. The grain plots are one-fortieth of an acre in size. Special attention is given to seed selection. Banner oats and Marquis wheat are being grown under the rules of the Canadian Seed Growers' Association. Students in attendance at the school, and farmers in the district, can secure small quantities of Elite and First Generation seed. Corn and peas are being given special attention with the object of discovering a variety of each that will mature annually in southern Alberta.

Much attention is given to grasses, clovers and alfalfas, and so far results are encouraging. It has been demonstrated that alfalfa, white Dutch clover, sweet clovers and alsike do well in southern Alberta. Efforts are being made to obtain a satisfactory permanent grass mixture. Ten different varieties of potatoes, garden vegetables, purple top swedes and white turnips are being tested out. Trees have been planted to serve as wind breaks. Ornamental trees and shrubs of various kinds, annual and perennial flowers have also been started with encouraging results. A start has been made with small fruits: these will receive more attention when the wind breaks afford sufficient shelter.

Olds.-Experiments are in progress to ascertain the varieties of wheat, oats and barley that will grow most successfully in the district and also the best dates and rates for the seeding of grain. Cultural methods are being tried and attention is being paid to roots, especially turnips. With mangolds and sugar beets indifferent success has so far been experienced. Other work started has reference to gardening, the use of vegetables best adapted to the locality and the most suitable varieties of grasses and legumes. Alfalfa has been fairly successful both in broadeast plots and in rows. Amongst six or seven varieties of grasses, timothy, brome and western rye give good promise.

Vermilion.-The Vermilion School of Agriculture was established in 1913 for the training of farmers' sons and daughters in the principles of practical farming and housekeeping, and for conducting agricultural investigations. The school course is of two years' duration with five months each year. The experimental area consists of twenty acres divided as follows: campus, including buildings, driveways, lawns, trees, shrubs, five acres; experimental area for horticultural and agronomy plots, fifteen acres. On these plots experiments are being conducted in rotation, variety tests and cultural methods of crop production. The investigations began in 1914, and deal with questions that are more or less vital to the districts in central and eastern Alberta. Fairly elaborate experiments on crop management include trials of every common field and garden crop in Alberta under dates, rates, and methods of seeding and harvesting. Many varieties of fruits, shrubs and trees are being tried out in regard to their adaptability to soil and elimate. Different varieties and strains of alfalfa, grasses and clovers are being investigated with the object of obtaining crops superior in hardiness and yielding qualities. A considerable amount of work in plant breeding is under way, head and plant selection with cereals, grasses, alfalfas and clovers being followed. Improvement work is in progress

## PRODUCTION

with potatoes. Experiments in cultural methods include comparisons in crop yields when grown on spring or fall ploughed stubble, summerfallow or hoed crop ground, harrowing after crops are up, packer versus no packer, etc. The school produces registered seed for multiplication on the demonstration farms, and experiments are organized amongst students for carrying out on their respective farms.

## Bhitish Coldmbia.

Department of Agriculture.-Experiments are being carried out by the Live Stock and Horticulture branches. The Live Stock branch is conducting one experimental plot of 13 acres, another of 10 acres, 11 plots of from four to five acres and six one-acre alfalia plots. Work in drainage and the correcting of the acidity in the soil is being carried out on a plot near Pitt Meadows. Where plots are located in newly-settled districts, the work naturally partakes largely of tests to determine the best crops and varieties for local conditions. On other plots a rotation system suitable fcr the district represented is being established. As far as possible the work is carried on in co-operation with the local Farmers' Institutes, and where practicable the plots are used as a centre of good seed production. The Horticultural branch is operating nine demonstration and experimental orchards of five acres each. These orchards are planted and cared for under a co-operative arrangement by which the owner of the land and the Department share the expense. The agreements cover a five-year period, but in some ceses further agreements are being made. The principal object in most cases is to demonstrate the results which may be secured in various districts by the adoption of the best possible methods. In other cases the orchards are used for experimental tests of varieties and experimental work with cover crops, etc. Three five-acre experimental and demonstration plots are being operated in the Northern Coast section. On these plots a wide range of experimental work in the testing of varieties of grains, grasses, fodder crops, vegetables, small fruits, ete., is being conducted. An Experiment Station for small fruits and vegetables has been operated for three years at Summerland, the owner of the property receiving a direct yearly remuneration. This plot is partly on a commercial basis, and does experimental work with varieties, methods of culture, etc., on the tender kinds of vegetables and on small fruits. At Chilliwack a five-acre plot was planted with small fruits five years ago to demonstrate the possibilities of these crops in this locality. It is operated under a five-year co-operative agreement with the owner. At Hatzic, an experimental test with varieties of strawberries is being conducted on a three-year basis. In orchards at various points, experimental tests of methods of apple-scab control are being conducted over a three-year period. Other experiments with fertilizers, varieties, spraying, etc., are being carried on at numerous points.

University of British Columbia.-At the University site, Point Grey, 100 acres of land have been cleared and are now under crop. The experimental results obtained by the Department of Agronomy during the past two years, with all classes of field crops, have proved of great value in determining the best methods of bringing heavily timbered

## FORESTRY

uplands under cultivation. The allotments of land made to the Departments of Agronomy and Horticulture are being specially prepared for investigational work. On the 20 acres at present devoted to these departments a wide range of experiments is being conducted. In Animal Husbandry, a dairy herd, representing several breeds, will be purchased during the summer of 1916. Special attention will be given to feed problems in connection with cattle, swine, sheep and poultry. Over 25,000 specimens of the native flora of the province, representing nearly 800 species, have been transferred to the Botanical Garden. This valuable collection constitutes a splendid nucleus for future botanical work, and is now recognized as the most representative botanical collection in British Columbia.

## FORESTRY.

Tables 31-37 consist of statistics and estimates for all forest products in Canada, as collected and published by the Forestry Branch of the Department of the Interior. Statistics collected by the Census of 1911 of forest products on occupied farm lands in Canada were published in the Year Book of 1915, at pp. 223 and 224. To the statistics of production have been added two tables showing (Table 38) the quantity and value of exports of wood pulp, by countries, for the fiscal years 1911-16, and (Table 39) the quantity and value of wood, blocks and other, exported to the United States for the fiscal years 1904-16.

Consumption of Pulpwood, 1916.-The steady growth of the pulp and paper industry of Canada was continued in 1916. Forty-nine firms reported their mills as active in 1916, as compared with fifty firms in 1915; but the total consumption of pulpwood and the total value of the wood used rose much above the preceding year. As shown in Table 33, the total consumption of wood pulp, which was 482,777 cords in 1908, rose to $1,405,836$ cords in 1915 and $1,764,912$ cords in 1916, whilst the total value of the wood used, which was $\$ 2,931,653$ in 1908 , was $\$ 9,426,217$ in 1915 and $\$ 13,104,458$ in 1916 . The Canadian pulp mills in 1916 consumed for the manufacture of pulp in Canada 1,764,912 cords, valued at $\$ 13,104,458$, while $1,068,207$ cords, valued at $\$ 6,866,669$, were exported, making a total production of $2,833,119$ cords, valued at $\$ 19,971,127$ This represents an increase of 25.5 p.c. in pulpwood production and 28.1 p.c. in total value as compared with 1915 . The great increase is due to the demand for pulp and paper caused by the war conditions of the two preceding years. The average value of pulpwood at the mill increased seventy-one cents per cord over that of 1915.

Estimated Value of all Forest Products.-Table 31 is an estimate of the total values of the different classes of forest products for the calendar years 1913 to 1916. The figures are rounded to hundreds of thousands of dollars and form as reliable a summary as can be made from the data available, which are partly actual statistics and partly estimates of the Forestry Branch. The total value for 1916 is $\$ 172,830,000$, as compared with $\$ 172,880,000$ for 1915.

## PRODUCTION

31.-Estimated Vaines of Forest Products, 1913-1916.

| Variety of Timber. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{8} 8$ | \$ | \$ ${ }^{\text {\% }}$ | ${ }^{8}$ |
| Lumber, lath and shingles. . | 71,000,000 | 67,500,000 | 69,750,000 | 66,075,000 |
| Firewood. | 55,000,000 | 60,500,000 | 60,650,000 | 62,000,000 |
| Pulpwood. | 15,000,000 | 15,500,000 | 15,750,000 | 19,975,000 |
| Fence posts and rails. | 10,000,000 | 9,500,000 | 9,000,000 | $8,000,000$ |
| Cross-ties. | 9,000,000 | 9,000,000 | 3,500,000 | 3,750,000 |
| Square timber exported. | 500,000 | 400,000 | 480,000 | 185,000 |
| Cooperage. | 1,900,000 | 1,900,000 | 1,400,000 | 1,250,000 |
| Poles. | 1,800,000 | 700,000 | 500,000 | 575,000 |
| Logs exported. | 900,000 | 850,000 | I,325,000 | 850,000 |
| Tanning materials. | 20,000 | 22,000 | 170,000 | 140,000 |
| Round mining timbers. | 600,000 . | 500,000 | 680,000 | 750,000 |
| Miscellaneous exports.... | 400,000 | 300,000 | 175,000 | 280,000 |
| Miscellaneous products. | 11,000,000 | 10,000,000 | 9,500,000 | 9,000,000 |
| Total. . . . | 177,120,000 | 176,672,000 | 172,880,000 | 172,830,000 |

## 32.-Quantities and Values of the cut of Lumber, Shingles and Lath by

 Previnces, 1915 and 1916.| Province. | LUmber. |  | Shingles. |  | Lath. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity. | Value. | Quantity. | Value. | Quantity. | Value. |
| 1915. | M.F.B.M | \$ | M. | 7 | M. | \$ |
| Ontario. | 1,035,341 | 19,663,950 | 93,497 | 176,317 | $309,022$ | 927,577 |
| British Columbia. | 669,816 1 | 8,414,227 | 1,894,642 | 3,231,508 | 46,345 | 78,201 147395 |
| Quebec. | 1,078,787 | 17,784,415 | 574,797 | 1,264,553 | $\stackrel{55,204}{ }$ | 147,395 |
| New Brunswick. | 633,518 | 9,902,202 | 458,987 | 917,208 52,053 | 288,951 59,921 | 693,795 128785 |
| Nova Scotia. | 294,475 | 4,366,165 | 30,733 | 52,053 910 | 59,921 23,611 | 128,785 47,222 |
| Saskatchewan. | 62,864 42,357 | 880,353 549,430 | 404 81 | 910 149 | 23,611 8,910 | 47,222 14,197 |
| Alberta. | 17,975 | 244,487 | 18,740 | 65,251 |  |  |
| Prince Edward Island | 7,543 | 114,577 | 17,589 | 26,903 | 1,262 | 3,647 |
| Toial. | 3,842,676 | 61,919,806 | 3,089,470 | 5,734,852 | 793,226 | 2,040,819 |
| Ontario.. | \$94,050 | 17,848,675 | 76,374 | 189,422 | 231,829 | 727,159 |
| British Columbia. | 875,937 | 12, 1 32,711 | 2,009,798 | 4,019,197 | 45,729 | 96,900 |
| Quebec. | 818,523 | 13,722,883 | 414,951 | 966,836 | 67,689 | 190,206 |
| New Brunswick. | 513,655 | 8,384,397 | 359,583 | 724,222 | 225,366 | 547,809 |
| Nova Scotia. | 220,718 | 3, 054,309 | 22,772 | 39,814 | 50,205 | 101,609 |
| Saskatchewan. | 84,275 | 1,189,351 |  | - | 25,061 | 36,768 |
| Manitoba. | 57,711 | 850,879 | - | 684 | 17,314 | 37,323 |
| Alberta. | 18,350 | 263,996 | 327 13 | 82.684 | - $\quad 1.4905$ | 1,829 4,337 |
| Prince Edward Isiand | 7,331 | 118,148 | 13,757 | 22,758 | - 1,495 | 4,337 |
| Total | 3,480,550 | 58,365,349 | 2,897,562 | 5,962,933 | 665,588 | 1,743,940 |

Nots.-M.F.B.M. signifies $1,000 \mathrm{ft}$. board measure.

FORESTRY
33.-Total Consumption and Value of Pulpwood, 1908-16.

| Year. | Total Consumption. | Total <br> Value. | Year. | Total Consumption. | Total <br> Value. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cords. | \$ |  | Cords. | \$ |
| 1908. | 482,777 | 2,931,653 | 1913. | 1,109,034 | 7,243,368 |
| 1909. | 622,129 | 3,464,080 | 1914. | 1,224,376 | 8,089,868 |
| 1910. | 598,487 | 3,585,154 | 1915. | 1,405,836 | 9,426,217 |
| 1911. | 672,288 | 4,338,024 | 1916. | 1,764,912 | 13,104,458 |
| 1912. | 866,042 | 5,215,582 |  |  |  |

34.-Quantities and Values of Wood used in the manufacture of Puip, 1914-16.


Diagram No. 1
PULPWOOD CONSUMPTION, BY PROVINCES, 1916


Dingram No. 2
PULPWOOD CONSUMPTION, BY SPECIES, 1916


Diagram No. 3
PULPWOOD CONSUMPTION, BY PROCESSES, 1916


## FORESTRY

35.-Kinds of Wood used in the manufacture of Pulp by Quantities and Values, 1914, 1915 and 1916.

| Kinds ol Wood. | 1914. |  |  | 1915. |  |  | 1916. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity. | Value. | Average Value. | Quantity. | Value. | A verage Valua. | Quantity. | Value. | Average Value. |
|  | Cords. | 1 | \$ cts. | Cords. | \$ | \$ cts. | Cords. | \$ | 5 cts, |
| Spruce. | 836,387 | 5,605,926 | 6.70 | 998,156 | 7,057,572 | 7.07 | 1,203,557 | 9,219,414 | 7.66 |
| BalmamiFir | 314,183 | 2,067,434 | 8.58 | 307,219 | 1.795 .372 | 5.84 | 433,154 | 3,167,31t | 7.31 |
| Poplar. ......... | 3, 3 , 845 | 26,470 | 6.81 | 3,243 | 22,503 | 6.94 | 6,177 | 41,695 | 6.75 |
| Iack Pine. . . . . | 24,715 | 135,762 | 5.49 | 41,253 | 225,359 | 5.37 | 30.717 | 192,405 | 4.84 |
| Tutal. | 1,224,376 | 3,089,868 | 6.61 | 1,405,836 | 9,426,217 | 6.71 | 1,764,912 | 13,104,458 | 7.42 |

36.-Quantities of Wood used and of Pulp manufactured, 1914-1916.

WOOD USED.

| Process of I Manufacture. |  | Quebec. | Ontario. | New Brunswick. | Nova Scotia. | British Columbia | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cords. | Cords. | Cords. | Cords. | Cords. | Cords. |
| Mechanical. | . 1914 | 394,32] | 202,715 | 4,319 | 10,777 | 32,792 | 644,924 |
|  | 1915 | 425,6\% | 247, 825 | 8,344 | 20,870 | 41,111 | 743,776 |
|  | 1916 | 448,938 | 308,416 | 7,154 | 14,437 | 48,313 | 827,258 |
| Sulphite. | . 1914 | 113,006 | 231,754 | 45,020 | - | 47,321 | 437,101 |
|  | 1916 | 101,225 | 212.802 | 107.488 | - | $49.42+$ | 470,949 |
|  | 1916. | 285,761 | 309,030 | 72,440 | - | 60,684 | 727,945 |
| Sulphate. | . 1914 | 125,384 | 13,282 | - | - | - | 138.666 |
|  | 1915 | 164,811 | 20,000 | - | - | - | 184,811 |
|  | 1816 | 181,818 | 20,136 | - | - | - | 201,954 |
| Soda. | . 1914 | 3,785 | - | - | - | - | 3,785 |
|  | 1915 | 6,300 | - | - | - | - | 6,300 |
|  | 1916 | 7,755 | - | - | - | - | 7,755 |
| All processes. | . 1914 | 636,496 | 447,751 | 49,339 | 10,777 | 80,113 | 1,224,476 |
|  | 1915 | 697,962 | 480,627 | 115,842 | 20,870 | 90,535 | 1,405,836 |
|  | 1916 | 924,272 | 637,612 | 79,594 | 14,437 | 108,997 | 1,764,912 |

## PRODUCTION

36.-Quantities of Wood used and of Pulp manufactured, 1914-1916.-concfuded.

PULP MANCFACTURED.

| Process of Manufacture. |  | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mechanical. | . 1914 | 394,321 | 202,715 | 4,319 | 10,777 | 32,792 | 644,924 |
|  | 1915 | 425,626 | 247, 325 | 8,344 | 20,870 | 41,11] | 743,776 |
|  | 1916 | 448,938 | 308,416 | 7,154 | 14,437 | 48,313 | 827,258 |
| Sulphite. | . 1914 | 56,503 | 115,877 | 21.510 | - | 23,660 | 217,550 |
|  | 1915 | 50,612 | 106,401 | 53,749 | - | 24,712 | 235,474 |
|  | 1916 | 142,880 | 154,530 | 36,220 | - | 30,342 | 363,972 |
| Sulphate. | . 1914 | 62,692 | 6,641 | 1,000 | - | - | 70,333 |
|  | 1915 | 82,405 | 10,000 |  | - | - | 92,405 |
|  | 1916 | 90,909 | 10,068 | - | - | - | 100,977 |
| Soda. | . 1914 | 1,893 | - | - | - | $\cdots$ | 1,883 |
|  | 1915 | 3,150 | $\cdots$ | - | - | - | 3,150 |
|  | 1916 | 3,877 |  |  | - | - | 3,877 |
| All processes. | . 1914 | 515,409 | 325,233 | 26,829 | 10,777 | 56,452 | 934,700 |
|  | 1915 | 561,793 | 364,226 | 62.1493 | 20,870 | 65,822 | 1,074,805 |
|  | 1916 | 686,604 | 473,014 | 43,374 | 14,437 | 78,655 | 1,296,084 |

## 37.-Quantities and Values of Cross-ties and Poles purchased by Railway and Electric Companies, 1915 and 1916.

| Purchased by | 1915. |  |  | 1916. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity. | Value. | Average Value. | Quantity. | Value. | Average Value. |
|  | No. | \$ | \$cts. | No. | \$ | \$ cts. |
| Steam Railtays: Cross-tics. | 7,399,753 | 3,229,000 | 0.44 | 7,572,878 | 3,189,834 | 0.42 |
| Telephone and telegraph poles. | 109,850 | 165,639 | 1.53 | 136,065 | 221,552 | 1.63 |
| Electric Railways: Cross-ties. | 192,777 | 100,029 | 0.52 | 266,637 | 117,485 | 0.44 |
| Poles ${ }^{1}$ | 69,398 | 285,200 | 4.11 | 46,252 | 205,602 | 4.45 |
| Total cross ${ }^{\text {dies }}$ | 7,592,530 | 3,329,029 | 0.44 | 7,839,515 | 3,397,319 | 0.42 |
| Total poles. | 179,248 | 450,848 | $2.5 i$ | 182,317 | 427,15! | 2.34 |

'Includes poles purchased by Power and Light Companies.

FORESTRY
38.-Exports from Canada of Wood Pulp, by Countries, in the fiscal years 1911-1916.


PRODUGTION
39.-Quantity and Value of Wood, Blocks and Other, for Pulp, exported to the United States, 1904-1916.

| Fiscal Year. | Cords. | \$ | Fiscal Year. | Cords. | \$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1904. | 479,238 | 1,788,049 | 1911. | 936,791 | 6,092,715 |
| 1905. | 593,624 | 2,600,814 | 1912. | 879,775 | 5,697,901 |
| 1906. | 614,286 | 2,649,106 | 1913. | 1,003,594 | 6,806,445 |
| 1907 (9 mos.). | 452,846 | 1,998,805 | 1914. | 1,089,384 | 7,388,770 |
| 1908.. .. | 901,861 | 4,655,371 | 1915... | 1,010,914 | 6,817,311 |
| 1909.. | 794,986 | 4,356,391 | 1916. | 879,934 | 5,743,847 |
| 1910.. | 965,271 | 6,076,628 |  |  |  |

Nore.-From 1902 to 1916 the exports from Canada of Wood, Blocks and Other, for Pulp went only to the United States; quantities were not given prior to 1904.

FISHERIES.
Capital Invested.-The estimated total capital invested in the fisheries amounted in $1915-16$ to $\$ 25,855,575$, as compared with $\$ 24,733,162$ in 1914-15. Of the total for $1915-16$ the sum of $\$ 23,260,456$ was invested in connection with the sea fisheries and $\$ 2,595,119$ in connection with the inland fisheries. The value of the vessels and boats is represented by $\$ 8,940,458$ in $1915-16$ as against $\$ 8,348,572$ in 1914-15, and the value of the fishing gear, canneries, fish-houses and other fixtures by $\$ 16,915,107$ in $1915-16$ as against $\$ 16,384,590$ in 1914-15. Table 40 shows the distribution of capital amongst the various descriptions of vessels, boats, nets, traps, etc., used in both sea and inland fisheries for the fiscal year 1915-16. ${ }^{1}$

Number of Fishermen.-There were 102,182 persons employed in the fishing industry during the year 1915-16, as compared with 94,513 in 1914-15, the sea fisheries engaging 86,766 persons and the inland fisheries 15,416 , Of the total in 1915-16, 9,541 were employed on vessels, tugs and smacks, 65,321 on boats, and 27,320 on shore in canneries, freezers, smoke-houses, etc. ${ }^{1}$

Fishing Bounties.-Under an Act of 1882 (45 Vict., c. 18), passed for development of the sea fisheries and encouragement of the building of fishing vessels, provision was made for the distribution in bounties of $\$ 150,000$ annually among the owners of fishing vessels and fishermen engaged in fishing from boats in the deep sea fisheries of Canada. An Act of 1891 (54-55 Vict., c. 42 ) increased the amount to $\$ 160,000$. By Order-in-Council of January 19, 1916, made under the provisions of the Revised Statutes of 1906, c. 46 , the distribution of the appropriation of $\$ 160,000$ for the year $1915-16$ was made on the following basis: $\$ 1$ per registered ton to owners of vessels, $\$ 590$ to each vessel fisherman, $\$ 345$ to each boat fisherman and $\$ 1$ per boat to owners of fishing boats. The number of vessels which received bounties in 1915-16 was 941 with an aggregate tonnage of 23,638 , a decrease of 14 vessels and 173 tons, as compared with 1914-15. The number of boats on which bountics were paid was 13,926 , and the number of boat fishermen who received bounties was 24,670 , an increase of 665 boats and of 1,842 men as compared with 1914-15. The total number of fishermen in vessels and boats to whom bounties were paid in 1915-16 was 30,777, a net increase of 1,827 as compared with the previous year. The number
${ }^{1}$ For similar statistics of previous years, see Canada Year Book of 1911, p. 390. Als fnr a description of the extent of Canadian fisheriea and the methods of capture, see edition of 1914 , page 230 .

FISHERIES
of claims filed in 1915-16 was 14,877, an increase of 596 over 1914-15, and the number paid was 14,857 , or 641 more than in the previous year. The total fishing bounties paid since 1882 amount to $\$ 5,377,186$.

Table 41 shows by provinces the number of fishermen who received bounties and the amount of the bounties paid to them during each of the fiscal years 1912-1915.
40.-Number and Value of Fishing Vessels, Boats, Nets, Traps, etc., used in the Sea and Inland Fisheries of Canada, 1915-1916.

| Desoription. | Sea Fisheries. |  | Inland Fisheries. |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | 8 | No. | $\$$ | No. | \$ |
| Steam fishing vessels... | 57 | 826,693 | 142 | 673,100 | 198 | 1,499,793 |
| Sailing and gasoline vessels.. | 1,294\% | 2,812,0no |  | - | 1,294. | 2,812,000 |
| Boats, sail and row | 23,551 | 1,052,754 | 3,888. | 134,007 | 27,439 | 1,186,761 |
| " gasoline.. | 10,262 | 2,864,068 | 835 | 295,125 | 11,097 | 3,159,193 |
| Carrying smacks. | 491 | 282,71] |  |  | 491 | 282,711 |
| Gill nets, seimes, trap and smelt nets, etc. | 7,824 | 2,587,000 | - | 957,087 | - | 3,54.4,087 |
| Weirs. | 794 | 534,890 | 184 | 67,200 | $97 \varepsilon$ | B02,090 |
| Trawls. | 21,101 | 225,833 | - | - | 21,101 | 225,833 |
| Spears. | - |  | 419 | 1,087 | 419 | 1,087 |
| Skates of gear | 1,950 | 28,500 |  |  | 1,956 | 28,500 |
| Hand lines. | 67,076 | 54,368 | 109,525 | 35,892 | 176,601 | 90,260 |
| Lobster traps. | 1,371,774 | 1,355,851 | - |  | 1,371,774 | 1,355,851 |
| Salmon " | 86 | 3,071,698 | - | - | 86 | 3,071,698 |
| Clam | 1.9 | 28,200 | - | - | 19 | 28,200 |
| Sardine | 5 | 349,000 | - | - | 5 | 349,000 |
| Freezers and icehouses. | 796 | 2,558,090 | 866 | 289,978 | 1,662 | 2,848,068 |
| Smoke and fishhouses. | 8,812 | 1,527,162 | 197 | 14,740 | 9,009 | 1,541,902 |
| Fishing piers and wharves. | 2,643 | 2,207,538 | 230 | 86,563 | 2,873 | 2,274,101 |
| Whaling stations... | , | 180,855 | - | - |  | 180,855 |
| Oil factories. .. | 1 | 40,000 | - | - | 1 | 40,000 |
| Fishing huts and cottages, etc. | -- |  | 55 | 60,000 | 55 | 60,000) |
| Scows, pile drivers, ete. | 576 | 35,46C |  | - | 576 | 35,460 |
| Eel traps. | - |  | 170 | 340 | 170 | 340 |
| Crah traps. | 75 | 750 | - | - | 75 | 750 |
| Salmon traps. | 2 | 6,000 | - | - | 2 | 6,000 |
| Total, 1915-16... | - | 23,260,456 | - | 2,595,119 | - | 25,855,575 |
| Total, 1914-15... | - | 22,331,072 | - | 2,402,090 | - | 24,733,162 |
| Number of men employed on vessels | 8,001 | - | 757 | - | 8,758 | - |
| Number of men employed on boats. | 52,452 | - | 12,869 | - | 65,321 | - |
| Number of men employed on carrying smacks. | 783 | - | - | - | 783 | - |
| Number of persons employed in fishhouses, freezers, canneries, etc | 25,530 | - | 1,790 | - | 27,320 | - |
| Total.. | 86.766 | - - | 15,416 |  | 102,182 | - |

PRODUCTION゙
41.-Government Bounties to Fishermen in the fiscal years 1912 to 1915.

| Province. | Number of men who received bounties. |  |  |  | Value of bounties paid. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1912. | 1913. | 1914. | 1915. | 1912. | 1913. | 1914. | 1915 |
|  | No. | No. | No. | No. | $\$$ | 8 | 8 | 5 |
| Prince Edward Is'd | 2,262 | 2,328 | 2,349 | 2,263 | 11,119 | 11,082 | 10,340 | 9,514 |
| Nova Scotia., | 14,307 | 14,300 | 15,364 | 15,560 | 97,904 | $\mathbf{9 3 , 4 5 6}$ | 94,99) | 90,611 |
| New Brunswick. | 2,083 | 2,225 | 2,528 | 2,705 | 15,110 | 16,385 | 17,536 | 17,610 |
| Quebec... | 7,906 | 8,383 | 8,709 | 10,249 | 35,863 | 37,738 | 36,717 | 41,006 |
| Total . | 26,558 | 27,236 | 28,950 | 30,777 | 159,996 | 158,661 | 159,584 | 158,741 |

Inland Fish Markets.-Other government assistance to the fishing industry takes the form of encouraging the development of markets for fresh fish in the interior of the country by payment of one-third of the ordinary express charges on shipments of fresh fish from the Atlantic coast to points as far west as the eastern boundary of Manitoba and from the Pacific coast as far east as that boundary. Cold storage cars by fast freight are placed at the disposal of shippers from the Atlantic seaboard, and aid is rendered in the building of small cold storage establishments for the storing of bait. Fish-breeding is carried on by the Dominion Government upon an extensive scale, the expenditure for this service in $1915-16$ amounting to $\$ 275,079$. The hatcheries in operation number altogether 59, including seven subsidiary hatcheries; there are also retaining ponds for Atlantic salmon. The hatcheries are situated in Prince Edward Island (3), Nova Scotia (13), New Brunswick (11), Quebec (7), Ontario (8), Manitoba (4), Saskatchewan (1), Alberta (1) and British Columbia (11). In addition, there is one in British Columbia which is operated by the British Columbia Packers' Association.

Value of Fisheries.-As shown in Table 42, the total marketed value of all kinds of fish, fish products and marine animals, taken by Canadian fishermen in both the sea and inland fisheries during the year ended March 31, 1916, amounted to $\$ 35,860,708$, as compared with $\$ 31,264,631$ in 1914-15. To the total amount in 1915-16 the sea fisheries contributed $\$ 31,241,502$ and the inland fisheries $\$ 4,619,206 .{ }^{1}$

[^14]FISHERIES
12.-Quantities and Values of all Fish marketed in Canada in 1914-15 and 1915.16.


## PRODUCTION

42.-Quantities and Values of all Fish marketed in Canada in 1914-15 and 1915-16 -concluded.

| Kinds of Fish. |  | 1914-15. |  | 1915-16. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quantity. | Value. | Quantity | Value. |
| Canada-con. <br> Shad, fresh. | cwt. | 4,684 | \% ${ }_{36,509}$ | 8,879 |  |
| Smelts. | ${ }^{4}$ | 93,771 | 837,682 | 67,607. | 632,733 |
| Soles. | ${ }^{\prime}$ | 4,824 | 36,648 | 3,773 | 27,848 |
| Squid. | bbl. | 2,719 | 9,954 | 5,179 | 22,429 |
| Sturgeon. | ewt. | 4,871 | 69,447 | 4,363 | 62,687 |
| Sturgeon caviare. | * | 93 | 9,417. | 82 | 8,330 |
| Sword-fish. | * | 4,982 | 24,780 | 18,527 | 106,090 |
| Trout. | " | 67,890 | 623,504 | 115,999 | 870,209 |
| Tom cod. | * | 20,017 | 40,607 | 18,537 | 37,007 |
| Tongues and sounds. | ${ }^{\text {a }}$ | 1,045 | 7,565 | 1,046 | 5,802 |
| Tullibee. | $\cdots$ | 50,946 | 156,529 | 55,787 | 165,569 |
| Whale oil. | . gal. | 926,900 | 283,154 | 710,188 | 144,209 |
| Whitefish. | cwt. | 159,894 | 975,685 | 153,529 | 1,048,641 |
| Fish, all other, etc. .... |  | $-1$ | 553,664 | - | 626,776 |

43.-Quantities and Values of the catch of the Iniand Fisheries of Canada, 1914-15 and 1915-16.

| Kinds of Fish. |  | 1914-15. |  | 1915-16. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quantity | Value. | Quantity. | Value. |
|  |  |  |  |  | \$ 679 |
| Salmon, fresh. | cwit. | 80,636 | 400,681 | 105,852 | 523,300 |
| Herring, smoked. | " | 1,202 | 12,020 | 758 | 7,580 |
| Herring, pickled.. | bbl. | 3,089 | 30,890 | 3,334 | 33,340 |
| Catfish.. | cwt. | 6,823 | 52,147 | 8,061 | 60,923 |
| Whitefish. | * | 159,894 | 975,685 | 153,529 | 1,048,641 |
| Trout. | * | 63,340 | 576,758 | 111,361 | 811,464 |
| Pickerel. | " | 97,555 | 657,783 | 104,545 | 901,183 |
| Pike. | * | 97,724 | 469,919 | 69,229 | 347,355 |
| Perch. | " | 22,718 | 113,156 | 18,731 | 94,223 |
| Eels. | * | 8,520 | 51,258 | 10,560 | 77,746 |
| Sturgeon. | " | 3,634 | 46,111 | 3,511 | 45,947 |
| Tullibee. | ${ }^{\prime}$ | 50,946 | 156,529 | 55,787 | 165,569 |
| Bass. | * | 715 | 7,521 | 256 | 2,756 |
| Maskinonge. | * | 105 | 1,411 | 303 | 3,451 |
| Alewives, fresh. | " | 4,374 | 8,748 | 2,842 | 5,684 |
| Shad, fresh... | ${ }^{\prime \prime}$ | 922 | 4,610 | 1,571 | 9,125 |
| Shad, salted. | bbl. | 45 | 225 | 35 | 525 |
| Mixed fish. : | CWt. | 116,105 | 375,738 | 113,371 | 385,235 |
| Sturgeon caviare. | ${ }^{*}$ | 991 | 9,017 | ${ }^{81}$ | 8,130 |
| Muilets. | " | 9,158 | 9,158 | 6,673 | 6,673 |
| Gold eyes. | " | 7,327 | 14,643 | 4,055 | 8,473 40,362 |
| Carp. all other... | * | 27,897 | 55,794 | 20,181 | $\begin{array}{r}40,362 \\ 3,842 \\ \hline\end{array}$ |
| Total... |  | $-$ | 4,066,374 | - | 4,619,206 |

Note. The figures in Table 43 are also included in Table 42.

FISHERIES
44.-Total Value of Fisheries by Provinces in the fiscal years 1912-1916.

| Province. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Prince Edward Island. | $\underset{1,196,396}{\$}$ | $\begin{gathered} \$ \\ 1,379,905 \end{gathered}$ | $\begin{gathered} \$ \\ 1,280,447 \end{gathered}$ | $\underset{1,261,666}{\$}$ | $\stackrel{\$}{933,682}$ |
| Nova Scotia. | 9,367,550 | 7,384,055 | 8,297,626 | 7,730,191 | 9,166,851 |
| New Brunswick. | 4,886,157 | 4,264,054 | 4,308,707 | 4,940,083 | 4.737,145 |
| Quebec. | 1,868,136 | 1,988,241 | 1,850,427 | 1,924,430 | 2,076,851 |
| Ontario. | 2,205,436 | 2,842,878 | 2,674,685 | 2,755,291 | 3,341,182 |
| Manitoba... | 1,113,486 | 800,149 | 606,272 | 849,422 | 742,925 |
| Saskatchewan. | 139,436 | 111,839 | 148,602 | 132,017 | 165,888 |
| Alberta. | 102,325 | 51,616 | 81,319 | 86,720 | 94,134 |
| British Columbia. | 13,677,125 | 14,455,488 | 13,891,398 | 11,515,086 | 14,538,320 |
| Yukon. | 111,825 | 111,239 | 68,265 | 69,725 | 63,730 |
| Total for Canada. | 34,667,872 | 33,389,464 | 33,207,748 | 31,264,631 | 35,860,708 |

45.-Total Value of the Fisheries of Canada in the fiscal years 1870-1916.

| Years. | Value. | Years. | Value. | Years. | Value. | Years. | Value. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1870. | $\begin{gathered} \$ \\ 6,577,391 \end{gathered}$ | 1882. | $\begin{gathered} \$ \\ 16,824,092 \end{gathered}$ | 1894. | $\begin{gathered} \$ \\ 20,719,573 \end{gathered}$ | 1906. | $\begin{gathered} \$ \\ 26,279,485 \end{gathered}$ |
| 1871. | 7,573,199 | 1883. | 16,958,192 | 1895. | 20,199,338 | 1907-08 | 25,499,349 |
| 1872. | 9,570,116 | 1884. | 17,766,404 | 1896. | 20,407,425 | 1908-09 | 25,451,085 |
| 1873. | 10,754,997 | 1885. | 17,722,973 | 1897 | 22,783,546 | 1909-10 | 29,629,167 |
| 1874. | 11,681,886 | 1886. | 18,679,288 | 1898. | 19,667,121 | 1910-11 | 29,965,433 |
| 1875. | 10,350,385 | 1887 | 18,386,103 | 1899. | 21,891,706 | 1911-12 | 34,667,872 |
| 1876. | 11,117,000 | 1888. | 17,418,510 | 1900 | 21,557,639 | 1912-13 | 33,389,464 |
| 1877 | 12,005,934 | 1889 | 17,655,256 | 1901 | 25,737,158 | 1913-14 | 33,207,748 |
| 1878. | 13,215,678 | 1890. | 17,714,902 | 1902. | 21,959,433 | 1914-15 | 31,264,631 |
| 1879. | 13,529,254 | 1891 | 18,977,878 | 1903. | 23,101,878 | 1915-16 | 35,860,708 |
| 1880. | 14,499,979 | 1892 | 18,941,171 | 1904. | 23,516,439 |  |  |
| 1881 | 15,817,162 | 1893 | 20,686,661 | 1905. | 29,479,562 |  |  |

## PRODUCTION

46.-Values of Experts and Imports of Fish, 1902-1916.

| Fiscal <br> Year. | Exports of fisheries, domestic. | Imports of fish for home consumption. |  | Fiscal Year. | Exports of fisheries, domestic. | Imports of fish for home consumption. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Dutiable. | Free. |  |  | Dutiable. | Free. |
| 1902.. | $\stackrel{\$}{8}$ | $\underset{591,064}{\$}$ | $\$$ | 1910. | $\stackrel{\$}{15,663,162}$ | $\stackrel{\$}{909,036}$ | $\stackrel{8}{815,703}$ |
| 1908. | 11,800,184 | 629,545 | 633,680 | 1911. | 15,675,544 | 1,123,581 | 669,033 |
| 1904. | 10,759,029 | 704,577 | 685,936 | 1912. | 16,704,678 | 1,203,045 | 984,458 |
| 1905. | 11,114,318 | 713,264 | 630,660 | 1913. | 16,336,721 | 1,519,571 | 910,923 |
| 1906. | 16,025,840 | 265,410 | 1,152,253 | 1914. | 20,623,560 | 1,469,305 | 635,231 |
| 1907 | 10,362,142 | 699,218 | 862,880 | 1915. | 19,687,068 | 1,080,225 | 568,880 |
| 1908. | 13,867,367 | 795,612 | 1,026,996 | 1916. | 22,377,977 | 804,398 | 537,342 |
| 1909. | 13,319,664 | 746,315 | 814,770 |  |  |  |  |

${ }^{1}$ Nine months.
47.-Exports of the Fisheries, the Produce of Canada, by principal commeries, in the fiscal years 1915.1916.


## MINERALS.

Mineral Statistics.-The results of the census of mineral production, taken in 1911, were published in the Year Book of 1913 (pages 196199). In the present edition the Canadian statistics given are limited to those of the Dominion Government and of the Departments of Mines of the Provincial Governments of Nova Scotia, New Brunswick, Quebec, Ontario, Alberta and British Columbia. To the statistics of production in this section have been added statements of the imports of Portland cement (Table 66), of the imports of anthracite and bituminous coal (Table 67) and of the exports of coal (Table 68).

Dominion Department of Mines.-According to the annual preliminary report of the Division of Mineral Resources and Statistics of the Dominion Department of Mines, the total value of the metal and mineral production of 1916 was $\$ 177,357,454$, as compared with $\$ 137,109,171$, the finally revised figures of 1915 . This is an increase of $\$ 40,248,283$, or 29.3 p.c. The previous maximum value of the mineral production was $\$ 145,634,812$ in 1913.

The war has had a pronounced effect not only in stimulating the production of those metals such as nickel, copper and zine, iron and steel, molybdenum, etc., which are used extensively for war purposes, but also in increasing the production of other products such as chromite and magnesite which can only now be obtained with difficulty, if at all, from sources previously available. The general industrial activity in metallurgical operations and in the manufacture generally of munitions of all kinds, including the freight movements required, have in turn increased the demand for fuel, which has been met in Western Canada at least by large increases in coal production. Increased production in quantity has in most instances been accompanied by large increases in prices, thus further enhancing the total value of the production. Considerable progress has been made during the year in establishing and increasing smelting and refining capacities of which the installation of electrolytic zinc and copper refineries at Trail, and the beginning of the construction of a nickel refinery at Port Colborne, Ont., are conspicuous examples. In addition, mention should be made of the production of metallic magnesium at Shawinigan Falls, of ferro-molybdenum at Orillia and Bellevilie, of metalic arsenic at Thorold, and of stellite, the cobalt alloy for high speed tool metal, at Deloro, and of the increased capacity for the production of steel, particularly the installation of electric furnaces. The mining output has been restricted and the efficiency of its operation considerably reduced by the withdrawal for war service of a large proportion of the more highly experienced labour and engineering supervision. Higher costs have tended to offset the advantages to be derived from higher prices of output and in the case of gold mining have been a distinct burden.

Increase or Decrease in Principal Products, 1916.-From Table 48 it will be noted that there has been an increased production of nearly all metals, with the exception of lead and silver. The total value of the metallic production in 1916 was $\$ 107,040,035$, as compared with $\$ 75,814,-$ 841 in 1915, an increase of $\$ 31,225,194$, or 41.2 p.c. The total value of the non-metallic production, including clay and quarry products, in

## PRODUCTION

1916, was $\$ 70,317,419$, as compared with $\$ 61,294,330$ in 1915 , an increase of $\$ 9,023,089$, or 14.7 p.c. The aggregate production of structural materials showed a slight decrease, the value in 1916 being $\$ 17,301,726$, as against $\$ 17,920,759$ in 1915. The total of all other non-metallics increased from $\$ 43,373,571$ to $\$ 53,015,693$ in 1916 . Of gold the production in 1916 is estimated at 926,963 fine oz., valued at $\$ 19,162,025$, as compared with 918,056 fine $0 z$., valued at $\$ 18,977,901$ in 1915 . an increase of $\$ 184,124$, or about 1 p.c. It is the largest production since 1902. The highest production recorded was $\$ 27,908,153$ in 1900 , and the lowest since then was $\$ 8,382,780$ in 1907 The production of silver in 1916 was $25,669,172$ fine oz., valued at $\$ 16,854,635$, as against $26,625,960$ fine oz., valued at $\$ 13,228,842$ in 1915, a decrease of 3.6 p.c. in quantity, but an increase of 27 p.e. in value. Copper has shown large increases during the past three years. In 1916 the total copper contents of smelter products credited to Canadian ores and estimated recoveries from ores exported amounted to $119,770,814 \mathrm{lb}$., which would be worth $\$ 32,580,057$ at the average monthly price of refined copper in New York, 27.202 cents per lb. The production in 1915 was 100,785, 150 lb ., and at 17.275 cents per lb., the average price for the year, would be worth $\$ 17,410,635$. There was thus an increase in 1916 of $18,985,664$ lb., or 18.8 p.c., in quantity and $\$ 15,169,422$, or 871 p.c., in total value. Nickel shows a production in 1916 of $82,958,564 \mathrm{lb}$. of the value of $\$ 29,035,497$, as against $68,308,657 \mathrm{lb}$. of the value of $\$ 20,492,597 \mathrm{in}$ 1915; the increase in quantity is at the rate of 21.45 and in value 4169 p.c. The production of lead in 1916 was $41,593,680 \mathrm{lb}$., as compared with $46,316,450 \mathrm{lb}$. in 1915 , a decrease of 10.20 p.c.; in value the respective figures are $\$ 3,540,870$ for 1916 and $\$ 2,593,721$ for 1915 , an increase of 36.52 p.c. The total production of marketable coal in 1916 was $14,461,678$ short tons of the value of $\$ 38,857,557$, as against 13,267,023 tons, value $\$ 32,111,182$, in 1915, an increase of $1,194,655$ tons, or 9 p.c., in quantity and of $\$ 6,746,375$, or 21 p.c., in value. The production of structural materials and clay products, which showed a large falling off in both 1914 and 1915, showed a further decrease in 1916. The total value of the production in 1916 was $\$ 17,301,726$, as against $\$ 17,920,759$ in 1915 and $\$ 26,009,227$ in 1914.

World's Production of Gold and Silver.-Table 65, which is taken from the Annual Report for 1916 of the Director of the United States Mint, gives by countries the quantity and value of the world's production of gold and silver for the calendar years 1914 and 1915. For 1915, the total production of gold amounted to $22,760,788$ fine oz. of the value of $\$ 470,607,144$, as compared with $21,240,416 \mathrm{oz}$. of the value of $\$ 439,-$ 078,263 in 1914 . By countries the Transvaal leads with a total gold production in 1915 of $9,096,106$ oz., the United States being second with $4,887,604$ oz., followed by Australia, third with $1,948,520 \mathrm{oz}$., Russia, fourth with $1,382,867 \mathrm{oz}$., Canada fifth with $918,056 \mathrm{oz}$. and Rhodesia, sixth with $915,029 \mathrm{oz}$. The gold production of the British Empire in 1915 (excluding the British East Indies, the production of which is included with the Dutch East Indies) was 14, 347, 582 fine oz., constituting 63 p.e. of the world's total of $22,760,788 \mathrm{oz}$. The world's production of silver in 1915 was $177,978,435$ fine $o z$. of the value of

## MINERALS.

$\$ 92,356,568$, as compared with $160,669,129 \mathrm{oz}$. of the value of $\$ 88,869,307$ in 1914. By countries the lead in silver production is taken by the United States with $74,961,075$ oz in 1915, followed by Mexico with $39,570,151$ oz and Canada with $26,625,960 \mathrm{oz}$. The silver production of the British Empire in 1915 was $32,486,309 \mathrm{oz}$., or 18 p.c. of the total of $177,978,435 \mathrm{oz}$.

## 48.-Qaantities and Values of Minerals produced in Canada, 1915 and 1916.

| Description. | Quantities. |  | Values. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1915. | 1916.1 | 1915. | 1916.1 |
| Metallic. |  |  | \$ | \$ |
| Copper... lb. | 100,785,150 | 119,770,814 | 17,410.635 | 32,580,057 |
| Gold. . oz. | 918,056 | 926,963 | 18,977,901 | 19,162,025 |
| Pig iron. ton | 158,590 | 115,691 | 1,715,874 | 1,328,595 |
| Lead. lb. | 46,316,450 | 41,593,680 | 2,593,721 | 3.540,870 |
| Nickel. " | 68,308,657 | 82,958,564 | 20,492,597 | 29,035,497 |
| Silver. .il oz. | 26,625,960 | 25,669,172 | 13,228,842 | 16,854,635 |
| Other metallic products. |  | - | 1,395,271 | 4,538,356 |
| Total Metalife | - | - | 75,814,841 | 107,040,035 |
| Non-Metallic. |  |  |  |  |
| Asbestos and asbestic.. ton | 136,842 | 154,516 | 3,574,985 | 5,169,479 |
| Coal. | 13,267,023 | 14,428,278 | 32,111,182 | 38,797,437 |
| Gypsum.... | 474,815 | 341,618 | 854,929 | 730,831 |
| Natural gas. .... M.cu.ft. | 20,124,162 | 25,238,598 | 3,706,035. | 3.924,632 |
| Petroleum. brl. | 215,464 | 198,123 | 300,572 | 392,284 |
| Pyrites. ton | 286,038 | 309,411 | 985,190 | 1,084,019 |
| Salt. * | 119,900 | 124,033 | 600,228 | 668,627 |
| Cement.. brl. | 5,681,032 | 5,359,050 | 6,977,024 | 6,529,861 |
| Clay products. in |  | , | 3,914,488 | 4,196,933 |
| Lime....... . .bush. | 5,047,244 | 5,482,876 | 1,015,702 | 1,089,505 |
| Sand and gravel. .ton | 6,445,717 | - | 1,624,767 | 1,498,009 |
| Stone:- |  |  |  |  |
| Granite. | - | - | 1,525,553 |  |
| Limestone. ${ }_{\text {Marble and sandstone }}$ | - | - | $2,312,081$ 407,363 | 2,326,519 |
| Miscellaneous non-metallic. | - | - | 1,384,233 | 2,376,743 |
| Total non-metallic. | - | $\sim$ | 61,294,330 | 70,317,419 |
| Total metallic. | - | - | 75,814,841 | 107,040,035 |
| Grand Total. | - | - | 137,109,171 | 177,357,454 |

Note.-In Tableg 48 to 61 the ton is the short ton of $2,000 \mathrm{lb}$.
${ }^{2}$ Subject to revision.

## PRODUCTION

49.-Increase or Decrease in Principal Mineral Products, 1916.

| Principal Products. |  | Increase ( + ) or . Decrease (-) in Quantity. |  | Increase ( $\dagger$ ) or Decrease (-) in Value. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Copper. | lb. | + 18,985 664 | p.c. | \$ 42 | p.c. |
| Gold. | oz. | + 18,985,904 | 18.87 | 189,422 | 87.13 0.97 |
| Pig iron, from Cabadian ore. | ton | - 42,904 | 27.05 | - 387,279 | 22.57 |
| Lead.... | lb. | - 4,722,770 | 10.20 | + 947,149 | 36.52 |
| Nickel. | ${ }^{\prime}$ | +14,649,907 | 21.45 | + 8,542,900 | 41.69 |
| Silver. | oz. | - 956,788 | 3.59 | + 3,625,793 | 21.41 |
| Total metallic |  | - | - | +31,225,194 | 41.19 |
| Asbestos and Asbestic. | ton | $\pm \quad 17,674$ | 12.91 | + 1,585,494 | 44.35 |
| Coal. |  | + 1,194,655 |  | + 6,746,375 | 21.01 |
| Gypsum. | " | 133,197 | 28.05 | - 124,098 | 14.52 |
| Graphite |  | + 1,336 | 50.70 | $+\quad 161,139$ | 129.71 |
| Magnesite. |  | + 40,634 | 274.94 | + 437,245 | 345.40 |
| Quartz |  | + 8,695 |  | + 36,653 | 1.87 |
| Natural gas. | m. cu. ft. | + 5,114,406 | 25.41 | + 216,997 | 5.86 |
| Petroleum. | brl. | - 17,341 |  | + 91,712 | 30.51 |
| Pyrites. | ton | $+\quad 23,373$ | 8.17 | $+\quad 98,829$ | 10.03 |
| Salt. |  | + 4,133 | 3.45 | + 68,401 | 11.40 |
| Cement. | brl. | 321,982 | 5.67 | - 447,163 | 6.41 |
| Clay products. |  |  | - | + 282,445 | 7.22 |
| Lime. $\because$ | bush | + 435,632 | 8.63 | 73,803 | 7.28 |
| Sand and Gravel. |  | - |  | 126,758 | 7.80 |
| Stone. |  | - |  | - 376,938 | 8.88 |
| Total non-metalic |  | - |  | + 9,023,089 | 14.72 |
| Grand total..... |  | $-$ | - | +40,248,283 | 29.35 |

50.-Mineral Production of Canada in the Calendar Years 1915 and 1916.

| Minerals. | 1915. |  | 1916. ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Quantity. | Value. | Quantity . | Value. |
|  |  | \$ |  | * |
| Actinolite.. . . ton. | 220 | 2,420 | 250 | 2,750 |
| Antimony, refined. lb. | 59,440 | 11,888 | - | - |
| Antimony, ore. ton | 1,341 | 81,283 | 794 | 48,158 |
| Arsenic, white. " | 2,396 | 147,830 | 2,186 | 262,349 |
| Asbestos. | 111,142 | 3,553,166 | 136,016 | 5,133,332 |
| Asbestic. | 25,700 | 21,819 | 18,500 | 27,147 |
| Barytes. | 550 | 6,875 | 1,368 | 19,393 |
| Bricks, common. No. | 234,732,882 | 1,755,187 |  |  |
| Bricks, pressed. " | 49,817,160 | 492,774 | - | 2,358,245 |
| Bricks, paving. | 1,227,647 | 20,694 |  | 2,058,245 |
| Bricks, other. ${ }^{\text {" }}$ | 1,008,567 | 6,977,097 |  |  |
| $\begin{array}{ll}\text { Cement, Portland. } & \text { brl. } \\ \text { Chromite. } & \text { ton. }\end{array}$ | 5,681,032 | $6,977,024$ 179,543 | 5,37,030 ${ }^{2}$ | $6,529,861$ 299,753 |
| Coal. . . . . ton . | 12,267,023 | 32,111,182 | 14,428,278 | 38,797,437 |
| Cobalt metallic and contained in oxide, ete | 504,212 | 536,268 | 841,859 | 926,045 |

${ }^{1}$ Subject to revision. ${ }^{2}$ Crude ore.

MINERALS.
50.-Mineral Production of Canada in the Caiendar Years 1915 and 1916-concluded.

| Minerals. | 1915. |  | 1916.1 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Value. | Quantity | Value. |
|  |  | \$ |  | * |
| Copper... lb. | 100,785, 150 | 17,410,635 | 119,770,814 | 32,580,057 |
| Corundum. ton. | - 262 | 33,138 | 67 | 10,307 |
| Felspar " | 14,559 | 57,801 | 19,166 | 71,357 |
| Fire clay and products... $\$$ |  |  |  |  |
| Fire-proofing and architectural terra-cotta. |  | 110,693 <br> 253,401 | - | 1,104,901 ${ }^{2}$ |
| Fluorspar ton. |  | 1877-1 | 1,284 | 10,238 |
| Gold.... oz. | 918,056 | 18,977,901 | 926,963 | 19,162,025 |
| Graphite. ton. | 2,635 | 124,223 | 3,971 | 285,362 |
| Grindstones.. " | 2,580 | 35,768 | 3,328 | 50,982 |
| Gypsum. | 474,815 | 854,929 | 341,618 | 730,831 |
| Iron ore (exports) | 89,730 | 181,381 | 140,608 | 393,689 |
| Kaolin. | 1,300 | 13,000 | 1,750 | 17,500 |
| Lead... lb. | 46,316,450 | 2,593,721 | 41,593,680 | 3,540,870 |
| Lime. ... .bush. | 5,047,244 | 1,015,702 | 5,482,876 | 1,089,505 |
| Manganese. ton. | 201 | 9,360 | 979 | 90,791 |
| Maguesite. " | 14,779. | 126,584 | 55,413 | 563,829 |
| Mica.... |  | 91,905 | 914 | 122,541 |
| Mineral water. \$ |  | 115,274 | - | 114,587 |
| Molybdenite. lb. | 29,210 | 28,450 | 159,000 | 159,000 |
| Natural gas. $\quad$.. m.cu. ft. | 20,124,162 | 3,706,035 | 25,238,568 | 3,924,632 |
| Nickel. .. lb. | 68,308,657 | 20,492,597 | 82,958,564 | 29,035,497 |
| Ochres. .. ton. | 6,248 | 48,353 | 8,811 | 58,711 |
| Peat. ${ }^{\text {a }}$ | 300 | 1,050 | 300 | 1,500 |
| Petroleum. oz. | 215,464 | 300,572 | 198,123 | 392,284 |
| Phosphate. ${ }_{\text {Pr }}$ ton. | 217 | 2,502. | 203 | 2,514 |
| Pig iron from Can. ore. " | 158,595 | 1,715,874. | 115,691 | 1,328,595 |
| Platinum. ${ }_{\text {Pottery }}$. oz. | 23 | 1,063 | 15 | 600 |
| Pottery. . \$ | $\square^{-}$ | 64,900 | - - |  |
| Pyrites. ton. | 286,038 | 985,190 | 309,411 | 1,084,019 |
| Quartz.. " | 127,108 | 205,153 | 135,803 | 241,806 |
| Salt Sand and | 119,900 | 609,226 | 124,033 | 668,627 |
| Sand and gravel. " | 6,445,717 | 1,624,767 |  | 1,498,009 |
| Sand lime-brick. No. | 17,960,802 | 141,742 | 13,825,307. | 113,136 |
| Sewer pipes. |  | 799,446 |  | 716,287 |
| Slate. . .squares. | 26,625,960 | 13,228,842 | 25,669,172 | 16,854,635 |
| Stone, Granite. ${ }^{\text {Squares. }}$ | 387 | 1,525,553 | 1,262 | 1,277,223 |
| Limestone. | - | 2,312,081 | - | 2,326,519 |
| Marble. |  | 158,027 | - | 118,810 |
| Tale Sandstone.. |  | 249,336 | - | 145,711 |
| Tiles, drain. $\quad .$. ton | 11,885 | 40,554 | 10,651 | 36,475 |
| Tripolite.. $\quad .$. ton | 317 | 355,296 | 620 |  |
| 7inc ore... $\quad . . .4$ | 14,895 | 154,938 | 620 | 12,139 |
| Zinc. .lb. | - | 5, | 23,515,030 | 3,010,864 |
| Total.. | - | 137,109,171 | - | 177,357,454 |
| ${ }^{1}$ Subject to revision. <br> ${ }^{3}$ Included with value of fire | ${ }^{2}$ Includes $\mathbf{v}$ clay, etc. | le of drain | tiles and | ery, etc. |

## PRODUCTION <br> 51.-Value of Mineral Production in Canada, 1886-1916.

| $\begin{gathered} \text { Calendar } \\ \text { Year. } \end{gathered}$ | Total Value. | Value per capita | Calendar Year. | Total Value. | Value per capita | Calendar Year. | Total Value. | Value per capita |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{8}$ | \$ cts. |  | \$ | \$cts. |  | \$ | 5 cts . |
| 1886 | 10,221, 255 | 2.23 | 1897 | 28,485,023 | 5.49 | 1908. | 85,557,101 | 13.16 |
| 1887 | 10,321,331 | 2.23 | 1898. | 38,412,431 | 7.32 | 1909. | 91,831,441 | 13.70 |
| 1888. | 12,518,894 | 2.67 | 1899 | 49,234,005 | 9.27 | 1910. | 106,823,622 | 15.44 |
| 1889 | 14,013,11. | 2.96 | 1900 | 64,490,877 | 12.04 | 1911. | 103,220,994 | 14.42 |
| 1890. | 16,763,352 | 3.50 | 1901 | 65,797,911 | 12.16 | 1912. | 135,048,296 | 18.39 |
| 1891. | 18,976,616 | 3.92 | 1902. | 63,231,836 | 11.36 | 1913. | 145,634,812 | 19.34 |
| 1892. | 16,623,415 | 3.39 | 1903. | 61,740,513 | $10.8{ }^{*}$ | 1914. | 128,863,075 | 16.68 |
| 1893. | 20,035,082 | 4.04 | 1904. | 60,082,771 | 10.27 | 1915. | 137,109,171 | 17.29 |
| 1894. | 19,931,158 | 3.98 | 1905 | 69,078,990 | 11.49 | 19161.. | 177,357,454 | 21.79 |
| 1895 | 20,505,917 | 4.05 | 1906. | 79,286,697 | 12.81 |  |  |  |
| 189 | 22,474.256 | 4.3 | 1907 | 86,865.202 | 13.75 |  |  |  |

52.-Value of Minerals produced in Canada by Provinces in the Calendar Years 1915 and 1916.

| Province. | , | 1915. |  | 1916.1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Value. | Per cent. of total. | Value. | Per cent. of total. |
| Nova Scotia |  | 18,088,342 | 13.19 | 19,963,985 | 11.26 |
| New Brunswick. | . | -903,467 | 0.66 | 878,446 | 0.49 |
| Quebec. |  | 11,619,275 | 8.48 | 14,397,909 | 8.12 |
| Ontario. |  | 61,071,287 | 44.54 | 80,379,352 | 45.32 |
| Manitoba. |  | 1,318,387 | 0.96 | 1,819,921 | 1.03 |
| Saskatchewan. |  | 451,933 | 0.33 | 583,708 | 0.33 |
| Alberta. |  | 9,909,347 | 7.23 | 13,336,702 | 7.52 |
| British Columbia. . |  | 28,689,425 | 20.92 | 40,191,744 | 22.66 |
| Yukon Territory |  | 5,057,708 | 3.69 | 5,805,687 | 3.27 |
| Total... |  | 137,109,171 | 100.00 | 177,357,454 | 100.00 |

${ }^{1}$ Subject to revision.
53.-Quantity of Gold produced in Canada by Provinces during the Calendar Years 1862-1916.

| Years. | Nova Scotia. | Quebec. | Ontario. | Alberta. | British Columbia. | Yukon Territory | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ozs. fine. | Ozs. fine. | Ozs. fine. | Ozs. fine. | Ozs. fine. 796,234 | Ozs. fine. | Ozs. fine. 882,947 |
| 1852-1866. | 86,713 25,763 |  | - |  | 120,012 |  | 145,775 |
| 1868.. | 19,377 | - | - | - | 114,792 |  | 134,169 |
| 1869.. | 16,855 | - | - | - | 85,865 |  | 102,720 |
| 1870.. | 18,740 | - | - | - | 64,675 | - | 83,415 |
| 1871.. | 18,139 | - | - | - | 87,048 | - | 105,187 |
| 1872. | 12,352 | - | $\div$ | - | 77,931 | - | 90,283 |
| 1873. | 11,180 | - | - | - | 63,166 |  | 74,346 |
| 1874.. | 8,623 | - | - | - | 89;233 |  | 97,856 |
| 1875. | 10.576 | $\cdots$ | - | - | 119,724 | - | 130,300 |

53．－Quantity of Gold produced in Canada by Provinces during the CaIendar Years

|  |  |  |  N <br>  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { E } \\ 0 \\ 0 \\ 3 \\ 3 \end{gathered}$ |  |  | $1111$ |  |  |  |  |  |  |
| 象耧 | $\begin{aligned} & \dot{8} \\ & \text { 嵲 } \\ & \dot{8} \end{aligned}$ |  |  |  | 웅엉 OROM <br>  |  |  1 CH会が25 <br>  |  | 움웅웅웅 Ho <br>  |
| $\begin{aligned} & \text { ⿷匚 } \\ & \text { 5 } \\ & \text { 今 } \\ & \text { § } \end{aligned}$ | $\begin{aligned} & \dot{9} . \\ & \text { B. } \\ & \stackrel{N}{\circ} \end{aligned}$ | $11111$ | $11111$ |  |  | Mog \%99 |  |  |  |
| $\begin{aligned} & \dot{9} \\ & \text { M } \\ & \text { 总 } \end{aligned}$ | $\begin{aligned} & \text { © } \\ & \text { (1) } \\ & \dot{8} \end{aligned}$ | t1111 | 11111 | 1 感111 | B H g w |  |  | がががが |  |
| $\begin{aligned} & \text { © } \\ & \text { © } \\ & \text { © } \\ & \hline 8 \end{aligned}$ | $\begin{aligned} & \text { 8 } \\ & 8 \\ & 8 \\ & 8 \end{aligned}$ | $1 \text { 为为象芜 }$ |  | BNo M | ~ocge |  | 佥我禺果 |  |  |
|  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Nown } \\ & \text { Now } \\ & \text { Nowsin } \end{aligned}$ |  <br>  |
|  |  | かNos束 |  |  | －sis 犬ix |  |  |  |  |



MINERALS
55.-Quantity and Value of Silver produced in Canada during the Calendar Years 1887-1916.

| Years | Oz . | Value. | Years | Oz . | Value. | Years | Oz. | Value. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$ |  |  | \$ |  |  | \$ |
| 1887... | 355,083 | 347,271 | 1897 | 5,558,456 | 3,323,395 | 1907 | 12,779,799 | 8,348,659 |
| 1888... | 437,232 | 410,998 | 1898 | 4,452,333 | 2,593,929 | 1908 | 22,106,233 | 11,686,239 |
| 1889.. | 383,318 | 358,785 | 1899 | 3,411,644 | 2,032,658 | 1909 | 27,529,473 | 14,178,504 |
| 1890.. | 400,687 | 419,118 | 1900 | 4,468,225 | 2,740,362 | 1910 | 32,869,264 | 17,580,455 |
| 1891... | 414,523 | 409,549 | 1901 | 5,539,192 | 3,285,354 | 1911 | 32,559,044 | 17,355,272 |
| 1892... | 310,651 | 272,130 | 1902 | 4,291,317 | 2,238,351 | 1912 | 31,955,560 | 19,440,165 |
| 1893.. |  | 330,128 | 1903 | 3,198,581 | 1,709,642 | 1913 | 31,845,803 | 19,040,924 |
| 1894... | 847,697 | 534,049 | 1904 | 3,577,526 | 2,047,095 | 1814 | 28,449,821 | 15,593,631 |
| 1895... | 1,578,275 | 1,030,298 | 1905 | 6,000,023. | 3,621,133 | 1915 | 26,625,960 | 13,228,842 |
| 1896... | 3,205,343 | 2,149,503 | 1906 | 8,473,379 | 5,650,455 | 1916 | 25,459,741 | 16.717,121 |

56.-Quantity and Value of Silver produced in Canada, by Provinces, during the Calendar Years 1887-1916.

| Years. | Ontario. |  | Quebec. |  | British Columbia. |  | Y゙ukon Territory. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oz . | \$ | Oz | \$ | Oz . |  | Oz . | \$ |
| 1887 | 190,495 | 186,304 | 146,898 | 143,666 | 17,690 | 17,301 |  |  |
| 1888. | 208,064 | 195,580 | 149,388 | 140,425 | 79,780 | 74,993 |  |  |
| 1889 | 181,609 | 169,986 | 148,517 | 139,012 | 53,192 | 49,787 |  |  |
| 1890 | 158,715 | 166,016 | 171,545 | 179,436 | 70,427 | 73,666 |  |  |
| 1891. | 225,633 | 222,926 | 185,584 | 183,357 | 3,306 | 3,266 |  |  |
| 1892. | 41,581 | 36,425 | 191,910 | 168,113 | 77,160 | 67,592 |  |  |
| 1893. |  | 8,680 | - | 126,439 |  | 195,000 |  |  |
| 1894. | - |  | 101,318 | 63,830 | 746,379 | 470,219 |  |  |
| 1895. |  | - | 81,753, | 53,369 | 1,496,522 | 976,930 |  |  |
| 1896. | $\bigcirc$ |  | 70,000 | 46,942 | 3,135,343 | 2,102,561 |  |  |
| 1897 | 5,000 | 2,990 | 80,475 | 48,116 | 5,472,971 | 3,272,289 |  |  |
| 1898. | 85,000 | 49,521 | 74,932 | 43,655 | 4,292,401 | 2,500,753 | - |  |
| 1899. | 202,000 | 120,352 | 40,231 | 23,970 | 2,939,413 | 1,751,302 | 230,000 | 137,034 |
| 1900. | 161,650 | 99,140 | 58,400. | 35,817 | 3,958,175 | 2,427,548 | 290,000 | 177,857 |
| 1901. | 151,400 | 89,250 | 41,459 | 24,440 | 5,151,333 | 3,036,711 | 195,000 | 114,953 |
| 1902. | 145,000 | 75,032 | 42,500 | 22,168 | 3,917,917 | 2,043,586 | 185,900 | 96,985 |
| 1903 | 17,777 | 9,502 | 28,600 | 15,287 | 2,996,204 | 1,601,471 | 156,000 | 83,362 |
| 1904 | 206,875 | 118,376 | 15,000 | 8,583 | 3,222,481 | 1,843,985 | 133,170 | 76,201 |
| 1905 | 2,451,356 | 1,479,442 | 19,620 | 11,841 | 3,439,417 | 2,075,757 | 89,630 | 54,093 |
| 1906 | 5,401,766 | 3,607,894 | 17,686 | 11,813 | 2,990,262 | 1,997,226 | 63,665 | 42,522 |
| 1907 | 9,982,363 | 6,521,178 | 16,000 | 10,452 | 2,745,448 | 1,793,519 | 35,988 | 23,510 |
| 1908. | 19,398,545 | 10,254,847 | 13,299 | 7,030 | 2,631,389 | 1,391,058 | 63,000 | 33,304 |
| 1909. | 24,822,099 | 12,784,126 | 13,233 | 6,815 | 2,649,141 | 1,364, 387 | 45,000 | 23,176 |
| 1910. | 30,366,366 | 16,241,755 | 7,593 | 4,061 | 2,407,887 | 1,287,583 | 87,418 | 46,756 |
| 1911. | 30,540,754 | 16,279,443 | 18,435 | 9,827 | 1,887,147 | 1,005,924 | 112,708 | 60,078 |
| 1912. | 29,214,025 | 17,772,352 | 9,465 | 5,758 | 2,651,002 | 1,612,737 | 81,068 | 49,318 |
| 1913. | 28,411,261 | 16,987,377 | 34,573 | 20,672 | 3,312,343 | 1,980,483 | 87,626 | 52,382 |
| 1914. | 25,139,214 | 13,779,055 | 57,737 | 31,646 | 3,159,897 | 1,731,971 | 92,973 | 50,959 |
| 1915. | 22,748,609 | 11,302,419 | 63,450 | 31,524 | 3,565,852 | 1,771,658 | 248,049 | 123,241 |
| 1916. | 21,608,158 | 14,188,133 | 98,610 | 64,748 | 3,392,872\| | 2,227,794 | 360,101 | 236.446 |

## PRODUCTION

57.-Qzantity and Value of Copper prodaced in Canada, by Provinces, duriag the Calendar Years, 1886-1916.

| Year | Ontario. |  | Quebec. |  | British Columbia. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lb. | 3 | L.b. | $\delta$ | Lb. | \$ | Lb. | \$ |
| 1886 | 165,00 | 18,150 | ,347,000 | 367,400 | - | - | 3,505,906 | 385,550 |
| 1887 | 322,524 | 36,284 | 2,987,900 | 330,514 |  |  | 3,260,424 | 366,798 |
| 1888 | nil. | nil | 5,562,864 | 927,107 | - |  | 5,502,864 | 927,107 |
| 1889 | 1,466,752 | 201,678 | 5,315,600 | 730,813 |  |  | 6,781,752 | 932.491 |
| 1890 | 1,303,065 | 205,233 | 4,710,006 | 741.920 | - | - | 6,013,671 | 947,153 |
| 1891 | 4,127,697 | 531,234 | 5,401,704 | 695,469 |  |  | 9,529,401 | 1,226,703 |
| 1892 | 2,203,795 | 254,538 | 4,883,480 | 564,042 |  |  | 7,087,275 | 818,580 |
| 1893 | 3,641,504 | 391,461 | 4,468,352 | 480,348 |  |  | 8,104,856 | 871,809 |
| 1894 | 5,207,679 | 497,854 | 2,176,430 | 208,067 | 324,680 | 31,039 | 7,708,789 | 736,960 |
| 1895 | 4,576,337 | 492,414 | 2,242,462 | 241,288 | 952,840 | 102,526 | 7,771,639 | 836,228 |
| 1896 | 3,167,256 | 344,598 | 2,407,200 | 281,903 | 3,818,556 | 415,459 | 9,393,012 | 1,021,960 |
| 1897 | 5,500,652 | 621,023 | 2,474,970 | 279,424 | 5,325,180 | 601,213 | 13,300,802 | 1,501,660 |
| 1898 | 8,375,223 | 1,007,539 | 2,100,235 | 252,658 | 7,271,678 | 874,783 | 17,747,136 | 2,134,980 |
| 1899 | 5,723,324 | 1,007,877 | 1,632,500 | 287,494 | 7,722,591 | 1,359,948 | 15,078,475 | 2,655,319 |
| 1900 | 6,740,058 | 1,091,215 | 2,220,000 | 359,418 | 9,977,080 | 1,615,289 | 18,937,138 | 3,005,922 |
| 1901 | 8,695.831 | 1,401,507/1 | 1,527,442 | 246,178 | 27,608,746 | 4,448,896 | 37,827,019 | 6,096,581 |
| 1902 | 7,408,202 | 861,2781 | 1,640,000 | 190,668 | 29,636,057 | 3,445,488 | 38,684,259 | 4,497,432 |
| 1902 | 7,172.533 | 949,285 | 1,152,000 | 152,467 | 4,359,921 | 4,547,735 | 42,684,454 | 5,649,487 |
| 1904 | 4,913,594 | 630,070 | 702,000 | 97,455 | 35,710,128. | 4,579,110 | 41,383,722 | 5,306, 635 |
| 1905 | 8,779,259 | 1,368;686 | 1,621,243 | 252,752 | 37,692,251 | $5,876,222$ | 48,092,763 | 7,497,660 |
| 1906 | 10,638,231 | 2,050,838 1 | 1,981,169 | 381,92 | 42,990,488 | 8,287,706 | 55,609,888 | 10,720,474 |
| 1907 | 14,104,337 | 2,821,432 1 | 1,517,990 | 303,6594 | 40, 832,720 | 8,168,177 | 56,455,047 | 11,293,268 |
| 1908 | 15,005,171 | 1,981,8831 | 1,282,024 | $169,330 \mid 4$ | 47,274,614 | 6,244,031 | 63,561,809 | 8,395,344 |
| 1909 | 15,746,690 | $2,044,2371$ | 1,088,212 | 141,27235 | 35,658,952 | 4,629,245 | 52,493,863 | 6,814,754 |
| 1910 | 19,259,016 | 2,453,213 | 877,347 | 111,7573 | 35,270,006 | 4,492,693 | 55,692,3691 | 7,094,9941 |
| 1911 | 17,932,263 | 2,219,297 2 | 2,436,190 | 304,503 | 35,279,558 | 4,366,198 | 55,648,011 | 6,885,998 |
| 1912 | 22,250,601 | 3,635,971 | 3,282,210 | 536,346 | 50,526,656 | 8,256,561 | 77,832,127 | 12,718,548 |
| 1913 | 25,885,929 | 3,452,5223 | 3,455,887 | 527,6794 | 45,791,579 | 6,991,916 | 76,976,925 | 11,753,606 |
| 1914 | 28,948,211 | 3,937,53.54 | 4,201,497 | 571,4884 | 41,221,628 | 5,666,966 | 75,738,386 | 10,301,935 |
| 1915 | 39,361,464 | 6,799,6934 | 4,197,482 | 725,115 | 150,692,988 | 9,793,714 | 100,785,150 | 17,410,635 |
| 1916 | 44,997,035\|1 | 12,240,094 ${ }^{5}$ | 5,703,347 | 1,551,424 | 63,642,550 | 17,312,046 | 117,150,028 | 31,867,150 |

PEODUCTION IN YOEON THRRITORY (INCUUDED IN TOTALS.)

|  | L2. | \$ |  | Lb. | \$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1912. | 1,772,660 | 289,674 | 1915..... | 533,216 | 92,113 |
| 1913. | 1,843,530 | 281,489 | 1916... ... | 2,807,096 | 763,586 |
| 1914. | 1,367,050 | 185,946 |  |  |  |

Includes $286,000 \mathrm{lb}$., vałued at $\mathbf{\$ 3 6 , 4 3 1}$, prodnced in Nova Seotia and Yukeo Territory, not given separately.

## MINERALS

58.-Quantity and Value of Nickel produced in Canoda during the Calendar Years 1889-1916.

| Years. | Quantity | Value. | Years | Quantity | Value. | Years. | Quantity. | Value. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lb. | \$ |  | 71 |  |  |  | ${ }^{5}$ |
| 1889 | 830.477 | 498,286 | 1899 | 5,743,000 | $2,067,840$ | 1999 | 20,282,991 | 9,461,877 |
| 1890 | 1,435,742 | 933,232 | 1909 | 7,030,227 | 3,327,707 | 1910 | 37,271,033 | 11.181,310 |
| 1891 | 4,033, 317 | 2,421,208 | 1901 | 9,189,047 | 4,504,573 | 1911 | 34,008,744 | 10,229,623 |
| 1892 | 2,413.717 | 1,399,956 | 1902 | 10,693, 410 | 5,025,003 | 1912 | 44,841,542 | 13.452,463 |
| 1893 | 3,082,989 | 2,071, 151 | 1903 | 12.505,510 | 5,902,204 | 1913 | 49,676,772 | 14,903,032 |
| 1894 | 4,907,430 | 1,870,955 | 1994 | 10,547,883 | 4,219,1533 | 1934 | $15,517,937$ | 13,635, 381 |
| 1895 | 3,888,525 | 1,360,984 | 1905 | 18,876,315 | $\|7,550,526\|$ | $1915$ | 68,308,657 | 20,492,597 |
| 1896 | 3,397,113 | 1,185,990 | 1926 | $\begin{aligned} & 21,490,955 \\ & \hline 189.793 \end{aligned}$ | $8,948,834$ | 1916 | 82,958,564 | 29,035,498 |
| 1897 | $3,997,647$ $5,517,690$ | 1,389, 176 | 1907 1908 | $\left\|\begin{array}{l} 21,189,793 \\ 19,143,113 \end{array}\right\|$ | $\left\|\begin{array}{l} 9,535,403 \\ 8,231,538 \end{array}\right\|$ |  |  |  |
| 1898 | 5,517,690 | 1,820, 838 | 1908 | $\|19,143,111\|$ | $8,231,53 \mathrm{k}$ |  |  |  |

59.-Production of principal Minerals in Canada for the Calendar Years 1909-1916.

|  | Years. | Lead. ${ }^{3}$ |  | Iron Ore. Shipments |  | Zinc Ore. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 43,195,733 | 1,814,221 | '10n. ${ }^{388}$ | ${ }_{568,189}$ |  | 215 |
| 1909. |  | 45,857,424 | 1,602,139 | 268,043 | 659,316 | 18,3712 | 242,699 |
| 1910. |  | 32,987,508 | 1,216,249 | 259,41S | 574,362 | -5,063 | 120,003 |
| 1911. |  | 23,784,999 | 827,717 | 210,344 | 522,319 | 2,590 | 101,072 |
| 1912. |  | 35,763,476 | 1,597,554 | 215,883 | 523,315 | 6,415 | 215,149 |
| 1913. | .. | 37,602,703 | 1,754,705 | 307,634 | 629,843 | 7,889 | 186,827 |
| 1914. |  | 36,337,765 | 1,627,568 | 244,854 | 542,041 | 10,893 | 262,563 |
| 1915. |  | 46,316,450 | 2,593,723 | 398,112 | 774,427 | 14,895 | 554,938 |
| $1916^{1}$. |  | 41,593,681) | 3,340,870 | 339,600 | 814,144 | 235,150 ${ }^{+}$ | 3,010,864 |

${ }^{1}$ Subject to revision. ${ }^{2}$ Includes 7,424 tons shipped in 1908. ${ }^{3}$ All nroduced in
British Columbia. A small quantity was produced in Ontario in 1916. ${ }^{4}$ Cwts of Zinc.
pig Iron.

| Years | Nova Scotia. |  | Quebec. |  | Ontario. |  | Totals. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tons. | \$ | Tons. |  | Tons. | \$ | Tons. | \$ |
| 1909 | 345,380 | 3,453,800 | 4,770 | 125,623 | 407,012 | 6,002,441 | 757,162 | 9,581,864 |
| 1910 | 350,287 | 4,203,444 | 3,237 | 85,255 | 447,273 | 6,956,923 | 800,797 | 11,245,622 |
| 1911 | 390,242 | 4,682,904 | 658 | 17,282 | 526,635 | 7,606,939 | 917,535 | 12,307,125 |
| 1912 | 424,994 | 6,374,910 | - |  | 589,593 | 8,176,089 | 1,014,587 | 14,550,999 |
| 1913 | 480,068 | 7,201,020 | - | - | 648,899 | 9,338,992 | 1,128,967 | 16,540,012 |
| 1914 | 227,052 | 2,951,676 | - | - | 556,112 | 7,051,180 | 783,164 | 10,002,856 |
| 1915 | 420,275 | $5.462,847$ | - |  | 493,500 | 6,129,972 | 913,775 | 11,374,199 |
| 19161 | 470,055 | 7,050,825 | - | - | 699,202 | 9,700,073 | 1,169,257 | 16,750,898 |
| Coat. |  |  |  |  |  |  |  |  |


| Year. | Nova Scotia. | New Brunswick | Saskatchewan. | Aberta. | British Columbia | Yukon <br> Territory. | Total production. | Value. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - | Tons |  |  | T | Tons. | Ton | \$ |
| 19 | 5,652,0 | 49,02 | 192, | 1,994,741 | 2,606, 127 | 7,364 | 10,501,475 | 24,781,236 |
| 1910 | 6,431,14 | 55,45 | 181,156 | 2,894,469 | 3,330,745 | 16,185 | 12,909,152 | 30,909,779 |
| 11 | 7,004,420 | 55,781 | 206,779 | 1,511,036 | 2,542,582 | 2,840 | 11,323,388 | 26,467,646 |
| 1912 | 7,783,888 | 44,780 | 225,342 | 3,240,577 | 3,208,997 | 9,245 | 14,512,829 | 36,019,044 |
| 1913 | 7,980,073 | 70,311 | 212,897 | 4,014,755 | 2,714,420 | 19,722 | 15,012,178 | 37,334,940 |
| 1914 | $7,370,924$ | 98,849 | 232,299 | 3,683,015 | 2,239,799 | 13,443 | 13,637,529 | 33,41 801 |
| 1915 | 7,463,370 | 127,391 | 240,107 | 3,360,818 | 2,065,613 | 9,724 | 13,267,023 | 32,111,182 |
| 1916 | 6,694,728 | 137,058 | 280,83 | 4,563,02 | 2,582,727 | 3,300 | 14,461,678 | 38,857,557 |

${ }^{1}$ Subject to revision.

## PRODUCTION

59.-Production of principal Minerals in Canada for the Calendar Years 1909-1916-concluded.

|  | Years. | Asbestos. |  | Asbestic. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1909. |  | Tons. | \$ | ons. | \$ | 发s | \$ |
| 1910. |  | 63,349 | 2,284,587 | 23,951 | 17,188 | 87,300 | 2,301,775 |
| 1911. |  | 101,393 | 2,505,974 | 24,707 | 17,629, | 102,215 | 2,573,603 |
| 1912. | . | 111,561 | 3,117,572 | 27,740 | 19,707 | 136,301 | 2,943,108 |
| 1913. |  | 136,951 | 3,830,909 | 24,135 | 19,016 | 161,086 | 3,849,925 |
| 1914. |  | 96,542 | 2,892,266 | 21,031 | 17,540 | 117,573 | 2,909,806 |
| 1915.. |  | 111,142 | 3,553,166 | 25,700 | 21,819 | 136,842 | 3,574,985 |
| 1916 ${ }^{1}$. |  | 136,016 | 5,133,332 | 18,500 | 27,147 | 154,516 | 5,160,479 |

60.-Production of Cement in Canada for the Calendar Years 1902-1916.

| Years. | Natural rock cement. |  | Portland cement. |  | Total cenent. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1902. | $\begin{aligned} & \hline \text { brl. } \\ & 127,931 \end{aligned}$ | $\begin{gathered} \$ \\ 98,932 \end{gathered}$ | $\begin{array}{l\|} \hline \text { brl. } \\ 594,594 \end{array}$ | $1,028,618$ | brl. | $\stackrel{\$}{1,127,550}$ |
| 1903. | 92,252 | 74,655 | 627,741 | 1,150,592 | 719,993 | 1,225,247 |
| 1904. | 56,814 | 50,247 | 910,358 | 1,287,992 | 967,172 | 1,338,239 |
| 1905 | 14,184 | 10,274 | 1,346,548 | 1,913,740 | 1,360,732 | 1,924,014 |
| 1906. | 8,610 | 6,052 | 2,119,764 | 3,164,807 | 2,128,374 | 3,170,859 |
| 1907 | 5,775 | 4,043 | 2,436,093 | 3,777,328 | 2,441,868 | 3,781,371 |
| 1908. | 1,044 | 815 | 2,665,289 | 3,709,139 | 2,666,333 | 3,709,954 |
| 1909. | , | - | 4.067,709 | 5,345,802 | 4,067,709 | 5,345,802 |
| 1910. | - | - | 4,753,975 | 6,412,215 | 4,753,975 | 6,412,215 |
| 1911. | - | - | 5,692,915 | 7,644,537 | 5,692,915 | 7,644,537 |
| 1912. | - | - | 7,132,732 | 9,106,556 | 7,132,732 | 9,106,556 |
| 1913. | - | - | 8,658,805 | 11,019,418 | 8,658,805 | 11,019,418 |
| 1914. | - | - | 7,172,480 | 9,187,924 | 7,172,450 | 9,187,924 |
| 1915.. | - | - | 5,681,032 | 6,977,024 | 5,681,032 | 6,977,024 |
| $1916^{\text { }}$. | - | - | 5,359,050 | 6,529,861 | 5,359,050 | 6,529,861 |

Smelter Production.-Table 61 shows the character and quantities of the ores treated in Canadian smelters. The figures do not represent the total production from smelting ores mined in Canada, since considerable quantities of copper and silver ores are shipped to smelters outside of Canada.
61.-Character and Quantities of Ores treated in Canadian Smelters, 1911-1916.

| Ores. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nickel-Cop | $\begin{aligned} & \text { Tons. } \\ & 610,834 \end{aligned}$ | Tons. 725,065 | Tons: 823,403 | Tons. 947,053 | Tons. $1,272,283$ | Tons. $1,521,689$ |
| Silver-Cobalt-Nickel, Arsenic. | 610,834 9,330 | 8,097 | 6,124 | 5,681 | 7.526 | 7,771 |
| Lead and other ores treated in lead furnaces. | 55,408 | 59,932 | 88,100 | 71,224 | 99,528 | 107,154 |
| Copper-Gold-Silver. | 1,517,981 | 2,212,316 | 2,119,754 | 1,626,197 | 2,245,245 | 2,450,104 |
| Totals.... | 2,193,553 | 3,005,410 | 3,037,381 | 2,650,155 | 3,624,582 | 4,086,718 |

1 Subject to revision.

MINERALS
Iron Blast Furances in Canada in 1916.-Of 19 furnaces 13 were in blast in 1916 for varying periods of time. The total daily capacity of the 19 furnaces is about 4,835 tons. The operating companies, with numbers and capacities of furnaces, were as follows:

Dominion Jron and Steel Co., Sydney, C.B.: Six completed furnaces of 280 tons capacity each per day; three operated throughout 1916; one for 257 days and one for 122 days; one furnace idle throughout the year.

Nova Scotia Steel \& Coal Co., Ltd., New Glasgow, N.S.: Two stacks and one set of stoves at Sydney Mines, C.B., of 300 tons capacity; operated throughout 1916.

Londonderry lron \& Mining Co., Lto., Londonderry, N.S. (in liquidation): One furnace of 100 tons capacity; idle throughout the year, not operated since 1908.

Camada $l_{\text {ron }}$ Foundries, Lid., Montreal, Que.: Two furnaces of 125 tons and 250 tons at Midland, Ont.; both idle throughout the year, not operated since 1913.

Stavdifd Iron Co., Lid., Deseronto, Ont.: One furnace at Deseronto with a daily capacity of 65 tons, operated throughout 1916; one furnace of 65 tons at Parry Sound, idle throughout the year, not operated since 1913.

The Steei, Co. of Canada, Ltd., Hamilton, Ont.: Two furnaces, one of 260 tons capacity, operated for 353 days in 1916; a second furnace of 430 tons capacity operated 296 days.

Algoma Steel Corporation, Lad., Sault Ste. Marie, Ont,: Three furnaces at Steelton, near Sault Ste. Marie, two of 250 tons capacity each, and one of 500 tons capacity, operated throughout the year.

The Atikokan Iron Co., Ltid., Port Arthur. Ont.: One furnace of 175 tons capacity idle throughout the year, not operated since 1911.

Tie Canadian Furnace, Co., Ltd., Port Colborne, Ont.: One furnace of 325 capacity, operated 316 days in 1916 .

Mines Departments of Provincial Governments.-In addition to the Mines Department of the Dominion Government, from whose reports the foregoing tables and information have been compiled, there are Departments of Mines of the Provincial Governments of Nova Scotia, New Brunswick, Quebec, Ontario and British Columbia, as well as the Mines Branch of the Department of Public Works of the Provincial Government of Alberta.

Nova Scotia.-In Nova Scotia, the principal mining product is coal: and according to the annual report of the Department of Public Works and Mines the quantity of coal raised in the year ended September 30, 1916, was $6,496,472$ long tons, as compared with $6,379,464$ tons in 1915, an increase of 117,008 tons notwithstanding a shortage of men in the collieries and of means for water transportation. The production of other minerals in 1916 was, in short tons, as follows, the corresponding figures of 1915 being given within round brackets: pig iron 429,615 ( 295,868 ); steel ingots 502,106 ( 369,310 ); limestone 514,574 (353,412); coke 669,478 (452,099); gypsum 279,400 (230,216); building stone 32,399 ( 39,654 ). The number of bricks made was 19,504.987, as compared with $1,922,100$ in 1915 and $14,543,608$ in 1914, and the production of drain pipe and tile was $1,355,297$ feet, as against $1,022,470$ feet in 1915 . The production of gold was $4,963 \mathrm{oz}$., as compared with $7,216 \mathrm{oz}$. in 1915, and of antimony ore 14,149 long tons, as compared with 10,872 tons in 1915. The report of the Inspector of Mines, dated December 20, 1916, deseribes the proceedings at two conferences held at Halifax on March 14 and 15, and August 25, 1915, on the ways and means of reducing the number of accidents in the mines

## PRODUCTION

of the province, and referred to a statement that a reduction of fatal and non-fatal accidents to the amount of 31 and 35 p.e., respectively, had taken place during nine months of the fiscal year 1915-16, as against the corresponding period of the previous year.

New Brunswick.--The annual report for the year ended October 31, 1916, of the Minister of Lands and Mines, states that the mining industries of the province include three commercially successful branches, viz., gypsum, coal and oil with natural gas. The production of gypsum has been seriously hampered by war conditions, and, in 1916, 41,360 tons were quarried as against 72,000 tons last year. Of the amount quarried, 34,560 tons were manufactured into calcined plaster and hard wall plaster and shipped to various points in Canada. The remaining 6,800 tons of crude rock were exported to the United States. The production of coal in 1916 is given as 118,498 tons for ten mining companies in the Grand Lake Region, as compared with 109,792 tons in 1915. Royalty was also paid on 3,890 tons in Kent county for 1916 as against 5,263 tons in 1915. Natural gas is sold for distribution in the municipalities of Moncton and Hillsborough, the number of domestic consumers being 2,824 , an increase of 385 during the year. The total consumption of gas in Moncton and Hillsborough in December, 1916, was 70,845,000 cubic feet, as compared with $52,440,000$ cubic feet in December, 1915. The production of sil during the year 1915-16 was 27,250 gallons, as against 27,606 gallons for the nine months January to September, 1915.

Quebec.-The annual report of the Quebec Superintendent of Mines shows that the value of the mineral production of the province for the calendar year 1916 amounted to $\$ 13,070,566$, as compared with $\$ 11,465,873$ in $1915, \$ 11,732,783$ in 1914, and $\$ 13,119,811$ in 1913, the highest on record. The figures for 1916 show an increase over those of 1915 of $\$ 1,604,693$, or 14 p.c. Of the total the products of the mine are valued at $\$ 7,982,430$, and building materials at $\$ 5,088,136$; the former show an increase of 52.8 p.c. and the latter a decrease of 18.5 p.c. Amongst the principal products, with their respective values in 1916, are asbestos ( $\$ 5,182,905$ ); cement ( $\$ 2,525,841$ ); copper and sulphur ore ( $\$ 1,273,724$ ) ; limestone and marble ( $\$ 88,295$ ); brick $(\$ 742,163)$; magnesite ( $\$ 525,966$ ); chromite ( $\$ 299,070$ ); lime ( $\$ 275,945$ ), and granite ( $\$ 264,270$ ). Important shipments of molybdenite were made from the Quyon mine first opened in April, 1916, and the production was 129,267 lb. of the value of $\$ 129,267$ The Quyon mine is stated to be probably the largest producer of molybdenite in America.

Ontario.-Figures compiled by the Ontario Bureau of Mines show that the total value of the mineral production of Ontario in the calendar year 1916 was $\$ 65,303,822$, as compared with $\$ 54,245,679$ in 1915 and $\$ 46,295,959$ in 1914 . Of the total value in $1916, \$ 55,002,918$ represents the value of the metallic and $\$ 10,300,904$ the value of the nonmetallic production. A considerable expansion took place in the production of minerals in 1916, especially gold, nickel, copper, cobalt, molybdenite and lead, due in large part to the war and consequent high prices for metals. Items for 1916 which did not appear in the list of mineral products for 1915 are lead ( $796,833 \mathrm{lb}$.), a sample shipment of asbestos ( 500 lb .) and fluorspar ( $1,283 \mathrm{lb}$.), the last named being in

## MINERALS.

great demand for use as a flux by pig iron and steel makers. Fluorspar had not been produced in Ontario since 1911, nor lead since 1912; asbestos is a new item for Ontario. Gold shows a production of $497,833 \mathrm{oz}$., of the value of $\$ 10,339,259$, an increase over 1915 of $86,245 \mathrm{oz}$., or $\$ 1,837,868$. The total shipments of silver amounted to $20,007,367$ fine oz. of the value of $\$ 12,703,591$, as compared with $24,823,660 \mathrm{oz}$. in 1915 of the value of $\$ 12,174,312$. The average value of the silver works out to 63.511 cents per oz. In New York the average price for the year was 66.661 cents per oz., as compared with 4969 cents in 1915. The lowest figure in 1916 was $55 \frac{7}{8}$ cents and the highest $77 \frac{1}{4}$ cents per oz. The enhanced price of this metal is due chiefly to the great demand from belligerent countries where silver is being coined at an increased rate to replace gold withdrawn from circulation. During the year 1916 dividends and bonuses declared by silver mines at Cobalt amounted to $\$ 5,519,258$, making the total return to shareholders $\$ 65,290,170$ since the beginning of operations there in 1903. Table 62 shows the total production and value of silver at the Cobalt Camp each year from 1904 to 1916. The total for the 13 years is $255,189,988 \mathrm{oz}$. of the value of $\$ 135,748,876$. Gold mines at Porcupine and Kirkland Lake paid dividends in 1916 amounting to $\$ 4,431,750$, and the total gold mine dividends from these two camps to the end of 1916 amounted to $\$ 9,786,625$. The production of nickel and copper matte again shows a large increase, the figures for 1916 being 80,010 tons as compared with 67,703 tons in 1915 and 47,150 tons in the pre-war year of 1913. In 1916 the nickel and copper contents of the matte were 41,299 and 22,430 tons, respectively, with total values of $\$ 20,649,279$ for nickel and $\$ 8,332,153$ for copper. The total of these two values, viz. $\$ 28,981,432$, exceeds that of any other item and constitutes about 44 p.c. of the total value of the mineral production of the province.

Alberta.-The Mines Branch of the Department of Public Works reports that the total production of coal in Alberta during the year 1916 was $4,648,604$ short tons, as compared with $3,434,891$ tons in 1915. The production in 1916 of coke was 41,950 tons, as compared with 23,826 in 1915 , and of briquettes 107,959 tons, as compared with 83,180 tons. Of natural gas the consumption in the province during 1916 was, according to the Mines Department of the Dominion Government, $6,818,131,000$ cubic feet, as compared with $4,481,947,000$ cubic feet in 1915.

British Colnmbia.-According to the Annual Report for 1916 of the Provincial Mineralogist, the total value of the mineral production of British Columbia from 1852 to 1916 was $\$ 558,560,715$, distributed between the different mineral products as follows: Placer gold $\$ 74,620,103$; lode gold $\$ 91,350,784$; silver $\$ 41,358,012$; lead $\$ 36,415,124$; copper $\$ 114,559,364$; zinc $\$ 7,212,759$; coal and coke $\$ 165,829,315$; other metals and building stone $\$ 27,215,254$. Table 63 shows the value of the total mineral production of the province from 1852 to 1916 , inclusive. The value of the total mineral production for the calendar year 1916 was $\$ 42,290,462$, as compared with $\$ 29,477,508$ in 1915 , an increase of $\$ 12,842,954$, or nearly 44 p.c., and an increase over that of the previous record year, 1912 , of $\$ 9,849,662$, or 30.3 p.c. The principal mineral
products of British Columbia are gold, silver, lead, copper, zinc and coal. Table 64 shows the quantity and value of the mineral production of British Columbia for the three calendar years 1914-1916. The gross value of the metallic minerals recovered in 1916 was $\$ 32,063,514$, which represents an increase over 1915 of $\$ 11,301,365$ or about 54 p.c. The metalliferous output for 1916 was the greatest in the mining history of the province, being nearly 76 p.c. greater than that of the year 1912. The increase is due in part to the higher market prices of the metals during the year and in part to the much larger production of some metals, notably copper and zinc. The production of copper was $8,460,959 \mathrm{lb}$., or 14.85 p.c. more than in the previous record year of 1915 , while the zine output was three times in quantity that of the previous year. The year 1916 was a record one for mining in British Columbia, all branches of the industry, excepting gold and the building materials, showing increased production. The uncertainty of war conditions during 1915 was not such a prominent feature in 1916. and steady operations were general throughout the year. The continued enormous and everincreasing demand for shells of all kinds for the Allies has continued the great consumption of copper, lead and zinc, with the result that the market prices of these metals remained at an abnormally high level all the year.
62.-Production of Silver at the Cobalt Camp, Ontario, 1904-16.


## MINERALS

63.-Value of Total Mineral Production of British Columbia, 1852-1916.

| Year. | Value. | Year. | Value. | Year. | Value. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ |  | \$ |  | \$ |
| 1852-1892. | 81,090,069 | 1901. | 20,086,780 | 1910. | 26,377,066 |
| 1893 | 3,588,413 | 1902. | 17,486,550 | 1911. | 23,499,072 |
| 1894. | 4,225,717 | 1903. | 17,495,954 | 1912. | 32,440,800 |
| 1895. | 5,843,042 | 1904. | 18,977,359 | 1913. | 30,296,398 |
| 1896. | 7,507,956 | 1905. | 22,461,325 | 1914. | 26,388,825 |
| 1897. | 10,455,268 | 1906. | 24,980,546 | 1915. | 29,447,508 |
| 1898. | 10,906,861 | 1907 | 25,882,560 | 1916. : | 42,290,462 |
| 1899. | 12,393,131 | 1908. | 23,851,277 |  |  |
| 1900. | 16,344,751 | 1909. | 24,443,025 | Total . | 558,560,715 |

64.-Quantity and Value of Mineral Products in British Columbia for the Calendar Years 1914-1916.

| Produets. | 1914. |  | 1915. |  | 1916. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity. | Value. | Quantity. | Value. | Quantity. | Value. |
|  |  | \$ |  | \$ |  | \$ |
| Gold, placer.oz. | - | 565,000 | 38,500 | 770,000 | 29,025 | 580,500 |
| lode.. | 247,170 | 5,109,004 | 250,021 | 5,167,934 | 221,932 | 4,587,334 |
| Silver. | 3,602,180 | 1,876,736 | 3,366,506 | 1,588,991 | 3,301,923 | 2,059,739 |
| Lead.... .lb. | 50,625,048 | 1,771,877 | 46,503,590 | 1,939,200 | 48,727,516 | 3,007,462 |
| Copper.. | 45,009,699 | 6,121,319 | 56,918,405 | 9,835,500 | 65,379,364 | 17,784,494 |
| Zinc. | 7,866,467 | 346,125 | 12,982,440 | 1,460,524 | 37,168,980 | 4,043,985 |
| Coal ${ }^{\text {. }}$., ton | 1,810,967 | 6,338,385 | 1,811,129 | 5,638,952 | 2,084,093 | 7,294,325 |
| Coke ${ }^{1}$. | 234,577 | 1,407,462 | 245,871 | 1,475,226 | 267,725 | 1,606,350 |
| Miscellaneous products. | - | 2,852,917 | - | 1,571,181 | - | 1,326,273 |
| Total... |  | 26,388,825 | - | 29,447,508 | - | 42,290,462 |

${ }^{1}$ Long tons of $2,240 \mathrm{lb}$.

## PRODUCTION

## 65.-Quantity and Value of the World's Production of Gold and Silver for the Calendar Years 1914 and 1915.

(From the Annual Report of the Dinector of the United States Mint.)

| Countries. | 1914. |  |  |  | 1915. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Go |  | Silver. |  | Gold. |  | Silver. |  |
| North America- | 773.178 |  | fine oz. |  | fine oz. |  | fine os. | $138 * 6$ |
| Camada | 773.178 | 15.983,007 | 28,449,821 | 15,736,165 | $918,056$ | 18.977,901 | 26,625,960 | 13,816,743 |
| United | 4,572.976 | 94,531,782 | 72,455,100 | 10,076,365 | 4,887,604 | 101,035,700 | 74,961,075 | 38,898,801 |
| Mexico | 231,628 | 4,788,175 | 27,546,752 | 15,236,659 | 317,305 | 6,559,275 | 39,570,151 | 20,533,743 |
| 'Total | 5,577,782 | 115,302,964 | 128,451,673 | 71,049,189 | 6,122,965 | 126,572,876 | 141,157,186 | 73,249,287 |
| Central American <br> , States- | 115,771 | 2,393,100 | 2,754,868 | 1,523,773 | 143,687 | 2,970,271 | 2,920,498 | 1,5]5,504 |
| outh America $\rightarrow$ |  |  |  |  |  |  |  |  |
| Bolivia and Chile | 9,809 | 202.770 | 789.685 | 436,791 | 39.397 | 814,418 | 3,870,065 | 2,008,254 |
| Braxil | 103,513 | 2,139,803 | 70,685 | 42,46 | 117.236 | 2,424,515 | 21,523 | 11,139 |
| Colomb | 236,327 | 4,67S.587 | 351,971 | 194,295 | 283,796 | 5,453,148 | 351,271 | 182,281 |
| Ecuado | 16,779 | 346,838 | 16,726 | 9,251 | 26,397 | 545.654 | 24,655 | 12,794 |
| Pers. | 49,445, | 1,022, 125 | 9,214,190 | 5,096,553 | 55801 | 1,109,89] | 9,419,950 | 4,888,200 |
| Uruge | 739 | 15,276 |  |  | 573 | 11.888 |  |  |
| British | 34.495 | 1,136 | - | - | 44.0 | 323,892 | - |  |
| Duteh | 24,351 | 503,400 |  |  | 21,723 | 499.054 | - |  |
| Freach | 94,805 | 1,939,793 |  |  | 94,805 ${ }^{\text {3 }}$ | 1,950,793 | - |  |
| Venezuela | 29,644 | 612,796 |  |  | 29,644 | 612,796 |  |  |
| Total | 609,907 | 12,607,803 | 10,448,557 | 5,779,308 | 692,005 | 4, 505,017 | 13,687,464 | 7,102.698 |
| ropre- |  |  |  |  |  |  |  |  |
| Austria-Hungary | 9,711 67.725 | $\begin{array}{r} 200,744 \\ 1,400,000 \end{array}$ | 1,572,76 | 869,917 | 9,711 | $\begin{array}{r} 200,744 \\ 1,400,400 \end{array}$ | 1,572,746 | 816,29 |
| Great Britain | 979 | 20,238 | 135,458 | 74,925 | 932 | 19,266 | 96,450 | 50,050 |
| Greece |  |  | 591,464 | 327,150 |  |  | 591,464 | 306,022 |
| Italy | 1,000 |  |  | 24.20 | III | 2,380 | Tram | 48 |
| Porwa | 113 | -2,336 | 305824 | 113845 | 32 | 68 | 2058 |  |
| Russia. | 1,382,867 | 28,586,392 |  |  | 1,382,8671 | 28,5e6,392 |  |  |
| Servia | 5,611 | 116,000 | 12,014 | 6,645 |  |  | - |  |
| Spain. |  |  | 4,228,593 | 2,338,919 | - |  | 4,565,396 | 2,369,075 |
| Sweden | 2.627 | 54,304 | 33,511, | 18,536 | 1,090 | 22,532 | 24,241 | 12,579 |
| Turkey | 23 | 475 | 1,509,133 | 834,732 | 231 | 475 | 1,509, 133 | 783,119 |
| Total............ | 1,471,211 | 30,412,634 | 9,210,025 | 5,110,842 | 1,462,491 | 30, 232,365 | 9,276,930 | 4,813,984 |
| Australi | 2,004, 924, | 42,479,040 | 2,973,915 | 1,844,933 | 1,988,520 | 40,279,473 | 3,338,214 | 1,732,266 |
| New Zealand | 227,954 | 4,712,226 | 599+162 | 331,408 | 422,825 | 8,740,567 | 977,541 | 406,887 |
| British New Guinea. | 18,274 ${ }^{2}$ | 377,757 |  |  | $18.274^{2}$ | 377,757 |  |  |
| Total | 2,301,152. | 47,569,023 | 3,573,077 | 1,976,341 | 2,369,619 | 49,397,797 | 4,295,765 | 2,223,153 |
|  |  |  |  |  |  |  |  |  |
| British | 550.432 | 11,378,40 | 236,440 | 130,779 | 557,399 | 11,522,457 | 284875 | 9480 |
| Chosen | 160,115 | 3,309,870 | 16,804 | 9,328 | 180,897 | 3,739,477 | 21,876 | 1,3,32 |
| East Indies- |  |  |  |  |  |  |  |  |
| British............. | 216,761 | 4,480,858 | - | * | 212,776 | 4,398,476 | - |  |
| Dutih.................) <br> Federated Malay |  |  |  |  |  |  |  |  |
| erated States. | 13,020 | 2691147 | - $0^{-}$ |  | 17,005 | 351,524 | - ${ }^{-1}$ |  |
| Formosa. | 40,092 | 952,806 | 51.080 | 28,253 | 55,293 | 1,143,017 | 48,976 | 24,377 |
| Indo-Chins | 3213 | 60,419 | 1,767 | 977 | 2,112 | 538,617 | 5,07955 |  |
| Japan. | 228,364 | $4,679,358$ | 4,836,228 | 2,675,014 | 200,544 | 5,385,917 | 5,079,552 | 2,035,881 |
| T | 1,392,096 | 28,795,753 | 5,142,879 | 2,844,351 | 1,421,703 | 20,389,219 | 5,452,565 | 2,829,445 |
|  |  |  |  |  |  |  |  |  |
| Belgian Congo |  |  | 4,770 1,223 | $\begin{array}{r}2,639 \\ \hline 676\end{array}$ | 49,7871 7,010 | $1,029,189$ 144,910 | 4,670 | 2,460 |
| Egypt, East ${ }^{\text {Effrica. }}$ | $\stackrel{6}{6+136}$ | 126,842 | 1,223 | 6.6 | 2,100 | 43,414 | 1, |  |
| Madagascar. | 56,553 | 1,169,055 |  |  | 56,5531 | 1,169,055 |  | 66.121 |
| Rhodesia. <br> Treusvaal, Cape Colony and Natal. Sierra Leone | 854,481 | 17,683,686 | 150,794 | 83,467 | 915,029 | 18,915,324 | 185,238 | 6,121 |
|  | 8,395,964 | 173,559,940 | 901,763 | 498,783 | 9,096,106 | 188,033,156 | 996,379 | 517,041 |
|  | 406,576 | 8,404,670 |  |  | 402,733 |  |  |  |
| Tetal............ . | 9,771.597 | 201,996,796 | 1,058,550 | 585,505 | 10,528,318 | 217,639,599 | 1,188,089 | 616,497 |
| Tolal for Werld. | 21,240,416 | 439,078.263 | 160,669,129 | 88,869,307 | 22,760,788 | 470,607,144 | 177,978,435 | 92,856,568 |

1914 figures.
Nork.-For 1914 the average value per fine oz. of silver is $\$ 0.55312$, and for $1915 \$ 0.51892$.

MINERALS
66.-Imports into Canada of Portland Cement, 1898-1916.

| Fiscal Year. | Quantity. | Value. | Duty paid. | Fiscal Year. | Quantity. | Value. | Duty paid. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cwt. | * | \$ |  | Cwt. | \$ | \$ |
| 1898. | 1,073,058 | 355,264 | 121,969 | 1908. | 2,427,381 | 852,041 | 259,549 |
| 1899. | 1,300,424 | 467,994 | 147,146 | 1909. | 1,460,850 | 475,676 | 159,077 |
| 1900. | 1,301,361 | 498, 607 | 147,067 | 1910. | 490,809 | 158,487 | 47,984 |
| 1901. | 1,612,432 | 654,505 | 179,550 | 1911. | 1,283,121 | 494,081 | 138,969 |
| 1902. | 1,971,616 | 833,657 | 233,754 | 1912. | 2,592,025 | 936,425 | 292,914 |
| 1903. | 2,316,853 | 868,131 | 271,004 | 1913. | 4,958,814 | 1,955,177 | 597,727 |
| 1904. | 2,476,388 | 995,017 | 290,778 | 1914. | 709,014 | 332,564 | 69,658 |
| 1905. | 3,228,394 | 1,234, 848 | 384,866 | 1915. | 287,402 | 123,613 | 26,034 |
| 1906. | 2,848,582 | 963,839 | 328,342 | 1916. | 94,136 | 37,C4: | 9,382 |
| $1907^{\prime}$. | 1,551,493] | 523,120 | 162,250, |  |  |  |  |

${ }^{1}$ Nín 2 months.
67.-Imports into Canada of Anthracite and Bituminous Coal for home consumption during the fiscal years 1901-1916.


Nors.-Anthracite coal dust is included under Anthracite coal. For records of previous years, see Year Book, 1911, page 420 . $\mathrm{I}_{\text {Nine months. }}$ min
68.-Exports of Coal, the produce of Canada, 1903-1916.

| Fiscal Year. | Quantity. | Value. | Fiscal Year. | Quantity. | Value. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1903. | Tons. | 5,542,434 | 1910. | Tons. | 5,013, ${ }^{\text {\% }}$ |
| 1904. | 1,974,9505 | 5,542,434 | 1911. | 1,826,339 | 6,013,221 |
| 1905. | 1,615,322 | 3,930,802 | 1912. | 1,494,756 | 4,338,128 |
| 1906. | 1,820,511 | 4,643,198 | 1913. | 2,055,993 | 5,555,099 |
| 1907 (9 mos.)... | 1,285,346 | 3,346,402 | 1914. | 1,498,820 | 3,703,765 |
| 1908. | 1,877,258 | 4,810,284 | 1915. | 1,512,487 | 4,466,258 |
| 1909. | 1,613,892 | 4,505,221 | 1916. | 1,971,124 | 6,032,765 |

PRODUCTION

## MANUFACTURES.

General Results of Census of 1916.-In 1917 the Census and Statistics Office published the Report on the Postal Census of Manufactures, which was taken in 1916 for the calendar year 1915. According to this report, the number of industrial establishments in operation in 1915 was 21,306 , representing an invested capital of $\$ 1,994,103,272$, employing 52,683 persons on salaries and 462,200 persons on wages, and producing goods to the value of $\$ 1,407,137,140$ from raw materials valued at $\$ 802,135,862$. Table 69 compares the industrial activities of the two years 1905 and 1915, the statistics in this table covering all establishments irrespective of the number of employees. It will be observed that the capital had increased during the ten years from $\$ 846,585,023$ in 1905 to $\$ 1,994,103,272$ in 1915 , the increase of $\$ 1,147,518,249$, representing a percentage ratio of 135.54 . In the same period the value of products rose from $\$ 718,352,603$ in 1905 to $\$ 1,407,137,140$ in 1915, an increase of $\$ 688,784,537$, or 95.88 p.c. Table 70 compares the two years 1910 and 1915 for establishments employing five hands and over, the census of manufactures in 1911 having been restricted to establishments employing five hands and over, except for flour and grist mills, butter and cheese factories, brick and tile yards, lime kilns, electric light plants, ete. From this table it will be noted that the number of establishments decreased during the five years by 3,625 , or 18.86 per cent. Capital increased, however, from $\$ 1,247,583,609$ to $\$ 1,958,705,230$, the increase amounting to $\$ 711,121,621$, or 57 p.c. The value of products rose from $\$ 1,165,975,639$ in 1910 to $\$ 1,381,547,225$ in 1915, an increase of $\$ 215,571,586$, or 18.49 p.c. The decrease in the number of establishments in operation in 1915 as compared with 1910 is chiefly a reflection of the falling off in construction enterprises which occurred in 1913 and was continued after the outbreak of the war. The number of sawmills and shingle mills in operation decreased from 3,499 in 1910 to 1,887 in 1915. Sash and door and planing mills decreased from 859 to 661, boat and canoe building establishments decreased from 126 to eightythree, and brick and tile yards from 399 to 230 . The number of small flour and grist mills, which are associated with saw-milling, fell from 1,141 to 644. Other decreases were in manfactures of agricultural implements, from seventy-seven to fifty-six, and in woollen mills from eighty-seven to fifty-two. Table $\mathbf{7 1}$ gives the principal statistics of manufactures, by provinces, for the years $1900,1905,1910$ and 1915, for establishments in each case employing five hands and over. Table 72 gives for all establishments, irrespective of the number of hands employed, the statistics of the census of manufactures for 1915, including the number of establishments, the amount of capital, the number of employees on wages, the amount of wages paid, the cost of materials and the value of products by fifteen groups of industries and by detailed kinds of industries. The number of employees on salaries and the amount of salaries paid is not given in this table; but the summary for all Canada is shown in Table 69.

## MANUFACTURES

War Trade in Manufactures, 1915.-In view of the extent to which the manufacturing industry in Canada has been affected by war conditions, each manufacturer was asked, in making his return for 1915, to report on such products of his establishment as he had reason to believe were destined for war purposes, whether supplied directly or indirectly. The results are summarized in Table 73, which includes only such goods as were actually delivered during the calendar year 1915.
69.-Statistics of Manufactures of Canada, 1905 and 1915.
(All establishments irrespective of number of employees).

| Items. |  | 1905. | 1915. | Increase. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amount. | Per cent. |
|  |  | \$ | \$ | $\$$ |  |
| Establishments... | . No. | 15,796 | 21,306 | 5,510 | 34.88 |
| Capital. | $\$$ | 846,585,023 | 1,994,103,272 | 1,147,518,249 | 135.54 |
| Employees on salaries. | .No. | 36,496 | 52,683 | 16,187 | 44.35 |
| Salaries. . | \$ | 30,724,086 | 60,308,293 | 29,584,207 | 96.29 |
| Employees on wages. . | . No. | 356,034 | 462,200 | 106,186 | 29.82 |
| Wages. | \$ | 134,375,925 | 229,456,210 | 95,080,285 | 70.76 |
| Value of products.... | \$ | 718,352,603 | 1,407,137,140 | 688,784,537 | 95.88 |

70.-Statistics of Manufactures of Canada, 1910 and 1915.
(Establishments employing five hands and over.)

| Items. |  | 1910. | 1915. | Increase or Decrease. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amount. | Per cent. |
| Establishments... | .No. | 19,218 | 15,593 | -3,625 | -18.86 |
| Capital. | \$ | 1,247,583,609 | 1,958,705,230 | 711,121,621 | 57.00 |
| Salaries and wages. | \$ | 241,008,416 | 283,311,505 | 42,303,089 | 17.55 |
| Cost of materials. | \$ | 601,509,018 | 791,943,433 | 190,434,415 | 31.66 |
| Value of products.... | \$ | 1,165,975,639 | 1,381,547,225 | 215,571,586 | 18.49 |

## PRODUCTION

71.-Statistics of Manufactures by Provinces, 1900, 1905, 1910 and 1915.
(Establishments employing five hands and over.)

| Provinces. | $\left\lvert\, \begin{gathered} \text { Estab- } \\ \text { lish- } \\ \text { ments. } \end{gathered}\right.$ | Capital. | $\underset{\text { Dloyees }}{\text { Em- }}$ | Salaries and wages. | Raw and partly mfd materials. | Value of products. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1900. | No. | \$ | No | \$ | * | \$ |
| Canada. | 14,650 | 446,916,487 | 339,173 | 113,249,350 | 266,527,858 | 481,053,375 |
| P. E. Island | 334 | 2,081,766 | 3,804 | 445,998 | 1,319,058 | 2,326,708 |
| Nova Scotia | 1,188 | 34,586,416 | 23,284 | 5,613,571 | 13,161,077 | 23,592,513 |
| N. Brunswick. | 919 | 20,741,170 | 22,158 | 5,748,990 | 10,814,014 | 20,972,470 |
| Quebec. | 4,845 | 142,403,407 | 110,329 | 36,550,655 | 86,679,779 | 158,287,994 |
| Ontario. | 6,543 | 214,972, 275 | 161,757 | 56,548,280 | 138,230,400 | 241,533,486 |
| Manitoba. Alberta | 324 | 7,539,691 | 5,219 | 2,419,549 | 7,955,504 | 12,927,439 |
| Saskatch'w'r | 105 | 1,689,870. | 1,168 | 465,763 | 1,121,342 | 1,964,987 |
| Br. Columbia. | 392 | 22,901,892 | 11,454 | 5,456,538 | 7,246,684 | 19,447,778 |
| $\begin{array}{r} 1905 . \\ \text { Canada... } \end{array}$ | 12,547 | 833,916,155 | 383,920 | 162,155,578 | - | 706,446,578 |
| P.E. Island. | 223 | 1,553,916 | 2,770 | 409,915 |  | 1,696,459 |
| Nova Scotia. | 720 | 74,599,538 | 23,754 | 9,139,371 |  | 31,987,449 |
| N. Brunswick. | 531 | 26,461,664 | 19,170 | 6,497,161 |  | 21,833,564 |
| Quebec. | 4,115 | 251,730,182 | 116,748 | 46,514,619 | - | 216,478,496 |
| Ontario.. | 6,163 | 390,875,465 | 184,526 | 80,729,889 | - | 361,372,741 |
| Manitoba. | 280 | 27,070,665 | 10,113 | 5,800,707 | - | 27,857,396 |
| Saskatchew | 55 | 3,820,975 | 1,376 | 681,381 |  | 2,443,801 |
| Alberta. | 97 | 5,400,371 | 1,983 | 1,129,272 | - | 4,979,932 |
| Br. Columbia. | 363 | 52,403,379 | 23,480 | 11,253,263 | - | 37,796,740 |
| $\begin{array}{r} 1910 . \\ \text { Canada... } \end{array}$ | 19,218 | 1,247,583,609 | 515,203 | 241,008,416 | 601,509,018 | 1,165,975,639 |
| P.E. Island. | 442 | 2,013,365 | 3,762 | 531,017 | 1,816,804 | 3,136,470 |
| Nova Scotir. | 1,480 | 79,596,341 | 28,795 | 10,628,955 | 26,058,315 | 52,706,184 |
| N. Brunswick. | 1,158 | 36,125,012 | 24,755 | 8,314,212 | 18,516,096 | 35,422,302 |
| Quebec. | 6,584 | 326,946,925 | 158,207 | 69,432,967 | 184,374,053 | 350,901,656 |
| Ontario.. | 8,001 | 595,394,608 | 238,817 | 117,645,784 | 297,580,125 | 579,810,225 |
| Manitoba. | 439 | 47,941,540 | 17,325 | 10,912,866 | 30,499,829 | 53,673,609 |
| Saskatchewan | 173 | 7,019,951 | 3,250 | 1,936,284 | 2,747,266 | 6,332,132 |
| Alberta. | 290 | 29,518,346 | 6,980 | 4,365,661 | 9,998,777 | 18,788,825 |
| Br. Columbia. | 651 | 123,027,521 | 33,312 | 17,240,670 | 29,917,753 | 65,204,236 |
| $\begin{array}{r} 1915 . \\ \text { Canada. } \end{array}$ | 15,593 | 1,958,705,230 | - | 283,311,505 | 791,943,433 | 1,381,547,225 |
| P.E. IsIand. | 261 | 1,841,690 | - | 543,954 | 1,499,066 | 2,586, 823 |
| Nova Scotia. | 781 | 125,754,562 | - | 17,175,818 | 36,194,004 | 69,345,819 |
| N. Brunswick | 630 | 45,970,488 | .. | 8,767,230 | 21,314,643 | 37,303,900 |
| Quebec | 5,743 | 530,312,464 | - | 80,324,171 | 213,754,115 | 381,203,999 |
| Ontario. | 6,538 | 946,619,114 | - | 140,600,691 | 410,670,537 | 7,715,531,839 |
| Manitoba. | 499 | 94,690,750 | - | 13,389,569 | 38,529,386 | 60,481,446 |
| Saskatchewan | 238 | 14,736,860 |  | 2,440,062 | 7,417,166 | 13,355,206 |
| Alberta. | 282 | 41,198,897 | - | 4,791,281 | 20,699,967 | 29,416,221 |
| Br. Columbia | 621 | 157,580,405 | - | 15,269,729 | 41,864,549 | 72,321,972 |

Note. $\rightarrow$ For 1915 the number of employees in establishments employing five bands and over has not been compiled.

## MANUFACTURES

72.-Statistics of Manufactures, 1915.
(All establishments irrespective of number of employees.)

| Groups and Kinds of Industries. | Estab lishments | Capital. |  | Wages paid. | Cost of materials. | Value of products. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \$ | No. | 5 | \$ | \$ |
| $\begin{aligned} & 1 \text { Food pro- } \\ & \text { ducts. } \end{aligned}$ | 6,472 | 199,205,254 | 55,085 | 22,026,238 | 301,618,217 | 388,815,362 |
| 2 Textiles. | 26,71 | 126,490,509 | 68,624 | 27,044,812 | 81,429,4\%9 | 144,686,605 |
| 3 Ironandsteel products. | 851 | 195,877,015 | 53,678 | 27,267,716 | 59,207,670 | 120,422,420 |
| 4 Timber and lumberandremanufactures | 3,187 | 263,588,882 | 63,663 | 28,964,555 | 59,212,349 | 123,306,686 |
| 5 Leather and its finished products. | 524 | 60,269,498 | 20,307, | 10,306,114 | 45,201,497 | 71,036,644 |
| 6 Paper and printing. | 1,306 | 138,544,786 | 30,817 | 18,780,569 | 29,324,906 | 74,038,398 |
| 7 Liquors and beverages. | 341 | 52,283,857 | 4,376 | 2,961,993 | 10,129,252 | 34,859,927 |
| $\begin{gathered} 8 \text { Chemicals } \\ \text { andallied } \\ \text { products. } \end{gathered}$ | 255 | 52,248,588 | 10,436 | 5,413,846 | 24,930,308 | 45,410,486 |
| 9 Clay. glass andstone products. | 772 | 96,376,573 | 14,498 | 8,249,184 | 10,971,641 | $27,244,813$ |
| 10 Metals and metal products other than steel. | 1,173 | 174,621,904 | 27,011 | 17,557,632 | 45,931,080 | 90,943,278 |
| 11 Tobaceo and its manufac tures. | 166 | 23,066,898 | 8,532 | 3,083,000 | 16,017,707 | 28,987,250 |
| 12 Vehicles for land transportation | 464 | 125,965,499 | 34,195 | 18,637,539 | 40,547,113 | 73,878,212 |
| 13 Vessels for water transportation. | 103 | 12,331,341 | 5,261 | 2,467,074 | 3,035,857 | 8,419,648 |
| 14 Miscellaneous industries. | 1,437 | 441,132,723 | 47,901 | 25,934,136 | 56,324,658 | 134,268,231 |
| 15 Hand trades. | 1,584 | 32,099,855 | 17,816 | 10,761,802 | 18,254,178 | 40,729,180 |
| Totals. | 21,306 | ,994,103,272 | 462,200 | 229,456,210 | 802,135,862 | ,407,137,140 |

PRODUCTION
72.-Statistics of Manufactures, 1915-con.

| Groups and Kinds of Industries. | Estab-lishments | Capital. |  | Wages paid. | Cost of materials. | Value of products. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \$ | No. | \$ | \$ | \$ |
| I. Food Products. | 6,472 | 199,205,254 | 55,085 | 22,026,238 | 301,618,217 | 388,815,362 |
| Baking powder and flavouring extracts. | 25 | 1,328,020 | 340 | 159,232 | 882,310 | 1,757,187 |
| Bread,biscuitsand confectionery. | 1,375 | 25,282,598 | 12,035 |  |  |  |
| Butter and cheese | 3,307 | 12,244,617 | 5,632 | 2,621,347 | 48,130,964 | 56,274,679 |
| Chewing gum. | 4 | 497,328 | 107 | 57,743 | 227,272 | -460,628 |
| Cocoa and chocolate... | 13 | 2,451,292 | 887 | 300,247 | 1,920,351 | 3.112,294 |
| Coffees and spices | 27 | 3,810,406 | 458 | 258,247 | 3,568,263 | 5,408,525 |
| Condensed milk, | 13 | 1,786,325 | 321 | 232,912 | 2,749,157. | 3,725,668 |
| Confectioners' supplies. | 3 | 248,603 | 53 | 42,607 | 14,053 | 136,700 |
| Dairy products. | 9 | 1,667,039 | 514 | 378,657 | 1,516,298 | 2,216,214 |
| Evaporated iruits and vegetables. | 46. | 836,645 | 1,397 | 169,461 | 792,582 | 1,223,034 |
| Fish, preserved... | 775 | 14,937,375 | 15,485 | 2,602,528 | 8,766,499 | 15,761,586 |
| Flour and gristmill products. . | 644 | 57,428,014 | 5,701 | 3,308,400 | 92,895,753 | 114,483,924 |
| Foods, stock. | 12 | 469,987 | 71 | 40,357 | 206,616 | 397,391 |
| Fruit and vegetable eanning. . | 80 | 4,580,855 | 1,453 | 429,766 | 2,283,880 | 3.794,922 |
| Jams and jellies | 13 | 778,526 | 196 | 77,244 | -520,006 | 946,886 |
| Macaroni. | 6. | 316,137 | 115 | 38,184 | 215,355 | 401,866 |
| Slaughtering and meat packing. | 59 | 32,371,658 | 6,484 | 3,25e,773 | 65,192,477 | 78,431,125 |
| Slaughtering, not including meat packing. | 4 | 4,700,456 | 1,062 | 481,807 | 14,920,821 | $18,358,606$ |
| Sugar, refined. | 9 | 30,925,525 | 2,276 | 1,320,941 | 32,110,686 | 37.752,235 |
| Tallow, refined. | 4 | 48,541 | 11 | 7,494 | 34,833 | 63,068 |
| Vinegarand pickles. | 33 | 1,638,108 | 332 | 157,518 | 715.283 | ,564,519 |
| All other industries. | 11. | $1,638,108$ 857,199 | 125 | 82,244 | 1,288,530 | 1.772,089 |
| II. Textiles. | 2,761 | 126,490,509 | 68,624 | 27,044,812 | 81,429,429 | 144,686,605 |
| Awnings, tents and sails. | 30 | 1,914,623 | 664 | 230,015 | 1,387,028 | 1,883,221 |
| Bags, cotton | 10 | 3,847,566 | 810 | 306,669 | 6,002,797 | $7,252,145$ |
| Batting. | 3 | 360,174 | 100 | 33,288 | 181,198 | 284,459 |
| Carpets. | 5 | 2,852,270 | 812 | 295,792 | 963,929 | 1,463,544 |
| Clothing, men's, custom.... | 1,048 | 4,649,480 | 4,667 | 1,973,845 | 3,217,191 | 7,022,009 |

## MANUFACTURES

72.-Statistics of Manufactures, 1915-con.

| Groups and Kinds of Industries. | Estab-lishments | Capital. | $\underset{\substack{\text { ployees } \\ \text { on }}}{\substack{\text { Em. } \\ \text { nes }}}$ wages. | Wages paid. | Cost of materials. | Value of products. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \$ | No. | \$ | \$ | \$ |
| Clothing, men's, factory. | 120 | 14,648,993 | 9,390 | 461,285 | 12,173,928 | 22,768,468 |
| Clothing, women's, custom. . | 853 | 4,838 | 4,37 | 651,249 | 3,452,183 | ,524,565 |
| Clothing, women's, factory. | 100 | 9,537,666 | 8,9 | 4,490 | 10,526,094 | 18,564,782 |
| Cordage, rope and twine. | 0 | 4,585 | 1,107 | 430,013 4753 | 2,867,286 | $4,238,651$ $2,512,909$ |
| Cottons. | 20 | 28,261,052 | 13,192 23 | 4,753,432 | 10,640,317 | $20,512,909$ 36,927 |
| Fmbroidery | 11. | 24,720 $1,327,879$ | 23 <br> 635 | 11,064 234,522 | 11,613 496,275 | 36,927 $1,116,002$ |
| Furnishing goods, men's. | 70 |  |  |  |  |  |
| Hats, caps and furs. | 159 |  |  |  |  |  |
| Hosiery and knit goods.. | 73 | 18,108 | 79 | 17. | 0 | ,096,800 |
| Laces a | 7 | 350,046 | 217 | 59,506 | 185,858 | 380,464 |
| Linen. | 3 | 422,943 | 130 | 47,766 | 122,192 | 268,015 |
| Mats and | 7 | 134,054 | 79 | 32,682 | 62,440 | 125,007 |
| Neckwear | 9 | 639,877 | 410 | 153,012 | 516,681 | 940,168 |
| Quilted goods | 3 | 187,353 | 92 | 33,421 | 48,177 | 177,293 |
| Regalia and society emblems.. | 4 | 50,532 | 23 |  | 24,581 | 66 |
| Shoddy | 9. | 1,177,667 | 188 | 85,882 | 727,683 | 1,307,228 |
| Silk and goods. | 4 | 1,487,913 | 68 | 219 | 495,036 | 4 |
| Textiles and fin | 3 |  | 55 | 23,251 |  | 8,231 |
| Thread. | 4 | 1,779,863 | 424 | 138,935 | 648,536 | ,869,926 |
| Waterproof cloth ing. | 8 | 724,4 | 268 | 113.70 | 309,468 | 82,039 |
| Wool car and fulling | 21 | 82,7 | 62 | 13,971 |  |  |
| Woollen goo | 52 | 8,479,492 | 3,879 | 1,398,643 | 5,315,648 | 8,745,868 |
| Woollen yarns | 14 | 2,181,899 | 708 | 228,761 | 1,916,088 | 2,465,796 |
| Wool pulling. | 3 | 188,177 | 26 | 23,879 | 157,700 | 289,182 |
| All other industries. | 9 | 553, | 181 | 74,362 | 315,642 | 643,532 |
| 1II. Iron |  |  |  |  |  |  |
| Steel products | 851 | 195,877,015 | 53,678 | 27,267,716 | 59,207,670 | 120,422,420 |
| Axes and tools. | 29 | 3,768,939 | 925 | 538,367 | 712,090 | 1,924,961 |
| Boilers and engines. | 51 | 16,10 |  | 2,246,86 | 3,050,194 |  |
| Bridges. iron steel. | 13 | 18,17 | 3,712 | 1,627,612 | 5,088,472 | ,611,553 |
| Chains. | , | 942,585 | 661 | 156,136 | 151,829 | 760.910 |
| Dies and moulds. . | 7 | 358,494 | 141 | 79,435 | 28,622 | 193,715 |
| $\begin{aligned} & \text { Foundry and ma- } \\ & \text { chine shop pro- } \\ & \text { ducts... } \end{aligned}$ | 536 | 68,914,734 | 19,985 | 10,093,232 | 14,387,898 | 36,736,288 |

## PRODUCTION

72.-Statistics of Manufactures, 1915-con.

| Groups and Kinds of Industries. | $\begin{aligned} & \text { Estab- } \\ & \text { lish- } \\ & \text { ments. } \end{aligned}$ | Capital. | $\underset{\text { ployees }}{\text { Em- }}$ on wrages | Wages paid. | Cost of materials. | Value of products. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \$ | No. | \$ | \$ | \$ |
| III. Iron and |  |  |  |  |  |  |
| Steel prod.-con. Gas machines... | 7 | 906 | 136 | 93,7 |  |  |
| Iron and steel products. | 95 | 74,369,256 | 588 | 10,598,956 | 29,430,623 | 711 |
| Safes and v | 4 | 296,364 | 30 | 19,428 | 16,510 | 8,092 |
| Saws | 13 | 1,595,937 | 284 | 187,058 | 299, 104 | 729,109 |
| Scales | 9 | 901,751 | 303 | 162,426 | 477,33C: | 855,959 |
| Skates. | 6 | 49,674 | 29 | 16,130 | 7,805 | 41,923 |
| $\begin{aligned} & \text { Stamps and } \\ & \text { stencils. } \end{aligned}$ | 17 | 180,720 | 110 | 6,544 | 34,11I | 58,460 |
| Wire | 25 | 3,810,924 | 979 | 505,603 | 2,028,157 | 2,510,494 |
| Wire fencing. | 17 | 2,175,458 | 353 | 255,936 | 2,048,626 | 3,022,615 |
| All other industries. | 17 | 3,327,694 | 1,307 | 626,237. | 1,297,321 | 3,257,694 |
| V. Timber |  |  |  |  |  |  |
| umberan |  |  |  |  |  |  |
|  | 3,187 | 26 | 63,6 | 28,964 | 59, 212,349 | 123,396,586 |
| Aratares. |  |  |  | 2 | 5,2, | 123,396,686 |
| and trusses. | 9 | 97,402 | 50 | 32,171 | 33,918 | 12,401 |
| Baskets.. | 19 | 253,695 | 220 | 109,944 | 110,405 | 313,830 |
| Billiard tables and materials. | 5 |  | 68 |  |  | 65,011 |
| Boxes, cigar. | 6 | 531,536 | 302 | 97,302 | 244,570 | 918,276 |
| Boxes, wooder. | 85 | 4,336,427 | 2,158 | 892,812 | 2,126,479 | 3,949,389 |
| Coffins and cas- |  |  |  |  |  | ,073,734 |
| Cooperag | 117 | 2,522,888 | 1,129 | 480,737 | 1,076,210 | 1,989,564 |
| Corks. | 11 | 1,653,749 | 152 | 82,513 | 186,508 | 365,691 |
| Furniture and up- | 175 | 18,067 | 6,905 | 13,168 | 3,955,786 | 765,339 |
| Hay presses. | 3 | 13,350 | 19 | 4,329 | 61,25: | 80,509 |
| Lasts and pegs. | 8 | 646,815 | 210 | 102,774 | 60,011 | 250,823 |
| Log products. | 1,887 | 144,758,399 | 34,964 | 15,586,915 | 33,365,810 | 68,815,472 |
| Lumber products. | 661 | 32,075,883 | 9,272 | 4,242,627 | 9,176,512 | 18,370,604 |
| Matches. | 3 | 508,599 | 241 | 79,793. | 150.045 | 413,144 |
| Picture frames | 25 | 1,132,606 | 517 | 240,270 | 337,556 | 831,652 |
| Pumps and windmills. | 36 | 2,328,237 | 551 | 289,271 | 363,888 | ,223,710 |
| Refrigerators | 10 | 468,745 | 138 | 81,330 | 131,541 | 326,639 |
| Shooks, box. | 8. | 791,007. | 482 | 211,725 | 406,479 | 935,387 |
| Show cases. | 14. | 625,590 | 233 | 114,258 | 185,346 | 438,272 |
| Wickerware. | 8 | 286,508 | 208 | 92,579 | 96,611 | 301,651 |
| Wooden piping. | 3 | 293,390 | 30 | 8,090 | 45,429 | 76,476 |
| Woodpulp, chemical and mechanical. | 32 | 47,626,237 | 4,456 | 2,412,037 | 5,821,997 | 10,952,468 |
| Woodworking and turning. | 41 | 1,481,458 | 719 | 326,432. | 554,680) | 1,254,923 |
| All other indus- | 10 | 657.411 | 220 | 103,667 | 165,494 | 381,732 |

Mandfactures.
72.-Statistics of Manufactures, 1915.-con.

| Groups and Kinds. of Industries. | Estab-lishments | Capital. | $\underset{\text { ployees }}{\text { Em- }}$ on wages. | Wages paid. | Cost of materials. | Value of products. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \$ |  | \$ | \$ | \$ |
| finis | 524 | 60,269 | 20,30 | 10,306,114 | 45,201,497. | 71,036,644 |
| Belting and hose, leather. | 7 |  | 151. | 81,742 | 1,027,763 | 1,717,702 |
| Boots and shoes.. | 146 | 30,881,172 | 14,290 | 6,814,772 | 18,980,004 | 34,064,696 |
| Boot and shoe pairs. | 127 | 153,284 |  | 99,429 | 5 | 328,303 |
| Boot and shoe supplies. | 8 |  | 105 | 35,166 | 107,520 | 185,868 |
| Harness and dlery | 102 | 5,747,234 | 1,4 | 1,115 | 5,595,080 | 8,739,278 |
| Leather, tanned, curried and finished. | 106 | 19,688,281 | 3,293 | 1,754,871 | 18,123,623 | 23,654,491 |
| Leather goods | 25 | 2,004,030 | 775 | 376,634 | 1,187,755 | 2,179,035 |
| Whips. | 3 | 217,762 | 66 | 28,461 | 95,347 | 167,271 |
| VI. Paper and printing. | 1,306 | 138,544,786 | 30,817 | 18,780 | 9,324,906 | 74,038,398 |
| Boxes and bags, paper | 71 | 53 | 861 | 8 , | 9 | 67 |
| Fly paper | 4 | 39,429 | 12 | 5,955 |  |  |
| Lithographing and engraving | 80 | 4,150 | 1,868 | 1,192,838 | 1,064,707 | 3,578,443 |
| Paper. | 48 | 86,110,566 | 10,099 | 6,337,838 | 15,149,987 | 29,395,535 |
| Paper patterns. | 5 | 221,476 | 98 | 46,807 | 102,132 | 504,281 |
| Printing and b binding. | 411 |  |  |  | 12 |  |
| Printing and lishing. | 646 | 21,340,992 | 8,314 | 25,190 | 5,153,819 |  |
| Stationery | 38 | 3,590,630 | 1,208 | 596,983. | 1,135,533 | 306545 |
| Stereotyping electrotypin | 11 | 231,161. | 108 | 81,387 | 50,132 | 252,634 |
| Wall paper | 3 | 1,112,854. | 264 | 127,561 | 245,717 | 648,099 |
| Waxed paper | 3 | 166,813 | 57 | 26,583 | 117,125 | 209,525 |
| All other indus- | 6 | 1,271,307 | 241 | 124 | 380,545 | 889,882 |
| VII. Liquors and beverages. | 341 | 52,283 | 4,376 | 2,961 | 10,129,2 | 34,859,927 |
| Aerated and mineral waters. | 221 | 4,058,962 | 1,092 |  | , |  |
| Liquors, distille | 11 | 15,802,769 | 835 | 395,509 | 1,671,665 | 14,692,952 |
| Liquors, malt. | 94 | 31,062,060 | 2,332 | 1,749,284 | 6,557,636 | 15,795,901 |
| Liquors, via | 12 | 844,867 | 31 | 24,863 | 105,313 | 268,623 |
| Malt.. | 3 | 515,250 | 86 | 148,119 | 835,769 | 1,295,509 |
| VIII. Chemicals and allied products. | 255 | 52,248,588 | 10,436 | 5,413,846 | 24,930,308 | 45,410,486 |
| Ammonia. | 析 | 314,527 | 26 | 14,971 | 169,634 | -221,708 |
| Druge. | 33 | 7,859,124 | 1,324 | 679,610 | 3,117,385 | 5,416,311 |
| Explosives. .. . . | 9 | 10,494,301 | 4,010 | 1,966,998 | 4,139,994 | 10,306,605 |

## PRODUCTION

72.-Statistics of Manufactures, 1915-con.

| Groups and Kinds of Industries. | $\begin{aligned} & \text { Estab- } \\ & \text { lish- } \\ & \text { ments } \end{aligned}$ | Capital. | Employees on wages. | Wages paid. | Cost of materials. | Value of products. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VIII. Chemicals and allied pro-ducts-con. | No. | \$ | No. | $\$$ | \$ | \$ |
| Fertilizers. | 9 | 1,655,426 | 173 | 88,285 | 535,466 | 1,016,140 |
| Oils. | 18 | 10,044,874 | 1,549 | 897,572 | 7,536,127 | 10,777,667 |
| Oxygen gas | 3 | 369,110 | 32 | 17,695 | 29,658 | 109,183 |
| nishes. | 40 | 9,301,005 | 835 | 497,967 | 4,769,112 | 8,373,746 |
| Patent medicines. | 106 | 4,314,859 | 1,081 | 600,180 | 1,848,420 | 4,085,136 |
| Salt. | 11 | 2,028,633 | 349 | 206,969 | 545,447 | 1,078,183 |
| Starch. | 10 | 2,062,596 | 532 | 216,523 | 1,839,430 | 2,602,584 |
| All other industries. | 13 | 3,804,133 | 525 | 227,076 | 399,635 | 1,423,223 |
| IX. Clay, glass and stone products. | 772 | 96,376,573 | 14,498 | 8,249,184 | 10,971,641 | 27,244,813 |
| Abrasive goods. | 10 | 824,595 | 248 | 79,922 | 226,004 | 558,099 |
| Brick, tile and pottery | 230 | 16,426,585 | 2,558 | 1,110,662 | 652,388 | 2,931,575 |
| Cement blocks and tiles. | 119 | 4,264,372 | 2,378 | 1,622,102 | 1,621,607 | 3,902,313 |
| Cement, Portland | 17 | 43,122,353 | 1,655 | 1,112,310 | 4,072,823 | 7,773,993 |
| Glass. | 9. | 10,713,646 | 2,855 | 1,550,167 | 1,656,190 | 4,192,169 |
| Glass, stained, cut and ornamental | 16 | 348,538 | 216 | 114,322 | -94,887 | 400,314 |
| Lime. | 51 | 2,481,304 | 663 | 306,358 | 270,064 | 809,326 |
| Mirrors and plate glass. | 16 | 1,761,968 | 276 | 202,842 | 586,934 | 1,095,985 |
| Monuments and tombstones. | 171 | 2,463,014 | 742 | 487,761 | 670,771 | 1,720,804 |
| Sewer pipe | 4 | 1,739,991 | 360 | 195,245 | 136,244 | 602,634 |
| Stone, artificial... | 15 | 209,024 | 81 | 36,736 | 26.813 | 92,590 |
| Statuary | 3 | 101,811 | 37 | 27,919 | 9,033 | 60,744 |
| Stone, cut. | 96 | 9,450,778 | 1,989 | 1,135,795 | 566,522 | 2,568,491 |
| Wall plaster. | 3 | 503,199 | 35 | 20,564 | 28,257 | 79,830 |
| All other industries. | 12 | 1,965,395 | 455 | 246,479 | 353,104 | 455,946 |
| X. Metals and metal products other than iron and steel. | 1,173 | 174,621,994 | 27,011 | 17,557,682 | 45,931,080 | 90,943,278 |
| Aluminium | 4. | 5,262,502 | 587 | 375,265 | 1,690,657 | 4,071,406 |
| Babbitt metal. | 7 | 349,917 | 80 | $35,272$ | 971,851 | $\begin{aligned} & 1,187,551 \end{aligned}$ |
| Brass castings.... | 50 | 6,184,426 | 1,884 | 998,205 | 4,748,823 | 7,787,302 |
| Brass andiron beds. | 4 | 318,504 | 116 | 39,963 | 69,765 | 202,103 |
| Jewellery and repairs. | 86 | 2,975,474 | 1,301 | 1,267,033 | 868,820 | 2,212,859 |

-MANUFACTURES
72.-Statistics of Manufactures, 1915-con.

| Groups and Kinds of Industries. | $\begin{gathered} \text { Estab- } \\ \text { lish- } \\ \text { ments. } \end{gathered}$ | Capital | Employees on wages. | Wages paid. | Cost of materials. | Value of products |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \$ | No. | \$ | \$ | \$ |
| X. Metals and metal products other than iron and steel.-con. |  |  |  |  |  |  |
| Lamps and lanterns. | 8 | 923,003. | 459 | 187,205 | 602,528 | 050,867 |
| Lightning rods. | 3 | 49,549 | 7 | 4,432 | 55,257 | 83,227 |
| Metallic roofing and flooring. | 14 | 3,535,992 | 825 | 431,094 | 2,359,290 | ,431,226 |
| Plumbers'supplies | 17 | 2,964,974 | 847. | 432,105 | 1,384,436 | -,268,858 |
| Plumbing and tissmithing. | 933 | 14,115,269 | 4,977 | 2,815,692 | ,935,350 | 04 |
| Silversmithing | 17 | 1,612,034 | 440 | 255,504 | 358,091 | 977,676 |
| Smelting. : | 17 | 134,164,510 | 15,139 | 10,497,858 | 25,706,190 | 52,782,156 |
| All other industries. | 13 | 2,165,840 | 349 | 218,004 | 1,180,022 | 1,835,743 |
| XI. Tobacco and its manufactures | 166 | 23,066,898 | 8,532 | 3,083,000 | 16,017,707 | 28,987,250 |
| Tobaceo, chewing, smoking and snuff. | 30 | 6,422,029 | 2,080 | 709,567 | 5,117,330 | 8,960,919 |
| Tobacco, cigars and cigarettes... | 136 | 16,644,869 | 6,452 | 2,373,433 | 10,900,377 | 20,026,331 |
| XII. Vehicles for land transpertation.... | 464 | 125,965,499 | 34,195 | 18,637,539 | 40,547,113 | 73,878,212 |
| Automobiles | 8 | 14,019,455 | 3,619 | 2,669,333 | 16,739,643 | 24,357,627 |
| Bicycles... |  | 112,874 | 21 | 13,593 | -98,517 | 147,266 |
| Car repairs.. | 50 | 34,620,434 | 13,023 | 7,009,077 | 6,166,585 | 14,842,457 |
| Carriages and wagons... | 364 | 13,777,562 | 2,64 | 1,356 | 3,939 | 8 |
| Carriage and wagon materials. | 26 | 3,186,538 | 598 | 343,591 | 958,537 | 1,908,012 |
| Carsandear works. | 13 | 60,248,636 | 14,290 | 7,045,526 | 12,643,922 | 24,951,922 |
| XIII. Vessels for water transportation. | 103 | 12,331,341 | 5,261 | 2,467,074 | 3,035,857 | 8,419,648 |
| Boats and canoes. | 83 | 870,573 | 377 | 196,571 | 234,726 | 639,147 |
| Ships and ship repairs. | 20 | 11,460,768 | 4,884 | 2,270,503 | 2,801,131 | 7,780,501 |
| XIV. Miscellaneous Industries. | 1,437 | 441,132,723 | 47,901 | 25,934,136 | 56,324,658 | 134,268,231 |
| Agricultural implements. | 56 | 59,529,091 | 6,737 | 3,125,066 | 5,983,236 | 13,372,506 |

## PRODUCTION

72.-Statistics of Manufactures, 1915--con.

| Groups and Kinds of Industries. | Estab-lishments | Capital. |  | Wages. paid. | Cost of materials. | Value of products. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| XIV. Miscellan- eous Industries -con. | No. | \$ | No. | \$ | \$ | \$ |
| Ammunitio | 5 | 4,656,84.5 | 1,662 | 765,986 | 1,740,881 | 2,918,783 |
| Artificial feathers and flowers.. | 6 | 327,593 | 268 | 105,940 | 167,925 | 385,773 |
| Artificial ice. | 6 | 723,157 | 98 | 72,466 | 27,136 | 420,600 |
| Asbestos. | $\stackrel{\square}{8}$ | 2,434,116 | 767 | 342,303 | 379,544 | 1,410,661 |
| Asphalt. ; | 16 | 1,415,720 | 734 | 348,333 | 538,344 | 1,134,673 |
| Eeekeepers' supplies. | 3 | 23,450 | ${ }^{4}$ | 1,568 | 1,022 | 4,365 |
| Blacking. | 25 | 765,310 | 163 | 84,492 | 540,415 | 999,460 |
| Brooms and brushes. | 52 | 1,403,325 | 736 | 305,540. | 684,007 | 1,378,828 |
| Buttons. - . | 15 | 607,627 | 548 | 204,059 | 146,907 | 453,836 |
| Carbide of cal- cium. | 4 | 5,243,020 | 696 | 455,816 | 1,054,666 | 2,143,577 |
| Coke. |  | 1,608,787 | 2,465 | 1,406,142 | 2,279,112 | 4,416,513 |
| Conduits, electric | 3 | 336,670 | 46. | 20,721 | 184,189 | 290,746 |
| Corsets and supplies. | 11 | 1,812,754 | 1,045 | 296,179. | 980,527 | 2,129,985 |
| Dental supplies... | 9 | 271,481 | 37 | 17,955 | 407,365 | 545,245 |
| Electrical apparatus and supplies. <br> Electric light and | 47 | 38,519,220 | 7,083 | 3,660,184 | 9,137,197 | 18,108,24 |
| power.... | 307 | 248,573,546 | 7,204 | 5,755,488 | 6,275,166 | 29,452,997 |
| Elevators. | 6 | 3,433,631 | 690 | 415,868 | 233,865 | 1,441,079 |
| Fancy goods. | , | 457,244 | 533 | 216,977 | 309,480 | 800,293 |
| Flour paste.. | 3 | 16,000 | 8 | 2,365 | 7,911 | 14,872 |
| Fringes, cords and tassels. | 4 | 108,558 | 137 | 37,406 | 44,995 | 129,774 |
| Gas, Iighting and heating. | 35 | 16,609,420 | 1,433 | 944,850 | 1,553,074 | 4,450,960 |
| Gloves and mittens. | 38 | 1,759,110 | 1,098 | 333,404 | 1,089,230 | 1,899,092 |
| Glue. | 5 | 897,033 | 233 | 130,182 | 369,661 | 624,728 |
| Hairwork | 14 | 627,773 | 130 | 64,308 | 153,648 | 286,228 |
| Hay, baled. | 5. | 45,729 | 82 | 22,790 | 269,992 | 330,986 |
| Inks. | 10 | 406,421 | 65 | 36,683 | 276,796 | 549,404 |
| Jewellery cases. | 3 | 35,008 | 36 | 12,077 | 9,996 | 26,488 |
| Labels. | 4 | 241,258 | 156 | 43,579 | 56,615 | 138,653 |
| Mattresses and spring beds. | 55 | 3,362,022 | 935 | 488,651 | 1,268,579 | 4,618,422 |
| Mica, cut..... | 3 | 123,256 | 529 | 44,533 | 42,948 | 81,105 |
| $\begin{aligned} & \text { Musical instru- } \\ & \text { ments... } \end{aligned}$ | 37 | 7,558,116 | 1,882 | 1,053,560 | 1,438,972 | 3,528,643 |
| Musical instrument materials. | 7 | 1,404,226 | 555 | 342,354 | 421,260 | 965,746 |
| Optical goods..... | 18 | 494,694 | 240 | 136,390 | 153,263 | 493,322 |
| Pstterns. . | 12 | 52,668 | 55 | 37,365 | 10,042 | 83,143 |

## MANUFACTURES

72.-Statistics of Manufactures, 1915-concluded.

| Groups and Kinds of Industries. | $\begin{gathered} \text { Estab- } \\ \text { lish- } \\ \text { ments } \end{gathered}$ | Capital. | Employees on wages. | Wages paid. | Cost of materials. | Value of products. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \$ | No. | \$ | \$ | 5 |
| XIV. Miscel'neous Industries-con. |  |  |  |  |  |  |
| Photography | 280 | 776,324 | 548 | .293,921 | 253,192 | 999,413 |
| Plaster. | 13 | 3,017,797 | 949 | 469,607 | 268,618. | 1,030,393 |
| Plaster and stucco | 4. | 15,203 | 9 | 9,129 | 4,525 | 18,395 |
| Printers' supplies | 3 | 86,732 | 16 | 15,040. | 46,535 | 86,694 |
| Pulleys. | 5 | 752,371 | 263 | 137,739 | 154,103 | 437,760 |
| Railway supplies. | 5 | 256,431 | 65 | 30,841 | 60,152 | 124,573 |
| Roofing and roofing materials... | 39 | 1,981,158 | 403 | 224,397 | 909,755 | 1,466,988 |
| Rubber and elastic goods... | 15 | 12,851,791 | 3,248 | 1,717,114 | 7,061,076 | 14,393,181 |
| Seed cleaning and preparing. | 10 | 1,168,319 | 235 | 82,720 | 2,166,482 | 2,636,327 |
| Signs. | 59 | 307,733 | 255 | 147,526 | 138,758 | 510,701 |
| Soap... | 26 | 5,042,065 | 663 | 342,176 | 4,095,033 | 6,445,939 |
| Sporting goods. | 8 | 351,599 | 114 | 38,427 | 131,871 | 237,242 |
| Sweeping compounds. | 9 | 248,758 | 27 | , | 27,014 | 37,006 |
| Umbrellas. | 6 | 231,921 | 102 | 38,261 | 192,561 | 354,361 |
| Vacuum cleaners. | 5 | 68,474 | 16 | 11,830 | 36,947 | 81,304 |
| Washing compounds. | 8 | 113,346 | 46 | 22,332 | 63,080 | 127,563 |
| Washing machines and wringers. | 5 | 499,791 | 110 | 67,947 | 137,939 | 274,591 |
| Wax candles.. ... | 7 | 84,270 | 22 | 9,538 | 41,284 | 91,675 |
| Weather-strips.... | 10 | 62,539 | 29 | 14,900 | 22,226 | 63,733 |
| Windowblinds and shades. | 3 | 545,151 | 135 | 46,270 | 344,608 | 568,912 |
| Window fixtures.. | 4 | 99,345 | 58 | 31,374 | 26,344 | 93,573 |
| All other industries. | 69 | 6,687,728 | 1,498 | 836,614 | 1,904,589 | 4,058,180 |
| XV. Hand Trades. | 1,584 | 32,099,855 | 17,816 | 10,761,802 | 18,254,178 | 40,729,180 |
| Automobilerepairs and accessories. | 120 | 3,540,441 | 1,233 | 944,561 | 2,434,197, | 329,938 |
| Bioycle repairs. | 13 | 51,783 | 17 | 10,410 | 11,773 | 30,950 |
| Blacksmithing.... | 611 | 1,821,735 | 901 | 487,938 | 351,836 | 1,437,172 |
| Dyeing and cleaning. | 133 | 3,809,730 | 3,534 | 1,564,820 | 662,345 | 3,986,670 |
| Housebuilding.... | 556 | 14,195,043 | 8,775 | 5,555,955 | 13,586,473 | 26,436,163 |
| Interior decorations..... | 10 | 604,419 | 202 | 120,162 | 119,198 | 360,561 |
| Lockand gunsmithing. | 26 | 7,251,810 | 2,693 | 1,783, | 854,331 | 3,264 |
| $\begin{gathered} \text { Painting and } \\ \text { glazing... } \end{gathered}$ | 115 | 824,894 | 461 | 294,660 | 234,025 | 883,461 |

## TRADE AND COMMERCE

73.-War Trade in Manufactures, 1915.

| Groups. | Value of war trade. | Groups. | Value of war trade. |
| :---: | :---: | :---: | :---: |
| Food products. | $\begin{gathered} \$ \\ 5,789,354 \end{gathered}$ | Metals and metal products | \$ |
| Textiles. | 23,319,659 | other than iron and steel | 9,837,013 |
| Iron and steel products... | 34,500,967 | Tobacco and its manufactures. | 127,686 |
| Timber and lumber and their re-manufactures... | 3,491,792 | Vehicles for land transportation. | 16,955,562 |
| Leather and its finished products. . | 13,159,261 | Vessels for water transportation. | 2,471,489 |
| Paper and printing. | 63,853 | Miscellaneous industries. | 12,555,128 |
| Liquors and beverages. | 19,358 | Hand trades. | 2,524,346 |
| Chemicals and allied products. . | 8,519,735 | Total. | 133,417,371 |
| Clay, glass and stone products. | 82,168 |  |  |

## VII.-TRADE AND COMMERCE.

Included in this section are tables showing the exports and imports of Canada in different categories and for varying periods. These are followed by grain statistics and statistics relating to bounties, patents and copyrights, trade marks, etc.

Import and Export Tables.-Hitherto the trade tables of Canada have included imports in the two categories of (1) merchandise for home consumption and (2) total merchandise, the latter including goods not taken out of bond and which may be intended for export. The export tables have included (1) merchandise the produce of Canada and (2) merchandise of foreign origin. The distinction thus made is usually described by the terms "special" trade (consisting of imports for home consumption and exports the produce of the exporting country) and " general" trade (consisting of total imports and exports). In so far as the imports not taken out of bond and therefore not reckoned as intended for home consumption may be exported, there has been a certain amount of duplication in the figures representing the total or general trade, because the total exports have included the imports not intended for home consumption. In 1912 the Departmental Commission on Official Statisties recommended that the column of total imports in the Trade and Navigation Returns should be dispensed with on the ground that the column showing imports for home consumption was sufficient. The Department of Customs has now decided to publish

## AGGREGATE EXTERNAL TRADE

only the imports for home consumption, and as a consequence the tables of imports and exports in this issue of the Year Book have been remodelled. Table 1 presents a general view of the aggregate trade of Canadia from 1868 to 1917 In this table the imports include only merchandise entered for home consumption, the exports are distinguished as between Canadian and foreign produce, and the aggregate trade consists of the imports for home consumption and the total exports. The values of coin and bullion, the movement of which during the past three years represents fiduciary transactions rather than trading exchanges, have been eliminated from the totals of imports and exports and are recorded separately in Table 2. The duties collected on exports and imports are given in Table 3, and Table 4 shows the ratio of exports to imports and the per capita value of Canadian trade. From Table 4 it will be observed that the so-called "balance of trade" has been against Canada (i.e. the imports have exceeded the exports) for thirty-five years out of the fifty years since Confederation, and that this adverse balance reached its highest ratio in 1913 just before the war. Since this date the adverse ratio has receded, and in 1915 for the first time since 1903 the balance became favourable to Canada, the exports exceeding imports by a little over one per cent. For 1916 the ratio rose to 153.46 per cent. and for 1917 it was 139.50 per cent. The value of the total trade per capita is shown by the same table to have risen from $\$ 35.53$ in 1868 to $\$ 242.14$ in 1917

Aggregate External Trade.-As shown by Table 1, the aggregate external trade of Canada for the year ended March 31, 1917, was of the value of $\$ 2,024,542,003$, as compared with $\$ 1,287,117,229$ in 191516 and $\$ 916,888,821$ in 1914-15. The increase in 1916-17, as compared with $1915-16$, is $\$ 737,424,774$, or 57.29 p.e., and as compared with $1914-15$ it is $\$ 1,107,653,182$, or 121 p.c. A considerable proportion of the increased value of Canadian exports during the last three years has been due directly to the war, large increases being shown for grain, hay, boots and shoes, cartridges, explosives and fulminates, metals, minerals, iron, steel and manufactures thereof. In 1916-17 the total trade of the Dominion with the United Kingdom was $\$ 863,142,240$, as compared with $\$ 540,485,602$ in 1915-16. With the United States it was $\$ 954,797,837$ in 1916-17, as compared with $\$ 83,610,018$ in 1915-16, while the trade with countries other than these two was $\$ 206,601,926$ in 1916-17, as compared with $\$ 263,021,609$ in 1915-16.

Trade of Calendar Year 1916.-For the calendar year 1916 the total value of Canadian trade with other countries amounted to $\$ 1,995,508,688$, exclusive of coin and bullion, as compared with $\$ 1,104,036,186$ in 1915 , an increase of $\$ 891,472,502$, or 80.7 p.c. Exports in 1916 amounted to $\$ 1,229,007,276$, as compared with $\$ 653$,488,412 in 1915 , and imports to $\$ 766,501,412$, as compared with $\$ 450,-$ 547,774 in 1915. Trade with the United Kingdom reached a total value of $\$ 821,714,082$, as compared with $\$ 435,851,194$ in 1915 . Exports to the United Kingdom in 1916 were $\$ 718,723,567$, as compared with $\$ 361,486,588$, and imports from the United Kingdom in 1916 were $\$ 102,990,515$, as compared with $\$ 74,364,606$. Trade with the United

## TRADE AND COMMERCE

States reached the total value of $\$ 862,033,042$, as compared with $\$ 521,306,567$ in 1915 . Exports to the United States were $\$ 269,981,964$, as compared with $\$ 204,708,903$ in 1915, and imports from the United States were $\$ 592,051,078$, as compared with $\$ 316,597,664$ in 1915.

Trade Fluctuations by Quantities and Values.-It is evident that values alone cannot give a true measurement of the increase or decrease of trade from year to year, because such increase or decrease depends upon the double factors of price and volume. The increase or decrease in the value of articles imported into and exported from Canada that may be due (a) to higher or lower prices and (b) larger or smaller quantities, as between the fiscal years 1915 and 1916, has been calculated in the Census and Statistics Office for a large number of separate articles as in Table 26. The principle of calculation followed is that of the British Board of Trade. For all articles of which quantities as well as values are recorded in the trade returns, it is easy to ascertain the difference due to each by direct calculation; but where values alone are recorded and not quantities, it is necessary to proceed by estimate. And the method adopted is to group such articles with the classes to which they properly belong and assume that the variation due to volume has been in the same proportion as other articles in the class for which quantities are given. Inasmuch as the articles for which only values are given are relatively few and unimportant, the results are not greatly influenced by the amount of estimation necessary. The table shows that in 1916 the total value of exports the produce of Canada (exclusive of coin and bullion) was $\$ 741,610,000$, as compared with $\$ 409,420,000$ in 1915. The increase of $\$ 332,190,000$ representing 81.1 p.c. in the year is made up of $\$ 43,397,000$, or 6.2 p.c., due to highor prices and of $\$ 288 ; 793,000$, or 70.5 p.c., due to larger quantities. In the case of imports for home consumption, the total value in 1916 was $\$ 507,817,000$, as compared with $\$ 455,445,000$ in 1915 , an increase of $\$ 52,372,000$, or 11.5 p.c. This increase is made up of $\$ 28,180,000$, or 5.9 p.e., due to higher prices and of $\$ 24,192,000$, or 5.3 p.c., due to larger quantities. The total trade (exports and imports) was of the value of $\$ 1,249,427,000$ in 1916 , as compared with $\$ 864,865,000$ in 1915 , an increase of $\$ 384,562,000$, or 44.5 p.c., which is made up of $\$ 71,577,000$, or 6.1 p.c., due to higher prices and of $\$ 312,985,000$, or 36.1 p.c., due to larger quantities. The table further shows the classes of produce that were affected by differences in price and volume. Of the exports, only fisheries show a reduction in price, and the quantities for all descriptions are higher. Of the imports, forest and mineral produce are less in value by reason of lower prices, and agricultural, fisheries and forest produce, as well as manufactures, are less owing to smaller quantities. The period covered by the table is for the fiscal year ended March 31, 1916, as compared with 1915.

## AGGREGATE EXTERNALTRADE

1.-Aggregate External Trade of Canada, 1868-1917.


TRADE AND COMMERCE
2.-Movement of Coin and Bullion, 1868-1917.

| Year. | Total lmports. | Exports. |  |  | Total Imports and Exports of Coin and Bullion. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Canadian. | Foreign. | Total. |  |
|  | \$ | \$ | \$ | \$ | \$ |
| 1868. | 4,895,147 | 4,866,168 | - | 4,806,168 | 9,761,314 |
| 1869. | 4,247,229 | 4,218,208 |  | $4,218,208$ | 8,465,437 |
| 1870. | 4,335,529 | 8,002,278 |  | 8,002,278 | 12,337,807 |
| 1871. | 2,733,094 | 6,690,350 | - | 6,690,350 | 9,423,444 |
| 1872. | 2,753,749 | 4,010,398 |  | 4,010,398 | 6,764,147 |
| 1873. | 3,005,465 | 3,845,987 |  | 3,845,987 | 6,851,452 |
| 1874. | 4,223,282 | 1,995,835 |  | 1,995,835 | - 6,219,117 |
| 1875. | 2,210,089 | 1,039,837 |  | 1,039,837 | 3,249,926 |
| 1876. | 2,220,111. | 1,240,037 |  | 1,240,087 | 3,460,148 |
| 1877 | 2,174,089 | - | 733,738 | 733,739 | 2,907,828 |
| 1878 | 803,726 | - | 168,989 | 168,989 | 972,715 |
| 1879. | 1,639,089 | - | 704,586 | 704,586 | 2,343,675 |
| 1880. | 1,881,807 | - | 1,771,755 | 1,771,755 | 3,653,562 |
| 1881. | 1,123,275 | - | 971,005 | 971.005 | 2,094,280 |
| 1882. | 1,503,743 | - | 371,093 | 371,093 | 1,874,836 |
| 1883. | 1,275,523 | - | 631,600 | 631,600 | 1,907,123 |
| 1884. | 2,207,666 | - | 2,184,292 | 2,184,292 | 4,391,958 |
| 1885. | 2,954,244 | - | 2,026,980 | 2,026,980 | 4,981,224 |
| 1886 | 3,610,557 | - | 56,531 | 56,531 | 3,667,088 |
| 1887 | 532,218 | - | 5,569 | 15,569 | 537,787 |
| 1888. | 2,175,472 | - | 17,534 | 7,534 | 2,193,006 |
| 1889. | 575,251 | - | 1,978,256 | 1,978,256 | 2,553,507 |
| 1890. | 1,083,011 | - | 2,439,782 | 2,439,782 | 3,522,793 |
| 1891. | 1,811,170 | 129,328 | 817,599 | 946,927 | 2,758,097 |
| 1892. | 1,818,530 | 306,447 | 1,502,671 | 1,809,118 | 3,627,648 |
| 1893. | 6,534,200 | 309,459 | 3,824,239 | 4,133,698 | 10,667,898 |
| 1894. | 4,023,072 | 310,006 | 1,529,374 | 1,839,380 | 5,862,452 |
| 1895. | 4,576,620 | 256,571 | 4,068,748 | 4,325,319 | 8,901,939 |
| 1896. | $5,226,319$ | 207,532 | 4,491,777 | 4,699,309 | 9,925,628 |
| 1897. | 4,676,194 | 327,298 | 3,165,252 | 3,492,550 | 8,168,744 |
| 1898. | 4,390,844 | 1,045,723 | 3,577,415 | 4,623,138 | 9,013,982 |
| 1899. | 4,705,134 | 1,101,245 | 2,914,780 | 4,016,025 | 8,721,159 |
| 1900. | 8,297,438 | 1,670,068 | 6,987,100 | 8,657,168 | 16,954,606 |
| 1901. | 3,537,294 | - | 1,978,489 | 1,978,489 | 5,515,783 |
| 1902. | 6,311,405 | - | 1,669,422 | 1,669,422 | 7,980,827 |
| 1903. | 8,976,797 | - | 619,903 | 619,963 | 9,596,760 |
| 1904. | 7,874,313 | - | 2,465,557 | 2,465,557 | 10,339,870 |
| 1905. | 10,308,435 | - | 1,844,811 | 1,844,811 | 12,153,246 |
| 1906. | 7,078,603 | - | 9,928,828 | 9,928,828 | 17,007,431 |
| 1907 (9 mos.) | 7,517,008 | - | 13,189,964 | 13,189,964 | 20,706,972 |
| 1908. | 6,548,661 | - | 16,637,654 | 16,637,654 | 23,186,315 |
| 1909. | 9,988,442 | 2 | 1,589,791 | 1,589,793 | 11,578,235 |
| 1910. | 6,017,589 | - | 2,594,536 | 2,594,536 | - 8,612,125 |
| 1911. | 10,206,210 | - | 7,196,155 | 7,196,155 | 17,402,365 |
| 1912. | 26,033,881 |  | 76,601,099 |  | $33,634,980$ $21,591,681$ |
| 1913. | $5,427,979$ $15,235,305$ | 1,219 | $16,163,702$ <br> $23,559,485$ | $16,163,702$ $23,560,704$ | $21,591,681$ $38,796,099$ |
| 1915. | 131,992,992 | -667 | 29,365,701 | 29,366,368 | $161,359,360$ |
| 1916. | 34,260,202 | 315 | 103,572,117 | 103,572,432 | 137,832,634 |
| 1917. | 28,081,120 | 86,087 | 196,460,961 | 196,547,048 | 224,628,168 |

DUTIES COLLECTED ON EXPORTS AND IMPORTS
3.-Duties Collected on Exports, 1868-1892, and on Imports for Home Consumption, 1868-1917.

| Year. | Duties collected on Exports. | Duties collected on Imports. | Year. | Duties collected on Exports. | Duties collected on Imports. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | * | \$ |  | 1 | \$ |
| 1868. | 17,986 | 8,801,446 | 1893. | - | 21,161,711 |
| 1869. | 14,403 | 8,284,507 | 1894. | - | 19,379 822 |
| 1870. | 37,912 | 9,425,028 | 1895. | - | 17,887,269 |
| 1871. | 36,066 | 11,807,590 | 1896. | - | 20,219,037 |
| 1872. | 24,809 | 13,020,684 | 1897. | - | 19,891,997 |
| 1873. | 20,152 | 12,997,578 | 1898. | - | 22,157,788 |
| 1874. | 14,565 | 14,407,318 | 1899. | - | 25,734,229 |
| 1875. | 7,243 | 15,354,139 | 1900. | - | 28,889,110 |
| 1876. | 4,500 | 12,828,614 | 1901. | - | 29,106,980 |
| 1877 | 4,103 | 12,544,348 | 1902. | - | 32,425,532 |
| 1878. | 4,161 | 12,791,532 | 1903. | - | 37,110,355 |
| 1879. | 4,272 | 12,935,269 | 1904 | - | 40,954,349 |
| 1880. | 8,896 | 14,129,953 | 1905. | - | 42,024,340 |
| 1881. . | 8,141 | 18,492,645 | 1906. | - | 46,671,101 |
| 1882. | 8,810 | 21,700,028 | 1907 (9 months) | - | 40,290,172 |
| 1883. | 9,756 | 23,162,553 | 1908. | - | 58,331,074 |
| 1884. | 8,515 | 20,156,448 | 1909. | - | 48,059,792 |
| 1885. | 12,305 | 19,121,254 | 1910. | - | 61,024,239 |
| 1886. | 20,726 | 19,427,398 | 1911. | - | 73,312,368 |
| 1887 | 31,397 | 22,438,309 | 1912. | - | 87,576,037 |
| 1888. | 21,772 | 22,187,869 | 1913. | - | 115,063,688 |
| 1889. | 42,207 | 23,742,317 | 1914. | - | 107,180,578 |
| 1890. | 93,674 | 23,921,234 | 1915. | - | 79,205,910 |
| 1891. | 64,808 | 23,416,266 | 1916. | - | 108,929,426 |
| 1892. | 108 | 20,550,474 | 1917 | - | 147,623,230 |

'Includes $\$ 2,638,473$ war tax.

TRADE AND COMMERCE.
4.-Ratio of Exports to Imports and Value per capita of Exports, Imports and Total Trade, 1868-1917.

| Year. | Excess of lmports over Total Exports. | Excess of Total Exports over Imports. | Percent-qae Rateof totalExportstoImportsenteredfor con-sumption | Estimated Population. | Value per capita of- |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Exports. | Imports. | Total Tiade. |
| 1868.. | $\stackrel{\$}{\$}$ | \$ | P.e. 78.56 | 3,372,000 |  | 8 <br> 19.9 <br> 19. | \$ c. |
| 1869 | 6,898,368 |  | 89.08 | $3,413,000$ | 16.48 | 18.50 |  |
| 1870. | 1,350,862 |  | 98.01 | $3,454,000$ | 18.98 | 19.37 | 38.35 |
| 1871. | 16,731,120 | - | 80.12 | 3,518,000 | 19.18 | 23.94 | 43.12 |
| 1872. | 26,326,102 |  | 74.92 | $3,611,000$ | 21.77 | 29.06 | 50.83 |
| 1873 | 38,565,149 |  | 69.03 | 3,668,000 | 23.43 | 33.94 | 57.37 |
| 1874 | 35,824,794 |  | 70.92 | 3,825,000 | 22.84 | 32.20 | 55.04 |
| 1875 | 40,561,426 |  | 65.45 | 3,887,000 | 19.77 | 30.21 | 49.98 |
| 1876 | 12,786,709 |  | 86.18 | 3,949,000 | 20.18 | 23.43 | 43.61 |
| 1877 | 18,984,740 |  | 79.83 | 4,013,000 | 18.72 | 23.45 | 42.17 |
| 1878 | 11,241,173 |  | 87.56 | 4,079,000 | 19.41 | 22.16 | 41.57 |
| 1879. | 7,915,850 |  | 89.94 | 4,146,000 | 17.07 | 18.98 | 36.05 |
| 1880 |  | 16,239,161 | 123.23 | 4,215,000 | 20.43 | 16.58 | 37.01 |
| 1881 |  | 6,831,489 | 107.55 | 4,337,000 | 22.44 | 20.86 | 43.30 |
| 1882. | 9,379,074 |  | 91.56 | 4,384,000 | 23.21 | 25.35 | 48.56 |
| 1883. | 24,407,292 | - | 79.97 | 4,433,000 | 21.98 | 27.49 | 49.47 |
| 1884 | 16,750,774 |  | 84.19 | 4,485,000 | 19.89 | 23.63 | 43.52 |
| 1885 | 12,544,394 |  | 8742 | 4,539,000 | 19.21 | 21.98 | 41.19 |
| 1886. | 10,797,354 |  | 88.75 | 4,589,000 | 18.56 | 20.92 | 39.48 |
| 1887 | 15,596,968 |  | 85.16 | 4,638,000 | 19.30 | 22.66 | 41.96 |
| 1888. | 10,486,162 |  | 89.58 | 4,688,0000 | '19.23 | 21.47 | 40.70 |
| 1889. | 21,887,285 |  | 79.94 | 4,740,000 | 18.40 | 23.02 | 41.43 |
| 1890. | 17,373,206 |  | 84.44 | 4,793,000 | 19.68 | 23.30 | 42.98 |
| 1891. | 14,063,585 |  | 87.39 | 4,844,000 | 20.12 | 23.02 | 43.14 |
| 1892. | 3,006,156 |  | 97.39 | 4,889,000 | 22.94 | 23.55 | 46.49 |
| 1893. | 740,176 |  | 99.36 | 4,936,000 | 23.18 | 23.33 | 46.51 |
| 1894. | - | 6,614,658 | 106.06 | 4,984,000 | 23.21 | 21.88 | 45.09 |
| 1895. | - | 8,637,593 | 108.58 | 5,034,000 | 21.71 | 20.0 C | 41.71 |
| 1895. | - | 10,953,382 | 110.40 | 5,086,000 | 22.87 | 20.72 | 43.59 |
| 1897 | - | 27,839,876 | 126.11 | 5,142,000 | 26.15 | 20.72 | 46.88 |
| 1898. | - | 33,222,383 | 126.30 | 5,199,000 | 30.68 | 24.29 | 54.97 |
| 1899. | - | 5,534,421 | 103.71 | 5,259,000 | 29.45 | 28.40 | 57.85 |
| 1900. | - | 10,730,677 | 106.22 | 5,322,000 | 34.43 | 32.41 | 66.84 |
| 1901. | - | 16,808,449 | 109.48 | 5,403,000 | 36.00 | 32.89 | 68.89 |
| 1902. | - | 13,490,674 | 106.87 | $5,532,000$ | 37.96 | 35.52 | 73.48 |
| 1903. |  | 416,042 | 100.19 | 5,673,000 | 39.87 | 39.63 | 79.50 |
| 1904. | 32,534,341 |  | 86.64 | 5,825,000 | 36.23 | 41.82 | 78.05 |
| 1905. | 50,145,058 | - | 80.07 | 5,992,000 | 33.62 | 41.99 | 75.61 |
| 1906. | 36,624,402 | - | 87.07 | $6,171,000$ | 39.97 | 45.90 | 85.87 |
| 1907 | 57,650,641 | - | 76.92 | 6,302,000 | 30.48 | 39.63 | 70.11 |
| 1908. | 88,511,003 | - | 74.85 | 6,491,000 | 40.57 | 54.21 | 94.78 |
| 1909. | 28,295,149 | - | 90.18 | 6,695,000 | 38.82 | 43.05 | 81.87 |
| 1910. | 71,051,434 | - | 81.79 | 6,917,000 | 43.19 | 53.46 | 96.65 |
| 1911 | 161,744,898 | - | 64.20 | 7,158,000 | 40.51 | 63.11 | 103.62 |
| 1912. | 213,732,158 | - | 59.01 | 7,343,000 | 41.91 | 71.01 | 112.92 |
| 1913. | 293,072,711 | - | 56.27 | 7,530,000 | 50.07 | 88.99 | 139.06 |
| 1914. | 163,019,920 | 5 - ${ }^{-}$ | 73.64 | 7,725,000 | 58.96 | 80.06 57.45 | 139.02 11565 |
| 1915. | - | 5,996,197 | 101.32 | $7,928,000$ $8,140,000$ | 58.20 95.74 | 57.45 <br> 62.39 | 115.65 158.13 |
| 1916. | - | 271,482,911 <br> 333,880 | 153.46 139.50 | $8,140,000$ $8,361,000$ | [ 95.74 | 62.39 101.10 | 1158.13 <br> 242.14 |

## EXPORTS OF CANADA

5.-Exports to the United Kingdom, to the United States and to Other Countries of Merchandise the produce of Canada, 1868-1917.

| Fiscal Year. | United Kingdom. | United States. | Other Countries. | Totala. |
| :---: | :---: | :---: | :---: | :---: |
|  | $17,905,808$ | $\begin{gathered} \mathbf{8} \\ 22,387,846 \end{gathered}$ | $5,249,523$ | $\stackrel{\$}{45,543,177}$ |
| 1869 | 20,486,389 | 23,640,188 | 5,196,727 | 49,323,304 |
| 1870. | 22,512,991 | 27,398,930 | 6,169,271 | 56,081,192 |
| 1871. | 21,733,556 | 26,715,650 | 6,732,110 | 55,181,356 |
| 1872. | 25,223,785 | 29,984,440 | 7,735,802 | 62,944,027 |
| 1873. | 31,402,234 | 33,421,725 | 8,421,647 | 73,245,606 |
| 1874 | 35,769,190 | 30,380,556 | 7,777,002 | 73,926,748 |
| 1875. | 34,199,134 | 25,683,818 | 7,607,941 | 67,490,893 |
| 1876. | 34,379,005 | 27,451,150 | 8,031,694 | 69,861,849 |
| 1877 | 35,491,671 | 22,160,666 | 8,212,543 | 65,864,880 |
| 1878. | 35,861,110 | 22,131,343 | 7,747,681 | 65,740,134 |
| 1879. | 29,393,424 | 23,149,909 | 7,546,245 | 60,089,578 |
| 1880. | 35,208,031 | 26,762,705 | 8,125,455 | 70,096,191 |
| 1881. | 42,637,219 | 31,015,109 | 7,269,051 | 80,921,379 |
| 1882. | 39,816,813 | 41,687,638 | 8,538,260 | 90,042,711 |
| 1883. | 39,538,067 | 36,096,501 | 8,651,139 | 84,285,707 |
| 1884. | 37,410,870 | 31,631,622 | 8,089,587 | 77,132,079 |
| 1885. | 36,479,051 | 32,618,593 | 7,085,874 | 76,183,518 |
| 1886. | 36,694,263 | 31,503,292 | 6,777,951 | 74,975,506 |
| 1887 | 38,714,331 | 32,273,033 | 6,976,656 | 77,964,020 |
| 1888. | 33,648,284 | 37,323,161 | 7,326,305 | 78,297,750 |
| 1889. | 33,504,281 | 36,449,288 | 7,248,235 | 77,201,804 |
| 1890. | 41,499,149 | 33,291,207 | 7,545,158 | 82,335,514 |
| 1891. | 43,243,784 | 34,829,436 | 7,684,524 | 85,757,744 |
| 1892. | 45,949,055 | 31,317,857 | 9,417,341 | 95,684,253 |
| 1893. | 58,409,606 | 33,813,802 | 9,783,082 | 102,006,490 |
| 1894. | $60,878,056$ | 29,297,598 | 10,411,199 | 100,586,853 |
| 1895. | 57,903,564 | 32,303,773 | 9,321,014 | 99,528,351 |
| 1896. | 62,717,941 | 34,460,428 | 9,200,383 | 106,378,752 |
| 1897 | 69,533,852 | 39,717,057 | 10,434,501 | 119,685,410 |
| 1898. | 93,065,019 | 34,361,795 | 12,494,118 | 139,920,930 |
| 1899. | 85,113,681 | 34,766,955 | 12,920,626 | 132,801,262 |
| 1900. | 96,562,875 | 52,584,977 | 14,412,938 | 163,510,790 |
| 1901. | 02,857,525 | 67,983,673 | 16,590,188 | 177,431,386 |
| 1902. | 109,347,345 | 66,567,784 | 20,104,634 | 196,019,763 |
| 1903. | 125,199,980 | 67,766,367 | 21,435,327 | 214,401,674 |
| 1904. | 110,120,892 | 66,856,885 | 21,436,662 | 198,414,439 |
| 1905 | 97,114,867 | 70,426,765 | 23,313,314 | 190,854,946 |
| 1906 | 127,456,465 | 83,546,306 | 24,481,185 | 235,483,956 |
| 1907 (9 months) | 98,691,186 | 62,257,299 | 19,596,821 | 180,545,306 |
| 1908. . | 126,194, 124 | 90, 814, 871 | 29,951,973 | 246,960,968 |
| 1909. | 126,384,724 | 85,334,806 | 30,884,054 | 242,603,584 |
| 1910. | 139,482,945 | 104,199,675 | 35,564,931 | 279,247,551 |
| 1911. | 132,156,924 | 104,115,823 | 38,043,806 | 274,316,553 |
| 1912. | 147,240,413 | 102,041,222 | 40,942,222 | 290,223,857 |
| 1913. | 170,161,903 | 139,725,953 | 45,866,744 | 355,754,600 |
| 1914. | 215,253,969 | 163,372,825 | 52,961,645 | 431,588,439 |
| 1915. | 186,668,55 | 173,320,216 | 49,430,066 | 409,418,836 |
| 1916. | 451,852,399 | 201,106,488 | 88,651,751 | 741,610,638 |
| 1817. | 742,147,537 | 280,616,330 | 128,611,001 | 1,151,375,768 |

## TRADEAND COMMERCE

6.-Imports from the United Kingdom, from the United States and from Other Countries of Merchandise entered for Home Consumption, 1868-1917


## EXPORTS OF CANADA

7.-Values of Exports from Canada to the United Kingdom, to the United States, to Other Countries and to All Countries, by Classes of Merchandise, in fiveyear averages and for the fiscal years 1911-1917.
agricultural produce.

| Five year averages and Fiscal Years. | United Kingdom. | United States. | Other Countries. | $\begin{array}{\|c\|} \hline \text { All } \\ \text { Countries, } \\ \text { Domestic. } \end{array}$ | $\begin{gathered} \text { All } \\ \text { Countries. } \\ \text { Foreign. } \end{gathered}$ | $\begin{array}{\|c} \text { All } \\ \text { Countries, } \\ \text { Domestic } \\ \text { and } \\ \text { Foreign. } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | ${ }^{\$}$ | \$ | \$ | \$ | ${ }^{\text {S }}$ |
| 1868-70 | 4,351,631 | 7,882,788 | 675,706 | 12,910,125 |  | 12,910,125 |
| 1871-75. | 6,671,196 | 7,447,890 | 896,245 | 15,015,331 | ${ }^{1}$ | 15,015,331 |
| 1876-80. | 9,384,915 | 8,687,568 | 1,079,634 | 19,152,117 | 7,073,387 | 26,225,504 |
| 1881-85. | 7,940,534 | 11,341,045 | 1,126,160 | 20,407,739 | 6,327,318 | 26,735,054 |
| 1886-90 | 5,759,239 | 8,734,096 | 954,168 | 15,447,503 | 4,647,322 | 20,094,825 |
| 1891-95 | 11,732,535 | 4,498,334 | 2,014,413 | 18,245,282 | 6,147,039 | 24,392,321 |
| 1896-00 | 18,185,661 | 1,995,339 | 2,938,763 | 23,119,763 | 9,533,823 | 32,653,586 |
| 1901-05 | 25,133,710 | 3,648,626 | 5,955,968 | 34,738,304 | 8,750,732 | 43,489,036 |
| 1906-10 | 51,527,333 | 4,690,418 | 7,466,218 | 63,683,969 | 9,113,570 | 72,797,539 |
| 1911. | 61,393,720 | 10,385,705 | 10,821,859 | 82,601,284 | 7,457,829 | 90,059,113 |
| 1912. | 81,784,731 | 11,685,611 | 13,673,033 | 107,143,375 | 8,311,111 | 115,454,486 |
| 1913. | 106,537,156 | 27,215,879 | 16,392,626 | 150,145,661 | 8,810,034 | 158,955,695 |
| 19 | 146,230,104 | 32,506,548 | 19,483,377 | 198,220,029 | 8,595,689 | 206,815,718 |
| 1915. | 95,834,460 | 19,405,521 | 19,506,069 | 134,746,050 | 35,604,014 | 170,350,064 |
| 1916. | 196,077,876 | 18,620,236 | 34,963,082 | 249,661,194 | 17,213,996 | 266,875,190 |
|  | 266,210,32 | 45,138,61 | 62,064,769 | 373,413,701 | 7,451,069 | 380,864,770 |
| ANIMALS AND THEIR PRODUCE. |  |  |  |  |  |  |
| 187175 |  | 5,377,809 | 418,579 | 9,266,912 |  |  |
| 1871-75.. | 6,755,882 | 6,128, 055 | 503,696 | 13,387,633 | ${ }^{1}$ | 13,387,633 |
| 1876-80. | 9,237,142 | 4,908,570 | 566,933 | 14,712,645 | 852,296 | 15,564,941 |
| 1881-85. | 15,177,091 | 6,372,773 | 526,642 | 22,076,506 | 1,102,096 | 23,178,602 |
| 1886-90... | 16,501,400 | 6,946,676 | 558,598 | 24,006,674 | 1,012,335 | 25,019,009 |
| 1891-95... | 26,223,970 | 3,645,801 | 643,996 | 30,513,767 | 1,244,390 | 31,758,157 |
| 1896-00. | 39,469,536 | 4,514,262 | 605,462 | 44,589,260 | 1,256,795 | 45,846,055 |
| 1901-05. | 55,778,082 | 5,182,806 | 1,363,839 | 62,324,727 | 662,755 | 62,987,482 |
| 1906-10 | 47,453,100 | 7,803,531 | 1,194,545 | 56,451,176 | 724,207 | 57,175,383 |
| 1911. | 40,636,575 | 10,063,544 | 1,544,055 | 52,244,174 | 809,663 | 53,053,837 |
| 1912. | 36,923,024 | 9,864,524 | 1,423,106 | 48,210,654 | 1,010,243 | 49,220,897 |
| 1913. | 30,335,784 | 12,866,948 | 1,581,647 | 44,784,593 | 988,634 | 45,773,227 |
| 1914. | 26,735,114 | 24,728,798 | 1,885,207 | 53,349,119 | 1,262,953 | 54,612,072 |
| 1915. | 38,222,698 | 34,186,056 | 1,981,989 | 74,390,743 | 2,565,259 | 76,956,002 |
| 1916. | 67,821,789 | 29,051,195 | 6,009,292 | 102,882,276 | 2,936,914 | 105,819,190 |
| 19 | 93,299,158 | 28,575,365 | 5,920,945 | 127,795,468 | 7,517,342 | 135,312.810 |

FISHERIES PRODUCE.

| 1868-70 (3 yrs) | 261,397 | 985,197 | 2,156,329 | 3,402,923 | , | 3,402,923 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1871-75.. | 513,070 | 1,269,409 | 2,984,053 | 4,766,532 | 1 | 4,766,532 |
| 1876-80. | 1,037,612 | 1,759,661 | 3,550,297 | 6,347,570 | 58,529 | 6,406,099 |
| 1881-85. | 1,838,937 | 3,005,591 | 3,137,585 | 7,982,113 | 25,701 | 8,007,814 |
| 1886-90. | 1,758,642 | 2,823,884 | 2,854,773 | 7,437,299 | 77,112 | 7,514,411 |
| 1891-95. | 3,366,495 | 3,409,915 | 3,209,347 | 9,985,757 | 224,550 | 10,210,307 |
| 1896-00... | 4,266,576 | 3,229,683 | 3,166,240 | 10,662,499 | 118,087 | 10,780,586 |
| 1901-05. | 3,800,480 | 4,197,481 | 3,709,474 | 11,707,435 | 25,127 | 11,732,562 |
| 1906-10. | 4,153,822 | 4,437,372 | 5,256,441 | 13,847,635 | 44,614 | 13,892,249 |
| 1911. | 4,435,891 | 4,980,741 | 6,258,912 | 15,675,544 | 114,315 | 15,789,859 |
| 1912. | 5,132,047 | 5,378,664 | 6,193,967 | 16,704,678 | 110,514 | 16,815,192 |
| 1913. | 3,946,471 | 5,747,688 | 6,642,562 | 16,336,721 | 106,101 | 16,442,822 |
| 1914. | 7,008,888 | 6,852,009 | 6,762,663 | 20,623,560 | 111,289 | 20,734.849 |
| 1915. | 5,448,902 | 8,521,901 | 5,716,265 | 19,687,068 | 131,669 | 19,818,737 |
| 1916. | 6,731,794 | 8,867,139 | 6,779,044 | 22,377,977 | 213,307 | 22,591,284 |
| 19 | 7,316,744 | 10,717,048 | 6,855,461 | 24,889,253 | 429,502 | 25,318,755 |

${ }^{1}$ Not separately stated prior to 1876 .

## TRADE AND COMMERCE

7.-Values of Exports from Canada to the United Kingdom, to the United States, to Other Countries and to All Countries, by Classes of Merchandise, in fiveyear averages and for the fiscal years 1911-1917-con.

FOREST PRODUCE.

| Five year averages and Fiscal Years. | United Kingdom. | United States. | Other Countries. | All Countries. Domestic. | $\begin{array}{\|c} \text { All } \\ \text { Countries. } \\ \text { Foreign. } \end{array}$ | All <br> Countries, <br> Domestic <br> and <br> Foreign |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 10,368 | 8,094 | 1770 | 23 | \$ | , |
|  | 10,368,800 | 8,094,2 | 1,770,2 | 20,233,269 | 1 | 20,233 269 |
| 1871-75. | 13,872,407 | 9,423,951 | 2,529,683 | 25,826,041 | ${ }^{-1}$ | 25,826,041 |
| 1876-80. | 12,007,936 | 4,912,106 | 1,674,162 | 18,594,204 | 551,197 | 19,145,401 |
| 1881-85. | 12,491,267 | 9,539,660 | 2,193,604 | 24,224,531 | 1,173,534 | 25,398,065 |
| 1886-90. | 10,714,758 | 9,962,383 | 1,731,722 | 22,408,863 | 1,541,613 | 23,950,476 |
| 1891-95. | 10,574,531 | 12,577,298 | 1,482,227 | 24,634,056 | 919,202 | 25,553,258 |
| 1896-00. | 14,544,194 | 12,205,380 | 1,776,656 | 28,526,230 | 247,499 | 28,773,729 |
| 1901-05 | 14,747,317 | 15,506,453 | 2,714,811 | 32,968,581 | 145,227 | 33,113,808 |
| 1906-10 | 11,400,778 | 25,442,049 | 3,888,204 | 40,731,031 | 198,768 | 40,929,799 |
| 1911. | 11,965,131 | 28,785,427 | 4,688,499 | 45,439,057 | 158,542 | 45,597,599 |
| 1912. | 10,950,840 | 25,483,532 | 4,458,302 | 40,892,674 | 212,213 | 41,104,887 |
| 1913. | 10,103,469 | 29,951,880 | 3,199,711 | 43,255,060 | 424,563 | 43,679,623 |
| 1914 | 10,647,123 | 29,304,546 | 2,840,468 | 42,792,137 | 593,950 | 43,386,087 |
| 1915. | 9,914,548 | 31,030,873 | 1,705,262 | 42,650,683 | 486,098 | 43,136,781 |
| 1916. | 14,147,250 | 34,619,722 | 2,504,428 | 51,271,400 | 426,884 | 51,698,284 |
| 1917 | 14,860,590 | 36,902,651 | 4,143,968 | 55,907,209 | 488,091 | 56,395,300 |

## MANUFACTURES.

| $18 \mathrm{si8-70}$ (3 yrs) | 1,167,472 | 829,903 | 360,405 | 2,357,780 | 1 | 2,357,780 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1871-75. | 1,221,958 | 1,238,702 | 486,204 | 2,946,864 | 1 | 2,946,864 |
| 1876-80 | 1,956,514 | 1,036,740 | 871,601 | 3,864,855 | 710,796 | 4,575,651 |
| 1881-85. | 1,320,117 | 1,330,968 | 682,305 | 3,333,390 | 745,285 | 4,078,675 |
| 1886-90. | 1,511,085 | 1,723,732 | 813,488 | 4,048,305 | 475,314 | 4,543,619 |
| 1891-95. | 2,677,734 | 3,011,203 | 1,609,628 | 7,298,565 | 783,335 | 8,081,900 |
| 1896-00. | 4,683,367 | 3,516,510 | 2,899,465 | 11,099,342 | 1,046,583 | 12,145,925 |
| 1901-05 | 6,662,550 | 6,984,218 | 5,584,337 | 19,231,105 | 2,478,872 | 21,709,977 |
| 1906-10. | 6,875,522 | 11,436,442 | 8,209,673 | 26,521,638 | 3,702,821 | 30,224,459 |
| 1911. | 6,973,820 | 16,524,005 | 11,785,293 | 35,283,118 | 5,149,408 | 40,432,526 |
| 1912. | 6,852,710 | 16,312,751 | 12,670,823 | 35,836,284 | 6,672,701 | 42,508,985 |
| 1913. | 7,158,746 | 21,321,458 | 15,212,504 | 43,692,708 | 8,832,374 | 52,525,082 |
| 1914. | 8,583,540 | 30,391,764 | 18,468,148 | 57,443,452 | 10,158,786 | 67,602,238 |
| 1915. | 24,848,359 | 42,164,753 | 18,526,389 | 85,539,501 | 9,529,024 | 95,068,525 |
| 1916. | 148,477,303 | 58,202,141 | 35,355,554 | 242,034,998 | 8,017,225 | 250,052,223 |
| 1917. | 339,013,448 | 91.990,586 | 46,395,642 | 477,399,676 | 9,913,090 | 487,312,766 |

MINERAL PRODUCE.

| 1868-70 (3 yrs) | 606,305 | 1,004,320 | 132,730 | 1,803,385 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1871-75. | 582,829 | 3,366,538 | 226,395 | 4,175,762 | 1 | 4,175,762 |
| 1876-80. | 409,727 | 2,637,275 | 183,491 | 3,230, 493 | 74,599 | 3,305,092 |
| 1881-85. | 375,996 | 2,500,124 | 251,663 | 3,127,783 | 160,862 | 3,288,645 |
| 1886-90 | 519,797 | 3,451,809 | 256,988 | 4,228,594 | 250,749 | 4,479,343 |
| 1891-95 | 485,094 | 5,113,029 | 362,825 | 5,960,948 | 242,450 | 6,203,398 |
| 1896-00. | 216,096 | 13,638,433 | 497,518 | 14,354,047 | 244,518 | 14,598,565 |
| 1901-05 | 782,159 | 32,367,609 | 1,238,069 | 34,387,837 | 187,891 | 34,575,728 |
| 1906-10. | 2,194,298 | 31,381,056 | 2,061,333 | 35,636,687 | 306,840 |  |
| 1911 | 6,726,015 | $33,129,505$ | 2,932,041 | 42,787,561 | 290,879 | 43,078,440 |
| 1912 | 5,555,599 | $33,259,580$ | 2,509,337 | 41,324,516 | 186,066 | 41,510,582 |
| 1913. | 12,066,622 | 42,541,751 | 2,834,173 | 57,442,546 | 140,484 | 57,583,030 |
| 1914. | 16,027,128 | $39,491,127$ | 3,520,799 | 59,039,054 | 194,852 | $59,233,906$ |
| 1915 | 12,219,937 | 37,558,209 | 1,962,843 | 51,740,989 | $\begin{array}{r}325,548 \\ 7 \\ \hline\end{array}$ | $52,066,537$ |
| 1916. | 12,425,248 | 51,425,708 | 2,738,905 | 66,589,861 | 7,329,537 | $73,919,398$ |
| 1917 | 15,545,227 | 66,974,768 | 3,096,912 | 85,616,907 | 219,514 | 85,836,421. |

NOTE.-The statistics of this table are exclusive of coin and bullion, and of exports to the United States estimated "short" for the years 1868-1900.
${ }^{1}$ Not separately stated prior to 1876.

EXPORTS OF CANADA
7.-Values of Exports from Canada to the United Kingdom, to the United States, to Other Countries and to All Countries, by Classes of Merchandise, in iveyear averages and for the fiscal years 1911-17-concluded.
miscellaneous produce.

| Five year averages and Fiscal Years. | United Kingdom. | United States. | Other Countries. | All <br> Countries. <br> Domestic. | All Countries. Foreign | All Countries. Domestic, and Foreign. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\$$ | \$ | \$ | \$ | \$ | \$ |
| 1898.70 (3 yrs) | 15,569 | 301,398 | 24,530 | 341,497 | 1 | 341,497 |
| 1871-75. | 48,238 | 362,698 | 28,625 | 439,562 | 1 | 439,562 |
| 1876-80... | 32,802 | 389,236 | 6,604 | 428,642 | 100,516 | 529,158 |
| 1881-85... | 32,450 | 519,732 | 8,823 | 561,015 | 110,023 | 671,038 |
| 1886-90... | 47,141 | 525,417 | 5,123 | 577,681 | 131,762 | 709,443 |
| 1891-95... | 16,454 | 56,913 | 995 | 74,362 | 275,261 | 349,623 |
| 1896-00... | 31,243 | 68,635 | 8,410 | 108,288 | 392,320 | 500,608 |
| 1901-05... | 28,823 | 33,102 | 9,526 | 66,451 | 772,457 | 838,908 |
| 1906-10... | 37,035 | 39,722 | 19,378 | 96,136 | 1,000,976 | 1,197,112 |
| 1911. . | 25,772 | 246,898 | 13,147 | 285,815 | 1,703,021 | 1,988,836 |
| 1912. | 41,462 | 55,560 | 13,654 | 111,676 | 989,446 | 1,101,122 |
| 1913. | 13,655 | 80,349 | 3,307 | 97,311 | 2,011,565 | 2,108,876 |
| 1914. | 22,072 | 98,033 | 983 | 121,088 | 2,931,266 | 3,052,354 |
| 1915. | 179,650 | 453,173 | 30,979 | 663,802 | 3,382,061 | 4,045,863 |
| 1916. | 6,171,139 | 320,347 | 301,446 | 6,792,932 | 1,551,569 | 8,344,501 |
| 1917 | 5,902,048 | 317,302 | 134,204 | 6,353,554 | 1,816,724 | 8,170,278 |

TOTAL EXPORTS OF MERCHANDISE.

| 1868-70 (3 yrs) | 20,301,729 | 24,475,655 | 5,538,507 | 50,315,891 | 4.860,081 | 55,175,972 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1871-75. | 29,665,580 | 29,237,246 | 7,654,900 | 66,557,726 | 9,961,75C | 76,519,476 |
| 1876-80. | 34,066,648 | 24,331,155 | 7,032,723 | 66,530,526 | 9,421,319 | 75,751,845 |
| 1881-85. | 39,176,404 | 34,609,893 | 7,926,782 | 81,713,079 | 9,644,819 | 91,357,898 |
| 1886-90. | 36,812,062 | 34,167,996 | 7,174,861 | 78,154,919 | 8,156,208 | 86,311,127 |
| 1891-95. | 55,076,813 | 32,312,493 | 9,323,432 | 96,712,738 | 9,836,225 | 106,548,963 |
| 1896-00. | 81,398,674 | 39,168,242 | 11,892,513 | 132,459,429 | 12,839,625 | 145,299,054 |
| 1901-05. | 106,928,122 | 67,920,295 | 20,576,025 | 195,424,442 | 13,023,060 | 208,447,502 |
| 1906- | 123,641,889 | 85,230,591 | 28,095,793 | 236,968,273 | 15,191,796 | 252,160,069 |
| 1911. | 132,156,924 | 104,115,823 | 38,043,806 | 274,316,553 | 15,683,657 | 290,000,210 |
| 1912. | 147,240,413 | 102,041,222 | 40,942,222 | 290,223,857 | 17,492,294 | 307,716,151 |
| 1913. | 170,161,903 | 139,725,923 | 45,866,744 | 355,754,600 | 21,313,755 | 377,068,355 |
| 1914. | 215,253,969 | 163,372,825 | 52,961,645 | 431,588,439 | 23,848,785 | 455,437,224 |
| 1915. | 186,668,554 | 173,320,216 | 49,430,066 | 409,418,836 | 52,023,673 | 461,442,509 |
| 1916. | 451,852,399 | 201,106,488 | 88,651,751 | 741,610,638 | 37,689,432 | 779,300,070 |
| 1917 | 742,147, | 280,616,380 | 128,611,901 | 1,151,375,768 | 27,835,332 | 179,211,100 |

${ }^{1}$ Not separately stated prior to 1876.

## 8.-Value of Exports of Merchandise the Produce of Canada, with Percentage Ratios of Totals, to the United Kingdom, to the United States and to All Countries by Classes, 1913-1916.

| Classer. | 1913. |  |  | 1914. |  |  | 1915. |  |  | 1918. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | United Kingdom. | United States. | Countriee. | United Kingdom. | United States. | $\underset{\text { Couptries. }}{\text { ALI }}$ | United Kingdom. | United States. | $\stackrel{\text { All }}{\text { Coontries. }}$ | United Kingdom. | United States. | Al! Countriee. |
| Agricultural produce. | 106.587.156 | 27,215,879 | 150,145,681 | 146,230,104 | $\stackrel{\$}{\mathbf{3 2}, 506,548}$ | (98,220,029 | $\stackrel{*}{*}$ | 19,405,251 | 134,746,050 | (06,077,876 |  | 249,661,194 |
| Animals and their produce... | 30,335,784 | 12.866,948 | 44,784,503, | 28.735,114 | 24,728,788 | $53,349,119$ | 38,222,898 | 34,186,056 | 74,390,743. | 87,821,789 | 29,051,195 | 102,882,278 |
| Fisheries produce........... | 3,946,471 | 5,747,688. | 16,336,721 | 7,008,888 | 6,852,009 | 20,623,560 | 5,448,002 | 8,521,901 | 19,687,068 | 6,731,704 | 8,867,139 | 422,377,977 |
| Forest produce. | 10,103,469 | 29,951,880 | 43,265,060 | 10,647,123 | 29,304,546 | 42,792,137 | 9,914,548 | 31,030,873 | 42,650,683 | 14,147,250 | 34,619,722 | 51,271,400 |
| Manufactures... | 7,158,746 | 21,321,458 | 43,692,708 | 8,583,540 | 30,391,764 | 57,443,452 | 24,848,359 | 42,164,753 | 85,539,501 | 148,477,303 | 58,202,141 | 242,034,998 |
| Mineral produce. | 12,066,622 | 42,541,751 | 57,442,546 | 16,027,128 | 38,491,127 | 59,039,054 | 12,219,987 | 37,558, 208 - | 51,740,989 | 12,425,248 | \$1,425,708 | 66,589,861 |
| Miscellaneous produce. | 13,655 | \$0,349 | 97,311 | 22,072 | 98,033 | 121,088 | 179,850 | 453,173 | 663,802 | [6,171,139 | 320,347 | 6,6,792,932 |
| Total | 170,161,903 | 139,725,953 | 355,754,600 | 215,253,969 | 163,372,825 | 431,588,439 | 196,668,554 | 173,320,216 | 409,418,836 | 451,852,399 | 201,106,488 | 741,610,678 |

Ratios of each clabs in Percentage of the Totals.


## 9.-Value of Imports from the United Kingdom, from the United States and from All Countries by Classes, of Merchandise entered for Home Consumption, 1913-1916.

| Classes. | 1913. |  |  | 1914. |  |  | 1915. |  |  | 1916. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | $\begin{gathered} \text { Alt } \\ \text { Countries. } \end{gathered}$ | United Kingdom, | United States. | Countries. | United Kingdom. | United States. | All Countries. |
|  | \$ | \$ | 5 | \$ | \$ | \$ | $\$$ | \$ | \$ | \$ | \$ | 8 |
| Agricultural produce. | 3,033,820 | 43,882,566 | 55,391,008 | 2,644,109 | 42,067,495 | 53,544,539 | 1.951,276 | 43,183,964 | 52,449,384 | 1,318,844 | 47,704,990 | 54,018,369 |
| Animals and their produce. | 4,833,470 | 21,671,491 | 41,088,978 | 2.579,810 | 15,514,944 | 29,880,211 | 2,874,649 | 15,329,058 | 27,873,971 | 4,801,505 | 22,686,093 | 37,555,794 |
| Fisheries produce. | 247,971 | 915,759 | 2,674,776 | 246,858 | 835,520 | 2,331,772 | 207,930 | 588,717 | 1,856,298 | 124,505 | 570,986 | 1,591,088 |
| Forest produce. | 63, 145 | 20,016,029 | 20,138,386 | 82,005 | 16,601,319 | 16.789,413 | 15,174 | 9,553,706 | 9,613,881 | 5,222 | 5,266,715 | 5,240,154 |
| Manufactureo. | [19,878,589 | 276,461,824 | 456,463,594 | 115,569,081 | 242,037,558 | 417,555,537 | 76,868,104 | 166,466,376 | 286,214,321 | 64,026,407 | 205,603,653 | 305,474,649 |
| Mineral produce. | 2,245,175 | 59,343,603 | 65,820,238 | 1,068,719 | 66.614,695 | 71,694,173 | 1,834,897 | 51,081,049 | 54,171,002 | 1,148,997 | 45,451,050 | 48,022,694 |
| Miscellaveous produce | 8,437,597 | 13,027,678 | 28,512,089 | 7,979.780 | 11.893,802 | 26,661,499 | 6,408,089 | 10,429,616 | 23,267,445 | 5,978,881 | 43,173,687 | 55,914,420 |
| Tolat. | 138,742,767 | 435,769,050 | 670,099,066 | 122,070,362 | 395,565,328 | 618,457,144 | 90,158,119 | 296,682,486 | 455,446,312 | 77,404,361 | 370,496,574 | 507,817,159 |

Ratios of each class in Percentage of the Totals.

|  | p.e. | p.e. | p.c. | p.c. | p.c. | p.c. | p.c. | p.e. | p.c. | p.e. | p.c. | p.c. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agricultural produce.. | 2.19 | 10.00 | 8.27 | 2.00 | 10.63 | 8.66 | 2.16 | 14.58 | 11.52 | 1.71 | 12.91 | 10.64 |
| Animals and their produce... | 3.48 | 4.97 | 6.13 | 2.71 | 3.92 | 4.83 | 3.19 | 5.17 | 6.12 | 6.20 | 6.12 | 7.40 |
| Fisheries produce. | . 18 | . 21 | 40 | . 19 | 21 | . 38 | . 23 | . 20 | . 41 | . 16 | . 15 | . 31 |
| lorest produce. | . 05 | 4.59 | 3.01 | . 96 | 4.20 | 2.71 | . 02 | 3.22 | 2.11 | . 01 | 1.41 | 1.05 |
| Manufactures. | 86.40 | 6344 | 68.12 | 87.51 | 61.19 | 67.52 | 85.25 | 56.11 | 62.81 | 82.72 | 56.49 | 60.15 |
| Mineral produce. | 1.62 | 13.74 | 9.82 | 149 | 18.84 | 11.59 | 2.04 | 17.22 | 11.89 | 1.48 | 12.27 | 9.46 |
| Miscellaneous produce. | 6.05 | 2.99 | 4.25 | 6.04 | 3.01 | 4.31 | 7.11 | 3.52 | 5.11 | 7.72 | 11.65 | 11.01 |
| Tolal | 100.0\% | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

## TRADEAND COMMERCE

10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. |
| $\begin{aligned} & \mathbf{1} \\ & \mathbf{2} \end{aligned}$ | 1. Agricultural produce <br> -totals. .. \$ | 106,537,156 | 27,215,879 | 150,145,661 | 146,230,104 | 32,506,548 |
|  | Balsam.. \$ | 186 | 6,086 | 7,377 | 4,536 | 17,591 |
|  | Cider gal. | 185,828 | 158 | 187,219 | 150,683 | ${ }_{40}$ |
|  | \$ | 22,014 | 17 | 22,266 | 19,580 | 10 |
| 3 | Flax .cwt. | 120 | 2,230 | 2,350 | - | 6,065 |
|  | Fruits- \$ | 1,250 | 22,926 | 24,176 | - | 46,369 |
| 4 | Apples, dried... lb. | 121,188 | 186,116 | 3,199,539 | 424,200 | 376,466 |
| 5 | Apples, dried... | 7,837 | 10,609 | 213,831 | 25,877 | 24,035 |
|  | Apples, green or ripe. .... ,bbl. | 1,245,104 | 9,366 | 1,324,769 | 858,413 | 18,230 |
|  | orpe. … 8 | 3,804,967 | 22,898 | $4,047,806$ | 3,137,267 | 62,431 |
| 6 | Berries, all kinds. |  | 99,965 | 100,019 | 3,137, | 91,705 |
| 7 | Canned or preserved.. | 216,589 | 3,336 | 220,786 | 375,913 | 14,546 |
| 8 | All other. | 35,978 | 15,136 | 96,741 | 110,695 | 40,673 |
|  | Total fruits... | 4,065,371 | 151,944 | 4,679,183 | 3,649,752 | 233,390 |
| 9 | Grain and products of- |  |  |  |  |  |
|  | Barley .bush. | 5,556,090 | 773,281 | 6,455,975 | 10,905,712 | 1,584,851 |
|  | * | 3,315,172 | 440,468 | 3,851,660 | 5,514,016 | 709,092 |
| 10 | Beans. .bush. |  | 2,128 | 3,759 |  | 8,737 |
|  | Bucmeat bush |  | 6,182 | 9,828 | ${ }^{-}{ }^{-}$ | 23,011 |
| 11 | Buckwheat. .bush. | 103,024 | 53,387 | 223,833 | 16,093 | 138,707 |
|  | \$ | 53,432 | 28,686 | 118,575 | 9,653 | 100,959 |
| 12 | Indian corn.. .bush. | 7,280 | 13,419 | 21,301 | 17,421 | 11,095 |
|  | \$ | 4,4,077 | 10,510 | 15,075 | 13,937 | 7,580 |
| 13 | Oats. .. .. .bush. | 7,293,004 | 1,726,580 | 10,478,554 | 13,903,389 | 18,928,221 |
|  | Peas, whole bush | 3,592,237 | 739,357 | 5,067,950 | 5,644,951 | 6,802,403 |
| 14 | Peas, whole. bush. | 22,420 | 49,730 | 87,694 | 12,187 | 82,424 |
| 15 | Peas, split. . .bush. | 43,299 | 116,538 ${ }_{4}$ | 199,125 6,852 | 27,538 | 162,020 11,647 |
|  | \$ |  | 7 | 10,447 | 1,486 | 8,327 |
| 16 | Rye. .bush. | 25,544 | 616 | 26,160 | 95,413 | 16,978 |
|  | Wheat ${ }^{\text {¢ }}$ | 14,305 | 603 9834 | 14,908 | $\begin{array}{r}64,393 \\ \hline 108 \\ \hline 74397\end{array}$ | - 11,473 |
| 17 | Wheat.... .bush. | $77,722,465$ $74,978,155$ | $9,834,530$ $8,352,983$ | $93,166,009$ <br> 88,608 | 108,574,397 | $\begin{aligned} & 7,522,027 \\ & 6891,624 \end{aligned}$ |
|  | Other grains. .bush. | 74,978,155 | 8,352,983 | $88,608,730$ 101,170 | 106,696,231 | $6,891,624$ |
| 18 | Other grams. $\$$ | - | 45,048 | 45,048 | - | - |
|  | Total grains. bush. | 90,729,827 | 12,554,845 | 110.571,307 | 133,525,256 | 28,304,687 |
|  | S | 82,000,687 | 9,740,382 | 97,941,344 | 117,972,205 | 14,716,489 |
| 19 | Bran. .. .cwt. | 97,822 | 1,019,766 | 1,662,338 | 28,717 | 1,806,242 |
|  |  | 92,221 | 888,432 | 1,603,003 | 25,355 | 1,509,595 |
|  | Cereal foods. | 1,382,331 | 34,275 | 2,015,675 | 1,408,413 | 25,120 |
| 21 | Flour of wheat...bbl. | 2,880,157 | 29,983 | 4,478,043 | 2,794,657 | 19,436 |
|  | 为 | 12,442,479 | 134,743 | 19,970,689 | 11,584,843. | 85,745 |
| 22 | Indian meal... .bbl. | , |  | 2,239 | 430 2400 | 200 400 |

EXPORTS OF CANADA.
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\text { All }}{\text { Countries. }}$ | United Kingdom. | United States. | $\left\lvert\, \begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}\right.$ | United Kingdom. | United States. | $\begin{gathered} \cdot \text { All } \\ \text { Countries. } \end{gathered}$ |  |
| 198,220,029 | 95,834,460 | 19,405,251 | 134,746,050 | 196,077,876 | 18,620,236 | 249,661,194 |  |
| 22,617 | 2,878 | 20,526 | 23,954 | 7,386 | 4,746 | 12,254 | 1 |
| 151,073 | 85,362 | 3,275 | 88,736 | 39,257 |  | 40,501, | 2 |
| 19,737 | 15,169 | 528 | 15,715 | 7,423 |  | 7,750 |  |
| 6,065 | 1,110. | 5,619 | 6,729 | 923 | 9,850 | 10,813 | 3 |
| 46,369 | 7,022 | 27,208 | 34,230 | 15,232 | 71,063 | 85,295 |  |
| 6,082,476 | 2,307,481 | 170,810 | 4,488,050 | 730,267 | 140 | 1,420,122 | 4 |
| 411,789 | 138,048 | 9,796 | 276,060 | 47,570 | 9 | 110,428 |  |
| 947,382 | 1,041,913 | 27,520 | 1,117,336 | 525,316 | 6,413 | 577,451 | 5 |
| 3,465,475 | 2,460,413 | 61,445 | 2,657,115 | 1,588,370 | 18,792 | 1,766,171 |  |
| 91,985 | - | 106,412 | 106,545 | 1,208 | 158,123 | 160,615 | 6 |
| 394,719 | 433,146 | 31,243 | 476,497 | 799,554 | 37,990 | 864,984 | 7 |
| 220,147 | 41,962 | 12,915 | 80,804 | 14,863 | 32,826 | 55,324 | 8 |
| 4,584,065 | 3,773,569 | 221,811 | 3,597,021 | 2,451,565 | 247,740 | 2,957,522 |  |
| 13,032,369 | 4,388,577 | 366,101 | 5,576,646 | 4,915,517 | 366,573 | 5,928,373 | 9 |
| 6,513,557 | 2,520,084 | 203,118 | 3,262,025 | 3,229,986 | 225,843 | 3,775,341 |  |
| 11,377 | 530 | 12,526 | 28,661 | 510 | 3,835 | 10,439 | 10 |
| 28,850 | 1,030 | 32,773 | 73,508 | 1,072 | 14,013 | 34,472 |  |
| 172,802 | 225,309 | 115,531 | 343,349 | 83,739 | 321,380 | 489,578 | 11 |
| 120,358 | 176,845 | 93,696 | 272,516 | 65,395 | 250,692 | 383,415 |  |
| 30,813 | 139,511 | 69,608 | 376,663 |  | 30,810 | 33,943 | 12 |
| 23,542 | 106,848 | 50,945 | 256,090 | 17 - ${ }^{-}$ | 27,639 | 30,906 |  |
| 34,996,664 | 8,537,236 | 3,825,549 | 17,768,166 | 17,597,470 | 1,364,479 | 26,816,322 | 13 |
| 13,379,849 | 4,067,540 | 1,536,465 | 8,961,126 | 8,606,102 | 632,748 | 14,637,849 |  |
| 121,359 | 25,587 | 213,224 | 261,354 | 30,233 | 104,147 | 166,699 | 14 |
| 240,274 | 66,013 | 417,331 | 532,171 | 105,741 | 249,624 | 448,446 |  |
| 21,371 | - | 13,885 | 41,624 |  | 11,525 | 21,895 | 15 |
| 22,971 |  | 39,483 | 107,677 |  | 34,556 | 64,471 |  |
| 112,436 75,88 | 87,282 | 146,055 | 263,422 | 153,883 | 426,437 | 644,720 | 16 |
| 120,426,579 | 64,301,202 | 4,092,026 | $71,913,385$ | 140,414,411 | 362,654 $8,365,331$ | 157,745,469 | 17 |
| 117,719,217 | 66,363,044 | 4,223,505 | 74,293,548 | 153,708,244 | 8,842,441 | 172,896,445 |  |
| 3,610 4,760 |  |  |  |  |  |  | 18 |
| 168,929,380 | 77,705,234 | 8,853,965 | 96,573,270 | 163,195,763 | 10,994,517 | 191,857,438 |  |
| 138,129,261 | 73,394,695 | 6,736,171 | 88,018,283 | 165,852,557 | 10,640,210 | 192,827,362 |  |
| 2,077,713 | 77,986 | 871,358 | 1,038,134 | - |  |  | 19 |
| 1,789,939 | 53,042 | 778,626 | 1946,331 | 76,040 | 1,602,158 | 1,787,398 |  |
| 2,166,330 | 1,474,907 | 24,559. | 1,970,402 | 1,746,361 | 28,095 | 1,950,706 | 20 |
| 4,832,183 | 3,137,146 | 52,429 | 4,952,337 | 3,894,511 | 251,220 | 6,400,214. | 21 |
| 20,581,079 | 15,901,713 | 232,967 | 24,610,946 | 21,812,179 | 1,259,898. | 35,767,044 |  |
| 3,939 |  |  | 2,560 | , | 1,272 | 2,184 | 22 |
| 14,639 | - | 25 | 9,549 | - | 735 | 8,043! |  |

TRADE AND COMMERCE
10.-Exports of Canada to United Kingdom, United States and All Countries in quantilies and values by classes of home produce in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. |
| 3 |   <br> I. Agricultural produce  <br> -con.  <br> Oatmeal. .. .bbl. <br> Meal, all other bbl. | $\begin{aligned} & 187,506 \\ & 830,417 \end{aligned}$ | 16 | $\begin{aligned} & 188,987 \\ & 837,079 \end{aligned}$ | $\begin{aligned} & 108,138 \\ & 473,220 \end{aligned}$ |  |
|  |  |  |  |  |  | $\mathbf{2 , 0 3 5}$ 9,085 |
|  |  | 11,956 | 4651,488 | 5,153 |  | 1,933 |
|  |  |  |  | 17,83623,006 | 50 | 7,096 |
|  | Malt... | -- | 120 120 |  |  | - |
|  | Total flour, meal and malt * | 13,284,852 | 136,357 | 20,849,094 | 12,060,613 | 102,326 |
| 4 | Hay | 62,871 | $\begin{array}{r} 316,521 \\ 2,978,682 \end{array}$ | $\begin{array}{r} 394,208 \\ 3,950,058 \end{array}$ | $\begin{array}{r} 26,916 \\ 296,331 \end{array}$ | $\begin{array}{r} 154,337 \\ 1,358,621 \end{array}$ |
|  |  | 759,241 |  |  |  |  |
| 5 | Hops. lb | 182,625 | 19,758 | 223,625 | 248,660 | 892 |
|  | Maple sugar.. lb. | 33,645 37,328 | 1,116,972 | 1,154,635 | 38,726 | 1,883,878 |
| 6 |  | 3,869 | 100,4191,670 | 104,3243,846 | 3,8622,880 | 155,4761,732 |
| 7 | Maple syrup. gal. | 1,915 |  |  |  |  |
|  | \$ | 2,105 | 1,785 | 4,151 | 2,769 | 1,893 |
|  | Seeds- <br> Clover.. .bush. $\$$ |  |  |  |  |  |
| 8 |  | $\begin{array}{r} 26,750 \\ 310,629 \end{array}$ | $\begin{array}{r} 30,513 \\ 292,801 \end{array}$ | $\begin{array}{r} 69,149 \\ 738,377 \end{array}$ | 24,226 | 86,458 798,771 |
| 9 | Flaxseed. .bush. | 2,536,336 | 7,561,004 | 10,123,693 | 8,579,713 | 10,164,536 |
|  |  | 4,537,360 | 11, 285,186 | 16,448,899 | 10,482,556 | 11,910,681 |
| 10 | Grass. .bush | 8,592 | 91,87684854 | 117,621 | 7, 7,268 | 76,850 |
|  |  | 11,854 |  | 124,949 | 8,816 | 67,598 |
| 11 | All other. | 777. | 43,426 | 44,831 | 1,644 | 48,973 |
|  | Total seeds." | 4,860,620 | 12,306,267 17,357,056 |  | 10,719,238 | 12,826,023 |
| 12 |  | 52 |  |  |  |  |
|  | \$ | 374 | x ${ }^{\text {ct }}$ 27,872 | 5,574 29,170 | - | $\begin{array}{r} 4,948 \\ 27,578 \end{array}$ |
| 13 | Tobacco leaf. lb. | 3,142 | 浆 62,767 | 90,382 | 4,220 | $\begin{array}{r} 163,122 \\ 54,022 \end{array}$ |
|  |  |  |  | 24,410 | 429 |  |
| 14 | Trees, shrubs and plants... | 701 | $\text { 要 } 23,532$ | 24,905 | 860 | 31,839 |
|  | VegetablesCanned or preserved. | 20,329 | 655 | 24.959 | 7,19420 | $\begin{array}{r} 3,708 \\ 1,001,287 \end{array}$ |
| 15 |  |  |  |  |  |  |
| 16 | Potatoes. .bush. | 8 | 152,557 | 1,019,716 |  |  |
|  |  |  |  |  | 120 | 434,956 |
| 17 | Turnips. .bush. | - | 1,318,655 | 1,353,810 | - |  |
| 18 | All other " | ${ }_{96}$ | 62,512 | 85,223 | 195 |  |
|  | Total vegetables" | 20,431 | 348,700 | 1,024,110 | 7,402 | 851,078 |
| 13 | All other agricultural products. | 6,808 | 424,664 | 442,952 | 1,957 | 548,825 |

## EXPORTS OF CANADA

10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries. | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ |  |
| 111,527 | 57,505 | 1,025 | 60,320 | 82,012 | 10,609 | 92,913 | 1 |
| 488,589 | 275,786 | 3,928 | 287,844 | 416,825 | 52,672 | 471,298 |  |
| 2,042 |  | 90 | 432 | 293 | 133 | 460 | 2 |
| 7,534 | - | 337 | 1,616 | 1,322 | 672 | 2,136 |  |
| 4,337 | - | 1,600 | 4,481 | - | - | 63,568 | 3 |
| 4,256 | - | 1,536 | 4,141 | - | - | 63,778 |  |
| 21,096,097 | 16,177,499 | 238,793 | 24,914,096 | 22,230,326 | 1,313,977 | 36,312,299 |  |
| 192,515 | 6,411 | 59,964 | 131,875 | 86,661 | 39,797 | 225,407 | 4 |
| 1,787,050 | 88,813 | 629,728 | 2,232,558 | 2,231,209 | 503,764 | 5,849,428 |  |
| 252,692 | 167,935 | 1,211 | 170,226 | 322,110 | 40,041 | 362,197 | 5 |
| 57,890 | 35,430 | 242 | 35,892 | 58,341 | 10,007 | 68,366 |  |
| 1,925,343 | 80,029 | 1,381,590 | 1,462,416 | 49,879 | 1,698,770 | 1,749,095 | 6 |
| 159,619 | 6,670 | 124,704 | 131,477 | 6,116 | 172,619 | 178,791 |  |
| 5,205 | 2,216 | 3,598 | 6,165 | 2,352 | 2,352 | 5,170 | 7 |
| 5,284 | 2,389 | 3,944 | 6,687 | 2,635 | 2,632 | 5,794 |  |
| 118,601 | 18,485 | 19,650 | 44,735 | 18,833 | 17,343 | 38,895 | 8 |
| 1,094,330 | 152,848 | 167,370 | 375,205 | 146,194 | 146,956 | 322,270 |  |
| 20,647,327 | 675,318 | 7,006,249 | 7,689,525 | 13,951 | 1,830,592 | 1,944,543 | 9 |
| 24,816,333 | 928,346 | 9,420,263 | 10,359,703 | 47,511 | 2,926,421 | 2,973,932 |  |
| 110,873 | 5,499 | 63,140 | 73,806 | 3,815 | 55,815 | 59,832 | 10 |
| 106,708 58,631 | 6,461 73 | 53,598 4,651 | 69,118 $\mathbf{5 , 7 5 5}$ | 10,023 4,156 | 53,953 14,793 | 64,579 20,507 | 11 |
| 26,076,002 | 1,087,728 | 9,645,882 | 10,809,781 | 207,884 | 3,142,123 | 3,381,288 |  |
| 5,118 | 24 | 4,816 | 4,962 | 31 | 7,073 | 7,337 | 12 |
| 28,964 | 194 | 28,502 | 29,618 | 271 | 39,549 | 41,798 |  |
| 196,524 | 1,419 | 28,724 | 36,445 | 122 | 67,259 | 89,974 | 13 |
| 66,126 | 624 | 18,336 | 21,644 | 61 | 24,119 | 28,396 |  |
| 34,224 | 18 | 20,748 | 22,538 | 22,509 | 18,769 | 43,517 | 14 |
| 17,655 | 262,918 | 11,627 | 299,412 | 587,722 | 8,915 | 637,617 | 15 |
| 1,980,844 | 102,090 | 89,610 | 1,192,258 | 10 | 53,222 | 684,455 | 16 |
| 1,127,541 | 71,477 | 34,765 | 696,783 | 7 | 27,046 | 445,191 |  |
| 1,707,062 | - | 2,138,701 | 2,150,399 | 1,600 | 1,931,395 | 1,945,623 | 17 |
| 309,582 |  | 284,171 | 286,461 | 336 | 314,973 | 318,439 |  |
| 123,479 | 73,970 | 129,124 | 217,627 | 563,657 | 135,123 | 2,395,265 | 18 |
| 1,578,257 | 408,335 | 459,687. | 1,500,283 | 1,151,722 | 486,057 | 3,796,512 |  |
| 572.198 | 5,478 | 425,256 | 435,540 | 10,238 | 312,613 | 325,718' | 19 |

TRADE AND COMMERCE
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.


EXPORTS OF CANADA
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries. | United Kingdom | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | $\left\lvert\, \begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}\right.$ |  |
| 53,349,119 | 38,222,698 | 34,186,056 | 74,390,743 | 67,821,789 | 29,051,195 | 102,882,276 |  |
| $\begin{array}{r} 20,782 \\ 252,078 \end{array}$ | - | $\begin{array}{r} 34,048 \\ 415,889 \end{array}$ | $\begin{array}{r} 34,082 \\ 416,038 \end{array}$ | - | $\begin{array}{r} 56,409 \\ 626,721 \end{array}$ | $\begin{array}{r} 56,455 \\ 627,005 \end{array}$ | 1 |
| $\begin{array}{r} 198,147 \\ \mathbf{7 , 6 5 4 , 7 1 6} \end{array}$ | - | $\begin{array}{r} 149,604 \\ 8,736,700 \end{array}$ | $\begin{array}{r} 151,821 \\ 8,851,496 \end{array}$ | $\begin{array}{r} 1,752 \\ 105,120 \end{array}$ | $\begin{array}{r} 170,775 \\ 10,523,073 \end{array}$ | $\begin{array}{r} 185,105 \\ 11,998,755 \end{array}$ | 2 |
| $\begin{array}{r} 82 \\ 4,067 \end{array}$ | - | 16 1,272 | 16 1,272 | - | 495 | 495 | 3 |
| 3,486 | 7,736 | 2,513 | 10,398 | 21,833 | 2,857 | 26,811 | 4 |
| 779,564 | 1,382,345 | 438,652 | 1,841,095 | 3,899,822 | 496,609 | 4,700,191 |  |
| 28,207 | - | 243,031 | 243,311 |  | 9,435 | 9,925 | 5 |
| 446,430 | - | 3,114,437, | 3,117,005 | - | 67,499 | 70,710 |  |
| 13,324 | - | 35,293 | 35,293 | - | 74,178 | 74,350 | 6 |
| 70,719 | - | 211,714 | 211,714 | - | 443,225 | 444,260 |  |
| 7,219 57,774 | - | 6,349 68,320 | 7,539 74,898 | - | 18,739 141,614 | $\begin{array}{r} 20,128 \\ 149,505 \end{array}$ | 7 |
| 189,735 | 10,760. | 400,174 | 417,474 | 701 | 387,675 | 403,197 | 8 |
| $\mathbf{9 , 4 5 5 , 0 8 3}$ | 1,393,105 | 13,387,158 | 14,930,992 | 4,005,643 | 12,686,911 | 18,394,118 |  |
| 23,859,754 | 72,036,025 | 4,606,235 | 76,801,419 | 144,150,309 | 615,901 | 144,918,867 | 9 |
| 3,763,195 | 11,080,424. | 707,334 | 11,811,825 | 25,563,698 | 124,176 | 25,710,767 |  |
| 13,133,205 | 1,330,282 | 17,036,698 | 18,828,257 | 13,912,371 | 9,433,072 | 47,422,564 | 10 |
| 1,127,908 | 179,998 | 1,761,145 | 1,988,489 | 2,009,427 | 938,232 | 5,994,833 |  |
| 1,890,182 | 9,198,208 | 8,744,079 | 17,958,874 | 7,376,160 | 832,523 | 8,732,857 | 11 |
| 269,911 | 1,376,151 | 1,273,810 | 2,652,917 | 1,186,172 | 113,042 | 1,379,346 |  |
| 65,167 10,804 |  | 1,029,021 | 1,064,963 |  | 45,973 | 99,593 | 12 |
| 10,804 $1,811,204$ | 5,849,254 | $119,911$ | 124,087 |  | -7,800 | 14,360 |  |
| $1,811,204$ 202,391 | 5,849,254 | 15,178,341. | 21,288,226 | $10,198,476$ | 2,268,989 | 13,142,169 | 13 |
| 202,391 | 781,643 | 1,791,592 | 2,590,844 | 1,645,333 | 245,939 | 1,990,856 |  |
| 73,972 | 64,791 | 138,614 | 212,992 | 40,662 | 59,054 | 111,878 | 14 |
| 4,831 |  | 2,143 | 2,340 | - | 3,725 | 4,147 | 15 |
| - | 12,272 2,369 | 178,897 22,074 | $\begin{array}{r} 192,469 \\ 24,703 \end{array}$ | $\left.\begin{gathered} 194,745 \\ 22,203 \end{gathered} \right\rvert\,$ | $\begin{array}{r} 290,435 \\ 36,892 \end{array}$ | $\begin{array}{r} 485,180 \\ 59,095 \end{array}$ | 16 |

## TRADEAND COMMERCE

10--Exports of Canada to United Kingdom, United States and All Countrjes in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. |
| II. Animals and their produce-con. <br> Animal products-con. Meats-con. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 1 | Canned. lb. | 244,732 | 2,661 | 254,937 | 279,922 | 170,564 |
|  |  | 25,788 | 355 | 26,718 | 31,518 | 24,958 |
| 2 | All other,n.e.s.lb. | 2,581,026 | 343,642 | 3,126,799 | 955,290 | 1,641,171 |
|  | ( | 265,209 | 38,367 | 338,971 | 95,297 | 132,184 |
|  | Total meats. * | 5,998,976 | 85,835 | 6,263,936 | 4,103,397 | 1,560,971 |
| 3 | Other animal products |  |  |  |  |  |
|  | Bones. ${ }^{\text {cwt. }}$ | - | 43,910 <br> 64,241 | $\begin{aligned} & 44,085 \\ & 64,503 \end{aligned}$ | 171 500 | $\begin{gathered} 65,012 \end{gathered}$ |
| 4 | Butter lb. | 681 | 304,503 | 828,323 | 138,349 | 500,623 |
|  | \$ | 173 | 75,192 | 223,578 | 31,950 | 111,894 |
| 5 | Casein. lb. | - | 349,865 | 349,865 | - | 270,486 |
|  | \$ |  | 15,342 | 155,342 | 142138799 | 11,071 |
| 6 | Cheese.. 1b. | 153,886,884 | 261,682 | 155,216,392 | 142,138,799 | 1,346,128 |
|  | Eggs . ${ }^{\text {\% }}$ | 20,497,195 | 41,366 9852 | $20,697,144$ 147,419 | 18,533,880 | 187,335 62,273 |
| 7 | Eggs... .doz. | 51,295 | 9,852 2,574 | 147,419 35,519 | - | 62,273 19,602 |
| 8 | Furs, dressed. * | 2,018 | 11,420 | 15,306 | 1,261 | 10,035 |
| 1 | Furs, undressed * | 2,628,994 | 2,184,275 | 5,150,833 | 3,059,305 | 2,139,228 |
| 101 | Grease and grease | 26,791 | 3,847,823 | 4,302,192 | 512,750 | 3,460,104 |
|  | scrap. | 1,900 | -80,943 | 116,172 | 22,059 | 88,250 |
| 11 | Glue stock. |  | 27,472 | 27,472 |  | 26,719 |
| 12 | Hair ${ }^{\text {a }}$ | 7,367 | 196,400 | 205,999 | 7,084 | 225,302 |
| 13 | Hides and skins, other than fur " | +367 | $7,162,287$ | $7,196,250$ | 6,408 | 9,062,045 |
| 14 | Horns and hoofs " |  | 25,553 | 26,976 | 75 | 14,252 |
| 15 | Honey lb. | 40 | 4,987 | 5,027 | 1,140 | 14,032 |
|  | \$ |  | 592 | 598 | 211 | 1,554 |
| 16 | Lard. lb. | 34,500 | 2,475 | 46,638 | 36,048 | 69,603 |
| 17 |  | 4,080 | 369 | 5,517 | 2,705 | 6,546 |
|  | Milk and cream, condensed... lb. | 30 | 35,105 | 335,849 | - | 5,573,737 |
|  |  | 3. | 5,107 | 25,554 | - | 301,177 |
| 18 | Milk and cream, fresh... gal. |  |  | 828,299 |  |  |
|  |  | - | 752,535 | 752,535 | - | $\begin{aligned} & 1,631,097 \\ & 1,337,300 \end{aligned}$ |
| 19 | Oils, neat's foot and other |  |  |  | 51 |  |
|  |  | 3,08 3,513 | 5,638 | $\begin{aligned} & 194,020 \\ & 222,746 \end{aligned}$ | 44 | 3,090 |
| 20 |  | 45,544 | 153,427 | 324,805 | 32,972 | 181,488 |
| 21 | Sheep pelts. \$ | $800.0{ }^{-}$ | 43,812 | 43,812 | - $\begin{array}{r}3,278 \\ 1,48576\end{array}$ | 134,410 |
| 22 | Tallow... .lb. | $\begin{array}{r} 890,037 \\ 55,689 \end{array}$ | $\begin{array}{r} 721,960 \\ 44,192 \end{array}$ | $\begin{array}{r} 1,995,433 \\ 123,424 \end{array}$ | $\begin{array}{r} 1,485,576 \\ 102,419 \end{array}$ | $\begin{array}{r} 664,993 \\ \mathbf{4 3 , 8 9 1} \\ \hline \end{array}$ |

EXPORTS OF CANADA
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries. | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ |  |
| 638,583 | 6,039,495 | 260,075 | 9,882,662 | 9,759,909 | 119,681 | 11,031,893 | 1 |
| 94,961 | 1,627,964 | 39,826 | 2,340,081 | 2,582,893 | 24,293 | 2,730,616 |  |
| 2,849,082 | 1,011,256 | 3,107,698 | 4,403,437 | 1,868,510 | 1,821,486 | 3,939,164 | 2 |
| 266,879 | 96,862 | 198,625 | 310,663 | 101,719 | 85,928 | 200,644 |  |
| 5,814,852 | 15,210,202 | 6,055,074 | 22,067,941 | 33,152,107 | 1,639,081 | 38,196,542 |  |
| 65,183 | - | 71,060 | 72,790 | - | 74,244 | 74,459 | 3 |
| 94,586 | - | 93,448 | 95,665 |  | 89,820 | 90,391 |  |
| 1,228,750 | 585,605 | 1,367,171 | 2,724,913 | 1,950,137 | 205,029 | 3,441,183 | 4 |
| 309,046 | 150,612 | 268,541 | 639,625 | 597,223 | 42,665 | 1,018,769 |  |
| 270,483 |  | 230,045 | 230,045 |  | 50,564 | 50,564 | 5 |
| 11,071 |  | 13,923 | 13,923 | - | 3,282 | 3,282 |  |
| $144,478,346$ $18,868,785$ | 135,900,614 | 253,809 | 137,601,661 | 167,414,411. | 103,308 | 168,961,583 | 6 |
| $18,868,785$ 124,002 | $18,936,794$ <br> $3,100,247$ | 39,461 436,569 | $19,213,501$ <br> $3,592,899$ | $\begin{array}{r}26,398,013 \\ 7,565,884 \\ \hline\end{array}$ | 270,573 | $26,690,500$ $7,898,322$ | 7 |
| 37,150 | 850,808 | 98,271 | 965,640 | 2,191,687 | 63,469 | 2,273,412 | H |
| 11,550 | 6,300 | 19,506 | 29,862 | 2,605 | 106,386 | 110,198 | 8 |
| 5,557,926 | 1,297,702 | 1,320,887 | 2,726,961 | 929,217 | 3,644,097 | 4,668,139 | 9 |
| 4,088,872 | 83,623 | 2,268,909 | 2,411,238 | - | 4,393,600 | 4,405,400 | 10 |
| 116,116 | 3,889 | 71,255 | 77,947 | - | 92,098 | 92,506 |  |
| 26,719 | 341 | 41,009 | 41,350 |  | 35,789 | 35,789 | 11 |
| 237,100 | 6,210 | 276,061 | 283,191 | 10,675 | 3,84,272 | 305,047 | 12 |
| 9,090,687 | 7,634 | 7,420,149 | 7,434,210 | 2,382 | 6,536,088 | 6,555,810 | 13 |
| 16,634 |  | 14,243 | 16,186 |  | 6,758 | 7,108 | 14 |
| 16,069 | 101 | 6,728 | 6,929 | 970 | 9,701 | 11,013 | 15 |
| :,342 | 14 | 762 | 792 | 186 | 1,227 | 1.491 |  |
| 125,619 | 1,807,146 | 795,029 | 2,689,036 | 4,809 | 1,660 | 24,998. | 16 |
| 11,519 | 213,207 | 83,523 | 305,933 | 481 | 207 | 2,980 |  |
| 9,339,382 | 208,073 | 15,455,340 | 18,355,975 | 4,909,495 | 7,256,991 | 13,247,834 | 17 |
| 666,941 | 12,075 | 945,189 | 1,181,300 | 258,448 | 423,724 | 770,566 |  |
| 1,631,117 | - | 2,373,267 | 2,373,267 | - | 1,657,111 | 1,657,111 | 18 |
| 1,337,325 | - | 1,904,211 | 1,904,21I | - | 1,190,860 | 1,190,860 |  |
| 240,358 | 35,488 | 64,213 | 228,126 | 145,882 | 71,408 | 218,625 | 19 |
| 247,143 | 40,146 | 67,536 | 239,638 | 156,925 | 80,470 | 240,500 |  |
| 366,931 | 91,121; | 294,450 | 441,587 | 112,305 | 200,368 | 330,675 | 20 |
| - 137,888 |  | 265,332 | 265,332 | - | 180,828 | 180,828 | 21 |
| $\begin{array}{r} 2,348,750 \\ \mathbf{1 5 7 , 9 8 7} \\ \hline \end{array}$ | $\begin{array}{r}10,000 \\ \hline 700\end{array}$ | $\begin{array}{r} 946,410 \\ 59,794 \\ \hline \end{array}$ | $\begin{array}{r} 1,039,872 \\ \quad 64,842 \end{array}$ | - | 930,859 65,789 | $\begin{array}{r} 1,024,584 \\ 71,569 \end{array}$ | 22 |

TRADEAND COMMERCE
10.-Exports of Canada to United Kingdom, United States and All Countries in quanti ties and values by classes of home produce in the four fiscal years 1913-1916-con.


EXPORTS OF CANADA
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. | All Countries. |  |
| 2,841,184 | 560 | 5,657,123 | 5,659,970 | 155 | 4,539,795 | 4,546,121 | 1 |
| 648,675 | 125 | 1,359,003 | 1,359,741 | 50 | 1,495,472 | 1,497,684 |  |
| 125,763 | 1,803 | 87,270 | 90,373 | 3,842 | 58,920 | 63,512 | 2 |
| 38,079,184 | 21,619,391 | 14,743,824 | 37,391,810 | 30,664,039 | 14,725,103 | 46,291,616 |  |
| 20,623,560 | 5,448,902 | 8,521,901 | 19,687,068 | 6,731,794 | 8,867,139 | 22,377,977 |  |
| $2,052,064$ 66,149 | 300 | $\begin{array}{r} 3,402,657 \\ 110,984 \end{array}$ | $3,403,157$ 111,004 | - | $2,574,000$ 109,762 | $2,574,900$ 109,762 | 3 |
| 746,482 $4,564,731$ | $\begin{aligned} & 12,411 \\ & 54,134 \end{aligned}$ | 244,338 $1,357,079$ | 659,903 4,21962 | 33,716 | 263,472 | 864,573 | 4 |
| 18,854 | 14,360 | 82,681 | 101,603 | 7,028 | 118,316 | 127,015 | 5 |
| 76,350 | 54,000 | 314,200 | 397,886 | 24,400 | 408,668 | 438,006 |  |
|  |  |  |  | 127,296 | 1,733,687 | 1,880,154 | 6 |
|  |  |  |  |  |  |  |  |
| $\begin{array}{r} 198,535 \\ 34,372 \end{array}$ | - | $\begin{array}{r} 137,723 \\ 30,725 \end{array}$ | 138,723 30,786 | - | $\begin{array}{r} 235,789 \\ 4975 \end{array}$ | $\begin{gathered} 236,009 \\ 49 \\ \hline 965 \end{gathered}$ | 7 |
| 4,742,102 | 108,143 | 1,812,988 | 4,661,638 | 203,384 | 2,106,991 | 6,122,161 |  |
| 4,610,435 | 194,000 | 7,071,875 | 7,270,514 | 1,627,700 | 5,859,100 | 7,499,700 | 8 |
| 282,304, | 14,300 | 437,148 | 451,912 | 147,326 | 398,450 | 546,950 |  |
| 54 | -- | 163 2296 | 163 2,296 | - | 213 | 213 | 9 |
|  |  |  |  |  |  |  |  |
| 282,328 | 14,300 | 439,444 | 454,208 | 147,326 | 401,192 | 549,692 |  |
| 10,662,576 | - | 29,735,473 | 30,725,723 | - | 31,229,300 | 31,267,400 | 10 |
| 143,116 |  | 492,896 | 506,536 |  | 380,438 | 330,838 |  |
| 342,147 | 30,651 | 45,508 | 331,056 | - | 74,403 | 201,024 | 11 |
| 793,401 | 30,656 | 167,131 | 821,252 | - | 389,291 | 760,292 |  |
| 32,640 | 59,046 | 405 | 619,934 | 46,500 | 72,964 | 1,036,923 | 12 |
| 1,834 | 8,500 | 17 | 53,338 | 6,000 | 5,665 | 103,512 |  |
| $3,606,225$ 89,931 | 4,950 | 3,811,052 | 4,193,419 | 64,700 | 2,339,368 | 2,965,974 | 13 |
| 89,931 | 256 | 129,079 | 141,963 | 2,631. | 165,337 | 186,475 |  |
| 1,028,282 | 39,412 | 789,123 | 1,523,089 | 8,631 | 890,731 | 1,381,117. |  |

## TRADE AND COMMERCE

10.-Exports of Canada to United Kingdom, United States and All Countries in guantities and values by classes of home produce in the four fiscal years 1913-1916--con.


1 Bbl.

EXPORTSOF CANADA
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries. | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | $\underset{\text { All }}{\text { Countries. }}$ |  |
| 4,943,930 | - | 5,500,5 | 5,500,5 | - | 6,278,376 | 6,278 | 1 |
| 707,486 |  | 849,368 | 849,368 | - | 934,522 | 934,522 |  |
| 8,271,662 | 2,796,102 | 2,268,838 | 7,518,741 | 3,662,148 | 1,920,601 | 8,339,903 | 2 |
| 2,983,987 | 1,123,691 | 892,442 | 3,013,782 | 1,236,278 | 533,072 | 2,672,179 |  |
| 3,691,473 | 1,123,691 | 1,741,810 | 3,863,150 | 1,236,278 | 1,467,594 | 3,606,701 |  |
| 4,047,121 | - | 3,229,558 | 3,229,558 | - | 4,583,600 | 4,583,600 | 3 |
| 216,516 | - | 156,487 | 156,487 | - | 220,664 | 220,664 |  |
| 29,444 | - | 19,691 | 27,776 | 7 | 25,612 | 33,642 | 4 |
| 343,692 |  | 219,967 | 299,208 | 91 | 329,624 | 410,199 |  |
| 560,208 | - | 376,454 | 455,695 | 91 | 550,288 | 630,863 |  |
| 4,060) | 194 | 6,511 | 6,915 | 158 | 3,066 | 3,351 | 5 |
| 4,432,562 | 854,429 | 4,688,580 | 5,569,545 | 1,496,000 | 3,127,700 | 4,644,400 | 6 |
| 364, 564 | 92,023 | 292,559 | 387,543 | 183,621 | 274,504 | 460,737 |  |
| 45,100 | 100 | 1,852 | 2,160 |  | 2,786 | 2,816 | 7 |
| 7.116 | - 10 | 271 | 313 |  | 300 | 304 |  |
| 61,097,424 | 23,385,101 | 274,745 | 34,655,108 | 35,225,051 | 18,725 | 49,142,882 | 8 |
| 6,631,437 | 4,018,304 | 17,216 | 4,948,723 | 4,930,625 | 2,584 | 6,306,056 |  |
| 3,403,658 | - | 5,523,710 | 6,312,230 | - | 20,545,600 | 20,545,600 | 9 |
| 42,198 48,058 | ${ }_{43}$ | 44,638 | 53,667 |  | 224,893 | 224,893 |  |
| 372,019 | 471 | 8,126 163,196 | 40,692 306,438 | $\begin{array}{r}793 \\ 8,824 \\ \hline\end{array}$ | 5,765, 97,873 | 13,704 145,101 | 10 |
| 7,417,329 | 4,110,808 | 517,880 | 5,696,684 | 5,123,070 | 600,154 | 7,137,091 |  |
| 712,045 | - | 1,360,875 | 1,360,875 | - | 2,106,000 | 2,106,000 | 11 |
| 39,035 | - | 76,947 | 76,947 | - | 119,787 | $119,787$ |  |
| 1,960,857 | 1,800 | 1,615,684 | 1,619,084 | 4,700 | 2,102,100 | 2,117,000 | 12 |
| 96,109 | 36 | 81,579 | 81,684 | 128 | 130,909 | 131,663 |  |
| 21,598 | 261 | 2,336 | 11,867 | 5 | 10,191. | 22,962 | 13 |
| 113,642 | 979 | 20,656 | 68,058 | 32 | 35,506 | 91,589 |  |
| 3,088,747 | 115,150 | 1,566,140 | 1,726,892 | 5,168 | 284,215 | 314,998 | 14 |
| 145,144 | 22,968 | 92,145 | 118,284 | 260 | 24,670 | 26,295 |  |
| 354,895 | 23,983 | 194,380 | 268,026 | 421 | 191,085 | 249,547 |  |
| 6,028,034 | - | 7,073,036 | 7,073,036 | 20 | 5,797,100 | 5,801,400 | 15 |
| 332,792 | - | 427,873 | 427,873 | 280 | 361,231 | 361,669 |  |
| $\begin{array}{r} 85,868 \\ 140,567 \end{array}$ | 250 1,750 | $\begin{aligned} & 28,894 \\ & \mathbf{6 5 , 3 1 6} \end{aligned}$ | $\begin{array}{r} 29,382 \\ 67,733 \end{array}$ | - | 8,028 17,484 | 9,825 19,331 | 16 |

TRADEAND COMMERCE
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.


EXPORTS OF CANADA
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries. | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ |  |
| 1,477,027 | - | 1,735,943 | 1,735,943 | - | 1,707,146 | 1,707,172 | 1 |
| 700 | - | 4,396 | 4,441 | - | 1,914 | 1,914 | 2 |
| 8,381 | - | 18,770 | 19,058 | - | 11,920 | 11,920 |  |
| 353,517 | 4, 48 | 581,928 | 596,137 | 4,880 | 514,352 | 532,782 | 3 |
| 112,790 | 1:275 | 185,478 | 188,798 | 2,072 | 214,329 | 221,915 |  |
| 858 | 3,120 | ${ }^{6,566}$ | 9,686 | 3,570 | 4,977 | 8,547 | 4 |
| 269 | 312 | 2,114 | 2,426 | 1,609 | 1,725 | 3,334 |  |
| 662,451 | 25,633 | 172,870 | 334,223 |  | 319,076 | 319,076. | 5 |
| 293,894 | 8,934 | 70,717 | 144,388 | - | 134,366 | 134,366 |  |
| 129,778 | 35,795 | 14,741 | 50,636 | - | 50,425 | 51,293 | 6 |
| 40,799 | 8,572 | 4,342 | 12,994 | - | 15,851 | 16,281 |  |
| 1,166,604 | 68,796 | 776,105 | 990,682 | 8,450 | 888,830 | 911,698 |  |
| 447,752 | 19,093 | 262,651 | 348,606 | 3,681 | 366,271 | 375,896 |  |
| 45,203 | 7,528 | 5,042 | 12,574 | 6,717 | 12,373 | 19,156 | 7 |
| 52,126 | - | 50,769 | 68,947 | 1,757 | 59,826 | 82,523 | 8 |
| 42,792,137 | 9,914,548 | 31,030,873 | 42,650,683 | 14,147,250 | 34,619,722 | 51,271,400 |  |
| 434 | 436 | 1 | 453 | 308 | 173 | 481 | 9 |
| 19,218 | 22,08I | 47 | 22,685 | 21,713 | 3,168 | 24,881 |  |
| 29,644 | - | 34,359 | 34,359 |  | 43,549 | 43,549 | 10 |
| 48,862 | 22,081 | 34,406 | 57,044 | 23,713 | 46,717 | 68,430 |  |
| 4,833 | - | 5,675 | 5,675 | - | 4,440 | 4,440, | 11 |
| 25,577 | - | 42,370 | 42,370 | - | 22,239 | 22,239 |  |
| 16,403 | - | 23,133 | 23,296 | - | 17,286 | 17,386 | 12 |
| 49,608 | - | 80,257 | 80,776 | - | 55,717 | 56,088 |  |
| 30,526 | - | 11,344 | 11,364 | - | 12,190 | 12,190 | 13 |
| 33,404 | - | 15,844 | 15,877 | - | 10,629 | 10,629 |  |
| 72 | - | 12 | 12 | - | 584 | 584 | 14 |
| 258 | - | 42 | 42 | - | 2,920 | 2,920 |  |
| 33,721 | 8,132 | 5,626 | 13,758 | 2,282 | 2,748 | 5,030 | 15 |
| 11,276 | - | 63,822 | 63,822 | - | 89,687 | 89,687 | 15 |
| 811 | - | 238 | 238 | - | 400 | 400 | 17 |
| 62,743 | - | 100,715 | 100,715 | - | 30,540 | 30,540 | 18 |
| 95,483 |  | 490,738 | 491,209 | - | 185,787 | 186,047 | 19 |
| 614,355 | 17,953 | 571,238 | 589,191 | 45,172 | 722,043 | 767,295 | 20 |
| 818,389 | 26,085 | 1,232,377 | 1,258,933 | 47,454 | 1,031,205 | 1,078,999 |  |

TRADEAND-COMMERCE
10.-Exports of Canada to United Kingdom, United States and All Countries in.quandities and values by clasees of home phoduce in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | All Countries | United Kingdom. | United States. |
| $\begin{aligned} & \text { IV Forest produce- } \\ & \text { con. } \\ & \text { Lumber- } \end{aligned}$ |  |  |  |  |  |  |
| 1 | Basswood. .m.ft. | 340 | 581 | 1,009 | 117 | 510 |
|  | \$ | 9,418 | 12,074 | 24,595 | 3,187 | 9,345 |
| 2 | Battens. .. " |  |  |  | 3,542 |  |
| 3 | Deals, pine.st.hund. | 17,507 | 1,956 | 19,956 | 19,000 | 1,061 |
| 4 | Deals, $\$$ | 1,285,863 | 78,355 | 1,386,708 | 1322,326 | 61,616 |
|  | Deals, spruce and other st. hund. | 114,790 | 18,115 | 134,835 | 136,147 | 11,876 |
|  |  | 4,683,821 | 743,561 | 5,513,543 | 5,947,348 | 513,883 |
| 5 | Deal ends..st. hund. | 4,403 | 1,080 | 6,086 | 6,179 | 536 |
|  | \$ | 176,449 | 30,141 | 228,399 | 249,088 | 30,408 |
| 6 | Laths. M. | 7,939 | 680,372 | 700,789 | 2,863 | 597,420 |
|  | \% | 21,261. | 1,743,248 | 1,780,969 | 8,055 | 1,669,547 |
| 7 | Palings and pickets. | 30,540 | 171,782 | 215,160 | 15,850 | 197,364 |
| 8 | Planks and boards. .M. ft. | 81,618 | 926,538 | 1,148,940 | 74,571 | 802,685 |
|  | boards. .m. ${ }^{\text {g }}$, | 1,825,549 | 16,247,450 | 20,839,098 | 1,772,005 | $\begin{array}{r} 8029,030 \\ 15,249,032 \end{array}$ |
| 9 | Scantling. . . .m. ft. | 24,142 | 76,875 | 106,312 | 27,282 | 56,628 |
|  | \% | 278,306 | 1,079,107 | 1,454,238 | 367,335 | 847,290 |
| 10 | Shingles. m. | 82 | 542,311 | 564,019 | 52 | 662,512 |
|  | \% | 160 | 1,374,569 | 1,409,116 | 292 | 1,738,879 |
| 11 | Shooks, box and other $\qquad$ | 167,887 | 19,768 | 265,042 | 121,781 | 22,908 |
| 12 | Staves and headings.... | 19,272 | 20,128 | 57,707 | 12,956. | 36,511 |
| 13 | Alt other lumber * | 168,072 | 76,474 | 249,514 | 187,930 | 71,573 |
|  | Total lumber | 8,666,609 | 21,596,657 | 33,433,089 | 10,011,695 | 20,448,356 |
| 14. | Match blocks. | 2,847 | 1,710 | 4,557 | - | 6,739 |
|  | Masts and spars. no. | - | 91 | 319 | - | 57 |
|  | * | - | 462 | 4,624 | - | 455 |
| 16 | Piling... ${ }^{\text {a }}$ | - | 127,062 | 130,600 | - | 175,509 |
|  | Poles, hop, hoop, telegraph and |  |  |  |  |  |
|  |  | 750 | 65,148 | 66,908 | 1,347 | 120,750 |
| 18 | Shingle bofts, pine or cedar ....cord |  |  | 7,853 | - | 13,582 |
|  | \| or cedar ...cord | - | 27,769 | 27,762 | - | 47,132 |
| $1)$ | Posts, sleepers and railroad ties.. | - | 219,788 | 220,043 | - | 247,996 |
|  | Timber, square - |  |  |  |  |  |
| 20 | Ash. | 1,327 | $\stackrel{-}{-}$ | 2,205 | 3,146 | - |
| 21 | Birch. | 221,658 | 2,363 | 231,182 | 122,904 | 780 |
| 22 | Elm | 76,481 | 1,571 | 78,827 | 73.997 | 572 |

EXPORTE OF CANADA
10.-Exports of Canada to.United Kingdom, United States and All Countries in quantities and values by classes of home'produce in the four fiscalyears:1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | $\stackrel{\text { All }}{\text { Countries. }}$ |  |
| 687 | 197 | 926 | 1,283 | 205 | 1,060 | 1,300 | 1 |
| 14,992 | 7,195 | 24,514 | 38,053 | 7,013 | 26,230 | 34,513 |  |
| 5,426 | 4,379 |  | 4,379 |  | 1,646 | 1,646 | 2 |
| 20,382 | 13,318 | 873 | 14,399 | 13,329 | 811 | 14,508 | 3 |
| 1,408,709 | 1,073,420 | 55,951 | 1,148,738 | 1,170,784 | 48,441 | 1,249,595 |  |
| 149,638 | 126,417 | 10,988 | 138,500 | 171,181 | 5,673 | 187,894 | 4 |
| 6,547,854 | 5,829,977 | 507,388 | 6,393,420 | 8,826, 107 | 263,483 | 9,677,355 |  |
| 7,124 | -5,767 | 301 | 6,582 | 5,326 | 115 | 5,740 | ${ }^{5}$ |
| 294,195 | 241,310 | 11,041 | 269,849 | 212,092 | 4,022 | 226,938 |  |
| 608,921 | 777 | 629,357 | 635,974 | 25. | 787,056 | 792,855 | 6 |
| 1,699,221 | 2,104 | 1,785,507 | 1,798,219 | 70. | 2,236,244 | 2,246,777 |  |
| 227,230 | 25,153 | 83,100 | 114,122 | 11,198 | 224,230 | 238,568 | 7 |
| 999,079 | 68,348 | 831,319 | 975,420 | 107,918 | 1,070;644 | 1,256,289 | 8 |
| 19,614,128 | 1,580,251 | 15,978,499 | 18,921,445 | 2,188,164 | 20,132,978 | 23,880,341 |  |
| 87,233 | 25,817 | 50,029 | 76,565 | 40,546 | 44,170 | 93,734 | 9 |
| 1,264,881 | 381,730 | 802,338 | 1,196,559 | 659,733 | 713,237 | 1,535,731 |  |
| 689,150 | 782 | 1,333,165 | 1,359,069 |  | 1,783,963 | 1,796,473 | 10 |
| 1,775,619 | 2,475 | 2,945,159 | 2,987,764 | - | 3,619,409 | 3,644,159 |  |
| 189,777 | 85,618 | 21,550 | 158,397 | 355,114 | 9,014 | 460,681 | 11 |
| 70,249 | 18,106 | 45,688 | 77,762 | 23,034 | 48,311 | 85,710 | 12 |
| 260,595 | 89,662 | 19;156 | 108,818 | 52,239. | 17,988 | 70,959 | 13 |
| 33,272,876 | 9,341 380 | 22,279,891 | 33,217,525 | 13,505,548 | 27,345,233 | 43,352,973 |  |
| 6,739 | 923 | 4,267 | 5,190 | - | 5,636 | 5,636 | 14 |
| 3, 2999 | - | 63 | 168 | - | 102 | 189 | 15 |
| 3,499 | - | 535 | 2,416 | - | 559 | 1,871 |  |
| 176,959 | - | 170,111 | 171,758 | - | 143,391 | 143,391 | 16 |
| 127,354 | - | 160,611 | 162,153 | 1,600 | 70,355 | 72,155 | 17 |
| 13,582 | - | 7,744 | 7,769 | - | 8,665 | 8,665 | 18 |
| 47,132 | - | 24,705 | 24,780 | - | 29,239 | 29,239 |  |
| 247,996 | 4,542 | 148,812 | 247,862 | 107,916. | 72,323 | 180,252 | 19 |
| 3,414 | 1,086 | - | 1,086 | 2,757 | - | 2,757 | 20 |
| 133,805 | 113,874 | 732 | 119,386 | 230,173 | - | 230,173 | 21 |
| 78,742 | 95,965 | 603 | 98,988 | 54,471 | - - | 54,471 | 22 |

TRADEAND COMMERCE
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. |
| IV Forest producecon. |  |  |  |  |  |  |
| Timber, square-con. |  |  |  |  |  |  |
| 2 | Oak. \$ | 24,541 | 1,285 | 25,826 | 71,835 | 644 |
|  | Pine, red. | 64, 144 | - | 64,144 | 12,150 | - |
|  | Pine, white. | 937,076 | 125 | 940,894 | 204,482 | 624 |
|  | All other | 12,017 | 5,853 | 20,122 | 19,053 | 9,304 |
|  | sq.. | 1,337,244 | 11,197 | 1,363,200 | 507,567 | 11,924 |
| 5 | Wood, blocks and other, for pulp. cord $\$$ | - | 1,003,594 | $\begin{aligned} & 1,003,594 \\ & 6,809,445 \end{aligned}$ | - | $\begin{aligned} & \mathbf{1 , 0 8 9 , 3 8 4} \\ & \mathbf{7 , 3 8 8 , 7 7 0} \end{aligned}$ |
| 6 | Other articles of the forest | - | 3,979 | 3,979 | 813 | 7,701 |
| V. Manufacturestotals. |  | 7,158,746 | 21,321,458 | 43,692,708 | 8,583,540 | 30,391,764 |
| Agricultural implements, viz.- |  |  |  |  |  |  |
| 7 | Drilis. no. | - | - | - | 626 | 13 |
|  | \$ | - | - | - | 34,781 | 760 |
| 8 | Mowing machines.... No. | 1.747 | 2 | 18,935 | 878 | 3 |
|  | makrs... | 60,291 | 80 | 665,551 | 30,270 | 140 |
| 9 | Reapers. No. | 103 | - | 4,215 | 10 |  |
|  | Harvestersand | 6,070 | - | 247,304 | 660 |  |
| 10 | binders. No. | 1,998 | 47 | 16,024 | 2,278 | 2 |
|  | \$ | 209,289 | 1,831 | 1,718,052 | 233,131 | 380 |
| 11 | Ploughs. No. | ${ }^{296}$ | 211 | 15,197 | 621 | 360 |
|  | \% | 20,017 | 11,437 | 479,828 | 8,400 | 9,062 |
| 12 | Harrows. No. | 226 | 67 | 4,247 | 821. | ${ }_{5} 126$ |
|  | $\$$ | 2,564 | 750 | 104,022 | 8,345 | 5,585 |
| 13 | Hay rakes. No. | 131 | 30 | 6,155 | 572 | - |
|  | \$ | 2,914 | 1,110 | 137,150 | 13,402 |  |
| 14 | Seeders No. | - | 70 7.040 | 70 7,040 | - | 1,140 |
| 15 | Threshing |  |  |  |  |  |
|  | machines. No. | - | - | 714 | - | - |
|  | Cultivator \$ | 47 | 79 | 213,265 | - | 195 |
| 16 | Cultivators.. ${ }^{\text {No. }}$ | 471 9,141 | 79 2,001 | 111,091 | 10,526 | 4,643 |
| 17 | All other | 79,280 | 13,344 | 2,022,981 | 71,705 | 32,050 |
| 18 | Parts of... | 47,440 | 16,494 | 659,540 | 77,347 | 39,289 |
|  | Total . ..... " | 437,006 | 54,087 | 6,365,824 | 488,367 | 93,049 |

EXPORTS OF CANADA
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-eon.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | U'nited Kingdom. | United States. | All Countries. | United Kingdom. | United States. | All <br> Countries. |  |
| 72.479 | 71,578 | 1,673 | 73,251 | 26,444 | 2,610 | 29,054 | 1 |
| 12,150 |  |  |  | 2,952 | 525 | 3,477 | 2 |
| 205,106 | 236,656 | $\rightarrow$ | 237,220 | 129,529 | 2,408 | 131,937 | 3 |
| 30,499 | 75 | 2,938 | 3,024 | 16,693 | 9,847 | 26,540 | 4 |
| 536,195 | 519,234 | 5,946 | 532,955 | 463,019 | 15,390 | 478,409 |  |
| 1,089,384 | - | 1,010,914 | 1,010,914 | - | 879,934 | 879,934 | 5 |
| 7,388,770 | - | 6,817,311 | 6,817,311 | - | 5,743,847 | 5,743,847 |  |
| 8,519 | 303 | 13,388 | 13,691 | - | 24,322 | 24,322 | 6 |
| 57,443,452 | 24,848,359 | 42,164,753 | 85,539,501 | 148,477,303 | 58,202,141 | 242,834,998 |  |
| 10,904 | 748 | 39 | 3,996 | 2,239 | 62 | 7,409 | 7 |
| 663,437 | 36,642 | 2,704 | 260,318 | 118,663 | 4,983 | 495,304 |  |
| -6,503 | 1,258 | 3 | 7,512 | 1,093 | 327 | 6,220 | 8 |
| 903,889 | 42,885 | 195 | 260,709 | 38,746 | 11,932 | 222.920 |  |
| 5,293 |  | 2. | 902 | - | - | 471 | 9 |
| 301,610 | 220 | 111. | 48,301 | - | - | 27,364 |  |
| 29,276 | 1,442 | 59 | 6,799 | 4,539 | 322 | 9,960 | 10 |
| 3,068,797 | 146,059 | 7,319 | 695,858 | 469,479 | 34,534 | 1,056,896 |  |
| 14,331 | 502 | 532 | 13,573 | 1,723 | 983 | 15,248 | 11 |
| 405,883, | 9,766 | 15,987 | 339,301 | 38,569 | 22,064 | 323,301 |  |
| 7,329 | 380 | 584 | 6,164 | 915 | 394 | 4,279 | 12 |
| 126,853 | 4,738 | 18,993 | 92,691 | 10,257 | 17,368 | 79,813 |  |
| 9,764 | 317 | 197 | 2.055 | 361 | 1 | 2,409 | 13 |
| 293,75 | 6,427 | $9.80{ }^{\circ}$ | 47,773 | 8,250 | 57 | 54,989 |  |
| 1,140 | - | 6591 | 11 670 | - | 18.5 | 185 | 14 |
| 1,925 | - | 285 | 2,043 | - | 17 | 923 | 15 |
| 712,270 | -- | 321,611 | 866,993 | -- | 14,358 | 500.715 |  |
| - $1 \times 0$ | 183 | 210 | 5,831 | 381 | 243 | 6,327 | 16 |
| 182, 05 | 4.641 | 6,023 | 143,807 | 10,376 | 6,978 | 177,431 |  |
| 388,039 879.214 | 49,982 | 78,232 | 263,776 | 169,126 | 55,520 | 343,635 | 17 |
| 879.214 | 53,524 | 51,891 | 648,892 | 97,608 | 116,164 | 571,797 | 18 |
| 7,931,7901 | 354,884 | 513,585 | 3,669,089 | 961,074 | 284,143 | 3,854,350 |  |

TRADE AND COMMERCE
10.-Exports of Canada to United Kingdom, United 8tates and All Conntries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | Enited States. | All <br> Countries. | United Kingdom. | Cnited States. |
|  | V. Manufactures-con. |  |  |  |  |  |
| 1 | Asbestos, mfs. of \$ Books, pamphlets, maps, cte. Biscuits and bread <br> cut. |  | - | - | 7,256 | 14,754 |
| 2 |  | 148,086 | 191,413 | 377,686 | 208,247 | 232,061 |
| 3 |  | 14, 21 | - 376 | 2,296 | 208,24 | 332 |
|  |  | 138 | ${ }_{4} \mathrm{SG}_{\mathrm{H}}$ | 14,996 | - | 1,989 |
| 4 | Binder twine. lb. | - | 9;698,561 | 10,248,031 | 9,020 | 3,641,850 |
|  | B | - | 831,510 | 869,028 | 735 | 364,204 |
| 5 |  | - | 663 | 706 | , | 1,032 |
|  |  | 7 | 8.762 | 9,251 | 5 | 8,172 |
| 67 |  | 7,717 | 334 | 38,348 | 4,680 | 911 |
|  | Buttons. " | 23 | 513 | 536 | 7,432 | 746 |
| 8 | Cartridges, gun, cifle, etc | $6,768$ | $1,708$ | 11,239 |  | 4,094 |
| 9 | Charcoal. | - | 4,970 | 11,338 | - | 3,073 |
| 10 | Cement. | - | 1,306 | 2,861 | - | 1,061 |
| 11 | Clay, mfs. of | 100 | 3,764 | 3,864 | 7,350 | 24,874 |
| 12 | Clothing and wearing apparel | 59,447 | 140,677 | 316.700 | 99,019 | 150,952 |
| 13 | Coke. ton | , | 61,990 | 92,028 |  | 73,285 |
|  |  |  | 269,133 | 269,383 | - | 332,620 |
| 14 | Cordage, rope and twine. | - | 7,112 | 31,28 2 | 1,129 | 9,807 |
| 15 | Cotton fabrics. vd | $11,72$. | 10.533 | 26,4,238 | 8,260 | 118,192 |
|  |  | 2,675 | $\underline{2}, 032$ | 53,883 | 876 | 7,870 |
| 16 | Cottons, otherCotton waste | 3,511 | $1 \times 179$ | 23,675 | 6,000 | 8,329 |
|  |  | 249,353 | 886,273 | 1,724,713 | 3,661 | 482,251 |
|  | , | 9,107 | 25,849 | 46,993 | 289 | 21,356 |
| 18 | Drugs, chemicals, medicines, etc. | 521,566 | 542.179 | 1,746,528 | 440,082 | 619,066 |
| 19 | Dye stuffs. |  | 10,791 | 14,087 |  | 2,629 |
| 20 | Fiectricalapparatus. | 8,48 | 40,178 | 62,756 | 25,183 | 66.849 |
| 21 | Electrotypes. Extract of hemlock bark. bbl. | 477 | 3,977 | 3,77t | 64 | 4,341 |
|  |  | 1,544 | - | 2,40) | 1,267 | 11 |
|  |  | 16,520 | - | 24.80 | 15,170 | 309 |
| 23 | Explosives and ulminates, n.e.s. |  |  |  |  |  |
|  |  | 5,385 | 27,383 | 101,090 | 7,900 | 96,492 |
| 24 | Fertilizers. | 25,441 | 1,592,185 | 1,677,703 | 1,405 | 2,436,765 |
| 25 | Fur manufactures | 25,206 | 35,207 | 69,768 | 21,597 | 23.992 |
| 26 | Giass and glassware, n.e.s. | 5,135 | 8,608 | 25,013 | 8,819 | 13,586 |
| 27 | Crindstones, manufar tured. | 332 | 24,454 | 27,118 | ---1 | 54.103 |
| 28 | Guns, rifles, ete. | 7,667 | 6,821 | 26,387 | 10,218. | 11,550 |
| 29 | Gypsum or plaster, ground | - | 7,125 | 7,552 | 1270 | 12,763 |
| 30 | Hats am! ${ }^{\text {ares. }}$ | 714 | 3.310 | 20,633 | 1,270 | $\underline{3.353}$ |

EXPORTSOF CANADA
10.- Exports of Canada to United Kingedom, United'States and All Countries in quantities and values by classes of home prodace in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underset{\text { Countries. }}{\text { All }}$ | United Kingdom. | United States. | All Countries. | United Kingdom, | United States. | All Countries. |  |
| 98,274 | 37,169 | 13,254 | 78,329 | 95,518 | 4,226 | 118,287 | 1 |
| 496,579 | 133,971 | 237,915 | 420,026 | 73,267 | 214,016 | 317,859 | 2 |
| \% 2,029 | 578 | 370 | 3,032 | 1,631 | 236 | 8,058 | 3 |
| 16,227 | 4,430 | 2,805 | 26,452 | 14,316 | 2,035 | 51,698 |  |
| 4,690,820 | 1,550,610 | 9,440,818 | 12, 281,708 | 3,061,643 | 7,569,325 | 17,336,927 | 4 |
| 453,530 | 105,611 | 872,592 | 1,077,021 | 228,966 | 710,727 | 1,529,540 |  |
| 1,048 |  | 1,431 | 1,482 |  | ${ }_{7} 971$ | 1,074 | 5 |
| 8,454 | 1271 | 11,542 | 12,020 |  | 7,301 | 8,506 |  |
| 16,989 | 1,271 |  | 14,471 | 2,455 | 80 | 16,071 | 6 |
| 1,144 |  | 339 | 394 | 27 | 257 | 7,079 | 7 |
| 13,353 | 116,014 | 97,718 | 221,137 | 73,071,562 | 13,451 | 73,904,584 | 8 |
| 3,073 | - | 1,991 | 3,878 | 9 | 25,458 | 25,467 | 9 |
| 2,393 | $\overline{7}$ | 445 | 1,065 |  | 1,635 | 5,139 | 10 |
| 36,628 | 77 | 17,319 | 17,396 | - | 32,707 | 34,649 | 11 |
| 446,52+ | 6,288,694 | 120,752 | 7,344,388 | 8,171,865 | 66,465 | 9,148,878 | 12 |
| 73,299 |  | 52,874 | 52,874 |  | 43,770 | 48,790 | 13 |
| 332,685 | - | 240,818 | 240,818 | - | 196,114 | 196,214 |  |
| 60,127 | 1,220 | 16,530 | 47,180 | 16,773 | 27,824 | 91,665 | 14 |
| 356,081 | 813,894 | 14,442 | 1,222,964 | 1,710,927 | 34,949 | 2,418,857 | 15 |
| 82,636 | 158,649 | 3,972 | 282, S2 8 | 415,127 | 8,788 | 614,730 |  |
| 24,591 | 33,275 | 69,799 | 151,343 | 1,089,693 | 27,670 | 1,161,556 | 16 |
| 511.390 | 231,625 | 1,369,448 | 1,606,881 |  | 1,042,914 | 1,049,775 | 17 |
| 22,960 | 12,403 | 60,132 | 72,786 | - | 39,352 | 39,551 |  |
| 1,688,778 | 463,427 | 2,446,363 | 3,474,232 | 758,809 | 4,569,668 | 6,353,462 | 18 |
| 6,583 |  | 21,609 | 24,734 |  | 17,951 | 26,724 | 19 |
| 106,816 | 17,012 | 49,417 | 97,890 | 141,666 | 52,270 | 573,044 | 20 |
| 4,719 | 66 | 6,080 | 6,287 |  | 4,325 | 4,519 | 21 |
| 1.969 | $\stackrel{\square}{2}, 371$ | 8 | 2,550 | 4,840 | - | 5,486 | 22 |
| 23,771 | 28,512 | 248 | 30,812 | 58,170 | - | 65,677 |  |
| 228,312 | 51,543 | 158,293 | 205,578 | 6,570,075 | 252,713 | 7,n9•,926 | 23 |
| 2,539,789 | 877 | 1,996,591, | 2,163,917 | 3,557 | 2,539,285 | 2,705,069 | 24 |
| 53,070 | 17,097 | 8,537 | 29,808 | 19,282 | 10,560 | 37,192 | 25 |
| 32,453 | 14,016 | 15,33 ? | 55,553 | 92,103 | 12,582 | 133,743 | 26 |
| 54.584 | - ${ }^{-}$ | 45,515 | 45,889 |  | 19,926 | 19,971 | 27 |
| 130,568 | 153,224, | 32,321 | 211,324 | 575,628 | 37, 181 | 017,795. | 28 |
| 14.225 | 216 | 24,039 | 31,878 | - | 71,541 | 92,446 | 29 |
| 21.521 | 917 | 1,947 | 16,203 | 118,791 | 3,264 | 134.912 | $3)$ |

TRADEAND COMMERCE
10.-Exports of Canada to United Kingdom, United States and All Countries in guanti-
ties and values by classes of home produce in the four fiscal years 1913-1916-con.


[^15]
## EXPORTS OF CANADA

10.-Exports of Canada to United Kingdom, United States and All Countries in quanti ties and values by classes of home produce in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | $\underset{\text { All }}{\text { Countries. }}$ | United Kingdom. | United States. | All |  |
| 2,841,408 | 356,918 | 3,211,798 | 3,681,709 | 413,933 | $3,750,722$ 9,384 | 4,222,234 | 1 |
| 272,278 | 182,843 | 106,830 | 446,777 | 2,043,774 | 128,090 | 2,494,609 | 3 |
| 5,061,919 | - | 4,221,476 | 4,221,476 | 60,600 | 8,718,500 | 8,779,100 | 4 |
| 413,953 |  | 276,128 | 276,128 | 6,368 | 580,897 | 587,265 |  |
| 46,648 | 127,522 | 17,356 | 148,145 | 2,391 | 11,911 | 18,4.58 | 5 |
| - | 39 | 6,631 | 6,901 | 5,016 | 5,782 | 12,398 | 6 |
|  | 1,900 | 377,637 | 398,488 | 293,309 | 316,682 | 729,029 |  |
| 18,832 | 1,850 | 1,700 | 20,080 | - | - | 326 | 7 |
| 201,319 | 141,323 | 139,267 | 369,714 | 585,442 | 153,767 | 888,120 | 8 |
| 444,456 | 55,477 | 193,299 | 351,067 | 256,412 | 379,971 | 763,854 | 9 |
| 9,310 |  | 8,664 | 10,477 |  | 19,691 | 22,350 | 10 |
| 347,347 | - | 104,444 | 126,975 | - | 266,126 | 307,721 |  |
| 851,279 | 17,206 | 831,208 | 858,855 | - | 1,753,238 | 1,766,634 | 11 |
| 458,800 | 6,864 | 522,548 | 534,946 | - | 840,542 | 849,338 |  |
| 7,055 | 163 | 2,522 | 3,026 | 505 | 594 | 1,715 | 12 |
| 98,648 | 4,988 | 24,351 | 33,244 | 7,919 | 14,618 | 29,300 |  |
| 1,265 | 38 | 3,151 | 4,225 | 91 | 329 | 1,307 | 13 |
| 20,618 | 1,488 | 8,656 | 24,708 | 2,026 | 4,992 | 19,257 |  |
| 3,126 | 1,857 | 156 | 2,674 | 2,900 | 132 | 3,349 | 14 |
| 204,502 | 119,825 | 8,443 | 173,211 | 196,085 | 11,689 | 228,710 |  |
| - | 266,919 | 4,880 | 446,909 | 943,628 | 29,950 | 1,792,851 | 15 |
| - - | 543,451 | 9,684 | 870,319 | 2,381,149 | 86,628. | 4,483,263 |  |
| 968,074 | 4,442,511 | 614,977 | 7,111,529 | 29,724,891 | 2,623,935 | 41,395,933 | 16 |
| 2,809,244 | 5,447,199 | 2,022,362 | 10,162,426 | 33,449,624 | 4,707,861 | 49,713,309 |  |
| 185,081 | 29,661 | 140,826 | 170,720 | 37,697 | 185,883 | 223,929 | 17 |
| 113,589 | 13,811 | $\begin{array}{r}34,493 \\ \hline 77\end{array}$ | 80,714 | 57,534 | 25,084 | 139,095 | 18 |
| 99,5231 | $167{ }^{1}$ | 77,2581 | 78,5081 | 7381 | 35,5901 | $38,049{ }^{1}$ | 19 |
| 203,302 | $408{ }^{1}$ | 159,8091 | 161,221 | 332 | 74,1601 | 80,807 ${ }^{1}$ |  |
| 11,268 | 5,211 | 7,081 | 14,294 | 25,952 | 3,013 | 32,783 | 20 |
| 82,520 | 32,725 | 104,188 | 188,084 | 88,774 | 87,531 | 537,505 | 21 |
| 21.288 | 1.651,562 | 123,523 | 3,981,959 | 3,806,414 | 267,051 | 6,188,426 | 22 |

[^16]
## TRADE AND COMMERCE

10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.


EXPORTS OF CANADA
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of heme produce in the four fiscal years 1913-1916-con.


TRADE AND COMMERCE.
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. |
|  | V. Manufactures-con. |  |  |  |  |  |
|  | Musical instruments- |  |  |  |  |  |
| 1 | Organs. No. | 11,726 | ${ }^{28}$ | 2,794 | 1,581 | 34 |
|  |  | 114,677 | 12,405 | 189,824 | 91,236 | 16,393 |
| 2 | Pianos. ${ }_{\text {coser }}$ No. | 49 13,420 | - 148 | 56,283 | 41 13,428 | 114 |
| 3 | Other and parts of. |  |  | 7,905 |  | 8,703 |
|  | Total.... | 131,721 | 50,711 | 254,012 | 162,903 | 53,376 |
| 4 | Oil cake cwt. | 324,136 | 7,630 | 691,280 | 322,350 | 42,792 |
|  |  | 509,509 | 12,781 | 1,074,701 | 444,349 | 54,140 |
| 5 | Oil, n.e.s. | 17,805. | 1,445,977. | 1,741,621 | 16,602 | 1,324,016 |
|  |  | 15,454 | 144,576 | 215,202 | 10,347 | 171,292 |
|  | Paper- | 480 | 54,119 | 746,705 | 1,000 | 3,850 |
| 6 | Paper, wall. roll. | 155 | 6,615 | 59,174 | 200 | 622 |
| 7 | Paper, felt. | 127 | 8,595 | 54,126 | 368 | 8,688 |
|  |  | 148 | 3,240 | 38,052 | 499 | 13,221 |
| 8 | Paper, wrapping lb. | - | 2,864,733 | 2,965,043 | 37,269 | 17,202,643 |
| 9 | Paper, printing lb, | 10,167,560 | [ 96,922 | 293,583,303 | 5,969,300 | 578,595 $506,124,800$ |
|  |  | - 202,215 | 4,242,298 | 5,692,126 | 122,207 | 9,818,539 |
| 10 | Paper, n.e.s. | 381,905 | 18,006 | 434,846 | 381,717 | 149,087 |
|  | Total paper | 584,423 | 4,367,081 | 6,324,810 | 505,676 | 10,560,064 |
| 11 | Paints and var- |  |  |  |  |  |
| 12 | Paintings, all kinds" | 23,466 | 133,992 | 162,878 | 71,733 | 58,488 |
| 13 | Plumbago, mfs. of " | 3,227 | 40,984 | 52,403 | 7,210 | 32,088 |
| 14 | Photographs. " | 778 | 9,097 | 10,053 | 1,396 | 7,026 |
| 15 | Rags.... lb. | 4,589,800 | 41,899,400 | 46,602,000 | 4,546,500 | 49,749,000 |
|  | \$ | 256,637 | 410,403 | 675,068 | $\cdot 287,837$ | 514,179 |
| 16 | Ships sold to other | - |  | 2,825 | - | 374 |
|  | counties... \$ |  | 4,350 | 107,850 |  | 21,050 |
|  | Soap. lb. | 20,435 | 16,413 | 559,646 | 92,545 | 7,423 |
|  | \$ | 1,030 | 1.437 | 23,947 | 9,513 | 646 |
| 18 | Starch. lb. | 20,235 | 400 | 28,797 | 132,828 | 860 |
|  | \$ | 781 | 21 | 1,282 | 6,577 | ${ }_{56}^{56}$ |
| 19 | Stationery ${ }^{\text {Stone, granite, }}$ | 17,044 | 12,594 | 70,046 | 12,326 | 13,476 |
|  | Stone, granite, marble, etc., dressed | 1 | 2,736 | 3,407 | 550 | 5,454 |
| 21 |  | - | 450 | 71,236 | - | 1,477 |
|  | $\$$ | - | 27 | 2,631 | - | 106 |
| 22 | Sugar-house syrup gal. | - | 183,449 | 183,759 | - | 153,520 |
|  | \% | - | 13,238 | 13,338 | - | 10,779 |
| 23 | Tar | - | 19,171 | 69.969 | 42 | 28,515 |



$$
\begin{aligned}
& \text { do sumodxa } \\
& \varepsilon \varepsilon \varepsilon_{8}
\end{aligned}
$$

## TRADEAND COMMERCE

10.-Exports of Canadm to UnitedKingdom, United States and All Countries in quantities and values by classees of home produce in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | Enited States. | All | United Kingdom. | United States. |
|  | V Manufactures-con. |  |  |  |  |  |
| 1 | Tin, manufactures of. \$ Tobacco- | 2,898 | 51,253, | 62,100 | 1,815 | 46,374 |
| 2 | Cigars . M. | 15 | 45 | 61 | 4 | - |
|  | Cigarattes \$ | 567 | 1,948 | 2,538 | 220 | - |
| 3 | Cigarettes. ${ }_{\text {m, }}^{\text {m }}$ |  |  | 34 302 | $-$ | 46 172 |
| 4 | Stems and cuttings. | 10,942 | 434,963 | 770,290 | 15,040 | 383,201 |
|  | \% | 1,074 | 14,873 | 52,514 | 1,326 | 15,256 |
| 5 | All other, n.e.s.llb. | 4,244 | 34,754 | 45,495 | 705 | 5,753 |
|  |  | 1,710 | 8,209 | 15,859 | 663 | 4,450 |
|  | Total tobacco. | 3,381 | 25,217 | 71,213 | 2,209 | 19,878 |
| 6 | Tow | 955 3,720 | 730 4,892 | 1,685 8,612 | - | 1,275 3,267 |
|  | Vehicles- |  |  |  |  |  |
| 7 | Automobiles. $\begin{gathered}\text { No. } \\ \text { \% }\end{gathered}$ | 74, $\stackrel{25}{25}^{(2)}$ | 190,070 | $\begin{array}{r} 3,766 \\ 2,284,820 \end{array}$ | - ${ }^{2901} \times 107$ | 81 138,978 |
| 8 | Automobiles, parts of. | 9,279 | 13,564 | 99,709 | 1,895 | 36,341 |
| 9 | Carrisges no. | 10 |  | 1,138 | 16 | 73 |
|  | Carriase parts | 1,453 | 5,343 | 57,146 | 2,042 | 7,784 |
| 10 | Carriages, parts of .. | 426 | 1,458 | 64,121 | 14 | 1,466 |
| 11 | Carts. No. | - | 32 | 383 | - | 26 |
|  | Wegons. | - | 1,029 | 11,003 | - | 780 |
| 12 | Wagons... no. | 1 | ${ }^{9}$ | ${ }_{6} 119$ | ${ }_{100}^{1}$ | 159 $\times 649$ |
| 13 | Bicyeles. $\quad \stackrel{\$}{\text { no. }}$ | 50 11 | 5, 142 | 6,184 92 | 100 23 | 8,649 70 |
|  | \$ | 1,605 | 6,484 | 9,124 | 3,145 | 4,805 |
| 14 | Bicycles, parts of. | 983 | 171 | 39,768 | 527 | 1,382 |
| 15 | Other vehicles * | 608 | 47,916 | 51,80. | 1,400 | 27,188 |
| 16 | Vinegar gal. | - | - | 170 35 | - | - |
|  | Wood-- |  |  |  |  |  |
| 17 | Barrels, empty no. | 325 | 16,665 | 23,493 | 177 | 7,713 |
|  | Hous, ${ }^{\text {\% }}$ | 629 | 19,008 | 28,903 | 498 | 8,941 |
| 18 | Household furni- " ture. | 23,746 | 25,111 | 381,50e | 35,572 | 69,319 |
| 19 | Doors, sashes and blinds. | 6,693 | 1,096 | 11,283 | 13,400 | 2,019 |
| 20 | Matches and mateh solints. | 164 | 1,587 | 2,436 | - |  |
| 21 | Mouldings, trimmings and other househoid furnishings. |  | - | 1,767 | 378 | 1,057 |

EXPORTS OF CANADA
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal:years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { All } \\ & \text { Countries. } \end{aligned}$ | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countrics. } \end{gathered}$ | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ |  |
| 53,683 | 79,733 | 12,656 | 98,870 | 78,583 | 3,711 | 96,354 | 1 |
| 32 | 1 | 2 | 18 |  | 1 | 14 | 2 |
| 1,373 | 25 | 33 | 762 | 108 | 15 | 523 |  |
|  | 118 | 7 | 185 | 296,417 | 8 | 296,525 | 3 |
| 203 | 1,351 | 68 | 1,754 | 717,924 | 77 | 718,491 |  |
| 767,626 | - | 69,018 | 293,963 | - | 370,693 | 478,723 | 4 |
| 55,685 | , | 6,120 | 27,515 | -7-8 | 9,451 | 20,648 |  |
| 10,267 | 4,391 | 7,344 | 13,293 | 255,798 | 9,848 | 267,925 | 5 |
| 7,773 | 4,185 | 3,602 | 8,308 | 130,174 | 5,674 | 137,178 |  |
| 65,034 | 5,561 | 9,823 | 38,339 | 848,206 | 15,217 | 876,840 |  |
| 1,275 | - | 1,356 | 1,356 | - | 10 | 10 | 6 |
| 3,267 | - | 1,947 | 1,947 | - | 18 | 18 |  |
| 6,306 | 23 | 76 | 5,238 | 2,536 | 50 | 17,283 | 7 |
| 3,571,862 | 76,050 | 97,013 | 2,645,824 | 2,350,198 | 75,138 | 8,897,801 |  |
| 235,857 | 130,001 | 35,558 | 408,629 | 77,703 | 17,689 | 533,361 | 8 |
| -544, | 1 | 1,721 | 4, 598 |  | 808 | 76 5,968 | 9 |
| 34,687 | 14,808 | 1,223 | 43,527 | 3,289 | 2,649 | 25,586 | 10 |
| 1,692 |  | 7 | 598 | , | 10 | 746 | 11 |
| 51,093 | 240 | 275 | 15,769 | - | 295 | 20,142 |  |
| 177 | 2,053 | 78 | 2,142 | 52 | 60 | 117 | 12 |
| 9,406 | 309,595, | 3,144 | 313,174 | 32,880 | 3,208 | 36,232 |  |
| 97 8 | ${ }_{21}^{21}$ | ${ }^{91}$ | 118 | 470 | 87 | 577 | 13 |
| 8,255 | 2,405 | 7,987 | 10,648 | 43,520 | 2,720 | 47,017 |  |
| 10,236 | 78 | 407 | 3,226 | 424 | 1,684 | 15,285 | 14 |
| 55,945 | 15,009 | 13,095 | 52,535 | 398,005 | 17,038 | 1,790,939 | 15 |
| 330 | - | - | 20 | 6,117 | 17, 25 | 1,6,332 | 16 |
| 82 | - | - | 5 | 1,468 | 8 | 1,526 |  |
| 12,405 | 69. | 7,724 | 14,330 | 116 | 10,375. | 19,222 | 17 |
| 14,228 | 439 | 8,848 | 16,913 | 267 | 6,813, | 15,008 |  |
| 411,074 | 30,076 | 85,789. | 299,679 | 160,842 | 60,283 | 396,223 | 18 |
| 20,699 | 4,975 | 497 | 12,440 | 6,167 | 54 | 18,872 | 19 |
| 334 | 12,893 | - | 13,363 | 48,845 | 509 | 55,693 | 20 |
| 5,601 | 35 | 3,068 | 4,731 | 30,722 | 1,605 | 33,901 | 21 |

## TRADE AND COMMERCE

10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.


EXPORTS OF CANADA
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All <br> Countries. | United Kingdom. | United States. | All <br> Countries. | United Kingdom. | United States. | All Countries. |  |
| 4,553 | 516 | 514 | 4,046 | 2,574 | 140 | 4,997 | 1 |
| 27,056 | 87,479 | 10,707 | 98,247 | 119,557 | 4,328 | 124,068 | 2 |
| 1,515,633 | 450 | 2,289,661 | 2,424,328 | 19,023 | 3,288,816 | 3,494,816 | 3 |
| 2,923,083 | 800 | 4,550,196 | 4,806,622 | 36,777 | 6,405,616 | 6,801,011 |  |
| 4,816,170 | 2,195,036 | 3,855,266 | $6,163,702$ | 362,531 | 3,875,972 | 4,649,203 | 4 |
| 3,441,741 | 1,495,521 | 2,893,618 | 4,459,539 | 290,264 | 2,967,153 | 3,575,537 |  |
| 396,842 | 192,091 | 97,366 | 360,372 | 303,806 | 108,515 | 472,560 | 5 |
| 7,245,211 | 1,824,825 | 7,650,603 | 10,075,952 | 1,008,821 | 9,555,016 | 11,497,870 |  |
| 81,555 | 113,629 | 67,455 | 1,301,671 | 160,809 | 48,389 | 657,475 | 6 |
| 906,053 | 447,219 | 516,820 | 1,448,987 | 459,280 | 432,075 | 1,270,933 | 7 |
| 59,039,054 | 12,219,937 | 37,558,203 | 51,740,989 | 12,425,248 | 51,425,708 | 66,589,861 |  |
| 2,948,700 | - | 3,265,500 | 3,265,500 | 175,500 | 5,080,000 | 5,255,500 | 8 |
| 117,497 | 14 ${ }^{-}$ | 120,242 | 120,242 | 5,156 | 196,960 | 202,116 |  |
| 105,971 | 14,726 | 51,447 | 74,904 | 18,461 | 63,538 | 88,833 | 9 |
| 2,891,669 | 513,877 | 1,437,653 | 2,227,387 | 642,865 | 2,007,994 | 2,962,010 |  |
| 28,433 | 967 | 18,729 | 19,928 | 310 | 25,640 | 26,050 | 10 |
| 162,767 | 12,223 | 98,314 | 111,727 | 3,094 | 166,036 | 170,030 |  |
| 1,498,820 | 28,663 | 1,189,234 | 1,512,487 | 61,077 | 1,460,582 | 1,971,124 | 11 |
| 3,703,765 | 96,834 | 3,360,887 | 4,466,258 | 210,845 | 4,297,035 | 6,032,765 |  |
| - | - | 79 | 79 | - | 11,735 | 11,735 | 12 |
| 18, | - | 878 | 878 | - | 133,756 | 133,756. |  |
| 18,898 | 22 | 13,627 | 13,649 | - |  |  | 13 |
| 75,988 | 176 | 56,492 | 56,668 | 548 | 237,526 | 240,593 |  |
| 13,326,755 | 105,324 | 15,294,355 | 15,406,510 | - | 16,870,394 | 16,870,394 | 14 |
| $\begin{aligned} & 395,952 \\ & 480,779 \end{aligned}$ | - | 322,680 378,648 | $\begin{aligned} & 322,680 \\ & 378,648 \\ & \hline \end{aligned}$ | - | 301,629 347,795 | $\begin{aligned} & 301,625 \\ & 347,795 \end{aligned}$ | 15 |

TRADE AND COMMERCE
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.


DXPORTS OF CANADA.
10.-Exports of Canada:to United Kingdom, United States and All Countries in quantities and values hy: classes of hame produce in the four flecal years 1013-1916-een.


TRADEAND COMMERCE
10.- Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.


EXPORTSOF CANADA
10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.

| All Countries. | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | All |  |
| 21,793 | - | - | 1,256 | 151,864 | 139,435 | 487,510 | 1 |
| 25,443 | - | 17,120 | 18,376 | 151,864 | 163,909 | 512,443 |  |
| 3,498 | - | 1,177 | 1,412 | 12,276 | 13,171 | 54,853 |  |
| - | 332 | 5 | 337 | 928 | 141 | 1,069 | 2 |
|  | 18,285 | 1,484 | 19,769 | 67,667 | 10,106 | 77,773 |  |
| 831 | 142 | 717 | 933 | 42 | 137 | 179 | 3 |
| 99,744 | 14,970 | 60,023 | 82,358 | 4,280. | 17,636 | 21,916 |  |
| 113,650 |  | 130,496 | 130,496 |  | 82,869 | 82,884 | 4 |
| 398,023 | - | 345,119 | 345,119 | - | 213,801 | 213,861 |  |
| - | - |  |  | - | 539 | 539 | 5 |
| - ${ }^{-}$ | 12 | 1,950 | 1,950 | - | 26,620 | 26,620 |  |
| 11,437 734,993 | 112 | 12,549 | 12,764 | 133 | 48,049 | 48,185. | 6 |
| 734,993 | 113,249 | 400,421 | 645,873 | 181,074 | 1,035,498 | 1,217,262 |  |
| 125.918 | ${ }^{586}$ | 143,857 | 144,620 | 1,103 | 131,735 | 132,856 |  |
| 1,232,760 | 146,504 | 808,997 | 1,095,069 | 253,021 | 1,303,661 | 1,557,432 |  |
| 187 | - | 60 | 60 | - | 282 | 282 | 7 |
| 30,127 | - | 9,388 | 9,944 | - | 8,060 | 8,060 | 8 |
| 81,209 | - | 21,490 | 24,120; | - | 18,976 | 18,976 |  |
| 46,293 | - | 95,901 | 95,901 | - | 145,021 | 145,021 | 9 |
| 212,220 | - | 393,085 | 393,085 | - | 550,330 | 550,330 |  |
| 369,900 | 1,500 | 408,000 | 951,900 | 64,900 | 246,800 | 837,300 | 10 |
| 2,140 | 15 | 1,847 | 5,509 | 667 | 1,811 | 5,536 |  |
| 685,143 | - | 959,039 | 959,039 | - | 774,189 | 774,189 | 11 |
| 485,578 | - | 808,012 | 808,012 | - | 319,608 | 319,608, |  |
| 160 5,396 | - | 95 399 | 95 | - | 44,992 | 44,992 | 12 |
| 192,327 | - | 62,600 | 62,600 | - | 28,658 | 28,658 | 13 |
| 93,007 | $\rightarrow$ | 45,950 | 45,950 | - | 21,552 | 21,552 |  |
| - | - | 28,995 | 28,995 | - | 42,003 | 42,003 | 14 |
|  | - | 20,080 | 20,080 | - | 25,016 | 25,016 |  |

## TRADE AND COMMERCE

10.-Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | Tnited States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. |
| VI. Mineral produce concluded. <br> 1 Stone, for manufacture of grindstones, rough.... .. ton 8 |  |  |  |  |  |  |
|  |  | - | - | - | - | - |
| 2 | Total stone $\ldots$ ton | - | 117,209 3,998 | 117,269 30,939 | - | 192,487 98,403 |
|  | Other articles of the mine. | 37,638 | 233,221 | -292,801 | 3,300 | 74,313 |
|  | VII. Miscellaneous produce--totals. | 13,655 | 80,349 | 97,311 | 22,126 | 99,048 |
| 3 | Coffee. lb. | - | S+,540 | 87,070 11,935 | $9,9.54$ | 53,478 |
| 4 | Contractors' outfits. . | - | 11, --14 | 11,935 | -,231 | 8,342 |
| 5 | Dried fruits, n.e.s. ${ }^{\text {l }}$ \% | - | - | 5,589 | 1,110 | 1,980 |
|  | Fice ${ }_{\text {db }}$ | - | - | 410 | 102 | 216 |
| 6 | Rice. lb. | - | - | - - | - | 190 |
| 7 | Rice meal. l . | sissora | 1:0.000 | 978,000 | $546,40 \mathrm{C}$ | 1,667,400 |
|  | Rice meal | 12,660 | $\bigcirc \cdot 670$ | 15,330 | 7,817 | 1,38,059 |
| 8 | Other miscellaneous articles <br> Coin- | 09 | 60,432 | 69,636 | 11,922 | 51,413 |
| 9 | Gold and silver" | - | - | - | 54 | 1,015 |
| 10 | Copper " | - |  | 1 - | - | - |

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for comsumption in the four fiscal years 1913-1916.

| No. | Principal articles by classes. | 1913. |  |  | 191土. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cnited Kingdom. | Énited States. | $\begin{array}{\|c\|} \text { All } \\ \text { Countries. } \end{array}$ | United Kingdom. | United States. |
| 11 | I. Agricultural produce | $\begin{array}{r} 3,033,820 \\ 94 \end{array}$ | $\begin{array}{r} 43,832,566 \\ 5,353 \end{array}$ | $\begin{array}{r} 55,391,008 \\ 8,622 \end{array}$ | $\begin{array}{r} \mathbf{2}, 644,109 \\ 479 \end{array}$ | $\begin{array}{r} 42,067,495 \\ 5,999 \end{array}$ |
|  | Bamboo reeds cut to length. |  |  |  |  |  |
|  | Breadstuffs, etc., viz.Biscuits, all |  |  |  |  |  |
|  | kinds. $\quad$¢ | $1,810,780$ 221,402 | $\begin{array}{r} 487,287 \\ 43,438 \end{array}$ | $\begin{array}{r} 2,433,405 \\ 276,568 \\ \hline \end{array}$ | $\begin{array}{r} 2,275,872 \\ 299,103 \end{array}$ | $\begin{array}{r} 514,804 \\ 49,327 \\ \hline \end{array}$ |

EXPORTS AND IMPORTS OF CANADA
10.--Exports of Canada to United Kingdom, United States and All Countries in quantities and values by classes of home produce in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries. | United Kingdon. | United States. | All <br> Countries. | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ |  |
| - | - | 54. | 54 | - | 180 | 180 | 1 |
| $\begin{array}{r} 192,487 \\ 98,403 \end{array}$ | - | $\begin{aligned} & 91,744 \\ & 66,723 \end{aligned}$ | $\begin{aligned} & 91,744 \\ & 66,723 \end{aligned}$ | - | $\begin{array}{r} 115,833 \\ 66,067 \end{array}$ | $\begin{array}{r} 115,833 \\ 66,067 \end{array}$ |  |
| 83,404 | 3,933 | 93,876 | 102,652 | 370 | 38,819 | 39,398 | 2 |
| 122,30\% | 179,695 | 453,755 | 664,469 | 6,171,139 | 320,462 | 6,793,247 |  |
| 66,933 | 6,000 | 90,401 | 107,397 | 4,000 | 366 | 11,565 | 3 |
| 11,517 | 1,440 | 17,041 | 21,117 | 1,000 | 100 | 3,086 |  |
|  | - | 167,191 | 186,831 | - | 89,985 | 103,524 | 4 |
| 3,380 | - | 3,154 | 3,329 | - | 30 | 4,354 | 5 |
| 352 | - |  | 105 | - | 3 | 467 |  |
| 100 | - | 1,915,108 | 2,207,680 | 200 | 2,848,434 | 5,864,830 | 6 |
| 3 | - | 76,154 | 84,498 | 9 | 111,260 | 226,475 |  |
| 2,613,800 | - | 4,310,910 | 4,310,9]0 | - | 3,978,240 | 3,978,240 | 7 |
| 45,876 | - | 109,242 | 109,242 | - | 104,927 | 104,927 |  |
| 63,340 | 178,210 | 83,464 | 262,009 | $6,170,130$ | 14,066 | 6,354,453 | 8 |
| 1,219 | 45 | 482 | 567 | - | - | 200 | - |
|  | - | 100 | 100 | - | 115 | 115 | 10 |

11.-Imports ef Canada frem the United Kingdom, the United States and Ail Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. | $\left\lvert\, \begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}\right.$ |  |
| 53,544,539 | 1,951,276 | 43,183,964 | 52,449,384 | 1,318,844 | 47,794,990 | 54,018,369 |  |
| 9,582 | 121 | 1,989 | 3,331 | 124 | 9,813 | 15,342 | 11 |
| 2,928,648 | 1,659,902 | 905,173 | 2,646,814 | 687,942 | 705,546. | 1,441,586 | 12 |
| 361,106 | 211,043 | 68,552 | 287,985 | 112,470 | 51,865 | 168,061 |  |

## TRADE AND COMMERCE

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entere. for consumption in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | All | United Kingdom. | United States. |
| I. Agricultural produce -con. |  |  |  |  |  |  |
| Breadstuffs, etc., viz. -con. |  |  |  |  |  |  |
| 1 | Macaroni and vermicelli. | 110,791 | 697,310 | 8,035,873 | 214,376 | 592,838 |
|  |  | 4,849 | 34, 462 | 392,890 | 9,924 | 31,148 |
| 2 | Rice, all kinds. $\mathbf{l b}$. | 6,996,981 | 1, 424,043 | 55,615,133 | 7,270,434 | 2,475,710 |
| 3 |  | 218,217 | 56,604 | 1,469,425 | 227,799 | 91,245 |
|  | Rice and sago flour. lb | 744,453 | 47,232 | 1,145,592 | 76,792 | 301,913 |
|  |  | 16,242 | 2,029 | 1, 28,715 | 2,447 | 14,785 |
| 4 | $\begin{aligned} & \text { Other bread- } \\ & \text { stuffs. } \end{aligned}$ | 1,078,359 | 432,655 |  | 77,175 | 615,001 |
|  |  | 1,40,047 | 17,061 | $171,905$ | 4,764 | 21,130 |
|  | stuffs. <br> lb. | 10,741,364 | 3,086,532 | 72,244,780 | 9,914,649 | 4,500,266 |
|  |  | 500,757 | 153,594 | 2,339,503 | 544,037 | 207,635 |
| Grain and products of- |  |  |  |  |  |  |
| 5 | Beans. .bush. | 83,963 | 80,111 | 400,848 | 30,494 | 30,888 |
|  | Indian corn ${ }^{\text {\% }}$ | 161,103 | 185,336 | 777,375 | 60,114 | 84,619 |
| 6 | Indian corn for distillation |  |  |  |  |  |
|  | purposes. .bush. | - | 975,252 686,549 | 975,252 686,549 | - | $1,056,546$ 740,768 |
| 7 | Indian corn, .bush. | 4,034 | 8,883,292 | 8,901,946 | 6 | 5,614,094 |
|  | \% | 3,838 | 5,511,510 | 5,525,982 | 12 | 3,612,203 |
| 8 | Oats. .bush. | 3,574 | 203,542 | 207,281 | 2,707 | 59,266 |
|  | \$ | 2,553 | 80,579 | 83,316 | 2,668 | 23,519 |
| 9 | Peas.. .bush. | 36,577 | 59,199 | 166,894 | 25,886 | 31,574 |
|  | $\cdots$ | 54,542 | 174,924 | 360,583 | 51,986 | 108,227 |
| 10 | Wheat. .bush. | 10 | 616,383 | 616,395 | 140 | 133,229 |
|  | ( ${ }^{\text {\% }}$ | 13 | 549,545 | 549,617 | 260 | 115,410 |
| 11 | Other grains . . bush. | 130 | 126,870 | 127,301 | 47 | 57,385 |
|  | \$ | 173 | 86.124 | 86,678 | 80 | 40,605 |
|  | Total grains.bush. | 128,288 | 10,944,649 | 11,395,917 | 59,280 | 6,982,982 |
|  |  | 222,222 | 7,274,567 | 8,070,100 | 115,120 | 4,725,351 |
| 12 | Bran, mill feed, etc. | 53,269 | 16,344 | 70,947 | 10,456 | 19,549 |
| 13 | Cereal foods, prepared. | 28,498 | 322,835 | 353,211 | 25,399 | 317,470 |
| 14 | Indian or corn meal. ... bbl. | 8,408 | 55,754 | 55,754 | - | 51,024 |
|  | meal. ${ }^{\text {c. }}$ ¢ | - | 176,804 | 176,804 |  | 168,803 |
| 15 | Oatmeal. lb. | 24,564 | 70,710 | 95,274 | 30,346 | 7,568 |
|  | \$ | 1,226 | 2,121 | 3,347 | 1,475 | 450 |

IMPORTS OF CANADA
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries. | United Kingdom. | United States. | All | United Kingdom. | United States. | All <br> Countries. |  |
| 10,543,569 | 122,836 | 1,092,481 | 6,701,681 | 4,154 | 1,679,688 | 2,564,933 | 1 |
| 493,330 | 7,281 | 60,959 | 307,144 | 319. | 102,097 | 155,333 |  |
| 61,904,867 | 6,539,662 | 963,004 | 72,891,845 | 1,248,291 | 828,897 | 79,454,700 | 2 |
| 1,542,247 | 184,502 | 41,996 | 1.571,232 | 34,153 | 38,283 | 1,550,566 |  |
| 979,043 | 144,156 | 160,292 | 768,627 | 20,628 | 315,036 | 1,116,155 | 3 |
| 31,737 | 4,802 | 8,082 | 24,479 | 1,133 | 18,758 | 38,000 |  |
| 4,368,291 | 92,410 | 599,689 | 3,781,668 | 38,217 | 561,086 | 3,367,054 | 4 |
| 117,815 | 4,669 | 19,946 | 96,257 | 2,462 | 22,901 | 103,207 |  |
| 80,724,418 | 8,558,966 | 3,720,639 | 86,790,635 | 1,999,232 | 4,090,253 | 87,944,428 |  |
| 2,546,235 | 412,297 | 199,535 | 2,290,378 | 150,537 | 233,904 | 2,015,167 |  |
| 177,434 | 27,409 | 29,581 | 170,273 | 114 | 130.774 | 211,534 | 5 |
| 1,056,546 | 1,000 | 901,401 | 903.401 | - | 378,961 | 378,961 | 6 |
| 740,768 | 600 | 688,980 | 690,355 |  | 265,573 | 265,573 |  |
| $6.141,933$ | 15 | 8,101,779 | 9,361,826 | 16. | 7,548,545 | 7,818,191 | 7 |
| 3,950,934 | 66 | 5,907,047 | 6,734,199 | 43 | 5,601,9191 | 5,764,025 |  |
| 61,974 | 2,282 | 1,407,133 | 1,411,400 | 3,648 | 2,757,463 | 2,762,388 | 8 |
| 26,189 | 2,167 | 696,167 | 701,365 | 3,721 | 1,229,813 | 1,234,031 |  |
| 125,972 | 4,130 | 28,765 | 68,549 | 1,720 | 11,224 | 26,667 | 9 |
| 267,659 | 8,138 | 80,419 | 144,094 | 5,110 | 32,116 | 61,418 |  |
| 133,370 | - | 1,870,174 | 1,870, 174 | 78 | 224,321 | 224,399 | 10 |
| 115,675 | 10 | 1,803,338 | 1,803,338 | 20 | 253,117 | 253,137 |  |
| 58,370 | 10 | 98,778 | 99,737 | 72 | 39,375 | 42,944 | 11 |
| 41,828 | 22 | 78,771. | 79,953 | 118 | 27,748 | 30,301 |  |
| 7,755,599 | 34,846 | 12,437,611 | 13,885,270 | 5,648 | 11,090,663 | 11,465,084 |  |
| 5,492,383 | 60,818 | 9,331,444 | 10,477,295 | 9,333 | 7,798,639 | 8,169,654 |  |
| 30,167 | 5,565 | 47,778 | 36,710 | 8,333 | 43,700 | 52,455 | 12 |
| 346,761 | 16,040 | 241,738 | 261,087 | 11,760 | 183,699 | 197,226 | 13 |
| 51,034 | - | 61,367 | 61,367 | - | 53,427 | 53,428 | 14 |
| 168.818 |  | 217,108 | 217,108 | - | 180,819 | 180,823 |  |
| 37,914 | 25,201 | 9,351. | 34,552 | 9,676 | 5,481 | 15,157 | 15 |
| 1.925 | 1,465 | 454 | 1,919 | 579 | 343 | 922 |  |

TRADEAND COMMERGE
11.-Imports of Canada from.the United Kingdem, the United States and All Countries in quantities and values by classes entered for cortsumption in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | I'nited States. | $\underset{\text { Countries. }}{\text { All }}$ | United Kingdom. | United States. |
| I. Agricultural produce -con. <br> Grain and products of -con. |  |  |  |  |  |  |
| 1 | Wheat flour bbl. | 28, | $\begin{array}{r} 59,013 \\ 267,541 \end{array}$ | $\begin{array}{r} 59,081 \\ 267,917 \end{array}$ | $\begin{array}{r} 23 \\ 124 \end{array}$ | $\begin{array}{r} 55,144 \\ 239,461 \end{array}$ |
| 2 | Other grain products... | 70,810 |  |  | 140,028 | 138,396 |
|  | Total grain produets. Grand total breadstuffs. | $\begin{aligned} & \mathbf{1 5 3 , 9 6 8} \\ & 876,947 \end{aligned}$ | $\begin{array}{r} 925,335 \\ 8,353,496 \end{array}$ | $\begin{array}{r} 1,094,003 \\ 11,503,606 \end{array}$ | $\begin{aligned} & 177,482 \\ & 836,639 \end{aligned}$ | $\begin{array}{r} 8 \oplus 6,129 \\ 5,818,115 \end{array}$ |
| 3 | Broom corn | 1,166 | 372,322 | 377,462 | - | 323.445 |
|  | Cane and rattans, not manufact'd | 1,333 |  |  | 2,343 | 65, 295 |
| 5 | Cider gal. | 991 | 3,517 | 4,762 | 1,823 | 3,933 |
|  |  | 1,045 | 1,574 | 2,705 | 1,820 | 1,363 |
| 6 | Cocoa beans, not roasted, crushed <br> or ground lb. | 917,339 | 4,845,338 | 6,613,083 | 759,129 | 3,702,080 |
|  | or ground. | 132,200 | -657,099 | -993,446 | 110,540 | 524,614 |
| 7 | Cocoanuts. No. | 80,200 | 524.186 | 4,472,968 | - | 166,803 |
| 8 | $\begin{aligned} & \text { Cotton wool or } \\ & \text { raw cotton. } \end{aligned}$ | 2,076 | 16,415 $77,457,809$ $8,735,191$ | 112,212 $77,457,809$ $8,735,191$ | - | $\begin{array}{r} 7,661 \\ 76,993,02 \\ 9,752,437 \end{array}$ |
| 9 | Fibre, Mexican, istle or tampico cwt. \$ | 100 1,412 | 2,261 24,378 | 2,465 27,050 | 209 2,395 | 1,538 16,397 |
| 10 | Fibre, vegetable, n.e.s. ewt | 1,822 | 6,351 | 8,811 | 1,315 | 5,543 |
|  | n.e.s. \$ | 15,346 | 52,161 | 73,933 | 13,062 | 50,263 |
| 11 | Florista' stoek. Fruits, dried, including nuts- | 17,109 | 51,795 | 293,418 | 15,379 | 05,742 |
| 12 | Apples. <br> lb . | - | 339,758 16,520 | 339,758 16,520 | - - | 259,034 $1 ; 5 ; 576$ |
| 13 | Currants. lb. | 132,308 | 2,209,762 | 12,217,006 | 193,705 | 2,069,396 |
|  | * | 7,508 | 140,649 | 655,735 | 9,030 | 129,311 |
| 14 | Dates. 1b. | 318,960 | 3,453,111 | 3,983,050 | 452,861 | 3,602,157 |
|  | \$ | 10,445 | 190,316 | 208,938 | 15,801 245,795 | 210,045 $1,185,701$ |
| 15 | Figs. ${ }_{\text {l }}^{\text {l }}$ ¢ | $\begin{array}{r} 317,176 \\ 13,335 \end{array}$ | $\begin{array}{r} 1,041,028 \\ 60,512 \end{array}$ | $\begin{gathered} 4,421,294 \\ 233,045 \end{gathered}$ | 245,693 9,677 | $\begin{array}{r} 1,185,701 \\ 74,340 \end{array}$ |
| 16 | Prunes and plums. | 338 | $8,832,113$ | $8 ; 942,599$ | $23,693$ | $10,382,578$ |
|  | $\$$ | $63$ | $458.402$ | $466,868$ | $\begin{array}{r} 969 \\ 596.629 \end{array}$ | $\begin{array}{r} 533,262 \\ 11,532,005 \end{array}$ |
| 17 | Raisins. ${ }_{\text {I }}$ \$. | $\begin{array}{r} 341,762 \\ 24,923 \end{array}$ | $\begin{array}{r} 17,888,503 \\ 882,529 \end{array}$ | $\begin{array}{r} 24,423,150 \\ 1,349,076 \end{array}$ | $\begin{aligned} & 536,6299 \\ & 30.5192 \end{aligned}$ | $\begin{array}{r} 11,532,005 \\ 668,831 \\ \hline \end{array}$ |

IMPORTS OF CANADA
11.-Imports of Canada from the United Kingdom, the United States and All Coxtritries in quantities and velues by chasses ertered for consumption in the four fiscal years 1913-1916-con.


## TRADEAND COMMERCE

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | $\begin{array}{c\|} \text { All } \\ \text { Countries. } \end{array}$ | United <br> Kingdom. | United States. |
| I. Agricultural produce -con. |  |  |  |  |  |  |
| Fruits, dried, including nuts-con. |  |  |  |  |  |  |
| 1 | Truis. ${ }^{\text {s }}$ | 1,887 | 346,692 | 365,815 | 22,010 | $3,581,452$ 238,466 |
| 2 | Nuts, all kinds lb. | 689,633 | 9,286,352 | 18,234,794 | 917,659 | 8,303,790 |
|  | \$ | 82,504 | 641,846 | 1,686,948 | 100,782 | 636,733 |
|  | Total dried fruits. | 1,815,275 | 48,142,094 | 78,089,036 | 2,752,375 | 40,916,113 |
|  | \$ | 140,665 | 2,737,466 | 4,982,945 | 188,815 | 2,511,564 |
| Fruits, green- |  |  |  |  |  |  |
| 3 | Apples. bbl. | - | 319,726 | 320,325 | - | 330,904 |
|  | - | - | 834,220 | 837,134 | - | 1,104,292 |
| 4 | Bananas. bunches | - | 2,122,680 | 2,145,423 | - | 2,624,887 |
|  | \% ${ }^{\text {\% }}$ | - | 2,347,047 | 2,368,762 | - | 2,657,615 |
| 6 | Berries, all kinds" |  | 581,632 | 581,754 | - | 680,160 |
|  | Cherries. lb. |  | 969,986 | 971,619 | - | 1,072,300 |
| 7 | Cranberries. .bush. | - | 102,855 49,853 | 103,038 49,853 | - | 119,021 73,626 |
|  | \$ |  | 131,590 | 131,590 | - ${ }^{-}$ | 133,072 |
| 8 | Grapes. lb. | 948,188 | 5,068,048 | 6,247,527 | 1,443,156 | 6,045,250 |
|  | * | 78,463 | 282,521 | 380,798 | 117,429 | 351,488 |
| 9 | Oranges, lemons, limes, ete. | 107,120 | 3,575,992 | 4,156,756 | 118,560 | 3,464,376 |
| 10 | Peaches. lb. | 107, | 14,579,107 | 14,579,147 | 18,500 | 12,136,954 |
|  | \$ |  | 330,589 | 330,599 | - | 353,440 |
| 11 | Pineapples. No. | - | 4,123,501 | 4,129,662 | - | 4,259,935 |
|  | Plums $\quad$$\$$ |  | 303,168 | 151, 540 | - | 344,258 123,527 |
| 12 | Plums. -bush. | - | 267,563 | 267,580 | - | 316,524 |
| 13 | " | 1,750 | 385,423 | 389,256 | 1,397 | 465,091 |
|  | Total fruits, green. | 187,333 | 9,142,600 | 9,851,108 | 237,386 | 9,989,337 |
| 14 | Fruits, preserved | 151,429 | 465,101 | 787,828 | 69,456 | 423,203 |
| 15 | Hay ton | 151, | 36,472 | 36,472 |  | 19,923 |
|  | \$ | - | 485,564 | 485,564 |  | 288,023 |
| 16 | Hemp, dressed and |  |  |  |  |  |
|  | undressed. ewt. | $\begin{array}{r} 18,825 \\ \mathbf{1 1 2 , 3 8 9} \end{array}$ | $\begin{array}{r} 33,070 \\ 185,997 \end{array}$ | $\begin{array}{r} 64,990 \\ 381,797 \end{array}$ | $\begin{array}{r} 7,391 \\ 56,489 \end{array}$ | $\begin{array}{r} 42,498 \\ 351,336 \end{array}$ |
| 17 | Hops. lb. | 107,291 | 1,225,795 | 1,658,113 | 117,942 | 1,513,593 |
|  | Hops. \$ | 40,501 | 372,747 | 522,398 | 44,663 | 375,957 |
| 18 | Malt. bush. | 26,706 | 107.528 | 134,234 | 5,475 | 247,143 |
|  | Malt \$ | 26,673 | 85,380 | 112,053 | 6,507 | 192.547 |

## IMPORTSOF CANADA

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\text { All }}{\text { Countries. }}$ | United <br> Kingdom. | Inited States. | All Commtrics. | United Kingdom | lnited States. | All Countries. |  |
| 4,275,201 | 330 | 3,971,424 | 4,116,280 | 1,750 | 5,927,050 | 6,064,324 | 1 |
| 278,151 | 37 | 246,295 | 256,669 | 292 | 288,270 | 297,500. |  |
| 19,568,801 | 639,235 | e,138,936 | 17,241,610 | 297,470 | 10,527,498 | 16,318,34? | 2 |
| 1,918,689 | 72,425 | 734,895 | 1,721,680 | 49,568 | 876,563 | 1,596,003 |  |
| 74,678,463 | 1,446,638 | 44,527,355 | 69,762,695 | 713,218 | 59,505,172 | 72,566,617 |  |
| 4,979,477 | 107,444 | 3,050,821 | 4,935,598 | 68,219 | 3,952,455 | 5,096,728 |  |
| 330,907 | - | 269,305 | 269,359 | - | 274,966 | 275,130 | 3 |
| 1,104,30? | - | 646,751 | 646,994 | - | 742,201 | 742,692 |  |
| 2,635,099 | - | 2,548,726 | 2,549,926 | - | 2,192,898 | $\underline{2} .192,898$ | 4 |
| 2,663,453 | - | 2,295,692 | 2, 296, 3 ¢ 1 | - | 2,230,826 | 2,230,826 |  |
| 681,001 | - | 607,177 | 607,319 | - | 435,464 | +35,870 | 5 |
| 1,084,797 | - | 936,507 | 938,704 | - | 564,779 | 565,806 | 6 |
| 120,397 | - | 102,155 | 102,397 | - | 48,598 | 48,725 |  |
| 73,629 | - | 84,582 | 84,768 | - | 51,153 | 51,153 | 7 |
| -133,078 | - - | 109,257 | 109,500 | - | 96,731 | 96,731 |  |
| $7,712,447$ 490,128 | 635,276 | 5,533,640 | 6,200,160 | 453,092 | 5,637,637 | 6,191,479 | 8 |
| 490,128 | 48,086 | 266,886 | 317,183 | 44,822 | 274,028 | 327,927 |  |
| 4,338,086 | 44,383 | 3,746,792 | 4,246,619 | 33,538 | 3,564,060 | 3,881,729 | 9 |
| 12. 137,209 | - | 12,733,661 | 12,733,661 | - | 13,182,317, | ,13,182,317 | 10 |
| 353,483 | - | 340,739 | 340,739 | - | 240,582 | 240,582 |  |
| $4,272,25$ | - |  |  |  |  |  | 11 |
| 34.3, 130 | - | 302,831 | 305,372 | - | 269,919 | 270,504 |  |
| 12, 23,531 | - | 104,896 | 104,904 | - | 110,662 | 110,662 | 12 |
| 316,560 472,887 | --1 | 251,762 | 251.791 | - | 182.685 | 182,685 |  |
| 472,887 | 120 | 405,522 | 420,328 | 152 | 291,562 | 298,682 | 13 |
| 11,018,505 | 92.589 | 9,075,564 | 9,644,623 | 78,512 | 8,376,656 | 8,756,953 |  |
| 1:31,775 | 62,661 | 289,267 | 465,201 | 15,015 | 188,778 | 252.0̃69 | 14 |
| 19,923 |  | 16,078 | 16,078 | - | 9,881 | 9,881 | 15 |
| 285,023 | - | 208,294 | 208,294 | - | 137,387 | 137,387 |  |
| 35.572 | 3,057 | 46,460 | 55,370 | 8,054 | 38,332 | 50,914 | 16 |
| 448.970 | 24,522 | 259.826 | 318,914 | 76,750 | 292, 051 | 401,516 |  |
| 1,6157,042 | 137,673 | 1,185, 195 | 1,367,106 | 134,014 | 636,346 | 770,360 | 17 |
| 579,871 | 31,973 | 221,193 | 278,310 | 38,787 | 97,088 | 135,875. |  |
| $\square 23,862$ | 3,830 | 75,696 | 88,002 | 1,440 | 32,120 | 33,560 | 18 |
| 238,373 | 4,090 | 66,981 | 80,37. | 2.139 | 29.3691 | 31,508 |  |

## TRADE AND COMMERCE

11.- Imports of Canada from the United Kingdom,the United States and All Countries. in quantities and values by classes entered for censumption in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | I'nited States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. |
|  | I. Agricultaral produce -con. |  |  |  |  |  |
| 1 | Manila grass cwt. | 14,606 | 186,984 | 343,644 | 9,956 | 148.250 |
|  | \% | 94,003 | 1,318,245 | 2,273,810 | 71,882 | 1.108,141 |
| 2 | Oils, vegetable. gal. | 238,651 | 4,037,224 | 4,664,593 | 196,129 | 3,088,667 |
|  | ob | 180.802 | 1,885,758 | 2,382,265 | 175,145 | 1,575,962 |
| 3 | Oits, vegetable ib. | 825,930 70,676 | 228,784 | 1,200,404 | 187,645 | 96,027 |
| 4 | Pickles. gal. | 350, 214 | 152,534 | 707, 214 | 313,154 | 125,582 |
|  | \$ | 296,386 | 98,315 | 456,546 | 292,525 | 69,631 |
| 6 | Plants and trees * | 15,683 | 178,254 | 236,703 | 18,283 | 349,655 |
|  | Seeds, garden, field, etc. . | 132,519 | 1,120,081 | 1,343,364 | 83,482 | 1,229,125 |
| 7 | Seed, flax. lb. | - 2 | 282,184 | +327,376 | 39 | -56,336 |
|  | \% ${ }_{\text {¢ }}$ | 7 | 9,395 | 11,422 | 50 | 2,336 |
| 8 | Seeds, all other " | 118,121 | 37,058 | 279,454 | 130,614 | 28,547 |
|  | Total seedis. | 250,647 | 1,166,534 | 1,634,240 | 214,146 | 1,260,008 |
| 9 | Straw ton | - | 1,151 | 1,151 |  | 311 |
|  | * |  | 10,026 | 10,026 |  | 3,342 |
| 10 | Sugar, maple, and maple syrup.. lb. | 350 | 23,934 | 24,634 | - | 23,092 |
|  |  | 35 | 2,678 | 2,719 | - | 2,249 |
| 11 | Tobacco, unmanufactured. | 120,035 | 19,873,932 | 22,153,588 | 97,806 | 15,515,446 |
|  | factured. \% | 128,005 | 4,893;065 | -5,719,755 | 29,641 | 4,353,184 |
| 12 | Vegetables... " | 337,215 | 2,396,093 | 3,242,214 | 214,332 | -,516,677 |
|  | Other agricultural produce. | 41,750 | 57,376 | 105,193 | 28,885 | 38,264 |
|  | II. Animals and their produce-totals. \$ | 4,833,470 | 21,671,491 | 41,088,978 | 3,579,810 | 15,514,944 |
|  | Animals, living- |  |  |  |  |  |
| 14 | Cattle. no. | 304 | $\begin{array}{r} 7,361 \\ 187.904 \end{array}$ | $\begin{array}{r} 8,661 \\ 9,956 \end{array}$ |  | $\begin{array}{r} 7,255 \\ 215,310 \end{array}$ |
| 15 | Dogs. | 41,278 194 | $\begin{array}{r} 187,904 \\ 759 \end{array}$ | $\begin{array}{r} 242.956 \\ 956 \end{array}$ | 28,225 | $\begin{array}{r} 215,310 \\ 670 \end{array}$ |
| 15 | Dogs. ${ }^{\text {¢ }}$ | 10,279 | 29,600 | 40,103 | 12,123 | 25,675 |
| 16 | Fowls, domestic, pure bred |  | 26,114 |  | 1,613 | 27.123 |
|  | pure bred. ${ }^{\text {a }}$ | 4,583 | 40,296 | 45,026 | 4,417 | 53,640 |
| 17 | Hogs. | - | 2,579 | 2,879 | 1,550 | 4.378 |
| 18 | Horses. . No. | 2,126 | 17,537 | 19,924 | 1,510 | ii, 436 |
|  | \$ | 613,288 | 1,862,358 | 2,569,826 | 344,900 | S58,369 |
| 19 | Sheep. No. | 14 | 229,757 | 299,771 | 176 | 209,919 |
|  | \% ${ }^{\text {\% }}$ | 550 | 627,127 | 627,677 | 5,722 3,974 | 638.268 190.350 |
| 20 | Other animaks | 2,872 | 1-5,801 | 170,008 | 3,974 |  |
|  | Total animals, living. | 672,850 | 2,904,965 | 3,699,436 | 400,911 | 1,985,999 |

IMPORTA OF CANADA
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for oonsumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\text { All }}{\text { Countries. }}$ | United Kingdom. | Innited States. | All <br> Countries | United Kingdom. | United States. | $\underset{\text { All }}{\text { Countries. }}$ |  |
| 189,010. | 4,534 | 246,839 | 288,660 | 6,773 | 369,733 | 382,233 | 1 |
| 1,384,031. | 24,947 | 1,671,608 | 1,883,551 | 62,127 | 2,553,221 | 2,653,816 |  |
| 3,630,223 | 150,028 | 3,292,094 | 3,694,930 | 208,765 | 4,600,426 | 5,033,897 | 2 |
| 2,014, 819 | 129;558 | 1,526,181 | 1,943,471 | 178,837 | 2,866,001 | 3,277,129 |  |
| 293,512 | 154,337 | 76,983 | 231,752 | 105,020 | 65,889 | 191.179 | 3 |
| 21,075 | 10,074 | 5,829 | 15,925 | 7,563 | 5,834. | 15,520 |  |
| 568,045 | 204,171 | 51,399 | 358,741 | 65,713 | 65,818. | 212,149 | 4 |
| 424,576 | 201,997 | 31,366 | 288,910 | 68,689 | 34,439 | 139,602 |  |
| 408,585 | 14,713 | 233,357 | 278,513 | 9;830, | 166,340 | 196,011 | 5 |
| 1,367,085 | 210,043 | 1, 800,977 | 2,058,436 | 196,534 | 2,107,682 | 2,377,157 | 6 |
| 68,712 |  | 11,872 | 12.376 |  | 2,936,080 | 4,343, 136 | 7 |
| 2.906 |  | 353 | 366 |  | 65,149 | 96,941 |  |
| 2S5,426. | 139,582 | 76,779 | 289,699 | 42,578 | 91,744 | 151,422 | 8 |
| 1,655,417 | 349,625 | 1,878,109 | 2,348,501 | 239,112 | 2;264,575 | 2,625,520 |  |
| 312 | - | 198 | 198 | - | 93 | 93 | 9 |
| 3,357 | - | 2,955 | 2,955 | - | 1,187 | 1,187 |  |
| 23,092 | - | 20,564 | 20,564 | 2,400 | 5,756 | 8,15B | 10 |
| 2,249 |  | 2,099 | 2,090 | 145 | 588 | 733 |  |
| 17,598,449 | 124,419 | 17,155,278 | 18,595,957 | 95,957 | 19,806,720 | 20,834,672 | 11 |
| 5,109,641 | 30,226 | 4,226,593 | 4,718, 488 | 27,040 | 4,262,023 | 4,624,607 |  |
| 3,306,930 | 142,106 | $2,552,114$ | 3,039,350 | 31,591 | 1,990,297 | 2,246,677 | 12 |
| 112,821 | 21,550 | 23,340 | 53,940 | 40,294 | 81,290 | 125,122 | 13 |
| 29,880,211 | 2,874,649 | 15,329,058 | 27,873,971 | 4,801,505 | 22,686,093 | 37,555,794 |  |
| 9,727 | 47 | 1,967 | 2,014 | 122 | 409 | 532 | 14 |
| 269,754 | 10,125 | 80,463 | 90,588 | 29,596 | 35,752 | 65,308. |  |
| 888 | 113 | 516 | 636 | 59 | 441 | 500 | 15 |
| 38,00s | 6,911 | 20;933 | 28,337 | 3,493 | 18,723 | 22,216 |  |
| 2 | 492 | 75, 6477 | 76,148 | 193 | 34,329 | 34,532 | 16 |
| 38,238 | 3,087 | 42,236 | 45,370 | 1,326 | 27,992 | 29,368 |  |
| 3,92S | 150 | 2,609 | 2,759 | - | 413 | 413. | 17 |
| 8,099 | 178 | 3,070 | 3,352 | 80 | 1,593 | 1,715 | 18 |
| 1,258,867 | 52,656 | 378,064 | 471,202 | 34,018 | 261,224 | 207,313 |  |
| $\because 10,095$ | 280 | 110,726 | 1.11,006 | 70 | 68,535 | 68,646 | 19 |
| 643,990 | 3,924 | 364, 235 | 363;159 | 750 | 231,160 | 233,345 |  |
| 236,701 | 2,413 | 140,986 | 209,391 | 863 | 51,078 | 55,818 | 20 |
| 2,511,585 | 79,266 | 1,038,526 | 1,224,806 | 70,046 | 626,342 | 703,900 |  |

## TRADEAND COMMERCE.

11. -Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. |
| 1 | II. Animals and their produce-cen. |  |  |  |  |  |
|  | Bones, crude, and bone dust, etc. cwt. | 24,141 | 59,732 | 99,271 | 16,106 | 64,196 |
|  | \$ | 57,599 | 75,733 | 150,009 | 56,935 | 116,310 |
| 2 | Bristles. lb. | 95,999 | 70,863 | 252,418 | 111,983 | 67,191 |
|  | Eggs.. ${ }_{\text {doz }}$ | 82,895 60,035 | 13,158, 71,824 | 13,240,263 | 102,427 | 54,880 $10,795,682$ |
| 3 | Lggo... \$ | 1,597 | 2,776,070 | 2,783,665 | 211 | 2,561,221 |
| 4 | Feathers. . " | 106,048 | 57,053 | 190,389 | 49,491 | 40,032 |
| 5 | Fur skins, not dressed. | 379,194. | 3,561,227 | 5,599,199 | 250,269 | 1,388,415 |
| 6 | Fur skins, wholly or partially dressed. | 384,094 | 325,113 | 1,362,825 | 153,711 | 48,503 |
| 7 | Grease and degras lb. | 503,182 | 1,639,507 | 2,434,441 | 442,201 | 1,166,650 |
|  | \% | 15,264 | 85,123 | 111,447 | 15,377 | 60,439 |
| 8 | Grease, rough. ib. | 5,367 | 13,245,724 | 13,684,437 | 402,862 | 11,708,048 |
|  |  | 379 | 867,433 | 895,957 | 24,810 | 765,323 |
| 9 | Hair, cleaned or uncleaned. | 9,210 | 89,132 | 114,048 | 9,104 | 94,466 |
| 10 | Hair, horse. lb. | 42,461 | 243,224 | 287,815 | 31,470 | 92,426 |
|  |  | 42,403 | 125,547 | 168,879 | 26,865 | 74,691 |
| 11 | Hatters' furs. | 10,022 | 89,905 | 115,867 | 12,675 | 56,832 |
| 12 | Hides and skins, <br> raw <br> lb. | 6,897,460 | 18,019,964 | 64,856,440 | 3,302,408 | 11,912,603 |
|  | 5 | 1,227,044 | 3,161,663 | 13,305,471 | 706,690 | 2,094,514 |
| 13 | Honey lb. | 71,174 | 351,392 | 652,817 | 16,201 | 265,935 |
|  | \% | 5,969 | 46,336 | 66,871 | 1,539 | 38,674 |
| 14 | Milk, condensed. lb. | 22,327 | 219,881 | 261,555 | 85,079 | 247,001 |
|  |  | 2,583 | 15,819 | 21,171 | 5,320 | 16,791 |
| 15 | Milk and cream, fresh. |  |  |  |  | 236,772 |
| 16 | Oils, animal. gal. | 6,103 | 109,702 | 117,653 | 5,537 | 60,873 |
|  |  | 3,265 | 60,911 | 64,840 | 2,691 | 37,974 |
| 17 | Provisions, viz.- <br> Butter | 767,131 | 1,100,431 | 7,989,269 | 91,900 | 262,840 |
|  | Butter \$ | 200,389 | 1,311,022 | 2,081,989 | 24,322 | 73,419 |
| 18 | Cheese.. lb. | 69,911 | 371,454 | 1,495,758 | 49,472 | 336,041 |
|  | \$ | 14,688 | 76,619 | 302,153 | 12,066 | 68,733 |
| 19 | Lard and lard compound, etc. lb. | 368,291 | 13,417,325 | 13,835,493 | 310,726 | 6,733,993 |
|  |  | 40,141 | 1,472,084 | 1,520,450 | 40,417 | 743,173 |
|  | Meats, viz.- |  |  |  |  |  |
| 20 | Bacon and hams, shoul- |  |  |  |  |  |
|  | ders andsides lb. | 46,203 | 13,501,736 | 13,554,394 | 48,153 | 7,060,936 |
|  | ders | 9,086 | 1,936,565 | 1,946,278 | 10,767 | 1,171,691 |
| 21 | Beef, salted. lb. | 12,500 | 1,005,607 | 1,018,857 | 2,740 | 640,191 |
|  |  | 1,013 | 67,991 | 69,057 6097 | 220 | ${ }_{525}^{5271}$ |
| 22 | Beef, fresh. ${ }^{\text {l }}$ | - |  | 609,707 57,712 | - | $\begin{array}{r}235,284 \\ 43,828 \\ \hline\end{array}$ |

IMPORTS OF CANADA
11.-Imports of Canada from the United Kingdom, the United States and All Countries in gasntities and values by classes en:ered for consumption in the four fiscal years, 1913-1916--con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries. | United Kingdom. | United Stater. | All Countries. | United Kingdom. | United States. | $\left\lvert\, \begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}\right.$ |  |
| 120,025 | 40,273 | 64,310 | 109,389 | 3,214 | 62,555 | 67,885 | 1 |
| 209,505 | 97,204 | 119,181 | 220,450 | 6,983 | 91,378 | 101,852 |  |
| 257,251 | 70,790 | 61,888 | 138,956 | 42,707 | 128,225 | 187,352 | 2 |
| 214,998 | 61,019 | 67,557 | 132,040 | 41,055 | 120,486. | 174,909 |  |
| 11,274,036 | 1,143 | 4,191,968 | 4,354,611 | 272 | 3,655,703 | 3,783,952 | 3 |
| 2,630,364 | 15337 | 950,855 | 1,005,976 | ${ }^{68}$ | 770,462 | 786,100 |  |
| 121,070 | 15,575 | 19,397 | 39,320 | 1,863 | 20,378 | 23,017 | 4 |
| 2,241,877 | 68,239 | 1,124,144 | 1,328,864 | 33,087 | 1,937,386 | 1,986,581 | 5 |
| 699,979 | 62,583 | 135,252 | 375,675 | 40,402 | 239,820 | 349,168 | 6 |
| 1,828,930 | 364,981 | 1,495,780 | 1,916,816 | 659,935 | 2,883, 127 | 3,493,062 | 7 |
| 87,067 | 10,682 | 80,474 | 94,457 | 27,154 | 153,116 | 180,270 |  |
| 12,166,081 | 2,653 | 11,840,628 | 11,869,101 | 18,271 | 7,824,418 | 7,900,459 | 8 |
| 794,477 | 198 | 749,463 | 751,756 | 1,264 | 536,221 | 542,360 |  |
| 109,194 | 5,746 | 61,872 | 72,428 | 2,055 | 32,233 | 35,881 | 9 |
| 126,258 | 15,984. | 50,488 | 67,401 | 1,155 | 150,606. | 151,761 | 10 |
| 102,140 | 17,323 | 41,544 | 59,622 | 1,351 | 98,790 | 100,141 |  |
| 92,689 | 11,616 | 91,285 | 105,976 | 759 | 90,385 | 91,144 | 11 |
| 39,016,872 | 3,636,412 | 25,252,917 | 59,110,483 | 4,237,772 | 18,364,233 | 53,457,468 | 12 |
| 8,777,694 | 753,856 | 5,124,285 | 12,828,215 | 874,879 | 4,363,538 | 12,440,979 |  |
| 538,560 | 10,902 | 130,956 | 163,827 | 2,693 | 256,048 | 429,078 | 13 |
| 55,985 | 1,351 | 17,240 | 19,661 | 194 | 30,507 | 38,605 |  |
| 453,417 | 15,095 | 97,336 | 120,845 | 5,916 | 46,512 | 53,258 | 14 |
| 38,416 | 1,515. | 6,889 | 9,485 | 712 | 3,177 | 3,987 |  |
| 236,772 | - | 77,413 | 77,413 | - | 13,914 | 13,914 | 15 |
| 66,410 | 6,293 | 45,831 | 52,124 | 2,940 | 75,030 | 77,978. | 16 |
| 39,665 | 2,328 | 25,529 | 27,857 | 1,043 | 43,096 | 44,157 |  |
| 7,317,259 | 66,259 | 1,534,232 | 6,822,540 | 64,456 | 3,072,050 | 4,309,831 | 17 |
| 1,823,994 | 16,949 | 375,394 | 1,678,056 | 20,087 | 745,860 | 1,092,800 |  |
| 1,512,108 | 35,628 | 425,560 | 1,162,465 | 16,614 | 577,318. | 971,821 | 18 |
| 299,223 | 8,366 | 80,812 | 229,094 | 5,154 | 104,533 | 187,873 |  |
| 7,089,650 | 575,362 | 2,588,184 | 3,237,249 | 2,137 | 7,354,409 | 7,969,945 | 19 |
| 792,025 | 51,939 | 247,484 | 306,030 | 253 | 663,056 | 666,102 |  |
| 7,113,029 | 13,227, | 1,493,708 | 1,512,086 | 2,805 | 2,714,817 | 2,721,682 | 20 |
| 1,182,899 | 2,875 | 239,551 | 243,483 | 651 | 343,316 | 344,553 |  |
| 642,931 | 5,861 | 1,005,010 | 1,012,641 | 400 | 5,083,739. | 5,090,889 | 21 |
| 52,491 | 517 | 78,944 | 79,648 | 30 | 470,872 | 471,567 |  |
| 5,561,911 | - | 156,305 | 771,295 | - | 4,252,387 | 4,252,387 | 22 |
| 380,049 | - | 26,800 | 70,830 | - | 374,499 | 374,499 |  |

## TRADEAND COMMERCE

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. |
| 1 | II. Animals and their produce-con. <br> Meats, viz.-con. <br> Canned meats and canned poultry and game. . | 1,098,790 | 692,658 128,544 | 2,228,484 | $1,523,044$ 276,086 | $\begin{aligned} & 544,451 \\ & \mathbf{1 0 5 , 4 7 9} \end{aligned}$ |
| 2 | Extracts of meats, fluid |  |  |  |  |  |
| 3 | beef, etc. <br> Muttonand lamb, fresh.. lb. | 96,381 | $\begin{array}{r} 197,520 \\ 4,284,300 \\ 439,401 \end{array}$ | $\begin{array}{r} 327,173 \\ 5,649,118 \\ 543,779 \end{array}$ | 212,347 251,287 25,151 | $\begin{array}{r} 282,297 \\ 3,821,777 \\ 425,941 \end{array}$ |
| 4 | Pork.. lb. | 10,246 | 10,191,235 | 10,204,676 | 3,829 | 12,092,507 |
|  |  | 956 | 1,025,035 | 1,026,277 | 414 | 1,203,411 |
| 5 | Poultry and game. | 9,969 | 379,066 | $402,634$ | 14,144 | $258,387$ |
| 6 | Other meats.. lb. | 32,283 5,126 | $\begin{array}{r} 3,642,542 \\ 537,923 \end{array}$ | $\begin{array}{r} 4,168,509 \\ 572,589 \\ \hline \end{array}$ | 7,661 | $\begin{array}{r} 3,004,758 \\ 496,998 \end{array}$ |
|  | Total meats.. " | 324,526 | 4,712,045 | 5,338,673 | 546,790 | 4,040,303 |
| 7 | Reanet. | 3,584 | 35,885 | 66,392 | 2,306 | 32,507 |
| 8 | Sausage casings.. | 46,637 | 101,478 | 162,474 | 68,131 | 84,604 |
| 9 | Silk, raw, etc. " | 10,473 | 296,740 | 354,147 | 19,653 | 360,163 |
| 10 | Wax, bees' lb. | 8,022 | 80,024 | 116,173 | 1,046 | 54,863 |
| 11 |  | 1,555 $4,573,672$ | 24,934 $1,097,799$ | - ${ }_{\text {36,209,170 }}$ | 3,929,650 | 18,310 776,350 |
|  |  | 1,081,706 | - 217,041 | 2,063,028 | 1,014,157 | 171,001 |
| 12 | Other articles. " | 109,355 | 109,789 | 290,080 | 32,563 | 148,895 |
|  | III. Fisheries produce -totals. | 247,971 | 915,759 | 2,674,776 | 246,858 | 835,520 |
| 13 | $\begin{gathered} \text { Anchovies and } \\ \text { sardines. .....boxes } \end{gathered}$ | 1,481,866 | 53,904 | 7,690,651 | 1,314,273 | 56,073 |
| 14 | ¢ | 82,977 | 5,322 | 434,844 | 73,205 | 5,226 |
|  | Cod, haddock, ling and pollock, all kinds lb. | 63,654 | 354,821 | 15,068,061 | 28,780 | 242,920 |
|  | lock, all kiads ${ }_{\text {\% }}$ | 3,839 | 18,476 | 691,571 | 1,880 | 13,159 |
| 15 | Halibut. lb. | - | 2,387,455 | 2,514,833 | - | 1,553,759 |
|  |  | 1075 $7^{-}$ | 123,371 | 131,905 | 1,417096 | 86,286 |
| 16 | Herring. lb. | 1,075,773 | $\mathbf{1 8 7 , 0 5 4}$ | $13,267,682$ | $\begin{array}{r} 1,417,096 \\ 66,952 \end{array}$ | 297,312 16,016 |

IMPORTS OF CANADA
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. | All Countries. |  |
| 2,466,763 | 1,010,340 | 283,884 | 1,466,556 | 88,595 | 199,245 | 306,205 | 1 |
| 550,840 | 182,604 | 269,250 | 472,204 | 136,405 | 320,377 | 461,934 | 2 |
| 5,610,812 | - | 2,955,592 | 3,451,812 | - | 2,715,338 | 2,841,838 | 3 |
| 566,794 |  | 335,933 | 370,330 |  | -325,217 | 334,856 |  |
| 12,102,244 | 6,890 693 | 8,488,988 | $8,499,505$ 821,411 | 625 | 52,773,737 | 52,783,487 | 4 |
| 293,513 | 7,164 | 69,494 | 90,712 | 1,055 | 47,775 | 55,051 | 5 |
| 4,007,851 |  | 1,518,582 | 1,857,168 | 1,120 | 10,568,752 | 10,700,156 | 6 |
| 595,959 | 4,110 | 280,416 | 323,374 | 279 | 1,258,593 | 1,275,870 |  |
| 5,267,853 | 371,563 | 2,167,233 | 2,716,338 | 163,002 | 9,023,080 | 9,229,800 |  |
| 53,261 | 5,266 | 46,825 | 72,564 | 4,702 | 82,295 | 97,712 | 7 |
| 162,662 | 82,571 | 82,023 | 174,543 | 73,217 | 81,436 | 178,963 | 8 |
| 413,821 | 22,192 | 374,122 | 433,739 | 23,016 | 355,943 | 379,924 | 9 |
| 87,762 | 9,931 | 56,811 | 78,804 | 14,257 | 54,640 | 80,302 | 10 |
| 29,131 | 4,001 | 19,890 | 28,700 | 5,346 | 17,605 | 26,302 |  |
| 7,252,119 | 3,795,798 | 7,460,638 | $13,193,986$ | 9,192,059 | 5,357,199 | 21,140,729 | 11 |
| 1,872,089 | 1,108,157 | 2,094,627 | 3,717,039 | 3,393,914 | 2,373,292 | 7,999,284 |  |
| 202,675 | 14,807 | 109,742 | 143,872 | 9,949 | 67,734 | 80,069 | 12 |
| 2,331,772 | 207,930 | 588,717 | 1,856,298 | 124,505 | 570,986 | 1,591,073 |  |
| 7,446,699 | 1,002,129 | 86,301 | 5,551,898 | 687,364 | 87,350 | 3,602,900 | 13 |
| 8,510,134 | 112 | 267,628 | 7,439,420 | - | 135,132 | 2,965,975 | 14 |
| 442,106 | 8 | 15,739 | 368,033 | - | 10,490 | 152,753 |  |
| 2,314,059 | - | 1,104,702 | 1,544,680 | - | 634,329 | 904,299 | 15 |
| 127,129 |  | 54,470 | 79,968 | - | 25,163 | 38,927 |  |
| 7,966,894 | 1,495,059 | 261,593 | 9,816,424 | 882,899 | 280,241 | 15,523,961 | 16 |
| 238,918 | 64,883 | 14,960 | 259,017 | 56,834 | 16,134 | 338,657 |  |

## TRADE AND COMMEACE

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | $\left\lvert\, \begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}\right.$ | United Kingdom. | United States. |
| III. Fisheries produce-con. |  |  |  |  |  |  |
| 1 | Lobsters. \$ | 6,266 | 3,564 | 3,564 | ${ }_{6}^{220}$ | 3,491 |
|  | Mackerel. lb. | 6,266 | 13,968 | 83,905 | 6,600 | 4,361 |
|  | \$ | 325 | 1,182 | 4,642 | 320 | 647 |
| 34 | Oysters. " | 851 | 404,647 | 406,818 | 75 | 388,431 |
|  | Salmon. .. lb. | 3,847 | 613,217 | 1,677,427 | - | 2,107,343 |
| 5 | Seafish, other lb. | 113,709 | 83,708 219,620 | 157,146 691,483 | 62,116 | 61,838 80,141 |
|  | Seansk, | 13,717 | 22,191 | 80,483 | 7,774 | 6,897 |
| 6 | Other fish, fresh, pickled, smoked, etc. | 95,820 | 122,980 | 284,694 | 89,879 | 132,720 |
|  | Total fish. | 242,711 | 795,573 | 2,430,494 | 240,305 | 714,711 |
| 7 | Fish oil- |  |  |  |  |  |
|  | Cod.... gal. | - | 3,522 1,330 | 120,216 | 379 |  |
| 8 | Cod liver gal. | 3,153 | 9,522 | 38,922 | 2,131 | 6,107 |
|  |  | 1,903 | 6,222 | 22,176 | 1,188 | 5,162 |
| 9 | Seal. .. gal. | - | 1,213 | 41,839 | - | 20 |
|  | Other |  | 672 51 597 | 25,509 | 6.975 | 22,444 |
| 10 | Other $\quad$. | 140 94 | 51,597 | 82,608 30,178 | 6,975 3,845 | 32,444 11,422 |
| 11 | Total fish oils gal. | 3,293 1,997 | $\mathbf{6 5 , 8 5 4}$ $\mathbf{2 6 , 5 6 4}$ | $\begin{aligned} & 283,585 \\ & 134.195 \end{aligned}$ | $\begin{aligned} & \mathbf{9 , 4 8 5} \\ & \mathbf{5 , 4 3 0} \end{aligned}$ | $\begin{aligned} & \mathbf{3 8 , 5 7 1} \\ & \mathbf{1 6 , 6 0 4} \end{aligned}$ |
|  | Other articles of fisheries. | 3,263 | 93,622 | 110,087 | 1,123 | 104,205 |
|  | IV Forest produce ${ }^{\text {I }}$ - | 63,145 | 20,016,029 | 20,138,388 | 82,005 | 16,601,319 |
| 12 | Corkwood..... * | 3,137 | 27,360 | 44,797 | 858 | 20,696 |
| 13 | D shovel handles " | 2,102 | 69,112 | 71,214 | 7 | 71,044 |
| 14 | Felloes of hickory or oak, rough sawn to shape only, etc | , | 112,238 | 112,238 | - | 79,861 |
| 15 | Handle, heading, |  |  |  |  |  |
| k | stave and shin- |  |  |  | - | 219,032 |
| 16 | Hickory billets. " | - | 86,246 | 86,246 | - | 69,995 |
| 17 | Hickory nad oak spokes, ete. | - | 308,820 | 308,820 | - | 231,328 |
| 18 | Hubs for wheels, ete. $\qquad$ | 463 | 136,020 | 136,733 | 671 | 74,893 |

## IMPORTS OF CANADA

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumplion in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\text { All }}{\text { Countries. }}$ | United Kingdom. | United States. | All | United Kingdom. | United States. | All Countries. |  |
| 26,110 | - | 2,650 | 11,950 | 42 | 4,749 | 42,624 | 1 |
| 14,559 | 360 | 2,652 | 3,012 | - | 5,047 | 8,247 | 2 |
| 1,063 | 28 | 394 | 422 | - | 579 | 696 |  |
| 390,449 | 21 | 256,048 | 259,063 | 2 | 280,198 | 283,536 | 3 |
| 2,952,661 | - | 118,197 | 731,004 | - | 62,044 | 951,775 | 4 |
| 112,602 | 28 | 7,310 | 46,803 | 17 | 6,627 | 55,190 |  |
| 613,728 | 64, 144 | 49,993 | 461,015 | 4,605 | 49,564 | 1,358,614 | 5 |
| 33,100 | 6,230 | 4,431 | 24,394 | 495. | 4,387 | 47,302 |  |
| 314,682 | 72,311 | 119,351 | 281,780 | 17,245 | 84,663 | 157,203 | 6 |
| 2,104,536 | 200,100 | 483,206 | 1,649,105 | 110,582 | 439,697 | 1,341,740 |  |
| 95,865 | 90 | 1,394 | 136,728 | 150 | 2,269 | 101,840 | 7 |
| 39,816 | 92 | 562 | 54,699 | 360 | 1,639 | 65,355 |  |
| 22,466 | 1,186 | 6,212 | 20,442 | 63 | 10,791 | 11,969 | 8 |
| 18,702 | 879 | 4,541 | 13,945 | 882 | 13,742 | 15,407 |  |
| 34,307 | - |  | 10,836 | - |  | 43,326 | 9 |
| 16,745 | - $5^{-}$ |  | 4,909 |  | 80 | 21,350 |  |
| 62,997 | 11,529 | 28,933 | 49,868 | 22,210 | 62,189 | 113,596 | 10 |
| 24,752 | 6,285 | 12,547 | 22,993 | 12,452 | 23,918 | 51,390 |  |
| 215,635 | 12,805 | 36,539 | 217,874 | 22,998 | 75,249 | 270,731 |  |
| 100,015 | 7,256 | 17,650 | 96,546 | 13,694 | 44,699. | 153,502 |  |
| 127,221 | 574 | 87,861 | 110,647 | 229 | 86,590 | 95,831 | 11 |
| 16,789,413 | 15,174 | 9,553,706 | 9,613,891 | 5,222 | 5,216,715 | 5,240,154 |  |
| $\begin{aligned} & 3+, 212 \\ & 71,051 \end{aligned}$ | 539 47 | $\begin{aligned} & 12,2+7 \\ & 36,000 \end{aligned}$ | 21,252 $\mathbf{3 6}, 056$ | 1,272 8 | $\begin{aligned} & 18,341 \\ & 46,890 \end{aligned}$ | 24,889 46,898 | 12 |
| 79,861 | - | 41,381 | 41,381 | - | 61,644 | 61,644 | 14 |
| 219,221 |  | 142,031 | 142,031 | - | 160,827 | 160,827 | 15 |
| 69,995 | 10 | 34,904 | 34,914 | - | 52,244 | 52,244 | 16 |
| 231,328 | - | 185,414 | 185,414 | - | 128,639 | 128,639 | 17 |
| 74.989 | 24 | 67,868 | 67,892 | - | 38,863 | 38,871 | 18 |

## TRADEAND COMMERCE

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916--con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. |
| IV Porest produce- |  |  |  |  |  |  |
| 1 | Ivory nuts, vegetable. | 1,126 | 69,098 | 70,224 | - | 70,222 |
| 2 | Fence posts and railroad ties. | - | 1,856,711 | 1,856,711 | - | 2,326,843 |
| 3 | Logs and round unmanufactured timber. | 4,618 | 997,099 | 1,001,717 | 16,425 | 648,200 |
|  | Lumber and timber, planks and boards, viz.- |  |  |  |  |  |
| 4 | Boards, planks, deals, etc. M. ft. | 45 | 443,502 | 443,736 | 219 | 266,638 |
| 5 | deals, ev. ${ }^{\text {\% }}$ | 1,388 | 7,011,936 | 7,015,312 | 8,611 | 4,931,371 |
|  | Cherry, chestnut. |  | 26,127 | $26,329,658$ | - | 22,661 |
|  | Mahogany ${ }^{\text {S }}$ | 398 | 882,698 | 892,963 | 408 | 774,658 |
| 6 | Mahogany .m.ft. | 398 44,449 | 3,378 429,973 | 3,785 475,148 | 47,344 | 2,334 282,487 |
| 7 | Oak. .m.ft. |  | 80,645 | 80,788 | 34 | 62,272 |
|  | \% ${ }^{\text {¢ }}$ | 123 | $3,218,870$ | $3,227,113$ | 6,074 | 2,629,788 |
| 8 | Pitch pine.....m. ft. | - | $118,868$ | 118,868 | - | 135,348 |
|  | \% | - | $2,435,376$ | $2,435,376$ | - | 2,912,363 |
| 9 | Timber, hewn and sawn. | - | 800,560 | 800,560 | 419 | 521,825 |
| 10 | Shingles. ${ }^{\text {a }}$ | - | 143,633 | 143,965 | - | 53,113 |
|  | \$ | - | 276,905 | 277,551 |  | 102,622 |
| 11 | Staves. M. | - | 8,793 | 8,793 | - | 5,567 |
|  | Walnut.... .m.ft. | 1 | 305,329 620 | 305,329 | 1 | 181,624 485 |
| 12 | Walnut... ${ }^{\text {m }}$. | 60 | 43,797 | 43,857 | 73 | 28,691 |
| 13 | White ash.. .m.ft. |  | 3,859 | 3,859 | - | 2,417 |
|  | \% | - | 204,847 | 204,847 | - | 119,552 |
| 14 | Other lumber and timber | 3,473 | 286,940 | 305,400 | 1,108 | 198,246 |
|  | Total Jumber and timber.. | 49,493 | 15,897,231 | 15,983,456 | 63,624 | 12,683,227 |
| 15 | Wood for fuel. .cord | - | 43,937 | 43,937 | - | 29,072 |
|  |  | - | 149,677 | 149,677 | - | 89,936 |
| 16 | Other articles of the forest. | 2,206 | 43,989 | 54,127 | 1,024 | 16,042 |

IMPORTSOFCANADA
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries. | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | All Countries. |  |
| 70,222 | - | 23,067 | 23,067 | - | 38,618 | 38,618 | 1 |
| 2,326,843 | - | 1,255,127 | 1,255,137 | - | 645,606 | 645,606 | 2 |
| 679,816 | 717 | 475,061 | 485,953 | - | 325,953 | 325,967 | 3 |
| 267,113 | 138 | 157,740 | 157,884 | - | 70,356 | 70,368 | 4 |
|  |  |  |  |  |  |  |  |
| 23,226,168 | - | 13,619 | 13,663,000 | - | 10,224 | 10,234,000 | 5 |
| 805,169 | - | 460,450 | 462,729 | 4 | 351,537 | 352,031 |  |
| 2,827 | 62 | 1,321 | 1,383 | 4 | 563 | 567 | 6 |
| 338,820 | \$,043 | 144,710 | 152,769 | 486 | 64,145 | 64,631 |  |
| 62,848 | - | 34,079 | -34,454 | - | 25,771 | 26,114 | 7 |
| 2,660,839 | - | 1,419,823 | 1,437,924 | - | 972,994 | 983,541 |  |
| 135,348 | - | 95,182 | 95,182 | - | 43,298 | 43,298 | 8 |
| 2,912,363 | - | 1,608,788 | 1,608,788 | 2 | 722,358 | 722,358 |  |
| 523,244 | 435 | 543,924 | 544,483 | 385 | 72,014 | 73,903 | 9 |
| 53,871 | - | 16,232 | 16,606 | - | 5,719 | 5,719 | 10 |
| 104, 166 | - | 28,707 | 29,494 | - | 8,682 | 8,682 |  |
| -5,567 | - | 3,177 | 3,177 | - | 1,200 | 1,200 | 11 |
| 181,624 486 | - | 122,727 | 122,727 | 2 | 34,173 | 34,173 |  |
| 28,764 | - | - 27,561 | 384 27,561 | 532 | 678 45,116 | 680 45,648 | 12 |
| 2,417 | - | 1,357 | 1,370 | - | 634 | 6.634 | 13 |
| 119,552 | - | 70,787 | 71,443 | - | 30,770 | 30,770 |  |
| 203,983 | 639 | 133,933 | 138,843 | 522 | 152,221 | 154,580 | 14 |
| 12,823,615 | 13,802 | 7,209,609 | 7,249,781 | 1,971 | 3,642,022 | 3,658,883 |  |
| 29,072 | - | 23,145 | 23,145 | - | 18,890 | 18,890 | 15 |
| 89,936 | - | 63,856 | 63,856 | - | 45,724 | 45,724 |  |
| 18,324 | 35 | 7,132 | 7,167 | - | 11,344 | 11,344 | 16 |

TRADEAND COMMERCE
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.


| Iz | LLLZ＇8II | $690^{\prime} 78$ | ｜EL＇zL | ［06 ${ }^{\text {c }} 998$ | ｜ZI9＇19 | ［18＊＇69I | ｜\＃79＇LIE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 07 | LII＇L2I | 29才＇İt | 8L7＇EE | 989＇6も1 | 016＇67 | \＆ $6_{6}{ }^{6} 9$ | L68＇8才Z |
| 6 I | SIE＇89I＇${ }^{\text {¢ }}$ | $68 L^{\prime} 866$＇ 6 | 00L＇I66 | $699^{\prime} 08 I^{\prime} 5$ | 278＇£ $8 z^{\prime}$ ¢ | $97 \mathrm{C}^{\prime} 89 \varepsilon^{\prime}$ I | 801＇ 89 ¢ $^{\text {c }} 9$ |
| 81 | $\begin{aligned} & 899^{\prime} 10 \\ & { }^{6} 07 \\ & \hline \end{aligned}$ | $\angle 1 z^{\prime} 6 z$ | $\overline{\varepsilon \& I}$ | OFt＇IZ | F99́0 |  |  |
| LI | 97 － | を1\％ |  |  |  |  | ${ }_{768}^{699}$ |
| 9 I | 80I＇伍 | てIも 9 |  | \＆\％9＇9\％ | ${ }_{06 \downarrow^{\prime} \mathrm{g}}$ | 0才6 0 ¢ | 887 ¢99 |
| er | 089＇891 | zZz＇z0I | $80 \chi^{\prime} 99$ | \＆zz＇8zI | \＆10＇66 | L86＇98 | Lモ0＇\＆\＆I |
| II | 899＇z8L | LLZ＇IEI | 288＇t | $276{ }^{\text {c }} 6$ | $276{ }^{\prime} 6$ | － | Z28＇zI |
|  | 890＇486＇${ }^{\text {a }}$ | 0才I＇02L＇${ }^{\text {c }}$ | $816^{6} 91 z$ | $\mp \angle z^{\prime} 88 L^{\prime} \%$ | I¢7＇L99＇z | £z8＇98 | 689＇6LL＇8 |
| EI | 891 $298^{\prime} \ddagger 8$ 788＇L |  |  | $\left\lvert\, \begin{aligned} & 0 \varepsilon 0^{\prime} \angle L 9^{\prime} 8 z \\ & 0 z L^{\prime} 0 \varepsilon^{\prime} \end{aligned}\right.$ | $0 \forall \mathrm{I}^{\prime} \angle 99^{\prime} L Z$ | O68'600 | ${ }^{206^{\circ} \angle 9 L^{\prime}}{ }^{\circ} 9$ |
| 71 | 69 | ${ }^{2} 8$ | ¢¢ | ¢¢\％ | 0ZI | モ\＆I | 869 |
| ${ }_{01}$ | 688＇72 | ${ }^{6015}{ }^{\text {c }}$＇67 | ${ }^{698}{ }^{\prime} 9$ |  | もGz＇8 | ${ }^{\text {cIz＇81 }}$ | ¢90＇LZI |
| 0 I | zz9＇\＆¢ |  | $98 \mathrm{I}^{\prime} 6$ | $99^{\prime} 02$ | ZLL＇g9 | 901＇tI | 296＇も6 |
| 6 | 992＇研 | 788＇88 | T89＇ 8 | $881^{\prime}$ 现 | 919＇＜${ }^{\text {¢ }}$ | 876 ¢ 9 | z¢z＇¢9 |
| 8 | ø7 $9^{\text {c } 67}$ | 098＇801 | 088＇68I | ZI6＇Lİ | \＆II＇68 | 880＇99I | 888＇827 |
| $\stackrel{L}{9}$ | $\begin{aligned} & \varepsilon 9 L^{\prime} 0 L \\ & Z \mathscr{H}^{\prime} \mathrm{II} \end{aligned}$ |  | $\begin{aligned} & \varepsilon \mp L^{\prime} \varepsilon I \\ & 806 \text { ' } \mathrm{I} \end{aligned}$ | $\begin{aligned} & 8 Z 6^{6} 86 \\ & I Z 6^{6} 61 \end{aligned}$ |  | $\begin{aligned} & 8 z 6^{\prime} \varepsilon L \\ & \angle L 9^{\prime} g \end{aligned}$ | $\begin{aligned} & 8 \boxed{G^{\prime} 6 G I} \\ & \\ & 8 L^{\prime} 8 z \end{aligned}$ |
| g | $\begin{aligned} & 10 \bigoplus^{\prime} \angle \\ & 066^{\prime} \mathrm{I} 8 \end{aligned}$ | $20 z^{\prime} L$ <br> โ9T＇土 |  |  | $867^{\prime} 67 \mathrm{~T}$ $880^{\prime} 079$ | I¢0＇4 | 8z\％＇20\％ |
|  | £E8＇1z9 | 690＇187 | ${ }_{\text {czL }} 6$ | ¢0\％＇989 | ${ }^{887^{\prime} 98 \%}$ | 6888 268 | ¢79＇E88 |
| $\checkmark$ | 6tI＇888 | 192＇88L | ชて7＇9z | 2L8＇İ8 | 86I＇c09 | ¢02＇\＆ | ォ¢8．020＇T |
| $\varepsilon$ | โ76＇26\％ | $668{ }^{\text {＇t }}$ ¢ | 682＇9¢ | 89才＇โ¢\％ | 869＇981 | 680＇c9 | 现＇1も\％ |
| $\boldsymbol{7}$ |  | $\begin{aligned} & 0 \neq 0 \text { 'I } \\ & z \& L^{\prime} G I I \\ & 008^{\prime} G 8 I \end{aligned}$ |  | $\begin{aligned} & 8 \tau L^{\prime} \angle z \\ & 98 L^{\prime} \angle 69 \\ & 990^{\prime} 190^{\prime} \mathrm{I} \end{aligned}$ |  |  | $\begin{aligned} & \mp 10^{\prime} \mp \varepsilon^{\prime} \\ & \varepsilon 68^{\prime} 8 \varepsilon^{\prime} \mathrm{I} \\ & \mp 6 \mathrm{I}^{\prime} 780^{\prime} \mathrm{Z} \end{aligned}$ |
|  | 679＇T2F＇ 0 08 | Ec9＇809＇c0z | 20才＇9z0＇ғ9 | IZ8＇7IZ＇98\％ | 9L8‘99才＇991 | F01＇898＇92 | $289^{6} \csc ^{2} 2 \mathrm{IF}$ |
| N | $\underset{\substack{\text { IIV } \\ \text { souno }}}{ }$ | －รว787S рәт！̣й | －шоряи！ рәт！u | $\underset{\text { IIV }}{\text { souquno }}$ | －รวาะ2S рәт！̣й | －шоряи！ рәт！${ }^{\circ} \Omega$ | $\begin{gathered} \text { soupuno } \\ \text { IIV } \end{gathered}$ |
|  | ${ }^{9} 9161$ |  |  | ¢¢6I |  |  |  |


 VGVNVD HO SLYOdNI

TRADEAND COMMERCE
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. |
| V. Manufacturescon. |  |  |  |  |  |  |
| 1 | Braces, suspenders and parts of. | 15,555 | 63,848 | 89,192 | 13,551 | 67,248 |
|  | Brass and mfs. ofBrass, old and scrap. |  |  |  |  |  |
| 2 |  | 502 | 43,617 | 44,487 | 138 | 24,980 |
|  |  | 7,256 | 542,120 | 553,405 | 2,088 | 291,667 |
| 3 | Brass, in blocks, ingots or pigs. cwt. | 2,172 | $\begin{array}{r} 19,820 \\ 292,526 \end{array}$ | $\begin{array}{r} 19,922 \\ 294,698 \end{array}$ | - | $\begin{array}{r} 17,663 \\ 232,831 \end{array}$ |
| 4 | Brass tubing, not polished, |  |  |  |  |  |
|  | etc lb. | 479,186 $\mathbf{9 4 , 7 9 4}$ | $1,621,989$ 348,747 | $2,254,884$ 471,193 | 344,075 67,987 | $\begin{array}{r} 1,436,659 \\ 313,836 \end{array}$ |
| 5 | Brass rods and sheets for mfs. cwt. | 1,183 | 53,254 | 54,499 | 804 | 46,507 |
|  | sheets | 20,795 | 912,290 | 934,109 | 13,461 | 735,148 |
| 6 | Brass wire, plain lb. | 35,671 | 371,753 | 411,838 | 12,051 | 400,883 |
|  | Brase other ${ }_{\text {d }}$ | 6,687 | 66,847 | 74,066 | 2,605 | 68,752 |
| 7 | Brass, other | 339,363 | 2,199,142 | 2,656,093 | 327,090 | 1,963,473 |
|  | Total. | 471,067 | 4,361,742 | 4,983,567 | 413,231 | 3,605,707 |
| 8 | Bricks, tiles and mfs. of clay | 324,068 | 1,977,553 | 2,303,602 | 247,269 | 1,587,395 |
| 910 | Bricks, fire.... " | 114,201 | 882,569 | 1,000,516 | 212,273 | 890,143 |
|  | British gum, dextrine, sizing cream, ete. lb . |  |  |  |  |  |
|  | cream, etc. lb. | 453,073 <br> 14,055 | $\begin{array}{r} 1,506,46 . \\ 58,628 \end{array}$ | $\begin{array}{r} 1,960,49 \\ 72,686 \end{array}$ | $\begin{gathered} 416,839 \\ 11,831 \end{gathered}$ | $\begin{array}{r} 1,023,426 \\ 43,160 \end{array}$ |
| 11 | Brooms, whisks and brushes. | 110,776 | 300,966 | 697,297 | 119,146 | 295,629 |
| 12 | Buttons... | 139,229 | 508,807 | 870,978 | 143,109 | 458,094 |
| 13 | Candles... lb. | 273,187, | 528,456 | 820,751 | 214,234 | 547,263 |
|  | \$ | 25,078 | 71,503. | 98,705 | 18,697 | 71,242 |
| 14 | Cane, reed or rattan, split or manufactured | 2,286 | 17,430 | 22,133 | 14 | 4,965 |
| 15 | Carbons. |  | 300,263 | 307,094 | 4 | 299,400 |
|  | Carriages and parts of - |  |  |  |  |  |
| 16 | Automobiles and motor vehicles no. | 352 583,910 | $\begin{array}{r} 7,993 \\ 9,084,723 \end{array}$ | $\begin{array}{r} 8,377 \\ 9,738,839 \end{array}$ | $\begin{array}{r} 399 \\ C 21,979 \end{array}$ | $\begin{array}{r} 5,864 \\ 6,528,086 \end{array}$ |
| 17 | Automobiles, etc., parts of. | 14,005 | 763,129 | 778,948 | 31,981 | 3,926,077 |

IMPORTS OF CANADA
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries. | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | All Countries. |  |
| 89,181 | 9,072 | 37,495 | 55,045 | 4,364 | 36,716 | 46,045 | 1 |
| 25,358 | 370 | 12,081 | 12,461 | - | 2,915 | 3,209 | 2 |
| 295,765 | 4,045 | 128,379 | 132,484 | - | 47,264 | 49,303 |  |
| 17,862 | - | 8,929 | 8,929 | - | 15,201 | 15,201 | 3 |
| 235,198 |  | 102,067 | 102,067 | - | 228,680 | 228,680 |  |
| 1,955,896 | 164,425 | 1,417,911 | 1,615,018 | 18,536 | 1,137,803 | 1,156,339 | 4 |
| 417,457 | 29,555 | 276,818 | 312,517 | 4,544 | 340,360 | 344,904 |  |
| 47,849 | - | - | - | - | - | - | 5 |
| 757,200 | 6,305 | 432,678 | 439,896 | 500 | 417,284 | 417,784 |  |
| 413,276 | 2,294 | 443,540 | 445,992 | 568 | 330,138 | 330,706 | 6 |
| 71,514 | 522 | 70,171 | 70,754 | 223 | 90,929 | 91,152 |  |
| 2,418,425 | 25,695 | 1,442,153 | 1,690,208 | 78,315 | 2,216,164 | 2,307,721 | 7 |
| 4,195,559 | 66,122 | 2,452,266 | 2,747,926 | 83,582 | 3,340,681 | 3,439,544 |  |
| 1,838,001 | 152,372 | 1,182,096 | 1,336,546 | 79,480 | 662,000 | 741,482 | 8 |
| 1,110,161 | 48,375 | 431,990 | 482,763 | 90,564 | 626,782 | 717,793 | 9 |
| 1,440,365 | 306,854 | 878,657 | 1,188,761 | 277,152 | 3,192,361 | 3,469,513 | 10 |
| 54,991 | 7,898 | 28,176 | 36,174 | 9,012 | 85,296 | 94,308 |  |
| 691,215 | 76,807 | 176,475 | 409,932 | 62,631 | 190,113 | 365,994 | 11 |
| 861,283 | 88,012 | 362,284 | 561,496 | 49,204 | 485,706 | 615,157 | 12 |
| 772,974 | 151,850 | 623,995 | 785,035 | 69,046 | 516,507 | 589,585 | 13 |
| 91,268 | 14,681 | 80,356 | 96,163 | 8,138 | 67,129. | 76,244 |  |
| 6,977 | 252 | 5,132 | 8,844 | 122 | 4,193 | 6,826 | 14 |
| 299,404 | 307 | 222,987 | 223,294 | - | 294,561 | 294,561 | 15 |
| - 6,288 | 299 | 5,158 | 5,476 | 29 | 8,026 | 8,055 | 16 |
| 7,213,375 | 252,898 | 4,591,182 | 4,888,704 | 23,502 | 5,065,827 | 5,089,329 |  |
| 3,966,379 | 22,337 | 2,142,895 | 2,166,193 | 13,735 | 4,536,731 | 4,550,480 | 17 |

TRADEAND COMMERCE
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.


1 Carpets, other, are included under the head of wool and mfs. of.
${ }^{2}$ Includes hand vacuum cleaners in 1916.

| 6I | ${ }^{7 Z 8^{\prime} 6 \mathrm{GII}}$ | $\left.\right\|^{886^{4}{ }^{\circ} \mathrm{SEI}}$ | $\left\lvert\, \begin{aligned} & 9 \varepsilon \varepsilon^{\prime} \& z \\ & 82 \varepsilon^{\prime} 06 \end{aligned}\right.$ | $\left.\right\|_{\ddagger 99^{\prime} I 88} ^{9 I Z^{\prime} 88 I}$ |  | ${ }_{z \& \varepsilon^{\prime} ¥ 0 \tau}^{6 L L^{\prime} \mp Z}$ | $\begin{aligned} & 09 z^{\prime} \varepsilon 2 Z \\ & 186^{\prime} \amalg I^{\prime} \mathrm{I} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 81 | $\begin{aligned} & \angle 80^{\prime} 08 \varepsilon^{\prime} \mathrm{I} \\ & 69 \sigma^{\prime} 0 z 0^{\prime} \mathrm{g} \end{aligned}$ | $\begin{aligned} & Z \boxed{76} 6^{969} 69 \\ & \forall I^{\prime} 81 \varepsilon^{\prime} \end{aligned}$ |  | $\begin{aligned} & 868^{\prime} 677^{\prime} I \\ & 276^{\prime} 870^{\prime} 9 \end{aligned}$ | $\begin{array}{\|l\|} 988^{\prime} \angle 88 \\ 20 I^{\prime} G \uparrow g^{\prime} \end{array}$ | $\begin{aligned} & \mp 60^{\prime} 678 \\ & \text { LZף' } 689^{\prime} \& \end{aligned}$ |  |
| $\begin{array}{r} { }_{91}^{1 I} \end{array}$ |  | $\begin{aligned} & 09 \\ & 68 Z^{\prime} \\ & 980^{\prime} \mathrm{I} \end{aligned}$ | $\begin{aligned} & 99 I^{\prime} \supsetneqq \\ & 9 L z^{\prime} z \sigma \\ & \mathrm{II} Z^{\prime} \mathrm{g} \end{aligned}$ | $\left\lvert\, \begin{aligned} & q L z^{\prime} Z 9 \\ & \angle 88^{\prime} G 29 \\ & 610^{\prime} \pm I \end{aligned}\right.$ | $\begin{aligned} & { }_{2}^{288} \\ & 9 \mathrm{Cl}^{\prime} \mathrm{I} \\ & 06 \mathrm{I}^{\prime}, \end{aligned}$ |  |  |
| 91 | $\left.\right\|_{\angle 69^{\prime} \succcurlyeq Z G} ^{98 L^{\prime} I \varepsilon}$ | $\begin{aligned} & z 0 Z^{\prime} 6 G \\ & Z \angle I ' \angle L F \end{aligned}$ |  | $\begin{aligned} & \mp \angle \varepsilon^{\prime} 89 \\ & 69 Z^{\prime} 790^{\prime} \mathrm{I} \end{aligned}$ | $\left\lvert\, \begin{aligned} & \angle 0 I^{\prime} \mathrm{Eg} \\ & \mathrm{I} \angle 8^{\circ} 0 \angle 6 \end{aligned}\right.$ | $\begin{aligned} & 29 \sigma^{\prime} c \\ & 86 \varepsilon^{\prime} \$ 6 \end{aligned}$ | $\begin{aligned} & 6 \mp Z^{\prime} \mathrm{I} 8 \\ & 629^{\prime} 29 \sigma^{\prime} \mathrm{I} \end{aligned}$ |
| $\underset{\& \mathbf{I}}{\mathbf{T I}}$ | $\begin{aligned} & 981^{\prime} z z \\ & 98 \varepsilon^{\prime} 8 L 8 \end{aligned}$ | $\left\lvert\, \begin{aligned} & 981 ' z Z \\ & 9 L 8^{\prime} \mathrm{gqE} \end{aligned}\right.$ | $\overline{-}$ | $\begin{aligned} & 611^{\prime} 9 z \\ & 69 \varepsilon^{\prime} 998 \end{aligned}$ |  |  |  |
| $\begin{aligned} & \text { ZI } \\ & \text { II } \\ & 0 \mathbf{1} \\ & 6 \\ & 8 \end{aligned}$ |  | ซ90＇ 1 <br> L95 6 て62＇ปII 898＇8 8たて＇ 8 8ZL＇86I | $\begin{aligned} & 866^{\prime} 9 \\ & 8 L 6 \\ & 8 \varepsilon 1^{\prime} \ddagger \mathrm{I} \\ & \angle 98 \\ & \angle 29 \\ & 098^{\prime} 8 \mathrm{I} \end{aligned}$ |  | 881 ＇ 6 <br> 6LL＇9 <br> ${ }^{\text {LIZ }}$＇88 <br> 2L9＇98 <br> 991＇もII | 787＇ 9 69L＇L EL9＇ELI GOT＇L 790＇98 2L9＇9才 |  |
| 2 | 99I＇z9 | ILL＇09 |  | 4LI＇LZI | LLI＇tzI | － | 09\％＇01z |
| 9 |  | $\begin{aligned} & 690^{\prime} 92 \\ & 6 \neq 6^{\prime} 91 \\ & 962 \\ & 178^{\prime} \mathrm{I} \end{aligned}$ |  |  |  | $\begin{aligned} & 98 \\ & 9 \\ & 98 \\ & 0 ¢ 8 \\ & \hline \end{aligned}$ |  |
|  | L67＇698＇01 | $760^{\prime} 68 L^{\prime} 0 \mathrm{~L}$ | 291＇08I |  | 898＇9L0＇8 | 999،968 |  |
| $\dagger$ | Iモ\＆＇も68 | İ0＇108 | $98 z^{\text {＇06 }}$ | 9خ்＇669 | 9L0＇629 | 981＇tII | โ¢6＇L97＇T |
| $\boldsymbol{\varepsilon}$ | $\begin{aligned} & 998^{‘} 88 z \\ & 2666 \\ & 2 z 8^{\prime} 69 \\ & 986^{6}{ }^{2} \end{aligned}$ |  | $\begin{aligned} & 8 \& z \\ & 9 \\ & \varepsilon L \varepsilon^{\prime} z \\ & 9 L \end{aligned}$ | $\left\lvert\, \begin{aligned} & 9 z z^{\prime} 62 G \\ & 08 z^{\prime}{ }^{\prime} \\ & 060^{9} 9 \mathrm{I} \\ & 9 z 0^{\prime} \& \end{aligned}\right.$ |  | $\begin{aligned} & q L 8^{\prime} 9 \\ & Z I Z \\ & 0 \& \mathrm{~L} \\ & \mathrm{~L} \end{aligned}$ |  |
| I | $\begin{array}{\|} \ddagger \subseteq 66^{\prime} 9 z \\ \ddagger \& 9 \end{array}$ |  | $\underset{I}{\varepsilon}$ | $\begin{aligned} & 9 \angle I^{\prime} \text { 研 } \\ & 698 \end{aligned}$ | $\begin{aligned} & \mathrm{c} 68^{〔} \& \succ \\ & \mathrm{I} 98 \end{aligned}$ | $\begin{aligned} & 18 z \\ & 8 \end{aligned}$ | $\left.\right\|_{889^{\prime} \mathrm{I}} ^{06 z^{\prime} \mathrm{I}}$ |
|  | $\operatorname{siv}_{\text {soupuno }}$ |  | －шоряи！ рәт！̣й | $\begin{aligned} & \text { sowipuno } \\ & \text { IIV } \end{aligned}$ | －sว787S <br> рәт！̣и | －шордии！ рәт！${ }^{\prime}{ }_{\Omega}$ | $\underset{\text { IIV }}{\text { soupuno }}$ |
|  |  | ${ }^{9} 9161$ |  |  | －916I |  |  |
| －но0－916I－EL6I sıeas <br>  <br>  |  |  |  |  |  |  |  |
| VGVNVD HO SLYOdNI |  |  |  |  |  |  |  |
| 998 |  |  |  |  |  |  |  |

## TRADEAND COMMERCE

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.


## IMPORTSOF CANADA

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries. | United Kingdom. | United States. | $\left\lvert\, \begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}\right.$ | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ |  |
| 708,777 | 161 | 506,638 | 506,799 | 563 | 693,044 | 693,607 | 1 |
| 2,060,914 | 844. | 1,444,992 | 1,445,836 | 4,883 | 1,745,828 | 1,750,711 |  |
| 212,608 | 33,686 | 74,191 | 124,047 | 30,696 | 77,464 | 149,285 | 2 |
| 174,646 | 63,440 | 26,575 | 126,687 | 49,183 | 50,811 | 105,268 | 3 |
| 50,956 | 1. | 44,225 | 44,226 | 2 | 37,223 | 37,225 | 4 |
| 792,861 | 10 | 585,600 | 585,610 | 44 | 716,203 | 716,247 |  |
| 270,282 | - | 14.782 | 14,782 | - | 133,446 | 133,446 | 5 |
| 4,338,199 | - | 2,056,510 | 2,056,510, | - | 2,631,652 | 2,631,652 |  |
| 39,877 | 90 | 33,486 | 33,276 | - | 25,527 | 25,527 | 6 |
| 725, 169 | 1,735 | 551,155 | 552,890 | - | 581,710 | 581,710. |  |
| 824,059 | 55,955 | 500,616 | 622,326 | 7,199 | -11,112 | 718,311, | 7 |
| 192,322 | 11,024 | 110,368 | 137,491 | 1,356 | 204,468 | 205,824 |  |
| 498,908 | 10,247 | 93,383 | 103,630 | - | 78,582 | 78,588 | 8 |
| 115,899 | 2,267 | 22,400 | 24,667 | - | 17,815 | 17,818 |  |
| 417,035 | 19,349 | 180,018 | 203,687 | 9,102, | 277,881 | 289,826 | 9 |
| 6,581,485 | 34,385 | 3,506,052 | 3,560,855 | 10,502 | 4,429,729. | 4,443,077 |  |
| 4,561,997 | 2,909,540 | 1,460,905 | 4,388,060 | 1,418,006 | 2,573,476 | 4,023,090 | 10 |
| 522,957 | 29,625 | 154,620 | 305,233 | 20,588. | 172,063 | 283,434 | 11 |
| 668,336 | 14,117 | 519,618 | 536,439 | 8,047 | 457,183 | 465,614 | 12 |
| 7,205 | 21 | 8,247 | 8,322 | - | 4,698. | 4,698 | 13 |
| 3,555,145 | 838,211 | 1,158,956 | 2,000,791 | 236,341 | 1,358,757 |  | 14 |
| 909,886 | 188,459 | 390,473 | 580,430 | 48,416 | 490,299 | 538,809 |  |

## TRADEAND COMMERCE

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.


## IMPORTSOF CANADA

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for comsumption in the four fiscal years 1913-1916-con.


## TRADEAND COMMERCE

11.-Imports of Canada from the United Kingdom, the United States and All Ceuntries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. |
|  |  |  |  |  |  |  |
| $\begin{gathered} \text { Crapes. } \\ \text { Curtains and } \\ \text { shams...... } \\ \text { Drugs, dyes, } \\ \text { chemicals, } \\ \text { medicines.... } \end{gathered}$ |  | 10,274 | 114 | 12,239 | 8,803 | 475 |
|  |  | 571,668 | 93,021 | 738,875 | 429,441 | 102,849 |
|  |  | 3,272,134 | 8,986,840 | 17,028,932 | 3,191,567 | 8,405,061 |
| 4 | Duck for belting snd hose. | $3,272,502$ | 98,600 | 102,102 |  | 78,782 |
| 5 | Earthenware and chinaware.. | 1,932,418 | 584,359 | 3,265,180 | 1,873,599 | 571,312 |
| 6 | Elastic, round or flat. | 144,378 | 38,653 | 184,908 | 118,919 | 29,253 |
| 7 | Electric apparatus, motors, etc." | 1,180,445 | 7,161,612 | 8,579,944 | 945,527 | 7,056,427 |
| 8 | Electric light carbons and carbon points. | 3,921 | 40,535 | 71,067 | 5,397 | 39,333 |
| 10 | Embroideries, n.e.s. | 38,786 | 32,248 | 143,701 | 34,596 | 29,237 |
| 10 | Emery wheels and manufactures of emery, etc.. | 383 | 140,137 | 141,017 | 05 | 123,729 |
| 11 | Express parcels. | 1,618 | 2,408,736 | 2,410,484 | 2,830 | 2,099,134 |
| 1 | Fancy goods. | 1,956,911 | 1,100,632 | 5,000,874 | $1,788,248$ 44,336 | $\begin{array}{r}1,127,726 \\ 555,638 \\ \hline\end{array}$ |
| 13 | Fertilizers. | 59,310 | 480,379 | 540,664 | 44,336 | 555,638 154,443 |
| 14 | Fibreware.. | 1,815 | 141,025 | 143,274 | 4,832 4,844 | 154,443 16,105 |
|  | Fireworks. | 8,652 | 42,551 | 55,361 | 4,844 | 16,105 |
| 15 | Fish hooks, nets, seines, etc. | 680,726 | 707,247 | 1,403,430 | 631,764 | 685,119 |
| 17 | Flax, hemp, jute and mis. of.. | 3,235,002 | 264,170 | 3,791,642 | 2,753,258 | 203,067 |
| 18 | Furniture, wood, iron or other material | 262,407 | 2,753,568 | 3,177,085 | 266,787 | 2,660,071 |
| 19. | Fur and mfs. of. . <br> Glass and manufactures of - <br> Common and colourless window glass. ...sq. ft. | 445,317 | 269,505 | 793,051 | 439,540 | 215,209 |
|  |  |  |  |  |  |  |
| 20 |  |  | 10,130,199 | 55,912,478 | 13,946,781 | 10,336,026 |
|  |  | 438,927 | -350,353 | 1,481,086 | 461,623 | 417,417 |
| 21 | Plate glass, not bevelled, in sheets not exceeding 7 sq. ft.......sq. ft. § |  |  |  |  |  |
|  |  | $\begin{aligned} & 808,782 \\ & 124,425 \end{aligned}$ | $\begin{array}{r} 282,198 \\ 52,459 \end{array}$ | $\begin{array}{r} 2,047,881 \\ 351,778 \\ \hline \end{array}$ | $\begin{array}{r} 541,509 \\ 82,332 \\ \hline \end{array}$ | $\begin{array}{r} 187,625 \\ 37,755 \\ \hline \end{array}$ |

IMPORTS OF CANADA
11.--lmports of Canada from the United Kingdom, the Uniled States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries. | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdoma. | United States. | All Countries. |  |
| 11,612 | 7,435 | 325 | 8,434 | 9,668 | 567 | 11,520 | 1 |
| 594,841 | 283,067 | 74,399 | 389,272 | 219,535 | 67,904 | 305,277 | 2 |
| 15,326,612 | 2,594,359 | 8,892,280 | 14,122,776 | 2,655,085 | 13,244,909 | 17,518,124 | 3 |
| 78,782 | 2,790 | 71,635 | 74,425 | 2,483 | 57,244 | 59,727 | 4 |
| 3,131,105 | 1,133,332 | 396,845 | 1,940,765 | 950,944 | 297,276 | 1,476,753 | 5 |
| 148,249 | 113,341 | 19,983 | 134,306 | 91,449 | 34,963 | 126,627 | 6 |
| 8,404,501 | 712,463 | 4,821,114 | 5,693,512 | 242,666 | 4,229,989 | 4,483,070 | 7 |
| 88,844 | 1,032 | 36,112 | 44,368 | 67 | 49,802 | 51,719 | 8 |
| 121,174 | 11,521 | 16,689 | 48,317 | 9,443 | 27,134 | 49,013 | 9 |
| 124,353 | 798 | 85,020 | 86,027 | 307 | 169,299 | 169,607 | 10 |
| 2,103,138 | 1,836 | 1,822,758 | 1,825,184 | 1,057 | 1,725,578 | 1,726,650 | 11 |
| 4,879,431 | 1,243,082 | 1,077,857 | 3,175,566 | 915,431 | 1,578,024 | 2,885,501 | 12 |
| 605,215 | 51,042 | 646,864 | 715,336 | 26,223 | 1591,240 | 617,463 | 13 |
| 159,714 | 4,649 | 97,450 | 102,100 | 690 | 107,671 | 108,391 | 14 |
| 28,727 | 1,792 | 12,902 | 24,670 | 2,558 | 14,006 | 24,268 | 15 |
| 1,333,737 | 691,389 | 664,527 | 1,368,151 | 447,657 | 852,733 | 1,324,237 | 16 |
| 3,298,599 | 2,825,591 | 670,207 | 4,345,123 | 2,871,341 | 1,357,971. | 6,598,201 | 17 |
| $\begin{array}{r} 3,049,874 \\ 719,596 \end{array}$ | 109,391 219,084 | $\begin{array}{r}1,313,492 \\ 159,057 \\ \hline\end{array}$ | $1,506,756$ 401,889 | 32,170 122,904 | 699,859 161,376 | 778,387 284,625 | 18 |
| 47,028,123 | 7,593,930 | 20,284,118 | 38,444,324 | 371,634 | 17,751,575 | 18,123,209 | 20 |
| 1,400,211 | 315,914 | 303,864 | 946,182 | 34,133 | 729,126 | 805,706 | 21 |
| 248,516 | 59,279 | 68,115 | 191,567 | 7,253 | 163,489 | 178,107 |  |

TRADEAND COMMERCE
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fise al years 1913-1916--con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. |
| 1 | V. Manufactures--con. |  |  |  |  | $\begin{array}{r} 42,137 \\ \mathbf{9 , 5 5 8} \end{array}$ |
|  | Glass and manutactures of-con. |  |  |  |  |  |
|  | Plate glass, not bevelled, in sheets exceeding 7 sq. ft. each, and not exceeding 25 |  |  |  |  |  |
| 2 | Plate glasś, n.o.p........sq. ft. | $\begin{aligned} & 988,891 \\ & 182,265 \end{aligned}$ | 52,390 10,654 | $1,720,005$ 312,823 | 750,127 151,394 |  |
|  |  |  |  | $\begin{array}{r} 2,421,271 \\ 532,572 \end{array}$ | $\begin{array}{r} 1,016,034 \\ 224,805 \end{array}$ | $\begin{aligned} & 68,833 \\ & 14,709 \end{aligned}$ |
|  |  | 1,521,690 | $\begin{gathered} 75,038 \\ 17,209 \end{gathered}$ |  |  |  |
| 3 | Glass, other, and mis. of. Total. | 407,413 | 1,644,674 | 2,692,172 | 416,885 | 1,615,020 |
|  |  | 1,510,585 | 2,075,349 | 5,370,431 | 1,337,039 | 2,094,459 |
| 4 | Glove fasteners, metal eyelet hooks and eyelets, etc. Gloves and mitts | 13,017 | 264,303 | $\begin{array}{r} 304,515 \\ 2,793,606 \end{array}$ | $\begin{array}{r} 11,405 \\ 1,219,887 \end{array}$ | $\begin{aligned} & 184,562 \\ & 323,964 \end{aligned}$ |
| 5 |  | 1,165,697 | 400,785 |  |  |  |
| 6 | Gloves and mitts Gold, silver and mfs. of. | 637,573 | 460,035 | $1,177,778$ | 551,882 | 339,045 |
| 7 | Grease, axle.. $\quad \mathbf{1 6}$. | 49,971 | 4,968,898 | $\begin{array}{r} 5,020,612 \\ 240,331 \end{array}$ | $\begin{array}{r} 78,317 \\ 3,822 \end{array}$ | $\begin{array}{r} 4,143,435 \\ 202,108 \end{array}$ |
|  |  | 2,375 | 237,813 |  |  |  |
| 8 | Gunpowder and other explosives. | 415,862 | 790,311 | 1,244,091 | 394,975 | 665,003 |
| 9 | Guttapercha, India rubber and mafs of. | 1,904,363 | 2,716,240 | 4,792,125 | 1,995,107 | 2,505,727 |
| 10 | Gutta percha, crude rubber, etc. | $\begin{aligned} & 617,473 \\ & 370,486 \end{aligned}$ |  |  |  |  |
|  |  |  | $\begin{array}{r} 11,808,205 \\ 5,637,479 \end{array}$ | $\left.\begin{array}{r} 12,914,438 \\ 6,267,054 \end{array} \right\rvert\,$ | $\begin{array}{r}1,176,725 \\ \hline 44,393\end{array}$ | $\begin{aligned} & 9,728,524 \\ & 3,631,044 \end{aligned}$ |
| 11 | Hair and manufactures of. | $\begin{array}{r} 82,809 \\ 3,045,361 \end{array}$ | $\begin{array}{r} 118,547 \\ 1,911,510 \end{array}$ | $\begin{array}{r} 215,083 \\ 5,354,912 \end{array}$ | $\begin{array}{r} 71,173 \\ 2,514,829 \end{array}$ | 80,833 |
| 12 | Hats, caps and bonnets. |  |  |  |  | 1,890,573 |
| 13 | Hatters' bands (not cords) bindings, tips and sides, etc. | 59,732 | 76,454 | 148,076 | 51,044 | 68,454 |

IMPORTS OF CANADA
I1.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.


TRADEAND COMMERCE
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow{2}{*}{No.} \& \multirow{2}{*}{Principal articles by classes.} \& \multicolumn{3}{|c|}{1913.} \& \multicolumn{2}{|r|}{1914.} \\
\hline \& \& United Kingdom. \& United States. \& \[
\left\lvert\, \begin{gathered}
\text { All } \\
\text { Countries. }
\end{gathered}\right.
\] \& United Kingdom. \& United States. \\
\hline \multirow{3}{*}{1} \& V. Manufactures-con. \& \multirow{3}{*}{40,017} \& \multirow{3}{*}{117,097} \& \multirow{3}{*}{160,388} \& \multirow{3}{*}{41,748} \& \multirow{3}{*}{114,289} \\
\hline \& Ink. \$ \& \& \& \& \& \\
\hline \& Iron and steel and mfs. of- \& \& \& \& \& \\
\hline \& \multirow[t]{2}{*}{Agricultural Implements-} \& \multirow[b]{4}{*}{3
28
78} \& \multirow[b]{3}{*}{\[
\begin{array}{r}
7,629 \\
282,450
\end{array}
\]} \& \multirow[b]{3}{*}{\[
\begin{array}{r}
7,632 \\
282,478
\end{array}
\]} \& \multirow[b]{3}{*}{\(\stackrel{-}{-}\)} \& \multirow[b]{3}{*}{\[
\begin{array}{r}
\mathbf{5 , 0 5 5} \\
\mathbf{9 9}, 441
\end{array}
\]} \\
\hline \& \& \& \& \& \& \\
\hline 2 \& Drills, seed. no. \& \& \& \& \& \\
\hline \multirow[b]{2}{*}{4} \& Harrows. \({ }^{\text {a }}\) \& \& 176,776 \& 176,853 \& 280 \& 156,434 \\
\hline \& Harvesters, self-binding no. \& - \& 2,316
215,129 \& 2,316
215,129 \& - \& 3,770
336,675 \\
\hline 5 \& Ploughs.. * * \& 34 \& 1,371,149 \& 1,371,243 \& 79 \& 1,011,557 \\
\hline 6 \& All other and parts of \& 80,657 \& 2,315,837 \& 2,399,781 \& 73,002 \& 1,594,156 \\
\hline 7 \& \begin{tabular}{l}
Threshing \\
machine \\
separators. No. \\
\(\$\)
\end{tabular} \& 8,067 \& \(2,315,837\)

3,291

$2,175,811$ \& $$
\begin{array}{r}
2,399,781 \\
\\
3,298 \\
2,176,077
\end{array}
$$ \& 73,002 \& $1,594,156$

1,643
926,751 <br>

\hline \multirow[t]{2}{*}{8} \& \multirow[t]{2}{*}{Portable engines, with boilers, and traction eagines for farm purposes no.} \& 31 \& 2,175,811 \& $$
2,176,077
$$ \& $\cdots$ \& 1,128 <br>

\hline \& \& 56,739 \& 7,312,480 \& 7,369,219 \& 48,471 \& 2,293,649 <br>
\hline 9 \& Sewing machines no. \& 1,712. \& 17,763 \& 19,556 \& 1,771 \& 15,901 <br>

\hline \& \multirow[t]{3}{*}{| Typewriting ma- |
| :--- |
| chines. no. |} \& 27,729 \& \multirow[t]{2}{*}{400,646} \& 430,066 \& 26,204 \& \multirow[t]{3}{*}{\[

$$
\begin{array}{r}
12,144 \\
721,259
\end{array}
$$
\]} <br>

\hline \multirow[t]{2}{*}{10} \& \& 21 \& \& \multirow[t]{2}{*}{$$
\begin{array}{r}
18,146 \\
1,141,903
\end{array}
$$} \& \multirow[t]{2}{*}{\[

$$
\begin{array}{r}
43 \\
1,279
\end{array}
$$
\]} \& <br>

\hline \& \& 797 \& 1,140,638 \& \& \& <br>
\hline \multirow[t]{2}{*}{11} \& \multirow[t]{2}{*}{Engines,
line.
gaso

no.} \& 216 \& \multirow[t]{2}{*}{$$
\begin{array}{r}
26,966 \\
3,301,369
\end{array}
$$} \& \multirow[t]{2}{*}{\[

$$
\begin{array}{r}
27,255 \\
3,413,595
\end{array}
$$

\]} \& \multirow[t]{2}{*}{\[

$$
\begin{array}{r}
520 \\
110,617
\end{array}
$$

\]} \& \multirow[t]{2}{*}{\[

$$
\begin{array}{r}
19,569 \\
2,456,507
\end{array}
$$
\]} <br>

\hline \& \& 107,144 \& \& \& \& <br>

\hline \multirow[t]{2}{*}{12} \& Bar iron or steel rolled... ewt \& 252,063 \& \multirow[t]{2}{*}{$$
\begin{aligned}
& 2,439,355 \\
& 3,401,180
\end{aligned}
$$} \& \multirow[t]{2}{*}{\[

$$
\begin{aligned}
& 2,704,621 \\
& 3,916,390
\end{aligned}
$$

\]} \& \multirow[t]{2}{*}{\[

$$
\begin{aligned}
& 260,786 \\
& 506,994
\end{aligned}
$$

\]} \& \multirow[t]{2}{*}{\[

$$
\begin{aligned}
& 2,056,400 \\
& 3,093,901
\end{aligned}
$$
\]} <br>

\hline \& $\cdots$ \% \& 487,650 \& \& \& \& <br>

\hline 13 \& \multirow[t]{3}{*}{lron or steel billets, weighing not less than 60 lb . per lineal yard.} \& \& \multirow[b]{3}{*}{$$
\begin{aligned}
& 1,613,677 \\
& 1,590,000
\end{aligned}
$$} \& \multirow[b]{3}{*}{\[

$$
\begin{aligned}
& 1,657,017 \\
& 1,641,909
\end{aligned}
$$

\]} \& \multirow[b]{3}{*}{\[

$$
\begin{aligned}
& 64,976 \\
& 62,746
\end{aligned}
$$

\]} \& \multirow[b]{3}{*}{\[

$$
\begin{aligned}
& 565,113 \\
& 668,220
\end{aligned}
$$
\]} <br>

\hline \& \& 42,989 \& \& \& \& <br>
\hline \& \& 50,494 \& \& \& \& <br>

\hline \multirow[t]{2}{*}{14} \& \multirow[t]{2}{*}{Iron in pigs. ton} \& 54,861 \& \multirow[t]{2}{*}{$$
\begin{array}{r}
237,043 \\
2,988,119
\end{array}
$$} \& \multirow[t]{2}{*}{\[

$$
\begin{array}{r}
291,904 \\
3,814,217
\end{array}
$$

\]} \& \multirow[t]{2}{*}{\[

$$
\begin{array}{r}
22,100 \\
344,438
\end{array}
$$

\]} \& \multirow[t]{2}{*}{\[

$$
\begin{array}{r}
173,233 \\
2,341,407
\end{array}
$$
\]} <br>

\hline \& \& 826,098 \& \& \& \& <br>

\hline 15 \& 1ron and steel railway bars or rails. \& $$
\begin{array}{r}
689 \\
16,565 \\
\hline
\end{array}
$$ \& \[

$$
\begin{array}{r}
149,849 \\
3,851,288 \\
\hline
\end{array}
$$

\] \& \[

$$
\begin{array}{r}
150,538 \\
3,867,833 \\
\hline
\end{array}
$$

\] \& \[

$$
\begin{array}{r}
650 \\
18,655 \\
\hline
\end{array}
$$

\] \& \[

$$
\begin{array}{r}
178,321 \\
4,901,851 \\
\hline
\end{array}
$$
\] <br>

\hline
\end{tabular}

IMPORTS OF CANADA
11.-Imports of Canada from the United Kingdom, the United States and All Coantries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United <br> States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ |  |
| 158,739 | 33,776 | 94,747 | 131,987 | 30,251 | 92,564 | 123,943 | 1 |
| 5,061 | 2. | 5,112 | 5,114 | - | 7,930 | 7,930 | 2 |
| 99,497 | 109 | 63,771 | 63,880 | - | 68,814 | 68,814 |  |
| 156,869 | 94 | 67,174 | 67,268 | 201 | 68,661 | 68,862 | 3 |
| 3,770 | - | 1,635 177158 | 1,635 177158 | - | 3,162 | 3,162 | 4 |
| 336,675 | 32 | 177,158 | 177,158 | 025 | 343,245 | 343,245 |  |
| 1,011,704 | 32 | 497,787 | 497,881 | 925 | 597,720 | 599,010 | 5 |
| 1,670,948 | 60,617 | 727,865 | 789,411 | 14,556 | 578,201 | 593,024 | 6 |
| $\begin{array}{r} 1,644 \\ 926,791 \end{array}$ | 2,706 | 597 302,495 | 599 305,201 | - | 1,002 624,554 | 1,003 624,641 | 7 |
| 1,160 | 13 | 464 | 477 | - | 838 | 838 | 8 |
| 2,342,120 | 21,345 | 691,120 | 712,465 | 1,378 | 1,166,967 | 1,168,345 |  |
| 17,846 | 1,099 | 14,766 | 15,942 | 1,208 | 14,788 | 15,997 | 3 |
| 336,685 | 16,686 | 301,054 | 319,344 | 20,140 | 307,998 | 328,204 |  |
| 12,196 | [35 | -7,223 | 7,269 | ${ }_{116}$ | 7,098 2775 | 7,109 | 10 |
| 722,919 | 1,510 | 401,046 | 402,646 | 116 | 377,024 | 377,282 |  |
| 20,100 | 364 | 14,292 | 14,668 | 205 | 28,520 | 28,732 | 11 |
| 2,570,138 | 85,180 | 1,873,486 | 2,002,685 | 31,505 | 3,376,288 | 3,408,649 |  |
| 2,437,569 | 83,369 | 728,249 | 853,881 | 19,607 | 1,388,315 | 1,411,847 | 12 |
| 3,774,986 | 149,450 | 1,020,028 | 1,223,381 | 51,795 | 2,502,357 | 2,565,614 |  |
| 764,307 | 1,117 | 198,700 | 230,104 | 251 | 714,868 | 715,119 | 13 |
| 855,851 | 9,269 | 189,925 | 226,114 | 548 | 845,552 | 846,100 |  |
| 195,333 | 8,533. | 50,403 | 58,936 | 588 | 50,204 | 50,792 | 14 |
| 2,685,845 | 105,842 | 620,422 | 726,264 | 9,695 | 731,583 | 741,278 |  |
| $\begin{array}{r} 179,056 \\ 4,922,795 \\ \hline \end{array}$ | $\begin{array}{r} 148 \\ \hline \\ \hline \end{array}$ | $\begin{array}{r} 27,555 \\ 704,468 \\ \hline \end{array}$ | $\begin{array}{r} 27,703 \\ 708,805 \end{array}$ | - | $\begin{array}{r} 10,747 \\ 308,188 \\ \hline \end{array}$ | $\begin{array}{r} 10,747 \\ 308,188 \end{array}$ | 15 |

## TRADEAND COMMERCE

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.


IMPORTS OF CANADA
11.--Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | All | United Kingdom. | United States. | Countries. |  |
|  |  |  |  |  | \% |  |  |
| $\begin{aligned} & 1,951,640 \\ & 2,860,109 \end{aligned}$ | $\begin{aligned} & 24,499 \\ & 34,891 \end{aligned}$ | $\begin{aligned} & 507,404 \\ & 677,877 \end{aligned}$ | $\begin{aligned} & 542,453 \\ & 723,221 \end{aligned}$ | 683 1,411 | $\begin{array}{r} 788,423 \\ 1,190,283 \end{array}$ | $\begin{array}{r} 789,106 \\ 1,191,694 \end{array}$ | 1 |
| 4,256,441 | 36,882 | 1,233,655 | 1,299,625 | - | 1,331,428 | '1,331,428 | 2 |
| 5,964,143 | 51,982 | 1,576,769 | 1,664,337 | - | 1,990,737 | 1,990,737 |  |
| $\begin{array}{r} 807,322 \\ 1,269,495 \end{array}$ | $\begin{array}{r} 9,291 \\ 14,095 \end{array}$ | $\begin{aligned} & 274,183 \\ & 407,197 \end{aligned}$ | $\begin{aligned} & 286,989 \\ & 425,315 \end{aligned}$ | $\begin{aligned} & 1,621 \\ & 6,285 \end{aligned}$ | 343,278 558,518 | 344,899 564,803 | 3 |
| 782,549 | 664 | 577,882 | 581,792 | 56. | 930,189 | 930,245 | 4 |
| 1,898,369 | 1,350 | 1,243,333 | 1,250,021 | 223 | 2,095,689 | 2,095,912 |  |
| 337,279 | - | 301.341 | 301,451 | - | 347,260 | 347,260 | 5 |
| 2,020,723 | - | 1,885,782 | 1,886,340 | - | 1,904, 802 | 1,904, $\mathbf{0} 02$ | 6 |
| 2,746,909 | - | 2,103,595 | 2,104,205 | - | 2,367,166 | 2,367,166 |  |
| 401,399 | 41,016 | 291,959 | 408,702 | 14,456 | 258,276 | 304,403 | 7 |
| 273,951 | 942 | 193,607 | 198,116 | - | 233,166 | 236,194 | 8 |
| 1,396,123 | 54,850 | 1,163,511 | 1,297,900 | - | 1,384,784 | 1,384,784 | 9 |
| 411,833 | 2,231 | 102,374 | 104,664 | 81 | 117,084 | 117,165 | 10 |
| 660,510 | 3,484 | 143,335 | 146,915 | 188 | 184,536 | 184,724 |  |

## TRADE AND COMMERCE.

11.-Imperts of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.


IMPORTS OF CANADA
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries. | United Kingdom. | United States. | $\underset{\text { All }}{\text { Countries. }}$ | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ |  |
| $\begin{aligned} & 1,096,647 \\ & 1,613,730 \end{aligned}$ | $\begin{aligned} & 11,717 \\ & 14,882 \end{aligned}$ | $\begin{aligned} & 431,299 \\ & 638,756 \end{aligned}$ | $\begin{aligned} & 444,629 \\ & 655,309 \end{aligned}$ | - | $\begin{aligned} & 547,128 \\ & 907,793 \end{aligned}$ | $\begin{aligned} & 547,128 \\ & 907,793 \end{aligned}$ | 1 |
| $\begin{aligned} & 319,074 \\ & 771,104 \end{aligned}$ | $\begin{aligned} & 145,200 \\ & 318,939 \end{aligned}$ | - | $\begin{aligned} & 145,200 \\ & 318,939 \end{aligned}$ | $\begin{aligned} & 29,661 \\ & 85,344 \end{aligned}$ | - | $\begin{array}{r} 29,661 \\ 85,344 \end{array}$ | 2 |
| $\begin{array}{r} 675,166 \\ 2,054,438 \end{array}$ | $\begin{array}{r} 403,704 \\ 1,197,223 \end{array}$ | - | $\begin{array}{r} 403,704 \\ 1,197,223 \end{array}$ | $\begin{aligned} & 130,831 \\ & 416,672 \end{aligned}$ | - | $\begin{aligned} & 130,831 \\ & 416,672 \end{aligned}$ | 3 |
| $\begin{aligned} & 235,280 \\ & 504,266 \end{aligned}$ | $\begin{aligned} & 15 \\ & 41 \end{aligned}$ | $\begin{aligned} & 325,375 \\ & 627,162 \end{aligned}$ | $\begin{aligned} & 325,390 \\ & 627,203 \end{aligned}$ | - | $\begin{array}{r} 389,342 \\ 1,020,639 \end{array}$ | $\begin{array}{r} 389,342 \\ 1,020,639 \end{array}$ | 4 |
| 719,205 | 225 | 745,371 | 758,258 | - | 705,931 | 705,931 | 5 |
| 1,308,802 | 756 | 1,281,757 | 1,306,942 | ${ }^{-}$ | 1,636,960 | 1,636,960 |  |
| 67,274,514 | 5,165,931 | 34,432,361 | 40,766,894 | 3,401,747 | 41,977,744 | 45,386,678 | 6 |
| 114,724,575, | 7,358,949 | 53,379,322 | 62,285,424 | 4,057,185 | 69,385,520 | 73,496,836 |  |
| 156,987 | 29,278 | 12,521 | 82,973 | 44,245 | 56.689 | 110,673 | 7 |
| 6,424,420 | 4,464,082 | 106,277 | 4,640,128 | 2,098,761 | 74,914 | 2,211,781 | 8 |
| 580,490 | 377,261 | 16,715 | 402,145 | 171,980 | 9,735 | 208,647 |  |
| 1,755,131 | 196,658 | 590,880 | 898,076 | 113,540 | 560,570 | 689,664 | - |
| 20,794 | 4,615 | 15,308 | 20,529 | 3,720 | 10,861 | 15,136 | 10 |
| 79,890 | 21,532 | 44,477 | 66,978 | 18,985 | 38,857 | 59,553 |  |
| 46,697,347 | 4,469,668 | 1,810,611 | 17,451,582 |  |  |  | 11 |
| 2,746,493 | 333,950 | 95,466 | 963,025 | 2,752,541 | 1,912,509 | 6,558,250 |  |
| $\begin{array}{r} 29,510,507 \\ 2,092,703 \end{array}$ | $\begin{array}{r} 2,899,030 \\ 276,490 \end{array}$ | $\begin{array}{r} 14,810 \\ 899 \end{array}$ | $\begin{array}{r} 6,383,87 \mathrm{~g} \\ 468,011 \end{array}$ | 228,597 | 114,000 | 430,757 | 12 |

## TRADEAND COMMERCE

11.-Imperts of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.
 ${ }^{1} \mathrm{Bbi}$.

IMPORTS OF CANADA
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. | All Countries. |  |
| 2,717,594 | 1,732,700 | 276,038 | 2,172,095 | 1,021,759 | 1,725,839 | 3,015,453 | 1 |
| 283,736 | 161,167 | 25,793 | 205,128 | 102,940 | 166,428 | 307,998 |  |
| 709,591 | 156,853 | 605,543 | 797,070 | 97,110 | 2,610,627 | 2,734,159 | 2 |
| 271,867 | 85,142 | 8,844 | 93,986 | 114,502 | 10,534 | 125,036 | 3 |
| 615,102 | 120,834 | 870,157 | 996,016 | 127,584 | 1,083,487 | 1,213,812 | 4 |
| 679,106 | 19,225 | 517,647 | 541,582 | 4,398 | 755,855 | 760,253 | 5 |
| 486,795 | 99,526 | 291,076 | 390,900 | 57,777 | 237,892 | 296,171 | 6 |
| 4,229,563 | 491,523 | 2,900,134 | 3,400,657 | 215,538 | 1,902,796 | 2,120,697 | 7 |
| 173,460 | 47,535 | 93,076 | 140,857 | 18,368 | 116,380 | 135,544 | 8 |
| 1,998,283 | 322,066 | 1,161,927 | 1,494,824 | 274,970 | 1,584,922 | 1,862,048 | 9 |
| 8,454,176 | 1,185,851 | 5,842,861 | 7,058,912 | 813,137 | 5,691,866 | 6,513,561 |  |
| 802,812 | 332 | 594,017 | 594,364 | 25 | 456,872 | 456,897 | 10 |
| 243,700 | 145 | 185,443 | 185,592 | 6 | 110,628 | 110,634 |  |
| 127,817 | 44,775 | 123,615 | 174,217 | 17,019 | 58,873 | 79,129 | 11 |
| 177,430 | 62,734 | 127,972 | 195,066 | 20,814 | 61,730 | 85, 163 |  |
| 47,407 | 21,978 | 14,032 | 37,175 | 15,663. | 29,215 | 48,878 | 12 |
| 1,214,428 | 42,948. | 1,251,668 | 1,305,571 | 39,402 | 1,138,987 | 1,184,696 | 13 |
| 64,665 | 16,087 | 61,327 | 78,095 | 10,945 | 49,641 | 60,586 | 14 |
| 177,885 | 12,015 | 100,277 | 124,519 | 3,167 | 34,934 | 38,833 | 15 |
| 7,694 | 340 | 4,165 | 4,640 | 17 | 2,527 | 2,583. | 16 |
| 21,618 | 184 | 324 | 530 | 8 | 994 | 1,077 | 17 |

## TRADEAND COMMERCE

11.-Imports of Canada from the United Kingdom, the United States and All Countries In quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.


IMPORTS OF CANADA
11.--Imports of Canada from the United Kingdom, the United States and Alt Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916--con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. | All Countries. |  |
| 6,671,323 | 747,141 | 3,380,920 | 4,515,354 | 401,735 | 3,855,215 | 4,455,583 | 1 |
| 579,196 | 42,845 | 251,856 | 299,537 | 49,666 | 219,767 | 269,467 | 2 |
| 34,306 | 3,978 | 31,815 | 35,833 | 3,352 | 25,055 | 28,468 | 3 |
| 2,038,559 | 74,166 | 1,167,962 | 1,358,513 | 90,204 | 1,339,447 | 1,477,433 | 4 |
| 224,863 | 169,153 | 41,564 | 211,542 | 158,605 | 44,871 | 203,818 | 5 |
| 1,297,399 | 82,137 | 1,339,730. | 1,425,848 | 57,963 | 1,434,433 | 1,499,009 | 6 |
| 1,072,066 | 1,033,504 | 278,376 | 1,312,885 | 2,334,887 | 253,062 | 2,587,949 | 7 |
| 94,543 | 5,851 | 239,613 | 255,374 | 4,759 | 111,752 | 125,279 | 8 |
| 138,224 | 10,554 | 309,192 | 331,639 | 11,132 | 158,824 | 180,512 |  |
| 393,862 | 145,268 | 178,736 | 411,797 | 309,332 | 213,316 | 615,933 | 9 |
| 365,796 | 127,559 | 161,338 | 353,285 | 266,312 | 173,476 | 489,966 |  |
| 1,331,652 | 128,389 | 752,263 | 971,069 | 95,832 | 786,898 | 967,165 | 10 |
| 2,314,378 | 955,172 | 333,718 | 1,292,820 | 573,089 | 501,773 | 1,075,735 | 11 |
| 1,226,157 | 215,971 | 681,149 | 968,120 | 99,523 | 517,361 | 632,990 | 12 |
| 3,144,972 | 1,182,069 | 438,869 | 2,123,533 | 904,129 | 413,972 | 1,620,884 | 13 |
| 1,673,027 | 302,690 | 759,224 | 1,175,319 | 224,003 | 1,322,075 | 1,570,809 | 14 |
| 4,086,329 | 202,810 | 2,692,256 | 2,924,855 | 235,697 | 2,254,918 | 2,4¢3,510 | 15 |
| 436,244 | 32,307 | 226,000 | 264,242 | 31,158 | 175,233 | 207,948 |  |
| 19,366,757 | 3,177,638 | 6,127,746 | 9,380,068 | 1,465,005 | 3,056,820 | 4,618,280 | 16 |
| 815,990 | 169,472 | 284,564 | 458,010 | 83,712 | 172,915 | 260,805 |  |
| 313,329 | 407 | 317,349 | 317,756 | 678 | 188,084 | 188,712 | 17 |
| 6,980,626 | 416,601 | 6,209,612 | 7,744,278 | 55,510 | 4,614,949 | 4,772,764 | 18 |
| 214,498 | 22,346 | 130,374 | 192,770 | 2,990 | 134,509 | 141,110 |  |
| 6,062,772 | 1,028,477 | 3,023,320 | 4,478,756 | 723,618 | 3,061,849 | 3,923,626 | 19 |
| 8,042,833 | 1,253,279 | 3,981,607 | 5,711,534 | 842,156 | 3,732,540 | 4,722,201 |  |

TRADE AND COMMERCE
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.


IMPORTS OF CANADA
11.-Imports of Canada from the United Kingdom, the United States and All Conntries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. | All Countries. |  |
| 360,218 | 33,756 | 184,859 | 261,548 | 17,925 | 246,724 | 265,608 | 1 |
| 213,954 | 62,374 | 66,983 | 132,956 | 54,686 | 75,341 | 130,363 | 2 |
| 539,491 | 40,896 | 345,585 | 449,578 | 33,311 | 343,067 | 448,329 | 3 |
| 62,364 | 41,830 | 13,509 | 55,592 | 20,579 | 13,137 | 33,716 | 4 |
| 169,157 | 21,448 | 84,072 | 110,853 | 12,965 | 78,165 | 92,966 | 5 |
| 2,646,790 | 14,264 | 2,920,562 | 2,937,062 | 23,835 | 2,733,618 | 2,757,453 | 6 |
| 113,812 | 1,041 | 122,633 | 124,065 | 2,882 | 118,223 | 121,105 |  |
| 261,656 | 88,824 | 136,514 | 292,685 | 73,151 | 215,180 | 347,008 | 7 |
| 358,206 | 1,866 | 129,439 | 132,112 | 1,141 | 47,810 | 48,980 | 8 |
| 138,231 | 1,620 | 46,488 | 48,602 | 1,083 | 16,185 | 17,288 |  |
| 67,470 | 9,324 | 77,701 | 88,039 | 5,832 | 46,882 | 52,714 | 9 |
| 665,039 | 61,252 | 246,219, | 370,375 | 27,577 | 304,500 | 344,380 | 10 |
| 229,517 | 98,501 | 74,975 | 175,441 | 61,156 | 74,746 | 137,042 | 11 |
| 160 |  |  | 250 |  | 163 | 563 | 12 |
| - ${ }^{346}$ |  |  | 4782 |  | 230 | 814 |  |
| 1,569,506 | 310,01S | 1,109,014 | 1,419,934 | 255,093 | 1,004,385 | 1,259,888 | 13 |
| 346,653 | 83,195 | 36,542 | 167,544 | 53,771 | 50,254 | 128,680 | 14 |
| 716,882 | 97,440 | 421,726 | 540,922 | 68,724 | 416,559 | 510,472 | 15 |
| 1,423,458 | 141,791 | 1,049,104 | 1,244,469 | 92,360 | 1,207,326 | 1,333,260 |  |
| 67,304 | 19,21? | 27,217 | 46,538 | 21,295 | 12,804 | 34,110 | 16 |
| 279,357 | 11,373 | 240,557 | 251,941 | 7,021 | 263,605 | 270,626 | 17 |
| 572,062 | 27,848 | 416,710 | 444,601 | 26,178 | 455,227 | 481,405 |  |
| 1,820,037 | 670,057 | 181,104 | 1,761,857 | 602,051 | 242,433 | 1,447,657 | 18 |
| 172,427 | 7,468 | 118,605 | 126,170 | 4,754 | 107,756 | 175,512 | 19 |
| 367,618 | 98,288 | 99,877 | 311,146 | 68,329 | 73,121 | 250,534 | 20 |
| 324,214 | 130,449 | 106,031 | 276,570 | 91,279 | 64,794 | 196,137 |  |
| 1,001,764 | - | 661,213 | 707,446 | 970 | 217,705 | 249,065 | 21 |
| 172,007 | 25,399 | 84,949 | 113,874 | 13,677 | 71,786 | 85,781 | 22 |
| 9,250,696 | 2,539,965 | 1,300,802 | 7,684,180 | 1,936,253 | 2,507,572 | 8,296,054 | 23 |
| 236,038 | 15,273 | 169,169 | 188,080 | 583 | 105,228 | 105,877 | 24 |

## TRADEAND COMMERCE

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United <br> States. | All | United Kingdom. | United States. |
| V. Manufactures-con. |  |  |  |  |  |  |
| 1 | SoapCommon or laundry$\mathrm{lb} \text {. }$ |  |  |  |  |  |
|  |  | 369,504 | 6,514,381 | 6,910,305 | 265,022 | 6,805,057 |
|  |  | 21,503 | 362,933 | 386,190 | 15,134 | 367,001 |
| 2 | Castile... | 188,629 | 68,440 | 2,889,836 | 327,525 | 31,867 |
|  |  | 11,066 | 7,075 | 175,629 | 19,094 | 4,058 |
| 34 | Toilet. Other soap, powders, etc. | 75,033 | 325,776 | 415,563 | 64,484 | 323,823 |
|  |  | 35,939 | 316,840 | 355,545 | 44,606 | 312,017 |
|  | Total | 143,541 | 1,012,624 | 1,332,927 | 143,318 | 1,006,899 |
| 5 | Spectacles, eyeglasses, frames, ete | 2,217 | 125,228 | 131,243 | 4,557. | 116,985 |
| 6 | Spieen. lb. | 1,297,792 | 900,126 | 4,096,620 | 1,117,176 | 701,734 |
|  | Spirits- | 44,307 | 90,139 | 378,568 | 127,964 | 84,414 |
| 7 | Brandy, including artificial brandy, etc.. gal. |  |  |  |  |  |
|  |  | $\begin{array}{r}8,762 \\ 18,328 \\ \hline\end{array}$ | 794 1,889 | $\begin{array}{r} 565,555 \\ 1,140,290 \end{array}$ | 9,353 23,963 | 1,651 |
| 8 | Gin of all kinds gal. | 170,921 | 867 | 1,156,893 | 184,331 | 281 |
|  | \$ | 222,987 | 1,383 | 828,473 | 239,765 | 534 |
| 9 | Rum. | 75,331 | 7,009 | 222,841 | 65,225 | 7,285 |
|  | , | 48,604 | 2,710 | 122,448 | 42,730 | 2,596 |
| 10 | Whiskey gal | 1,450, 231 | 17,875 | 1,469,148 | 1,525,166 | 24,473 |
|  | Spirits, other ${ }^{\text {\% }}$ | $2,639,691$ 25,950 | 54,751 | 2,696,139 | 2,867,978 | 72,079 14,780 |
| 11 | Spirits, other gal. | 80,587 | 140,476 | 629,555 | 104,830 | 118,434 |
|  | Total..... gal. | 1,731,195 | 46,144 | 3,628,021 | 1,814,036 | 48,470 |
|  |  | 3,010,197 | 201,209 | 5,416,905 | 3,279,266 | 198,028 |
| 12 | Starch, ete | 600,729 | 1,877,155 | 2,841,792 | 598,459 | 1,816,822 |
|  |  | 27,684 | 71,250 | 108,206 | 26,439 | 68,952 |
| 13 | Sockinettes for manufacture of rubber boots. | 44,695 | 78,575 | 123,270 | 26,804 | 43,670 |
| 14 | Stone, mfs. of. | 187,294 | 726,037 | 917,791 | 210,337 | 869,879 |
| 15 | Straw, manufactures of | 3,030 | 20,873 | 122,132 | 1,513 | 21,340 |
| 16 | Sugar and syrups. lb. | 14,597,352 | 28,797,360 | 640,197,946 | 5,856,959 | 17,820,672 |
|  | \% | 537,544 | 801,336 | 17,392,146 | 171,483 | 388,249 |
| 17 | Candy and confectionery. . | 7,280,853 | 2,756,476 | 10,785,514 | -- |  |
|  |  | 1,064,070 | 2,756,783 | 1,541,485 | 690,769 | 304,806 |
| 18 | $\begin{array}{\|l\|} \hline \begin{array}{l} \text { Glucose and sac- } \\ \text { charine. } \end{array} \\ \hline \end{array}$ | 180,191 | 7,571,618 | 7,773,437 | 38,628 | 4,456,623 |
|  |  | 6,507 | 176,212 | 183,343 | 1,914 | 102,845 |

IMPORTS OF CANADA
11．－Imports of Canada from the United Kingdom，the United States and All Countries
in quantities and values by classes entered for consumption in the four fiscal

|  |  |  | \＃ |  | 2080 | $t$ ¢ $\quad \rightarrow$ |  | 1 | $\underset{y}{\omega}$ | $109$ | E | 00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\dot{1}}{\underset{\sim}{0}}$ |  |  | $$ | 困 |  |  <br>  <br> 心氏 नiت～ |  |  |  | $\begin{aligned} & 880 \\ & 1080 \\ & 180 \\ & 088 \\ & 088 \\ & 88 \end{aligned}$ | $\begin{aligned} & 980 \\ & 084 \\ & 50 \\ & 000 \\ & 15 \end{aligned}$ |  |
|  |  |  | $\begin{aligned} & 8 \\ & 8 \\ & \text { N } \\ & \text { N } \end{aligned}$ |  |  |  | $\begin{aligned} & 68 \\ & 68 \\ & 068 \end{aligned}$ | $\begin{aligned} & \text { Fi } \\ & \text { rin } \\ & 60 \\ & 8 \infty \\ & 6 \end{aligned}$ | $\begin{aligned} & 600 \\ & 0_{0}=1 \\ & 00 \end{aligned}$ |  |  | $\begin{aligned} & \text { W } \\ & 08 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |
|  |  |  | $\begin{aligned} & 9 \\ & 48 \\ & 6 \\ & 4 \end{aligned}$ | $\begin{aligned} & \text { N } \\ & \stackrel{3}{6} \\ & \sqrt{6} \end{aligned}$ |  | 品 <br>  <br>  |  |  | $8$ |  |  | $\begin{aligned} & \oint_{1}^{\infty} \\ & \text { 玉 } \end{aligned}$ |
| $\begin{aligned} & \text { é } \\ & \stackrel{y}{7} \end{aligned}$ | $\begin{array}{r} \text { 鲶 } \\ \text { 泉 } \\ \text { 易 } \end{array}$ |  |  | $\begin{aligned} & 5 \\ & 8 \\ & 8 \\ & 8 \\ & 8 \end{aligned}$ |  |  |  |  | $\begin{aligned} & 80 \\ & 01 \\ & 00 \\ & 0 \end{aligned}$ |  | $1 \text { E゙ }$ |  |
|  |  |  | $\begin{aligned} & 5 \\ & 5 \\ & 5 \end{aligned}$ | 10 6 6 0 0 0 | $\begin{aligned} & M 88 \\ & N 6 \% \\ & 085 \\ & 080 \end{aligned}$ |  |  | $\begin{aligned} & 98 \\ & 68 \\ & 06 \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { W } \\ & \text { rin } \\ & \text { N } \end{aligned}$ |  | $1 \frac{8}{8}$ | $\begin{aligned} & \text { OO } \\ & 00 \\ & \infty \\ & 0 \\ & 0-1 \end{aligned}$ |
|  |  |  | $\begin{aligned} & 5 \\ & 5 \end{aligned}$ |  |  |  <br>  <br>  |  | $\begin{aligned} & 5 E \\ & 065 \\ & 50 \end{aligned}$ | 5 |  | $1 \text { 等 }$ |  |
|  |  |  | $\begin{aligned} & \frac{8}{\infty} \\ & \substack{n \\ n \\ n \\ n} \end{aligned}$ |  |  |  |  |  | $\begin{gathered} \text { W9 } \\ \text { His } \\ \text { No } \end{gathered}$ |  |  |  |

## TRADEAND COMMERCE

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. |
| V. Manufactures-con. |  |  |  |  |  |  |
| 1 | Molasses... gal. | 63,653 | 525,413 | 6,248,818 | 67,500 | 470,209 |
|  |  | 40,992 | 96,663 | 1,471,795 | 44,645 | 95,753 |
| 2 | Surgical and dental instruments." | 40,156 | 378,659 | 455,678 | 48,672 | 435,330 |
| 4 | Tape lines. | 3,976 | 5,072 | 11,674 | 6,572 | 6,860 |
|  | Teeth, artificial. | 15,009 | 150,431 | 165,578 | 20,089 | 162,636 |
|  | Tin and mis. ofTin in blocks, |  |  |  |  |  |
|  | pigs and bars ewt. | 21,135 | 22,778 | 51,319 | 17,524 | 20,237 |
|  | Ti \$ | 983,942 | 1,023,280 | 2,286,142 | 728,619 | 886,014 |
| 6 | Tin plates and sheets. cwt. | 160,921 | 1,130,329 | 1,291,428 | 204,017 | 853,517 |
|  | sheets. ${ }^{\text {a }}$. | 582,610 | 3,594,554 | 4,178,323 | 684,947 | 2,859,061 |
| 7 | Tin foil. $\quad \mathbf{l b}$. | 12,204 | 1,208,260 | 1,260,908 | 7,511 | 1,102,668 |
|  |  | 4,584 | 170,265 | 194,206 | 3,238 | 165,475 |
| 8 | Tinware, and all otber mfs. of | 126,641 | 439,749 | 575,595 | 133,971 | 511,578 |
|  | Total . | 1,697,777 | 5,227,848 | 7,234,266 | 1,550,775 | 4,402,128 |
| Tobacco and mfs. of - |  |  |  |  |  |  |
| 9. | Cigarettes. lb. | 51,034 | 4,497 | 75,555 | 58,670 | 2,977 |
| 10 |  | 117,728 | 13,667 | 178,644 | 132,118 | 10,860 |
|  | Cigars. lb. | 2,239 | 17,564 | 167,326 | 1,297 4,522 | 12,960 57,718 |
| 11 | Tobacco, cut.. lb. | 489,807 | 297,590 | 823,727 | 467,904 | 335,151 |
|  | Thers | 370,803 | 174,802 | 556,064 | 556,238 | 202,740 |
| 12] | Other and mfs. of lb. | 74,572 | 223,331 | 299,691 | 75,489 | 159,865 |
|  | d | 27,936 | 100,654 | 129,270 | 64,837 | 76,270 |
|  | Total.... lb. | 617,652 | 542,982 | 1,366,299 | 603,360 | 510,953 |
|  | \$ | 524,479 | 364,411 | 1,563,617 | 757,715 | 347,588 |
|  |  |  |  |  |  |  |
|  | Tobacco pipes... ${ }^{\text {Trawls and trawl. }}$ | 479,157 | 99,147 | 1,015,890 | 394,741 | ,607 |
| $14$ | ing spoons.... a | 32,734 | 25,052 | 57,826 | 32,664 | 23,992 |
| 15. | Trunks and valises, bat boxes, etc. | 26,233 | 124, 053 | 154,827 | 31,757 | 113,590 |
| 16 | Turpentine, spirits of....... .. gal. |  |  | 1,147,786 | 62,008 | 970,479 |
|  | of........... gal. | 3,038 | 1,142, 57243 | 1,575,981 | 24,609 | 454,670 |
|  | Twine, mis. of... | 14,371 | 47,269 | 61,995 | 34,185 | 42,180 |
|  | Umbrellas, parasols and sunshades. | 98,333 | $25,927$ | 127,208 | 73,840 | 18,776 |
| 19 | Unenumerated... | 81,028 | 1,001,008 | 1,154,196 | 114,126 | 643,615 |



## TRADEAND COMMERCE

11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.


IMPORTS OF CANADA
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916--con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | All Countries. | United Kingdom. | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ |  |
| 90,573 | 17,671 | 46,830 | 64,736 | 12,636 | 41,145 | 53,985 | 1 |
| 167,326 | 37,880 | 86,942 | 125,364 | 28,660 | 87,408 | 116,621 |  |
| 215,316 | 141,960 | 29,307 | 181,332 | 96,387 | 36,383 | 143,660 | 2 |
| 83,001 | 58,240 | 5,208 | 66,137 | 35,532 | 4,450 | 42,792 |  |
| 1,574,261 | 96,059 | 533,457 | 876,179 | 68,787 | 690,373 | 1,067,568 | 3 |
| 266,113 | 29,845 | 168,829 | 195,813 | 23,644 | 215,693 | 241,310 | 4 |
| 35,038 | 18,540 | 146,888 | 166,895 | 14,067 | 189,559 | 203,956 | 5 |
| 26,010 | 4,277 | 21,502 | 25,803 | 4,105 | 16,364 | 20,531 | 6 |
| 92,192 | 33,342 | 20,132 | 53,532 | 21,837 | 18,550 | 40,387 | 7 |
| 928,255 | 19,492 | 45,627 | 738,345 | 13,632 | 30,460 | 493,459 | 8 |
| 809,475, | 33,316 | 24,121 | 632,275 | 23,186 | 16,291 | 405,342 |  |
| 85,240 | 1,025 | 149 | 32,288 | 198 | 24 | 9,118 | 9 |
| 762,293 | 13,847 | 900 | 363,409 | 2,288 | 255 | 96,724 |  |
| 4,042,386 | 127,814. | 2,384,365 | 2,795,592 | 92,542 | 1,897,423 | 2,097,203 | 10 |
| 2,959,503 | 1,587,875 | 143,182 | 1,844,362 | 1,159,620 | 302,357 | 1,465,069 | 11 |
| 1,967,706 | 1,394,885 | 161,815 | 1,658,163 | 1,130,899 | 307,694 | 1,442,385 |  |
| 1,564,828 | 1,197,229 | 16,136 | 1,250,697 | 972,543 | 109,393 | 1,082,815 | 12 |
| 1,317,921 | 976,629 | 13,090 | 1,019,014 | 855,006 | 90,428 | 946,882 |  |
| 2,135,706 | 1,601,413 | 100,428 | 1,739,971 | 1,509,810 | 153,081 | 1,668,489 | 13 |
| 1,274,755 | 831,449 | 169,424 | 1,017,980 | 891,354 | 55,947 | 951,349 |  |
| 1,265,261 | 422,737 | 52,999 | 510,439 | 314,675 | 96,020 | 412,323 | 14 |
| 965,711 | 645,270 | 21,898 | 677,668 | 362,179 | 123,518 | 485,955 | 15 |
| 4,030,279 | 1,834,010 | 45,896 | 1,908,661 | 1,501,922 | 600, 176 | 2,102,098 | 16 |
| 2,284,2051 | 1,151,536 | 29,536 | 1,198,457 | 1,084,083 | 550,376 | 1,634,459 |  |

TR_ADE AND COMMERCE
11.-Imports of Canada from the United Kingdom, the United States and All Conntries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.


IMPORTS OF CANADA
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ | United Kingdom. | United States. | $\begin{aligned} & \text { All } \\ & \text { Countries. } \end{aligned}$ | United Kingdom | United States. | $\begin{gathered} \text { All } \\ \text { Countries. } \end{gathered}$ |  |
| $\begin{aligned} & 475,474 \\ & 267,135 \end{aligned}$ | $\begin{aligned} & 355,135 \\ & 219,346 \end{aligned}$ | $\begin{aligned} & 19,207 \\ & 10,334 \end{aligned}$ | $\begin{aligned} & 403,559 \\ & 249,039 \end{aligned}$ | $\begin{aligned} & 328,212 \\ & 287,642 \end{aligned}$ | $\begin{gathered} 28,641 \\ 20,352 \end{gathered}$ | $\begin{aligned} & 357,582 \\ & 309,237 \end{aligned}$ | 1 |
| 10,115,541 | 5,886,908 | 515,211 | 6,965,040 | 5,898,960 | 1,945,152 | 7,908,429 | 2 |
| 589,788 | 191,564 | 349,528 | 568,674 | 161,617 | 705,305 | 868,330 | 3 |
| 2,183,755 | 721,787 | 527,049 | 1,287,264 | 390,240 | 430,309 | 821,523 | 4 |
| 5,363,515 | 3,100,762 | 769,415 | 4,013,310 | 2,966,895 | 409,643 | 3,402,144 | 5 |
| -28,459,250 | 16,068,218 | 2,645,304 | 19,723,162 | 14,722,058 | 4,837,003 | 19,664,109 |  |
| $\begin{aligned} & 259,833 \\ & 215,387 \end{aligned}$ | $\begin{aligned} & 392,262 \\ & 157,421 \end{aligned}$ | $\begin{aligned} & 67,701 \\ & 97,051 \end{aligned}$ | $\begin{aligned} & 504,590 \\ & 305,851 \end{aligned}$ | 338,757 245,898 | $\begin{aligned} & 100,401 \\ & 143,298 \end{aligned}$ | $\begin{aligned} & 492,366 \\ & 434,175 \end{aligned}$ | 6 |
| 919,418 | 26,945 | 733,054 | 941,814 | 3,270 | 2,387,549 | 2,390,884 | 7 |
| 2,886,256 | 847,550 | 1,538,148 | 2,292,645 | 426,818 | 1,479,969 | 2,265,129 | 8 |
| $\begin{array}{r} 71,694,173 \\ 319,985 \end{array}$ | $\begin{array}{r} 1,834,897 \\ 66,642 \end{array}$ | $\begin{array}{r} \mathbf{5 1 , 0 8 1 , 0 4 9} \\ 200,769 \end{array}$ | $\begin{array}{r} 54,171,002 \\ 267,888 \end{array}$ | $\begin{array}{r} 1,148,997 \\ 75,093 \end{array}$ | $\begin{array}{r} 45,451,050 \\ 183,563 \end{array}$ | $\left\|\begin{array}{r} 48,022.694 \\ 258,727 \end{array}\right\|$ | 9 |
| 4,385,709 | 27,114 | 4,356,268 | 4,383,407 | 2,859 | 4,426,279 | 4,429,143 | 10 |
| 20,734,126 | 129,712 | 20,797,654 | 20,927,589 | 14,678 | 20,445,875 | 20,460,571 |  |
| 13,754,244 | 11,261 | 9,113,165 | 9,124,499 | 2,705 | 9,628,393 | 9,631,101 | 11 |
| 26,140,676 | 38,230 | 16,097,495 | 16,135,920 | 8,128 | 10,211,063 | 10,219,206 |  |
| 42,948 | 875 | 27,147 | 28,150 | 1,039 | 98,825 | 99,866 | 12 |
| 423,512 | 2,949 | 248,441 | 258,062 | 16 | 208,873 | 208,928 | 13 |
| 419,720 | 6,757 | 199,017 | 215,933 | 76 | 126,981 | 127,211 |  |
| 7,336 | 100 | 2,914 | 3,014 | 20 | 1,065 | 1,065 | 14 |
| 235,623 | 1,135 | 150,374 | 178,773 | 20 | 85,826 | 85,846 | 15 |
| 117,821 | - | 89,327 | 104,261 | - | 23,834 | 23,983 | 16 |
| 259,836 | 25,186 | 38,493 | 194,125 | 19,519 | 32,631 | \$27,575 | 7 |

TRADE AND COMMERCE
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-con.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | $\underset{\text { All }}{\text { Countries. }}$ | United Kingdom. | United States. |
| VI. Mineral produce-con. |  |  |  |  |  |  |
| 1 | Minerals, viz. - |  |  |  |  |  |
|  | Alumina. cwt. | - | 262,419 525,017 | 262,419 <br> 525,017 | - | 299,918 600,454 |
| 2 | Litharge. cwt. | 9,989 | 6,092 | 26,402 | 3,492 | 1,758 |
|  | \$ | 3,020 | 29,680 | 116,960 | 15,672 | 10,600 |
| 3 | Other minerals " | 18,214 | 228,905 | 278,501 | 23,221 | 192,094 |
|  | Oils, mineral- |  |  |  |  |  |
| 4 | Coal and kerosene, distilled, purified or re- |  |  |  |  |  |
|  | fined. gal. | 1,446 385 | $\begin{array}{r} 16,496,527 \\ 1,103,769 \end{array}$ | $\begin{array}{r} 16,545,672 \\ 1,110,690 \end{array}$ | 175 33 | $\begin{array}{r} 19,278,099 \\ 1,350,502 \end{array}$ |
| 5 | Oils, products of petroleum gal. | 22,949 | 4,091,173 | 4,114,122 | 26,819 | 5,138,909 |
|  | \% | 5,037 | 432,217 | 437,254 | 6,740 | 618,506 |
| 6 | Oils, lubricating, composed wholly or in part of petro- |  |  |  |  |  |
|  | leum........ gal. | 29,364 | 6,250,223 | 6,282,819 | 13,241 3,012 | 5,134,973 |
|  | Oils, other $\quad \begin{gathered}\$ \\ \text { gal. }\end{gathered}$ | 5,861 1,643 | 819,159 $185,679,913$ | 825,792 $186,843,680$ | 3,012 | 145,560,851 |
| 7 | Ons, other gal. | +620 | 10,278,747 | 10,462,656 | 787 | 10,531,634 |
| 8 | Ores of metals, n.o.p. ewt. | - | 898,244 | 898,244 | 63 | 1,504,024 |
|  | , \$ | - | 672,237 | 672,237 | 530 | 982,89C |
| 9 | Ore, iron. ton | 50 | 1,256,996 | 2,116,933 | 500 | 1,105,412 |
|  | \$ | 975 | 3,191,643 | 4,052,505 | 502 | 3,160,664 |
| 10 | Phosphate rock.. " | - | 24,137 | 24,137 | - | 16,22] |
|  | Precious stones, diamonds unset, diamond dust or bort, and black diamonds for |  |  |  |  |  |
|  | drills. " | 1,446,401 | 119,888 | 3,858,283 | 1,207,302 | 71,729 |
| 12 | Salt. cwt. | 1,310,663 | 792,645 | 2,797,272 | 1,185,153 | 943,247 |
|  | Stone f | 273,035 | 175,458 | 500,095 | 269,429 | 221,55( |
| 13 | Stone, flag, granite, rough, sandstone, etc. | 3,412 | 118,385 | 123,691 | 4,465 | 91,96؛ |
| 14 | Stone, granite, sawn only | 974 | 22.555 | 24,636 | 699 | 10,866 |
| 15 | Whiting or whitening. cwt | 231,968 | 48,412 | $290,49+4$ | 228,237 | 45,776 |
|  | ling. $\$$ | -90,383 | 26,607 | 119,578 | 76,668 | 24,066 |
| 16 | Other mineral products. | 46,727 | 349,157 | 418,488 | 35,263 | 366.93 |

IMPORTS OF CANADA
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and valines by classes entered for consumption in the four fiscal years 1913-1916-con.

|  | 1915. |  |  | 1916. |  |  | No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Countries | United <br> Kingdom. | United States. | $\underset{\text { All }}{\text { Countries. }}$ | United Kingdom. | United States. | All Countries. |  |
| 299,918 | - | 250,805 | 250,805 | - | 368,087 | 368,308 | 1 |
| 600,454 | - | 501,807 | 501,807 |  | 987,517 | 988,062 |  |
| 11,288 | 3,855 | 4,851 | 10,547 | 150 | 22,830 | 22,980 | 2 |
| 57,207 | 17,415 | 23,862 | 49,920 | 876 | 136,854 | 137,730 |  |
| 230,453 | 11,416 | 171,642 | 190,646 | 10,458 | 208,619 | 220,015 | 3 |
| 19,280,479 | 110 | 9,586,232 | 9,587,159 | 1,219 | 6,420,166 | 6,421,825 | 4 |
| 1,351,098 | 18 | 653,241 | 653,401 | 341 | 345,694 | 346,125 |  |
| 5,166,274 | 44,771 | 5,723,266 | 5,768,037 | 150,126 | 6,149,659 | 6,299,785 | 5 |
| 625,367 | 8,354 | 588,238 | 596,592 | 22,978 | 582,075 | 605,053 |  |
| 5,156,734 | 3,287 | 4,360,438 | 4,369,293 | 1,994 | 3,755,768 | 3,757,762 | 6 |
| 712,808 | 696 | 570,364 | 572,375 | 476 | 510,506 | 510,982 |  |
| 205,563,375 | 5,771 | 219,534,783 | 222,896,594 | 3,157 | 216,366,660 | 229,027,484 | 7 |
| 10,532,931 | 1,801 | 8,026,234 | 8,114,801 | 1,753 | 7,158,596 | 7,533,978 |  |
| 1,504,087 | 576 | 765,714 | 766,568 | - | 2,889,528 | 2,889,528 | 8 |
| 1983,420 | 101 | 469,578 | 469,945 | $\bigcirc$ | 1,976,160 | 1,976,160 |  |
| 1,972,207 | - | 674,215 | 1,055,724 | 24 | 784,458 | 1,595,995 | 9 |
| 4,027,460 | - | 1,739,210 | 2,138,398 | 561 | 1,735,322 | 2,518,286 |  |
| 16,221 | - | 17,122 | 17,122 | - | 15,068 | 15,068 | 10 |
| 2,986,507 | 1,196,857 | 59,636 | 1,682,623 | 672,843 | 34,736 | 795,299 | 11 |
| 2,926,408 | 983,985 | 943,529 | 2,681,891 | 919,340 | 926,450 | 2,772,724 | 12 |
| 563,568 | 237,589 | 222,245 | 517,610 | 227,534 | 192,052 | 517,302 |  |
| 98,582 | 761 | 73,858 | 74,619 | - | 47,303 | 47,303 | 13 |
| 11,567 | 764 | 3,076 | 3,840 | 262 | 2,712 | 2,974 | 14 |
| . 280,122 | 188,815 | 44,096 | 234,166 | 130,367 | 60,866 | 191,239 | 15 |
| 102,993 | 65,099 | 21,885 | 87,499 | 46,117 | 34,809 | 80,929 |  |
| 515,166 | 25,2991 | 335,858 | 444,201 | 46,245 | 273,364 | 323,378 | 16 |

TRADE AND COMMERCE
11.--Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four fiscal years 1913-1916-concluded.

| No. | Principal articles by classes. | 1913. |  |  | 1914. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | United Kingdom. | United States. | All Countries. | United Kingdom. | United <br> States. |
|  | VII. Miscellaneous produce totals. | 8,444,828 | 18,400,190 | 33,940,068 | 7,980,294 | 27,114,565 |
| 1 | Articles, the growth, produce or manufacture of Canada, returned after having been exported " | 59,699. | 451,219 | 567,392 | 31,032 | 616,489 |
| 2 | Articles for use of the GovernorGeneral. . | 18,481 | 3,198 | 23,320 | 15,788 | 315 |
| 3 | Articles for army ${ }^{\text {and navy... }}$ | 3,402 | 13,993 |  | 148 | 127 |
| 4 | Articles ex-warehoused for ship's stores... | 21,121 | 781,560 | 811,332 | 29,038 | 989,911 |
| 5 | Bacteriological products or serums.. | 20,635 | 103,197 | 127,564 | 19,969 | 87,696 |
| 6 | Barrels or packages returned.. | 23,687 | 90,259 | 124,907 | 10,823 | 163,607 |
| 7 | Cabinets of coins, collections of medals, etc. | 1,210 | 1,664 | 3,314 | 431 | 1,829 |
| 8 | Coffee, green... ib. | $1,583,154$ 293,515 | 173,289 28,882 | $15,228,569$ $2,457,262$ | $1,044,138$ 178,230 | 187,432 26,403 |
| 9 | Models of inventions and other improvements. | 4,905 | 40,299 | 47,467 | 4,334 | 44,062 |
| 10 | Paintings in oil or water colours. | 382,540 | 436,384 | 930,939 | 384,807 | 349,958 |
| 11 | Settlers' effects.. "* | 4,850,843 | 10,675,453 | 15,934,383 | 4,530,625 | 9,238,698 |
| 12 | Sponges. | 11,078 | 85,540 | 98,278 | 14,248 | 77,992 |
| 13 | Tea... lb. | 13,937,870 | 220,533 | 40,296,055 | 13,325,663 | 301,653 |
| 14 | Other miscellaneous articles. | $2,620,212$ 126,269 | 34,433 272,597 | 6,843,620 | $2,623,639$ 136,668 | 38,648 258,067 |
| 15 | Coin and bullionCoins, British and Canadian and foreign gold coins... | 6,210 | 3,010,911 | 3,025,219 | 267 | 13,649,197 |
| 16 | Gold bullion in bars, blocks, ingots, drops, sheets or plates, unmanufactured. | 113 | 1,244,367 | 1,284,592 | 203 | 834,756 |
| 17 | Silver bullion in bars, blocks, ingots, drops, oheets or plates, unmanufactured. | 908 | 1,117,234 | 1,118,168 | $44^{1}$ | 736,810 |

IMPORTS OF CANADA
11.-Imports of Canada from the United Kingdom, the United States and All Countries in quantities and values by classes entered for consumption in the four iscal years 1913-1916-coneluded.

|  | 1915. |  |  | 1916. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All <br> Countries. | United Kingdom. | United States. | All Countries | United Kingdom. | United States. | $\underset{\text { All }}{\text { Countries. }}$ |  |
| 41,896,804 | 6,408,751 | 142,414,057 | 155,260,437 | 8,683,315 | 71,370,233 | 90,174,628 |  |
| 694,688 | 126,005 | 557,242 | 718,652 | 98,114 | 890,437 | 1,166,104 | 1 |
| 16,110 | 7,712 | 2,127 | 9,874 | 5,570 | 1,329 | 6,899 | 2 |
| 372 | 465,448 | 2,727,305 | 3,210,698 | 1,929,447 | 36,646,716 | 38,633,283 | , |
| 1,041,782 | 31,577, | 923,158 | 967,173 | 23,685 | 922,450 | 952,630 | 4 |
| 114,448 | 6,600 | 95,988 | 107,568 | 2,900 | 108,805 | 116,245 | 5 |
| 174,661 | 22,702 | 181,803 | 213,225 | 4,161 | 124,405 | 129,392 | 6 |
| 2,569 | 487 | 1,995 | 2,577 | 624 | 2,464 | 3,088 | 7 |
| 15,691,293 | 1,051,873 | 631,865 | 14,489,622 | 538,188 | 1,110,818 | 15,402,664 | 8 |
| 2,103,203 | 158,084 | 65,156 | 1,751,810 | 81,200 | 126,351 | 1,558,605 |  |
| 50,294 | 6,289 | 27,738 | 34,176 | 504 | 26,509 | 27,013 | 9 |
| 932,272 | 174,507 | 214,242 | 455,266 | 65,088 | 172,741 | 246,496 | 10 |
| 14,348,441 | 2,467,101 | 5,213,211 | 7,864,092 | 451,645 | 3,442,574 | 3,968,986 |  |
| -95,927 | 8,580 | 62,523 | 72,928 | 8,157 | 47,947 | 62,094 |  |
| 37,628,322 | 13,573,807 | 516,697 | 40,830,701 | 15,028,017 | 313,168 | 40,655,939 | 3 |
| 6,649,716 | 2,749,368 | 76,557 | 7,364,250 | 3,278,820 | 42,195 | 8,271,900 |  |
| 440,016 | 181,629 | 280,571 | 495,156 | 28,966 | 618,164 | 771,691 | 4 |
| 13,659,492 | 2,612 | 117,050,072 | 17,055,024 | 2,606,025 | 26,195,399 | 32,137,908 | 5 |
| 838,959 | 7 | 14,424,816 | 14,428,372 | 98,409 | 1,617,772 | 1,738,319 |  |
| 736,854 | 43 ) | 509,553, | 500,596 | - | 383,975 | 383,9751 |  |

TRADEAND COMMERCE
12.-Values of Exports which may be classed as Manufactures in the four fiscal years 1913-1916.

| Principal articles by classes. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: |
| Agricultural products- | \$ | \$ | \$ | \$ |
| Cider | 22,266 | 19,737 | 15,715 | 7,750 |
| Fruits, canned or preserved. | 220,786 | 394,719 | 476,497 | 864,984 |
| Flour of wheat | 19,970,689 | 20,581,079 | 24,610,946 | 35,767,044 |
| Indian meal .. | 7,767 | 14,639 | 9,549 | 8,043 |
| Ortmeal | 837,079 | 488,589 | 287,844 | 471,298 |
| Meal and four, all other | 17,836 | 7,534 | 1,616 | 2,136 |
| Malt | 15,723 | 4,256 | 4,141 | 63,778 |
| Maple sugar | 104,324 | 159,619 | 131,477 | 178,791 |
| Maple syrup | 4,151 | 5,284 | 6,687 | 5,794 |
| Vegetables, canned | 24,959 | 17,655 | 299,412 | 637,617 |
| Cereal foods | 2,015,675 | 2,168,330 | 1,970,402 | 1,950,706 |
| Totals | 23,241,255 | 23,859,441 | 27,814,286 | 39,957,941 |
| Animal products- Butter | 223,578 | 309,046 | 639,625 | 1,018,769 |
| Cheese | 20,697,144 | 18,868,785 | 19,213,501 | 26,690,500 |
| Furs, dressed | 15,306 | 11,550 | 29,862 | 110,198 |
| Meats, canned | 26,718 | 94,961 | 2,340,081 | 2,730,616 |
| Milk and cream, condensed. | 25,554 | 666,941 | 1,181,300 | 770,566 |
| Oils, animal .. . | 222,746 | 247,143 | 1,239,638 | 240,500 |
| Totals | 21,211,046 | 20,198,426 | 23,644,007 | 31,561,149 |
| Fisheries- |  |  |  |  |
| Herring, canned | 1,755 | 1,834 | 53,338 | 103,512 |
| Sea fish, preserved in | 102,983 | 145,144 | 118,284 | 26,295 |
| Oysters, preserved in cans.. |  | 1,547 |  |  |
| Lobsters, canned | 3,048,798 | 2,983,987 | 3,013,782 | 2,672,179 |
| Salmon, canned | 3,484,110 | 6,831,437 | 4,948,723 | 6,306,056 |
| Oils, fish.. | 628,155 | 447,752 | 348,606 | 375,893 |
| Totals | 7,265,801 | 10,211,701 | 8,482,773 | 9,483,038 |
| Ashes, pot, pearl and other. | 62,140 | 48,862 | 57,044 | 68,430 |
| Lumber, all kinds, including shingles, shooks, staves, etc. <br> Totals . | $\begin{aligned} & 33,433,089 \\ & 33,495,229 \end{aligned}$ | $\begin{aligned} & 33,272,876 \\ & 33,321,738 \end{aligned}$ | $\begin{aligned} & 33,217,525 \\ & 33,274,569 \end{aligned}$ | $\begin{aligned} & 43,352,973 \\ & 43,421,403 \end{aligned}$ |
| Mineral products- |  |  |  |  |
| Copper, fine, contained in ore, matte, regulus, etc. | 9,911,542 | 9,489,729 | 7,545,246 | 14,670,073 |
| Lead, metallic, contained in ore, etc.. | 8,442 | 7,562 | 12,534 | 46,718 |
| Lead, pig <br> Nickel, contained in ore, matte, etc. | 5,045,197 | 5,374,738 | 97,286 $5,063,656$ | 8,698 $7,714,769$ |
| Platinum, contained in concentrates, etc. | 3,519 | 7,784 | 2,171 | 25,426 |
| Silver, contained in ore, concentrates, etc. | 20,202,559 | 20,971,538 | 13,516,390 | 14,298,351 |
| Oils, mineral, coal and kerosene, refined. | 6,723 | 3,119 | 235 | 53,744 |
| Salt. | 3,358 | 2,140 | 5,509 | 5,536 |
| Totals | 35,181,340 | 35,856,610 | 26,243,027 | 36,823,315 |
| Aggregates for the five classes | 120,394,671 | 123,447,916 | 119,458,662 | 161,247,746 |

EXPORTS CLASGED AS MANUFACTURES
13.-Summary of Values of Exports to the United Kingdom, to the United States and to Other Countries of Home Produce which may be classed as Manufactures in the four fiscal years 1913-1916.

| Classes of products. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: |
|  | \$ | $\$$ | \$ | \$ |
| Agricultural productsUnited Kingdom | 14,932,089 | 13,878,344 | 18,372,698 | 23,633,776 |
| United States | -276,844 | 1303,079 | -435,470 | 1,564,228 |
| Other countries | 8,032,322 | 9,678,018 | 9,006,118 | 14,759,937 |
| Totals. | 23,241,255 | 23,859,441 | 27,814,286 | 39,957,041 |
| Animal productsUnited Kingdom | 20,528,690 | 18,598,653 | 20,773,801 | 29,996,107 |
| United States | 139,078 | 638,489 | 1,380,058 | 700,052 |
| Other countries | 543,278 | 961,284 | 1,490,147 | 864,990 |
| Totals. | 21,211,046 | 20,198,426 | 23,644,007 | 31,561,149 |
| Fisheries- |  |  |  |  |
| United Kingdom | 3,754,2966 | 6,710,922 | 5,192,556 | 6,176,844 |
| United States | 1,280,468 | 1,238,946 | 1,264,511 | 932,262 |
| Other countries | 2,231,037 | 2,261,833 | 2,025,706 | 2,374,832 |
| Totals | 7,265,801 | 10,211,701 | 8,482,773 | 9,483,938 |
| Forest products- |  |  |  |  |
| United Kingdom | 8,688,225 | 10,029,680 | 9,363,461 | 13,527,261 |
| United States | 21,635,336 | 20,478,553 | 22,314,297 | 27,391,950 |
| Other countries | 3,171,668 | 2,813,525 | 1,596,811 | 2,502,192 |
| Totals | 33,495,229 | 33,321,738 | 33,274,569 | 43,421,403 |
| Mineral products- |  |  |  |  |
| United Kingdom | 11,440,156 | 15,398,598 | 11,303,230 | 11,272,143 |
| United States | 22,673,179 | 18,801,733 | 14,422,654 | 24,652,731 |
| Other countries | 1,068,011 | 1,656,279 | 517,143 | 898,441 |
| Totals | 35,181,340 | 35,856,610 | 26,243,027 | 36,823,315 |
| Aggregates by countries- |  |  |  |  |
| United Kingdom .. | 59,343,450 | 64,618,177 | 65,005,746 | 84,606,131 |
| United States | 46,004,905 | 41,460,800 | 39,816,991 | 55,241,223 |
| Other countries | 15,046,316 | 17,370,939 | 14,835,925 | 21,400,392 |
| Totals | 120,394,671 | 123,447,916 | 119,458,682 | 161,247,746 |

The articles in Tables 12 and 13 are usually grouped as natural products, as has been done in Table 7 under the heads of agricultural, animal, fisheries, forest and mineral produce, as well as in Table 10. But by some authorities they are grouped with manufactured products, and they have been abstracted here to show the kinds and values of articles to be added to manufactures in those several tables, if so classified. If added to the exports of manufactures as given in Table 7, page 304, or in Table 10, pages 324-5, the total values would be $\$ 164,087,379$ for $1913, \$ 180,891,368$ for $1914, \$ 204,998,163$ for 1915 , and $\$ 403,282,744$ for 1916 . Added to the exports of manufactures to the United Kingdom in Table 7, page 304, the total value for 1916 would be $\$ 233,083,434$, to the United States $\$ 113,443,364$, and to other countries $\$ 56,755,946$, and the total increase in the period from 1913 to 1916 would be over 145 p.c. But the chief component value of these exports is that of raw material.

## TRADEAND COMMERCE

14.-Values of Imports which may be classed as Manufactures in the four fiscal years 1913-1916.

| Principal articles by classes. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: |
| Agricultural products- | \$ | \$ | \$ | \$ |
| Arrowroot . | 6,665 | 7,540 | 5,659 | 7,761 |
| Biscuits, all kinds | 276,568 | 361,106 | 287,935 | 168,061 |
| Bran, mill feed, ete | 70,947 | 30,167 | 56,710 | 52,455 |
| Cereal, foods .. | 353,211 | 346,761 | 261,087 | 197,226 |
| Cider | 2,089 | 2,507 | 2,167 | 1,584 |
| Indian or corn meal | 176,804 | 168,818 | 217,108 | 180,823 |
| Malt | 112,053 | 238,373 | 80,375 | 31,508 |
| Macaroni or vermicelli | 392,890 | 493,330 | 307,144 | 155,333 |
| Oatmeal | 3,347 | 1,925 | 1,919 | 922 |
| Rice and sago flour | 28,715 | 31,737 | 24,479 | 38,000 |
| Rye flour | 19,451 | 28,848 | 43,900 | 26,467 |
| Tapioca and sago | 145,161 | 91,307 | 72,034 | 78,118 |
| Vegetables, canned | 901,343 | 698,540 | 377,259, | 221,687 |
| Wheat flour | 267,917 | 239,833 | 256,533 | 180,597 |
| Other articles | 222,405 | 281,344 | 260,304 | 187,519 |
| Totals.. | 2,979,566 | 3,022,136 | 2,254,613 | 1,528,061 |
| Animal products- |  |  |  |  |
| Butter.. | 2,081,989 | 1,823,994 | 1,678,056 | 1,092,800 |
| Cheese <br> Fur akins wholly or partially dressed | 302,153 | 299,223 | 229,094, | 187,873 |
|  | 1,362,825 | 699,979 | 375,675 | 349,168 |
| Lard and lard compound ... | 1,520,450 | 792,025 | 306,030 | 666,102 |
| Meats, canned | 393,174 | 430,803 | 244,346 | 58,875 |
| Meats, extracts of, etc. | 327,173 | 550,840 | 472,204 | 461,934 |
| Milk, condensed ... | 21,171 | 38,416 | 9,485 | 3,987 |
| Oils, animal | 64,840 | 39,665 | 27,857 | 44,157 |
| Wax, bees' | 36,255 | 29,13I | 28,700 | 26,302 |
| Totals | 6,110,030 | 4,704,076 | 3,371,447 | 2,891,198 |
| Fisheries- |  |  |  |  |
| Anchovies and sardines | 434,844 | 418,377 | 317,675 | 224,852 |
| Fish, preserved in oil | 7,682 | 8,479 | 8,760 | 9,304 |
| Lobsters, canned | 442 | 22,753 | 9,300 | 37,941 |
| Oysters, canned | 61,830 | 52,861. | 30,479 | 27,410 |
| Oils, fish ... | 134,195 | 100,015 | 96,546 | 153,502 |
| Salmon, canned | 90,523 | 2,416 | 2,350 | 1,048 |
| Sea fish, preserved | 73,990 | 11,670 | 11,319 | 1,490 |
| Totals .. | 803,506 | 616,571, | 476,429 | 455,547 |
| Forest products- |  |  |  |  |
| D shovel handles... indind- | 71,214 | 71,051 | 36,056 | 46,898 |
| Lumber, all kinds, including shingles and staves | 14,257,132 | 11,783,621 | 6,705,298 | 3,584,880 |
| ${ }^{\text {T Totals }}$.. ... | 14,328,346 | 11,854,672 | 6,741,354 | 3,631,878 |
| Mineral products- |  |  |  |  |
| Oils, coal and kerosene, distilled, purified or refined | 1,110,690 | 1,351,098 | 653,401 | 346,125 |
| Oils, product of petroleum | 437,254 | 625,367 | 596,592, | 605,053 |
| Oils, lubricating .. | 825,792 | 712,808 | 572,375 | 510,982 |
| Salt . $\quad$ | 500,095 | 563,868 | 517,610 | 517,302 |
| Whiting, or whitening | 119,578 | 102,993 | 87,499 | 80,929 |
| Totals. $\quad . \quad$. | 2,993,409 | 3,356,134 | 2,427,477 | 2,060,391 |
| Aggregates for the five classes | 27,214,857 | 23,553,589 | 15,271,320 | 10,567,075 |

IMPORTS CLASSED AS MAN.UFACTURES.
15.-Summary of Imports from the United Kingdom, from the United States and from Other Countries which may be classed as Manafactures, in the four fiscal years 1913-1916.


The articles in Tables 14 and 15, if added to the imports of manufactures in Table 11, pages $360-1$, would give totals of $\$ 483,678,451$ for 1913, $\$ 441,109,126$ for $1914, \$ 301,485,641$ for 1915 , and $\$ 316,041,724$ for 1916. The imports of manufactures from the United Kingdom with the articles in these tables added would reach a total for 1916 of $\$ 64,792,474$, from the United States of $\$ 214,206,769$, and from other countries of $\$ 37,042,481$, making an aggregate import of manufactures for the year of $\$ 316,041,724$, or over 58 p.c. of all imports.

## TRADEAND COMMERCE.

16.-Values of Exports (domestic and foreign) to the British and Foreign West Indies by Countries during the fiscal years 1914-1916.

| Countries. | 1914. |  | 1915. |  | 1916. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Exports, domestic. | Exports, foreign. | Exports, domestic. | Exports, foreign. | Exports, domestic. | Exports, foreign. |
| British Guiana. .: . | $\stackrel{\$}{649,675}$ | \$ 3,061 | $\stackrel{8}{875,660}$ | \$ 3,137 | 1,207,134 | \$,770 |
| British West Indies... | 4,469,329 | 20,540 | 4,333,095 | 33,697 | 4,115,872 | 19,029 |
| Total British West Indies... | 5,119,004 | 23,601 | 5,008,755 | 36,834 | 5,323,006 | 23,799 |
| Cuba. | 1,815,414 | 13,107 | 1,482,649 | 39,342 | 1,419,087 | 12,203 |
| Danish West Indies... | 15,207 | 173 | 13,536 | 35 | 7,537 |  |
| French West Indies... | 20,862 | - | 32,479 | - | 103,895 |  |
| Dutch West Indies... | 2,289 | - | 6,715 |  | 7,701 |  |
| Dutch Guiana. | 46,749 | - | 40,453 | 495 | 49,574 | 301 |
| French Guiana. |  | - | 2,374 |  | 1,234 |  |
| Hayti... | 37,783 | 9 | 4,295 | - | 2,119 | - ${ }^{-}$ |
| Porto Rico. | 542,962 | 324 | 468,698 | - | 699,460 | 3,256 |
| San Domingo.. | 59,721 |  | 3,938 | - | 12,919 |  |
| Total Foreign West Indies. | 2,540,987 | 13,604 | 2,055,137 | 39,872 | 2,303,526 | 15,770 |
| Total Exports to the British and Foreign West Indies. | 7,659,991 | 37,205 | 7,063,892 | 76,706 | 7,626,532 | 39,569 |

17.-Values of Total Imports (dutiable and free) from the British and Foreign West Indies by Countries during the fiscal years 1914-1916.

| Countries. | 1914. |  | 1915. |  | 1916. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Imports, dutiable. | Imports, free. | Imports, dutiable. | Imports, free. | Imports, dutiable. | Imports, free. |
| Brish Guiana... <br> British West Indies.. | $\begin{gathered} \$ \\ 3,554,353 \\ 2,368,940 \end{gathered}$ | $\begin{array}{r} 5 \\ 6,547 \\ 2,116,004 \end{array}$ | $\begin{gathered} \$ \\ 2,909,514 \\ 4,267,015 \end{gathered}$ | $\begin{array}{r} 5 \\ 13,601 \\ 1,772,580 \end{array}$ | $\begin{gathered} \$ \\ 5,681,148 \\ 4,696,006 \end{gathered}$ | $\begin{array}{r} \$, 902 \\ 1,659,779 \end{array}$ |
| Total British West Indies... | 5,923,293 | 2,122,551 | 7,176,529 | 1,786,181 | 10,377,154 | 1,664,681 |
| Cuba.. | 3,362,993 | 569,113 | 1,520,619 | 183,585 | 1,149,079 | 244,415 |
| Danish West Indies... | 259,214 |  | 117,687 | - | 58,307 |  |
| Dutch West Indies.... |  |  | $203,898$ | - | $329,430$ |  |
| Hayti... |  | 106 |  | - |  |  |
| Porto Rico. | ${ }^{2} 166{ }^{22}$ | 1,591 | $3.464 .512 \mid$ | - |  | 124 |
| San Domingo... | 3,166,144 | - |  | - |  | 124 |
| Total Foreign West Indies.... | 7,029,640 | 571,177 | 5,306,716 | 183,585 | 4,825,514 | 244,539 |
| Total Imports from the British and Foreign West Indies. | 12,952,983 | 2,693,728 | 12,483,245 | 1,969,766 | 15,202,668 | ,909,220 |

TRADE WITH WEST INDIES
18.-Value of Imports and Exports from and to British and Foreign West Indies 1901-1916.

| Fiscal Year. | Imports from |  |  | Exports (domestic and foreign) to |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | British West Indies and British Guians. | Foreign West Indies and Foreign Guiana. | - Total. | $\begin{gathered} \text { British } \\ \text { West Indies } \\ \text { and British } \\ \text { Guiana. } \end{gathered}$ | Foreign West Indies and Foreign Guiana. | Total. |
| 1901. | 1,406,480 | 594,768 | 2,001,248 | \$ $2,297,804$ | \$ 984,308 | $\begin{gathered} \$ \\ 3,282,110 \end{gathered}$ |
| 1902. | 1,702,293 | 539,697 | 2,241,990 | 2,456,132 | 1,339,408 | 3,795,540 |
| 1903. | 2,415,608 | 596,970 | 3,012,578 | 2,699,167 | 1,471,843 | 4,171,010 |
| 1904. | 7,006,892 | 667,232 | 7,674,124 | 2,662,524 | 1,423,542 | 4,086,066 |
| 1905. | 8,589,656 | 714,339 | 9,303,995 | 2,872,770 | 1,460,801 | 4,333,571 |
| 1906. | 7,521,360 | 657,081 | 8,178,441 | 2,847,381 | 1,831,656 | 4,679,037 |
| $1907{ }^{1}$ | 5,208,892 | 524,599 | 5,733,491 | 2,188,542 | 1,497,240 | 3,685,782 |
| 1908. | 9,293,804 | 525,026 | 9,818,830 | 3,090,468 | 2,096,502 | 5,186,970 |
| 1909. | 9,088,596 | 605,260 | 9,693,856 | 3,054,073 | 2,006,362 | 5,060,435 |
| 1910. | 9,004,421 | 1,815,110 | 10,819,531 | 3,697,872 | 2,384,296 | 6,082,168 |
| 1911. | 10,262,613 | 2,002,006 | 12,324,619 | 4,736,005 | 2,501,599 | 7,237,604 |
| 1912. | 10,550,491 | 2,891,199 | 13,441,690 | 4,617,961 | 2,925,246 | 7,543,207 |
| 1913. | 9,443, 393 | 4,941,127 | 14,384,520 | 4,591,105 | 2,327,508 | 6,918,613 |
| 1914. | 8,045,844 | 7,600,817 | 15,646,661 | 5,142,605 | 2,554,591 | 7,697,198 |
| 1915. | 8,962,710 | 5,490,301 | 14,453,011 | 5,045,589 | 2,095,009 | 7,140,598 |
| 1916. | 12,041,835 | 5,070,053 | 17,111,888 | 5,346,805 | 2,319,296 | 7,666,101 |

inine months.
Note,-Foreign West Indies include Cuba, Danish, Dutch and French West Indies, Dutch and French Guiana, Hayti, Porto Rico and San Domingo.
19.-Percentage Proportions of Imports from United Kingdom and United States, respectively, to totals of dutiable and free in the 49 fiscal years 1868-1916.

| Fiscal Year. | United Kingdom. |  |  | United States. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dutiable to total dutiable. | Free to total free. | Dutiable and free to all imports. | Dutiable to total dutiable. | Free to total free. | Dutiable and free to all imports. |
|  | p.c. | p.c. | p.c. | p.c. | p.c. | p.c. |
| 1868. | 64.78 | 39.82 | 56.06 | 22.93 | 53.96 | 33.77 |
| 1869. | 69.35 | 31.75 | 56.20 | 18.95 | 62.04 | 34.03 |
| 1870. | 66.52 | 34.50 | 56.10 | 19.27 | 59.69 | 32.43 |
| 1871. | 66.25 | 35.99 | 57.58 | 23.43 | 54.31 | 32.28 |
| 1872. | 70.59 | 38.20 | 59.27 | 19.43 | 55.81 | 32.14 |
| 1873. | 66.63 | 38.55 | 54.61 | 23.42 | 53.47 | 36.29 |
| 1874. | 62.69 | 29.03 | 49.87 | 27.67 | 65.19 | 41.97 |
| 1875. | 62.64 | 28.16 | 51.11 | 28.55 | 67.78 | 41.66 |
| 1876. | 53.76 | 25.08 | 43.75 | 35.41 | 70.53 | 47.67 |
| 1877 | 54.03 | 19.31 | 41.78 | 38.59 | 77.88 | 52.45 |
| 1878. | 53.76 | 16.69 | 41.21 | 39.25 | 80.13 | 53.10 |
| 1879 | 48.84 | 16.72 | 39.34 | 42.95 | 78.91 | 53.57 |
| 1880. | 51.74 | 36.43 | 48.30 | 36.11 | 54.88 | 40.33 |
| 1881. | 50.06 | 37.23 | 47.39 | 35.78 | 56.74 | 40.15 |
| 1882. | 48.34 | 35.04 | 45.30 | 38.41 | 55.58 | 42.33 |
| 1883. | 44.47 | 36.16 | 42.40 | 42.20 | 54.48 | 45.25 |
| 1884. | 41.02 | 35.03 | 39.56 | 44.74 | 53.88 | 46.97 |
| 1885. | 41.90 | 35.22 | 40.12 | 42.62 | 54.12 | 45.68 |

404
TRADEAND COMMERCE
19.-Percentage Proportions of Imports from United Kingdom and United States, respectively, to totals of dutiable and free in the 49 fiscal years 1868-1916-concluded.

| Fiscal Year. | United Kingdom. |  |  | United States. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dutiable to total dutiable. | Free to total free. | Dutiable and free to all imports. | Dutiable to total dutiable. | Free to total free. | Dutiable. and free to all imports. |
|  | p.c. | p.c. | p.c. | p.c. | p.c. | p.c. |
| 1886. | 43.00 | 34.13 | 40.66 | 41.97 | 51.94 | 44.60 |
| 1887 | 45.78 | 33.25 | 42.56 | 39.13 | 52.71 | 42.61 |
| 1888. | 44.29 | 26.81 | 38.90 | 38.90 | 62.34 | 46.13 |
| 1889. | 43.26 | 28.97 | 38.73 | 38.91 | 60.79 | 45.86 |
| 1890. | 43.15 | 28.95 | 38.75 | 39.65 | 60.13 | 45.99 |
| 1891. | 42.19 | 28.57 | 37.67 | 39.97 | 60.12 | 46.65 |
| 1892. | 44.58 | 22.24 | 35.66 | 42.66 | 48.34 | 44.90 |
| 1893. | 45.61 | 23.53 | 36.92 | 40.88 | 52.49 | 45.44 |
| 1894. | 43.79 | 20.61 | 33.96 | 41.13 | 53.84 | 48.52 |
| 1895. | 39.81 | 18.39 | 30.85 | 44.05 | 57.79 | 49.84 |
| 1896. | 36.24 | 22.19 | 31.15 | 43.28 | 64.07 | 50.80 |
| 1897 | 30.53 | 22.73 | 27.58 | 46.03 | 65.69 | 53.48 |
| 1898. | 30.23 | 18.35 | 25.36 | 51.00 | 71.13 | 59.24 |
| 1899. | 30.77 | 15.70 | 24.72 | 49.73 | 73.43 | 59.24 |
| 1900. | 30.25 | 18.66 | 25.66 | 51.65 | 70.69 | 59.17 |
| 1901. | 29.92 | 15.50 | 24.10 | 50.58 | 74.66 | 60.30 |
| 1902. | 29.54 | 17.94 | 24.95 | 50.72 | 70.11 | 58.40 |
| 1903. | 30.85 | 18.84 | 26.15 | 50.10 | 68.46 | 57.29 |
| 1904. | 30.18 | 17.73 | 25.34 | 52.07 | 69.14 | 58.71 |
| 1905. | 29.88 | 15.14 | 23.98 | 52.21 | 73.13 | 60.58 |
| 1906. | 30.40 | 15.03 | 24.42 | 51.74 | 71.90 | 59.59 |
| 1907 (9 months) | 32.05 | 16.04 | 25.79 | 51.93 | 71.28 | 59.50 |
| 1908. . | 32.64 | 17.35 | 26.83 | 50.59 | 70.51 | 58.16 |
| 1909. | 29.84 | 16.31 | 24.52 | 51.76 | 70.20 | 59.00 |
| 1910. | 31.60 | 16.49 | 25.78 | 52.29 | 69.22 | 58.81 |
| 1911. | 29.82 | 15.05 | 24.34 | 54.14 | 72.05 | 60.84 |
| 1912. | 26.69 | 14.72 | 22.42 | 58.72 | 71.74 | 63.37 |
| 1913. | 24.47 | 13.43 | 20.71 | 62.57 | 69.78 | 65.03 |
| 1914. | 24.95 | 14.26 | 21.35 | 60.81 | 70.16 | 63.96 |
| 1915. .. ... | 24.31 | 12.61 | 19.79 | 60.27 | 72.85 | 65.13 |
| 1916. ....... | 17.97 | 11.63 | 15.24 | 68.93 | 7S. 29 | 72.95 |

## RATES OF DUTY ON IMPORTS

20.-Average ad valorem Rates of Duty collected on Imports from United Kingdom, United States and All Countries in the 49 fiscal years 1868-1916.

| Fiscal Year. | United Kingdom. |  | United States. |  | All Countries. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average on dutiable imports. | $\begin{gathered} \text { Average } \\ \text { on } \\ \text { total } \\ \text { imports. } \end{gathered}$ | Average on dutiable imports. | $\begin{gathered} \text { Average } \\ \text { on } \\ \text { total } \\ \text { imports. } \end{gathered}$ | Average on dutiable imports. | $\begin{gathered} \text { Average } \\ \text { on } \\ \text { total } \\ \text { imports. } \end{gathered}$ |
| 1868. | p.c. | p.c. | p.c. | p.c. | $21.161$ | ${ }_{13.119}$ |
| 1869. | 16.851 | 13.522 | 20.088 | 7.283 | 20.172 | 13.118 |
| 1870. | 16.779 | 13.420 | 19.546 | 7.836 | 20.890 | 14.088 |
| 1871. | 16.436 | 13.493 | 16.264 | 8.427 | 19.648 | 14.021 |
| 1872.. | 16.408 | 12.712 | 17.976 | 7.070 | 19.071 | 12.406 |
| 1873. | 15.583 | 10.872 | 17.663 | 6.519 | 18.281 | 10.439 |
| 1874. | 16.461 | 12.808 | 17.448 | 7.119 | 18.899 | 11.696 |
| 1875. | 18.145 | 14.801 | 17.271 | 7.876 | 19.650 | 13.078 |
| 1876. | 18.761 | 15.009 | 19.239 | 9.307 | 21.275 | 13.853 |
| 1877 | 19.375 | 16.215 | 18.687 | 8.898 | 20.539 | 13.292 |
| 1878. | 20.056 | 17.303 | 20.416 | 9.354 | 21.400 | 14.151 |
| 1879. | 20.542 | 17.963 | 23.210 | 13.101 | 23.335 | 16.334 |
| 1880. | 24.032 | 19.956 | 23.062 | 16.005 | 26.078 | 20.214 |
| 1881. | 24.464 | 20.457 | 22.039 | 15.546 | 25.820 | 20.436 |
| 1882. | 24.148 | 19.882 | 21.474 | 15.034 | 25.304 | 19.524 |
| 1883. | 24.299 | 19.152 | 21.081 | 14.776 | 25.290 | 19.007 |
| 1884. | 24.373 | 19.085 | 20.706 | 14.888 | 25.192 | 19.020 |
| 1885. | 24.810 | 19.028 | 21.209 | 14.534 | 26.097 | 19.168 |
| 1886. | 25.727 | 20.028 | 22.823 | 15.809 | 27.495 | 20.238 |
| 1887 | 26.055 | 20.828 | 23.775 | 16.225 | 28.723 | 21.348 |
| 1888. | 29.087 | 22.909 | 26.236 | 15.308 | 31.858 | 22.039 |
| 1889. | 29.331 | 22.367 | 25.433 | 14.733 | 31.869 | 21.755 |
| 1890. | 28.788 | 22.129 | 26.579 | 15.821 | 31.015 | 21.413 |
| 1891. | 28.982 | 21.691 | 25.963 | 14.864 | 31.386 | 20.974 |
| 1892. | 29.431 | 22.098 | 26.485 | 15.103 | 29.684 | 17.827 |
| 1893. | 29.805 | 22.335 | 26.735 | 14.589 | 30.275 | 18.368 |
| 1894. | 29.992 | 22.264 | 26.956 | 13.717 | 30.854 | 17.759 |
| 1895. | 30.056 | 22.559 | 26.739 | 13.746 | 30.522 | 17.753 |
| 1896. | 30.200 | 22.418 | 26.693 | 14.512 | 29.974 | 19.109 |
| 1897 | 30.693 | 21.106 | 26.727 | 14.287 | 29.967 | 18.613 |
| 1898. | 29.478 | 20.751 | 26.118 | 13.287 | 29.222 | 17.265 |
| 1899. | 26.627 | 19.842 | 26.339 | 13.241 | 28.652 | 17.157 |
| 1900. | 25.583 | 18.235 | 25.032 | 13.217 | 27.634 | 16.715 |
| 1901. | 24.748 | 18.322 | 24.835 | 12.424 | 27.427 | 16.355 |
| 1902. | 24.027 | 17.188 | 25.182 | 13.207 | 27.265 | 16.466 |
| 1903. | 23.316 | 16.739 | 24.905 | 13.254 | 27.064 | 16.468 |
| 1904. | 24.117 | 17.559 | 25.217 | 13.674 | 27.426 | 16.765 |
| 1905. | 24.770 | 18.513 | 26.118 | 13.501 | 27.692 | 16.610 |
| 1906. | 24.601 | 18.709 | 24.779 | 13.144 | 26.835 | 16.393 |
| 1907 (9 mos.).. | 24.252 | 18.355 | 24.167 | 12.843 | 26.339 | 16.038 |
| 1908. | 24.245 | 18.286 | 24.585 | 13.258 | 26.582 | 16.480 |
| 1909. | 25.755 | 19.028 | 24.868 | 13.247 | 27.315 | 16.586 |
| 1910. | 25.107 | 18.914 | 24.837 | 13.570 | 26.713 | 16.416 |
| 1911. | 24.561 | 18.881 | 24.737 | 13.773 | 25.797 | 16.145 |
| 1912. | 24.988 | 19.132 | 24.978 | 14.883 | 25.963 | 16.694 |
| 1913. | 25.133 | 19.574 | 24.945 | 15.818 | 25.928 | 17.087 |
| 1914. | 25.217 | 19.547 | 24.809 | 15.648 | 25.982 | 17.235 |
| 1915. | 27.124 | 20.461 | 25.101 | 14.272 | 27.195 | 16.706 |
| 1916 | 28.423 | 19.098 | 25.021 | 13.471 | 27.032 | 15.403 |

## TRADE AND COMMERCE

## 21.-Value of Imports entered for consumption at certain Ports during the fiscal year

 ended March 31, 1916.
22.-Value of Exports of Canadian produce by principal ports during the fiscal year ended March 31, 1916.

| Ports. | Value. | Ports. | Value. |
| :---: | :---: | :---: | :---: |
| Abercorn. | \$12,0<0,843 | Quebec | \$3,577,012 |
| Bridgeburg. | 30,309,501 | Rossland. | 58,517 |
| Coaticook. | 29,624,734 | St. Armand. | 4,983,240 |
| Fort William | 81,280,414 | St. Johns, Que. | 18,991,667 |
| Halifax. | 26,330,211 | St. John, N.B. | 119,490,818 |
| Athelstan. | 5,757,989 | Sault Ste. Marie. | 10,657,202 |
| Montreal. | 173,436,739 | Sydney.. .. | 7,262,941 |
| Nanaimo. | 2,607,837 | Vancouver. | 15,031,892 |
| New Westminster. | 2,511,269 | Winnipeg. | 180,967 |
| Niagara Falls... | 39,847,461 |  |  |
| Prescott.. | 11,872,088 | Totals. | 595,893,342 |

23.-Value of Total Exports and Imports, Imports entered for consumption and amount of duty collected, by Provinces, during the fiscal year ended March 31, 1916.

| Provinces. | Total Exports. | Total Imports. | $\begin{gathered} \text { Imports } \\ \text { entered for } \\ \text { consumption } \end{gathered}$ | Duty collected. |
| :---: | :---: | :---: | :---: | :---: |
| Ontario. | \%360,480,204 | \$277,229,141 | \$273,540,377 | \$50,018,747 |
| Quebec. | 279,039,923 | 180,356,089 | 161,627,839 | 29,016,813 |
| Nova Scotia | 46,681,013 | 18,516,375 | 18,210,396 | 3,929,987 |
| New Brunswic | 131,241,957 | 14,852,932 | 14,772,757 | 3,330,306 |
| Manitoba | 13,452,106 | 26,429,713 | 26,637,882 | 6,965,764 |
| British Columbia | 39,153,586 | 33,142,569 | 33,025,924 | 6,751,130 |
| Prince Edward Is | 428,106 | 713,629 | 718,262 | 153,324 |
| Alberta. | 344,491 | 6,292,677 | 6,489,378 | 1,943,666 |
| Saskatchewan. | 8,986,038 | 6,270,886 | 6,337,007 | 1,635,639 |
| Yukon. | 3,065,078 | 667,987 | 683,741 | 183,526 |
| Totals. | 882,872,502 | 564,471,998 | 542,043,563 | 103,928,902 |
| Prepaid postal parcels: duty received through Post Office Department. <br> Grand Total | 882,872,502 | $\begin{array}{r} 33,798 \\ \mathbf{5 6 4 , 5 0 5 , 7 9 6} \end{array}$ | $\begin{array}{r} 33,798 \\ 542,077,361 \end{array}$ | $\begin{array}{r} 11,199 \\ \hline 103,940,101 \\ \hline \end{array}$ |

Note.-Under regulations which went into effect July 1, 1900, all export entries are delivered at the frontier port of exit, and the totals are credited to the respective ports where the goods pass outwards from Canada.

## IMPORTS OF CANADA

24.-Imports of certain Articles of Raw Material for home consumption, 1902-1916.


Value only; the Trade and Navigation Returns do not give quantities.
${ }^{2}$ Cotton waste included with rags all kinds. ${ }^{3}$ Includes dressed hemp.

TRADE AND COMMERCE
25.- Imports of Canada by values entered for consumption from British Empire and Foreign Countries under the General, Preferential and Treaty Rate Tariffs in the four fiscal years 1913-1916.

| Countries. | 1913. |  |  | 1914. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | General. | Preferential. | Treaty rates. | General. | Preferential. | Treaty rates. |
|  | \$ | $\$$ | $\delta$ | \$ | \$ | \$ |
| totals. | 12,054,040 | 102,374,150 | 4,686,470 | 12,752,492 | 94,804,984 | 4,111,829 |
| United Kingdom. | 11,241,875 | 92,232,882 | 4,583,851 | 11,541,414 | 86,787,609 | 4,046,844 |
| Australia.. | 222,396 |  | 29,018 | 418,387 |  | 37,183 |
| British West Indies. | 38,683 | 4,249,758 | _ | 76,444 | 2,157,069 | - |
| BritishGuiana | 20,179 | 3,528,759 | - | 25,095 | 3,147,470 |  |
| India. - | 23,114 | 131,729 | - | 26,690 | 156,334 |  |
| New Zealand. | 15,363 | 1,586,262 | - | 72,724 | 1,904,016 | 60 |
| Fiji Islands... |  | 269,845 |  |  | 239,182 |  |
| Hong Kong... | 452,871 | - | 73,243 | 534,223 |  | 27,219 |
| Other Posses- sions. | 38,559 | 374,915 | 358 | 57,515 | 403,304 | 523 |
| Foreign Countries, totals. | 309,474,754 | - | 13,017,471 | 285,332,926 | - | 13,256,513 |
| AustriaHungary. | 953,556 | - | 628,168 | 1,010,740 | - | 689,661 |
| Cuba.... | 2,024,618 | - | - | 3,512,587 | - |  |
| Dutch East |  |  |  |  |  |  |
| Indies. | $2,957,287$ $2,096,918$ | - | 438,871 | -877,017 | - | 456,876 |
| Belgium. | 2,096,918 | - | 438,871 $6,352,913$ | 2,520,708 | - | 456,876 $6,505,128$ |
| Germany, | 10,082,199 | - | 6,352, | 11,151,601 | - |  |
| Holland. | 1,419,498 | - | 33,379 | 1,612,349 | - | 30,442 |
| Japan. | 1,422,204 | - | 695,942 | 729,558 | - | 734,412 |
| Spain.. | 698,053 | - | 505,170 | 778,828 | - | 494,815 |
| Switzerland... | 733,055 | - | 3,495,207 | 952,496 | - | 3,300,485 |
| United States. | 276,330,434 | - | , | 249,482,610 | - |  |
| Brazil. | 13,675 | - | - | 2,370 | - |  |
| China. ..... | 211,632 | - | - | 344,029 | - |  |
| Danish W. In- dies. | 240,687 | - | - | 259,368 | - | * |
| Greece ... . | 545,355 | - | - ${ }^{-}$ | 444,811 | - | 533 |
| Italy | 792,328 | - | 419,043 | 894,660 | - | 533,857 |
| Norway ... | 139;511, | - | 287,095 | 161,043 | - | 285,470 |
| Peru. . | 314,686 | - | - | 747,546 | - | - |
| Portugal. | 273,957, | - | - | 256,168 | - | - |
| San Domingo. | 1,803,963 | - |  | 2,942,333 | - | 191,352 |
| Sweden ... | 283,178 | - | 121,045 | 324,075 | - | 191,352 |
| Turkey | 407,364 | - |  | 397,234 | - | - |
| Other countries. | 405,307 | - | 40,638 | 521,834 | - | 34,035 |

## IMPORTS OF CANADA

25.-Imports of Canada by values entered for consumption from British Empire and Foreign Countries under the General, Preferential and Treaty Rate Tariffs in the four fiscal years 1913-1916-concluded.

| Countries. | 1915. |  |  | 1916. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | General. | Preferential. | Treaty rates. | General. | Preferential. | Treaty rates. |
|  | $\$$ | \$ | \$ | $\leqslant$ | \$ | \$ |
| totals. | 7,880,372 | 69,441,881 | 3,088,197 | 6,573,791 | 58,718,542 | 2,549,989 |
| United Kingdom. | 6,788,775 | 58,170,806 | 3,051,676 | 4,913,224 | 44,561,924 | 2,533,930 |
| Australia... | 183,641 |  | 7,679 | 32,154 |  | 524 |
| British West Indies. | 54,075 | 4,336,684 | 5 | 156,974 | 4,463,552 | 3 |
| BritishGuiana | 43,868 | 2,936,246 | 1 | 65,236 | 5,566,437 |  |
| India. $\quad$. | 68,955 | 757,745 | - | 99,646 | 2,272,677 |  |
| New Zealand. | 87,571 | 1,208,772 | - | 13,518 | 337,962 |  |
| Fiji Islands.. |  | 1,780,368 |  |  | 1,262,718 |  |
| Hong Kong... | 603,057. |  | 28,717 | 458,541 |  | 15,532 |
| Other Pos- | 50,430 | 251,260 | 118 | 934,498 | 253,272 |  |
| Foreign Countries, totals | 190,521,430 | - | 8,860,315 | 214,168,150 | - | 7,356,055 |
| Austria- |  |  |  |  |  |  |
| Hungary.... | 349,762 | $-$ | 260,919 | 2,718 | - | 305 |
| Cuba.... . | 1,384,407 | - | , | 1,304,904 | - | - |
| Dutch East |  |  |  | 31,315 | - | - |
| Indies. . | $\begin{array}{r} 116,153 \\ 1,050,777 \end{array}$ | - | 173,042 | 32,710 | - | 13,694 |
| France. | 3,539,598 | - | 3,651,585 | 2,142,947 | - | 2,810,256 |
| Germany. | 3,887,906 | - | - | 41,126 | $\cdots$ | - |
| Holland. | 1,206,806 | - | 22,699 | 772,148 | - | 9,975 |
| Japan. | 660,811 | - | 641,181 | 815,983 | - | 1,361,963 |
| Spain. | 477,561 | - | 423,686 | 272,702 | - | 256,579 |
| Switzerland.. | 833,960 | - | 3,086,427 | 764,117 | - | 2,710,184 |
| United States | 168,658,299 | - | - | 190,466,665 | - |  |
| Brazil.. | 723,754 | - | - | 855,778 | - | - |
| China. if ... | 228,!27 | - | - | 263,621 | - | - |
| $\begin{aligned} & \text { Danish W. In- } \\ & \text { dies. } \end{aligned}$ | 115,469 | - | - | 58,351 | _ |  |
| Greece. | 415,953 | - | - | 327,621 | $\sim$ | - |
| Italy | 734,251 | - | 321,265 | 584,723 | - | 48,831 |
| Norway ..... | 112,045 | - | 204,690 | 73,882 | - | 136,748 |
| Pera. | 1,407,350 | - | - | 789,223. | - | - |
| Portugal. | 196,395 | - | - | 164,051 | - | - |
| San Domingo. | 3,193,796 | - | $63-$ | 4,020,491 | $-$ | - |
| Sweden - | 347,979 | - | 63,303 | 107,469 | - | 4,772 |
| Turkey Other coun- | 306,849 | - |  | 42,248 | - | - |
| tries.. | 572,622 | - | 11,503 | 1,233,348 | - | 2,748 |

26.-Trade of Canada by Classes of Produce, compared as to Quantity and Value, for 1915 and 1916 (" 000 " omitted).


[^17]
## AGGREGATE TRADE OF CANADA

27.-Aggregate Trade of Canada by Countries during the fiscal year ended March 31,1916.

| Countries. | Total Exports. | Imports for Home Consumption | Total Trade. |
| :---: | :---: | :---: | :---: |
| British Empire- | \$ | \$ | ${ }^{\text {8 }}$ |
| United Kingdom. | 463,081,241 | 77,404,361 | 540,485,602 |
| Australia. | 7,773,209 | 1,062,752 | 8,835,961 |
| Bermuda. | 448,481 | 28,951 | 477,432 |
| British East and West Africa. | 205,239 | 3,302 | 208,541 |
| British South Africa. | 5,509,081 | 175,879 | 5,684,960 |
| British East Indies, all other | 44,217 | 1,793,067 | 1,837,284 |
| British West Indies. | $4,134,901$ | 6,257,963 | 10,392,864 |
| British Guiana. | 1,211,904 | $5,636,630$ | 6,848,534 |
| Fiji Islands. | 197,078 | 1,262,718 | $1,423,796$ $1,437,634$ |
| Straits Settlements. | 281,734 | 254,622 | 536,356 |
| Hong Kong. | 813,973 | 1,247,529 | 2,061,502 |
| India. | 916,314 | 4,732,772 | 5,649,086 |
| Newroundland. | 5,066,924 | 1,576,615 | 6,643,539 |
| New Zealand. | 3,361,999 | 3,310,334 | 6,672,333 |
| Other British Possessions | 58,967 | 5,881 | 64,848 |
| Total British Empire.. | 494,546,383 | 105,229,977 | 599,776,360 |
| Foreign countries- |  |  |  |
| Alaska.. | 356,266 | 6,360 | 362,626 |
| Argentina. | 2,398,655 | 3,971,271 | 6,369,926 |
| Beigium. | 334,762 | 59,315 | 394,077 |
| Brazil. | 1,142,105 | 883,832 | 2,025,937 |
| Central American States. | 61,396 | 133,206 | 194,602 |
| Chile. | 88,634 | 169,284 | 257,918 |
| China. | 536,482 | 918,610 | 1,455,092 |
| Cuba. | 1,431,290 | 1,540,519 | 2.971,809 |
| Denmark. | 112,088 | 45,849 | 158,837 |
| Danish West Indies. | 7,537 | 58,351 | 65,888 |
| Dutch East Indies. | 272,710 | 169,169 | 441,879 |
| Dutch Guiana. | 49,875 | 372,248 | 422,123 |
| Egypt and Soudan. | 39,839 | 6,512 | 46,351 |
| France. | 36,085,813 | 5,949,385 | 42,035,198 |
| Freach West Indies. | 103,895 |  | 103,895 |
| Greece. | 222,330 | 338,836 | 561,166 |
| Hawaii. | 39,539 | 22,107 | 61,646 |
| Holland. | 2,563,626 | 1,057,733 | 3,621,359 |
| Italy | 10,733,288 | 920,271 | 11,653,559 |
| Japan. | 998,240 | 4,015,125 | 5,013,365 |
| Mexico. | 87,163 | 623,281 | 710,444 |
| Norway. | 458,542 | 279,091 | 737,633 |
| Parama. | 153,556 |  | 153,556 |
| Peru. | 47,262 | 1,162,403 | 1,209,665 |
| Porto Rico... | 702,716 |  | 702,719 |
| Portugal. | 56,726 | 207,634 | 264,360 |
| Russia. | 6,737,152 | 123,904 | 6,861,056 |
| Santo Domingo. | 12,919 | 4,020,491 | 4,033,410 |
| St. Pierre and Miquelon. | 171,570 | 4,932 | 176,502 |
| Spain. | 634,998 | 617,025 | 1,252,023 |
| Sweden. | 53,440 | 162,671 | 216,111 |
| Switzerland. | 979,103 | 3,525,117 | 4,504,220 |
| Uruguay. | 33,801 | 280,437 | 314,238 |
| United States | 216,669,262 | 370,496,574 | 587,165,836 |
| U.S. of Colombia. | 32,258 | 137,470 | 169,729 |
| Venezuela. | 98,567 | 115,358 | 213,925 |
| Other Foreign countries. | 246,081 | 192,808 | 428,889 |
| Total Foreign countries. | 284,753,687 | 402,587,182 | 687,340,869 |
| Total imports and exports.... | 779,300,070 | 507,817,159 | 1,287,117,229 |


| Countries. | Total Exports. ${ }^{1}$ | Imports for Home Consumption | Total Trade. |
| :---: | :---: | :---: | :---: |
| British Empire- | 75 | \$ | 869 ${ }^{\$} 14240$ |
| United Kingdom. | 756,071,059 | 107,071,181 | 863,142,240 |
| Australia. | 6,576,725 | 762,113 | 7,338,838 |
| Bermuda. | 602,503 | 12,770 | 615,273 |
| British East and West Africa. | 294,527 |  | 294,595 |
| British South Africa... | 4,452,939 | 221,476 | 4,674,415 |
| British East Indies, all other | 27,827 | 1,132,706 | 1,160,533 |
| British West Indies. | 5,179,083 | 14,239,595 | 19,418,678 |
| British Guiana. | 1,639,470 | 7,192,893 | 8,832,363 |
| Gibraltar. | 2,808,554 |  | 2,808,554 |
| Straits Settlements. | 333,390 | 841,195 | 1,174,585 |
| Hong Kong. | 605,068 | 1,398,984 | 2,004,052 |
| India. | 1,098,356 | 4,925,882 | 6,024,238 |
| Newfoundland | 6,768,740 | 2,147,808 | 8,916,548 |
| New Zealand.... <br> Other British Possessions. | 3,333,910 | 2,242,515 | 5,576,425 $\mathbf{2 , 0 9 9 , 1 7 7}$ |
| Total British Empire ... | 789,982,434 | 144,098,080 | 934,080,514 |
| Foreign countries |  |  |  |
| Alaska... | 573,233 | 19,572 | 592,805 |
| Argentina. | 1,674,660 | 2,702,071 | 4,376,731 |
| Belgium. | 664,722 | 14,896 | 679,618 |
| Brazil. | 1,062,545 | 1,062,485 | 2,125,030 |
| Central American States. | $79,629$. | 351,350 | 430,979 |
| Chile. | 508,177 | 198,357 | 706,534 |
| China... | 418,399 | 1,128,342 | 1,546,741 |
| Cuba. | 3,014,322 | 610,807 | 3,625,129 |
| Denmark | 112,265 | 30,460 | 142,725 |
| Danish West Indies. | 24,910 | 107 | 25,017 |
| Dutch East Indies.. | 332,785 | 620,188 | 952,973 |
| Dutch Guiana. | 71,612 | 4,549 | 76,161 |
| Egypt and Soudan. | 160,295 | 11,341 | 171,636 |
| France. . | 66,652,910 | 6,481,098 | 73,134,008 |
| French Africa. | 8,744 | 140 | 8,884 |
| French West Indies. | 187,093 |  | 187,093 |
| Greece. | 19,309 | 160,472 | 179,781 |
| Hawaii. | 254,065 | 55,697 | 309,762 |
| Holland. | 1,569,314 | 1,234,993 | 2,804,307. |
| Italy | 11,468,599 | 1,227,007 | 12,695,606 |
| Japan. | 1,282,115 | 8,122,735 | 9,404,850 |
| Mexico. | 80,390 | 677,551 | 757,941 |
| Norway.. | 966,153 | 325,239 | 1,291,392 |
| Panama. | 271,022 |  | 271,022 |
| Peru. | 246,863 | 1,653,290 | 1,900,153 |
| Philippines... | 12,808 | 40,324 | 53,132 |
| Porto Rico.. | 720,494 | 5,388 | 725,882 |
| Portugal. | 209,689 | 260,094 | 469,783 |
| Russia. | 4,185,822 | 24,140 | 4,209,962 |
| Santo Domingo. | 39,827 | 3,888,807 | 3,928,634 |
| St. Pierre and Miquelon. | 209,784 | 5,362 | 215,146 |
| Spain. | 331,179 | 909,546 | 1,240,725 |
| Sweden. | 18,215 | 99,838 4,49931 | 5,172,711 |
| Switzerland. | 673,390 | 4,499,321 | 5,172,711 |
| Uruguay. | 290,578,773 | 664,219,653 | 954,798,496 |
| United States. | 20, 238,965 | 664, 157,084 | -396,049 |
| Other Foreign countries. | 282,943 | 286,427 | 569,370 |
| Total foreign countries. . . | $\begin{array}{r} 389,381,419 \\ 1.179,363,853 \end{array}$ | $\begin{aligned} & 7,235,350 \\ & 845,333,430 \end{aligned}$ | $\begin{aligned} & 1,090,616,769 \\ & 2,024,697 \end{aligned}$ |

[^18]
## EXPORTS OF CANADA

29.-Values of Exports from Canada of Home Produce to the British Empire and to Foreign Countries in the five fiscal years 1913-1917.

| Countries. | 1913. | 1914. | 1915. | 1916. | 1917.1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ |
| British Empire-total. | 190,181,6 | 238,642,721 | 210,550,854 | 482.490,440 | 775,666,086 |
| United Kingdom.. | 170,161,903 | 215,254,023 | 186,668,599 | 451,852,399. | 742,147,5055 |
| Australia.. . .. | 3,904,481 | 4,673,997 ${ }_{\text {i }}$ | 5,522,594 | 7,748,051i | 6,549,546 |
| New Zealand... | 1,694,408 | 1,933,698 | 2,619,556 | 3,307,404. | 3,302,240 |
| Bermuda | 414,644 | 383,151 | 357,712 | 435,615 | 585,634 |
| British Africa. | 3,465,892 | 3,927,384 | 4,686,556 | 5,661,390 | 4,742,329 |
| British Guiana. | 627,244 | 649,675 | 670,660 | 1,207,134 | 1,631,395 |
| British Honduras. | 10,252 | 9,298 | 9,450 | 3,355 | 2,562 |
| British India. | 226,184 | 416,373 | 415,105 | 904;889 | 1,094,046 |
| Straits Settlements | 228,606 | 230,455 | 245,355 | 281,734 | 333,390 |
| East Indies, all other | 7,243 | 39,496 | 23,905 | 44,217 | 27,827 |
| British West Indies. | 3,915,172 | 4,469,329 | 4,333,095 | 4,115,872 | 5,163,278 |
| Fiji. | 144,898 | 118,441 | 112,355 | 196,308 | 155,653 |
| Gibraltar. | 36,919 | 38,004 | 210,303 | 1,073,156 | 2,808,554 |
| Hong Kong | 774,954 | 1,879,261 | 653,878 | 779,558 | 494,462 |
| Newfoundla | 4,472,717 | 4,508,240 | 3,976,160 | 4,820,395 | 6,602,389 |
| All othe | 46,150 | $111,896^{4}$ | 40,571 | 58,963 | 25,226 |
| Woreign countries-total | 165,572,933 | 192,946,937 | 198,868,649 | 259,120,513 | 375,795,769 |
| Alaska. | 345,140 | 134,238 | 297,282 | 331,558 | 462,511 |
| Argentina. | 2,251,855 | 2,134,522 | 634,387 | 2,398,628 | 1,673,575 |
| Austria-Hungary | 154,165 | 368,425 | 220,654 |  |  |
| Belgium.. | 4,241,568 | 4,269,394 | 2,220,709 | 334,762 | 664,722 |
| Brazil. | 974,462 | 767,858 | 541,998 | 1,059,700 | 1,028,163 |
| Central Am. States ${ }^{2}$. | 103,480 | 113,482 | 72,760 | 61,396 | 79,639 |
| Chile. | 136,107 | 134,457 | 55,302 | 88,634 | 518,177 |
| China. | 740,690 | 473,074 | 294,251 | 536,332 | 408,002 |
| Denmark | 785,606 | 637,286. | 529,690 | 111,432 | 111,044 |
| Duteh East Indies.. | 11,578 | 20,368 | 25,927 | 272,710 | 332,785 |
| Egypt and Soudan. | 35,947 | 62,677, | 26,484 | 39,493 | 160,295 |
| France. | 2,357,154 | 3,632,444 | 10,499,680 | 33,703,183 | 64,039,192 |
| French Africa. | 65,409 | 57,105 | 4,170 | 12,536: | 8,744 |
| Germany. | 3,049,105 | 4,044,019 | 1,447,391 |  |  |
| Greece. | 65,658 | 11,934 | 87,485 | 222,330 | 19,309 |
| Hawaii.. | 76,498 | 29,672 | 70,591 | 35,756 | 247,752 |
| Holland.. | 2,380,983. | 3,985,987 | 1,623,405 | 1,815,950 | 1,561,480 |
| Italy.. | 328,148 | 514,660 | 521,802 | 6,572,687 | 11,226,051 |
| Japan. | 1,137,867 | 1,587,467 | 963,631 | 996,575 | 1,205,067 |
| Mexico.. | 218,371 | 51,747, | 18,55] | 72,819 | 70,330 |
| Norway.. | 673,304 | 845,331 | 1,000,715 | 458,530 | 964,552 |
| Peru. | 11,120 | 11,817 | 13,141 | 47,182 | 246,791 |
| Philippines. | 75,404 | 60,806 | 41,574 | 7,323 | 12,808 |
| Portugal. | 49,142 | 55,481 | 25,206 | 56,726 | 209,689 |
| Russia in Europe | 2,145,211 | 1,368,939 | 1,270,941 | 4,874,152 | 3,755,569 |
| St.Pierre\&Miquelon! | 155,927 | 114,827 | 141,097 | 154,920 | 187,661 |
| Spain. | 48,628 | 63,995: | 243,001 | 634,977 | 326,179 |
| Sweden. | 121,582 | 177,313 | 172,796 | 53,440 | 18,215 |

${ }^{1}$ Subject to revision.
${ }^{2}$ Guatemala, Salvador, Honduras, Niearagua and Costa Rica.

## TRADE AND COMMEROE

29.-Values of Exports from Canada of Home Produce to the British Empire and to Foreign Countries in the five fiscal years 1913-1917-concluded.

| Countries. | 1913. | 1914. | 1915. | 1916. | 1917. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Foreign countries-con. | \$ | \$ | \$ | \$ | \$ |
| Switzerland | 7,599 | 21,439 | 11,853 | 224,535 | 672,5 |
| Turkey in Asia. | 8,453 | 11,588 | 3,979 |  |  |
| United States. | 139,725,953 | 163,373,840 | 173,320,798 | 201,106,603 | 280,616,482 |
| Uruguay | 160,636 | -90,615 | 52,820 | 33,101 | 58,549 |
| Venezuela. . | 65,892 | 139,264 | 56,196 | 98,567 | 238,911 |
| West Indies-Cuba. | 1,496,857 | 1,815,414 | 1,482,649 | 1,419,087 | 2,067,053 |
| Danish W Indies. | 17,870. | 15,207 | 13,536 | 7,537 | 24,910 |
| Porto Rico. . | 609,375 | 542,962 | 468,698 | 699,460 | 719,918 |
| Santo Domingo... | 53,050 | 59,721 | 3,938 | 12,919 | 39,827 |
| Other West Indie: | 67,083 | 60,934 | 43,489 | 113,715 | 213,831 |
| All other. | 620,056 | 1,086,630 | 346,072 | 451,25: | 705,488 |

30.-Values of Imports into Canada of Merchandise entered for Consumption from the British Empire and from Foreign Countries in the five fiscal years 1913-1917; also of Coin and Bullion.

| Countries. | 1913. | 1914. | 1915. | 1916. | 1917. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | * | \% | $\$$ | 8 |
| British Empire-total. | 162,541,284 | 154,526,802 | 115,342,706 | 105,229,977 | 144,098,080 |
| United Kingdom.... | 138,742,767 | 132,070,362 | 90,158,119 | 77,404,361 | 107,071,181 |
| Australia.. | 443,381 | 713,111 | 412,205 | 1,062,752 | 762,113 2,2425 |
| New Zealand.. | 3,066,699, | 3,192,900 | 3,908,616 | 3,310,334 | 2,242,515 |
| Bermuda... | 34,724 272,199 | 7,539 522,916 | 23,923 338,403 | 28,951 $\mathbf{1 7 9 , 1 8 1}$ | 12,770 |
| British Guiana. | 3,550,765 | 3,179,112 | 2,993,534 | 5,636,630 | 7,192,893 |
| British Honduras. | 396,122 | 155,396 | 497,786 | 476,601 | 1,065,953 |
| British India. | 4,653,244 | 5,006,309 | 4,133, 847 | 4,732,772 | 4,925,882 |
| Straits Settlements. | 519,624 | 565,843 | 775,716 | 254,622 | 841,195 |
| East Indies, all other | 1,725,588 | 1,646,835 | 1,637,985 | 1,793,067 | 1,132,703 |
| British West Indies. | 5,982,406 | 4,347,310 | 6,162,338 | 6,257,563 | 14,239,595 |
| Fiji. ${ }^{\text {a }}$ | 271,919 | 240,719 | 1,780,368. | 1,262,718, | -81,880 |
| Hong Kong | 894,550 | 1,010,021 | 1,248,575 | 1,247,529 | 1,398,984 |
| Newfoundland. | 2,056,174 | 1,840,523 | 1,242,800 | 1,576,615 | 2,147,808 |
| All other... | 31,122 | 27,906 | 28,491 | 5,881 | 11,051 |

[^19]
## IMPORTS OF CANADA

30.-Values of Imporis into Canada of Merchandise entered for Consumption from the British Empire and from Foreign Countries in the five fiscal years 1913-1917; also of Coin and Bullion-concluded.

| Countries. | 1913. | 1914. | 1915. | 1916. | 1917. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | * | \% | \$ | * |
| Foreign countries-total | 507,547,782 | 463,930,342 | 340,103,606 | 402;587,182 | 701,235,350 |
| Alaska. | 46,577 | 66,470 | 38,292 | 6,380 | 19,572 |
| Argentina | 4,166,895. | 2,603,128 | 3,364,787 | 3,971,271 | 2,702,071 |
| Austria-Hungary | 1,700,429, | 1,773,021 | 642,182 | 3,156 | 1,390 |
| Belgium... | 4,020,178 | 4,490,476 | 1,875,963 | 59,315 | 14,896 |
| Brazil. | 1,295,521 | 1,163,785 | 1,149,551 | 883,832 | 1,062,485 |
| Central Am. States ${ }^{2}$ | 182,497, | 163,483 | 118,017 | 133,206 | 351,350 |
| China | 620,021 | 701,283 | 190 | 169, | 198,357 |
| Denmark | 117,078 |  |  |  | 128,342 |
| Dutch East Indies. | 3,209,394 | 976,090 | 197,742. | 169,169 | 620,188 |
| Dutch Guiana. | 64,330 | 216,126 | 186,376 | 372,248 | 4,549 |
| Egypt and Soudan.. | 51,640 | 49,064 | 30,482 | 6,512 | 11,341 |
| France. | 15,375,848 | 14,276,535 | 8,449,186 | 5,949,385 | 6,481,098 |
| Firench Africa. | 5,429. | 41,505 | 8,361 | 474 | 140 |
| Germany | 14,214,547 | 14,586,223 | 5,086,986 | 86,304 | 14,132 |
| Greece. | 545,595 | 445,036 | 417,911 | 338,836 | 160,472 |
| Hawaii | 44,689 | 61,365 | 32,655 | 22,107 | 55,697 |
| Holland. | 3,109,554. | 3,015,456 | 1,769,256 | 1,057,733. | 1,234,993 |
| Italy.. | 1,713,585 | 2,090,387 | 1,472,799 | 920,271 | 1,237,001 |
| Japan. | 3,503,533 | 2,604,216 | 2,783,465 | 4,015,125 | 8,122,735 |
| Mexico. | 3,104,072 | 1,471,182 | 1,229,977 | 623,281 | 677,551 |
| Norway | 488,139 | 486,379 | 385,647 | 279,091 | 325,239 |
| Peru. | 314,686 | 748,546 | 1,494,046 | 1,162,403 | 1,653,290 |
| Philippines. | 23,640 | 5,715 | 6,204 | 12,359 | 40,324 |
| Portugal. | 343,249 | 277,381 | 215,608 | 207,634 | 260,094 |
| Russia in Europe. | 924,223 | 482,809 | 105,455 | 123,904 | 24,140 |
| St.Pierre\&Miquelon | 4,068 | 6,068 | 4,244 | 4,932 | 5,362 |
| Spain. | 1,258,970 | 1,352,133 | 977,448 | 617,025 | 909,546 |
| Sweden. | 472,378 | 603,401 | 545,835 | 162,671 | 99,838 |
| Switzerland.. | 4,296,702 | 4,314,805 | 3,979,256 | 3,525,117 | 4,499,321 |
| Turkey in Asia. | 5,769,050 | 205 5659,269 | -323,227 | 42,248 | 243 |
| Uruguay | 160,642 | 395,565,328 | 296,632,506 12 | $\begin{array}{r}370,496,574 \\ 280,437 \\ \hline\end{array}$ | 664,219,653 |
| Venezuela. | 202,750. | 133,243 | 209,626. | 115,358 | 157,084 |
| West Indies-Cuba. | 2,549,673 | 3,952,887 | 1,617,291. | 1,540,519. | 610,807 |
| Danish W. Indies. | 240,687 | 259,368 | 115,469 | 58,351 | 107 |
| Porto Rico. |  | 1,613 |  |  | 5,388 |
| Santo Domingo.. | 1,803,963 | 2,942,333 | 3,193,796 | 4,020,491 | 3,888,807 |
| Other West Indies All other |  | 473 376,137 |  |  |  |
| All other | 324,036 | 376,137 | 344,262 | 192,249 | 270,662 |
| Coin add Bullion. | 5,427,979 | 15,235,305 | 131,992,992 | 34,260,202 | 28,081,120 |

${ }^{2}$ Guatemala, Salvada, Honduras, Nicaragua and Costa Rica.

## TRADE AND COMMERCE

31.-Value of Merchandise imported into and exported from Canada through the United States during the fiscal years ended March 31, 1915-1916.

| Countries whence imported and to which exported. | Merchandise imported through United States. |  | Merchandise exported through United States. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1915. | 1916. | 1915. | 1916. |
| U |  |  |  |  |
| Australia. | 4,853,190 | 3,521,227 | $60,433,803$ $1,322,414$ |  |
| British Africa. | 293,435 | 157,494 | 192,514 | 1,043,080 |
| British India | 1,257,848 | 1,142,660 | 289,373 | 879,912 |
| British East Indies | 960,383 | 941,834. | 19,262 | 44,217 |
| British Guiana. | 735,390 | 1,689,949 | 103,576 | 152,381 |
| British Honduras. | 79,5\% | 238,317 | 9,450 | 3,355 |
| British West Indies. | 784,811 | 1,784,134 | 1,346,956 | 1,076,697 |
| New Zealand... .. | 95,520 | 6,2E4 | 260,815 | 726,347 |
| Straits Settlements.... | 67,440 | 163,698 | 98,781 | 160,293 |
| Other British Possessions. | 12,783 | 73,649 | 174,368 | 354,860 |
| Total British Empire. | 9,157,115 | 9,774,285 | 64,551,312 | 167,789,876 |
| Argentina. | 1,500,270 | 2,938,920 | 328,489 | 1,832,485 |
| Austria-Hungary.. | 28,835 | $570^{\circ}$ | 34,658 |  |
| Belgium... | 134,711 | 35,018 | 67,860 | 267,579 |
| Brazil.. | 631,306 | 467,684 | 258,041, | 803,670 |
| Central American States. | 9,272 | 46,917 | 70,552 | 58,480 |
| Chile... | 190 |  | 43,653 | 70,094 |
| China. | 534,678. | 365,968 | 9,054 | 54,376 |
| Cuba. | 372,421 | 218,213 | 465,028 | 456,880 |
| Denmark. | 10,448 | 29,689' | 391,054 | 93,387 |
| Danish West Irdies. | 69 | 53,236 | 13,549 | 7,314 |
| Dutch East Indies. | 37,300 | 53,847 | 9,660 | 251,513 |
| Dutch Guiana | 68,809 | 307,144 | 32,958 | 34,117 |
| French West Indies. |  |  | 32,479 | 103,676 |
| Egypt and Soudan. | 19,526 | 2,783 | 6,940 | 31,375 |
| France... | 672,859 | 408,803 | 3,059,963 | 12,642,300 |
| French Africa. | 7,155 |  | 4,170 | 12,536 |
| Germany. | 818,240 | 5,263: | 505,597 |  |
| Greece. | 96,403 | 107,739: | 84,469 | 12,869 |
| Hayti.... |  |  | 3,815 | 1,420 |
| Holland. | 326,382 | 292,459. | 807,386 | 794,794 |
| Italy. . | 555,965 | 481,905 | 507,199 | 6,123,240 |
| Japan. | 130,996 | 146,768 | 114,962 | 218,164 |
| Mexico. | 206,554 | 156,928 | 16,306 | 58,510 |
| Norway | 33,567 | 24,101 | 856,890 | 457,222 |
| Panama. | - |  | 100,517 | 127,173 |
| Peru. |  | 190,459 | 12,506 | 11,288 |
| Porto Rico. | - |  | 251,601 | 281,826 |
| Portugal. | 29,069 | 63,310: | 6,688 | 32,272 |
| Portuguese Africa. |  |  | 48,603 | 46,362 |
| Russia in Europe.. | 26,104 | 1,345000 | 121,673 | 1,937,723 |
| Santo Domingo. | 524,694 | 1,345,908 | 2,791 | 10,018 |
| Siam.... |  |  | 4,026 | 10,977 617 |
| Spain.... | 147,929: | 116,076 | 46,647 | 617,973 |
| Sweden... | $155,86 \mathrm{I}^{1}$ | 71,560 | 111, 9,740 | 53,440 3,854 |
| Switzerland. | 173,926 | 128,627 | 9,740 1,757 | 3,894 |
| Turkey. ${ }^{\text {S }}$ - ${ }^{\text {colombia }}$ | 128,802 | 60,693 | 23,785 | 30,661 |
| U. S. of Colombia.... | 86,989 | 189,228 |  | 33,101 |
| Uruguay..... .. <br> Venezuela. | 6,152 45,566 | 189,228 66,829 | 19,338 | 30,916 |
| Other countries. | 107,270 | 7,658 | 41,003 | 36,922 |
| Total forelgn countries. | 7,638,338 | 8,391,619 | 8,580,518 | 27,720,507 |
| Grand total............ | 16,795,453 | 18,165,904 | 73,131,830 | 195,510,383 |

## Grain statistics.

A description of the arrangements for the storage, inspection, grading and shipment of Canadian grain has been given in previous issues of the Year Book (see pp. 454-457 of the edition of 1914). Tables 32 to 36 give the principal grain statistics for a series of years. For the year 1916-17 the total storage capacity of the 3,300 grain elevators in Canada was $193,844,000$ bushels, these figures representing an increase from a total of 523 elevators and warehouses with a capacity of $18,329,352$ bushels in $1900-01$. Under The Canada Grain Act, 1912, the Dominion Government has power itself to erect and operate terminal grain elevators. Five such elevators are already in operation, and are situated respectively at Port Arthur (Ont.), Saskatoon (Sask.), Moosejaw (Sask.), Calgary (Alberta) and Vancouver (B.C.).

Table 32 shows for the crop years 1901 to 1917 the number of railway stations at which elevators are placed, the number of elevators and warehouses and their total storage capacity, the figures being given by provinces for the country elevators of the West, and by description of clevators for the rest of the country. Tables 33 and 34 give statistics of the inspection of grain for the years 1914, 1915 and 1916, and Tables 35 and 36 of the shipment of grain by vessel and rail for 1915 and 1916.
32.-Number and Storage Capacity of Canadian Grain Elevators in the crop years 1901-1917.
COUNTET BLEVATORA IN MANITOBA.

| Year. | Nit.11tions. | $\begin{gathered} \text { bic- } \\ \text { vators. } \end{gathered}$ | houseg. | Capacity. | Year. | $\begin{aligned} & \text { Sta- } \\ & \text { tions. } \end{aligned}$ | Elevators. | Warehouses. | Capacity. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | No. | No. | Bustrels. |  | No. | No. | No. | Bushels. |
| 1901. | 167 | 333 | 76 | 10,323,272 | 1909. | 300 | 678 | 13 | 20,558,500 |
| 1902. | 180 | 427 | 69 | 12,255,000 | 1910. | 312 | 696 | 11 | 21,694,500 |
| 1908. | 216 | 558 | 59 | 16,121,403 | 1911. | 329 | 707 | 12 | 21,813,800 |
| 1904. | 234 | 651 | 46 | 19,297,000 | 1912. | 336 | 705 | 10 | 22,410,500 |
| 1905. | 247 | 609 | 33 | 19,557,630 | 1913... | 338 | 698 | 10 | 22,253,150 |
| 1906. | 371 | 699 | 33 | 20,656,100 | 1914. | 346 | 689 | 6 | 21,690,000 |
| 1907 | 275 | 686 | 32 | 20,502,200 | 1915. | 348 | 678 | 8 | 22,045,500 |
| 1908. | 282 | 685 | 20 | 21,015,600 | $1916 .$. $1917 .$. | 348 352 | 682 672 | 6 | $22,113,000$ $21,250,000$ |



COUNTRY ELEVATORS IN ALBERTA.

| 1906. | 27 | 43 | 2 | $1,715,506$ | 1912. | 142 | 279 | 14 | $9,863,000$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $1907 .$. | 49 | 71 | 10 | $2,785,500$ | 1913. | 168 | 321 | 19 | $11,565,500$ |
| 1908. | 59 | 109 | 6 | $3,818,400$ | 1914. | 195 | 397 | 11 | $14,793,000$ |
| 1909. | 72 | 120 | 14 | $4,386,490$ | 1915. | 219 | 449 | 14 | $16,089,000$ |
| 1910. | 121 | 229 | 17 | $8,080,400$ | 1916. | 249 | 525 | 11 | $18,807,000$ |
| 1911. | 130 | 249 | 13 | $8,764,500$ | $1917 .$. | 285 | 670 | - | $23,106,000$ |

## TRADE AND COMMERCE

## 32.-Number and Storage Capacity of Canadian Grain Elevators in

 the crop years 1901-1917-con.COUNTRY ELEVATORS IN BRITISH COLUMBIA.

| Year. | Stations. | E'levators. | Warehouses. | Capacity. | Year. | Stations. | Elevators. | Warehouses. | Capacity. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1907. | No. | No. | No. | Bushels. |  | No. | No. | No. | Bushels. |
| 1908. | 4 | 3 | 2 | 0 | 1913. | 7 | 6 | 2 | 487,000 |
| 1909. | 3 | 3 | - |  | , | 0 | 7 | 2 | 562,000 |
| 1910. | 6 | 6 |  | 108 | 1915. | 6 | 7 | 2 | 562,000 |
| 1911. | 7 | 6 | 2 | 444,000 | 191 | 5 | 7 | 1 | 440,000 |
|  |  |  |  |  | 1917.. | 6 | 9 | - | 527,000 |

TOTALS OF COUNTRY ELEVATORS.

| 1901. | 217 | 421 | 97 | 12,759,352 | 909. | 629 | 1,416 | 41 | 43,037,400 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1902. | 240 | 538 | 87 | 15,449,000 | 1910. | 769 | 1,766 | 38 | 54,460,400 |
| 1903. | 282 | 734 | 82 | 21,226,400 | 1911. | 840 | 1,866 | 32 | 57,487,300 |
| 1904. | 320 | 912 | 64 | 27,214,000 | 1912. | 915 | 1,997 | 31 | 62,074,500 |
| 1905. | 356 | 967 | 46 | 28,491,630 | 1913. | 1,025 | 2,272 | 37 | 70,883,650 |
| 1906. | 411 | 1,049 | 50 | 31,323,200 | 1914. | 1,194 | 2,552 | 24 | 80,040,000 |
| 1907 | 487 | 1,212 | 52 | 36,597,200 | 1915. | 1,225 | 2,752 | 28 | 86,649,000 |
| 1908. | 521 | 1,305 | 36 | 39,777,000 | 1916. | 1,312 | 2,995 | 19 | 94,322,000 |
|  |  |  |  |  | 1917 | 1,375 | 3,296 |  | 103,508,000 |

INTERIOR TERMINAL ELEVATORS.

| 1913-14 | 1 | 1 | - | 1,000,000 $1915-16$ | (1) | 4 | - | 10,500,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1914-15 | 3 | 3 | - | $8,000,000 \mid 1916-17$ | (1) | 4 | - | 10,500,000 |

INTERIOR HOSPITAL CLEVATORS.

| 1913-14 | (3) | 5 | - | 680,000 | 1915-16 | (3) | 7 | - | 825,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1914-15 | (3) | 6 | - | 805,000 | 1916-17\| | (3) | 6 | - | 805,000 |

BRITISH COLOMBLA TEFMINAL AND PUBLIC ELEVATORG.

| 1915-16 | (1) | 2 | - | 1,266,000 $1916-17)$ | (1) | 2 | - | 1,266,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

ONPARIO TERMINAL ELEVATORS.

| 1901. | ${ }^{4}$ | 5 | - | 5,570,000 | 1909. | 3 | 10 | - | 18,852,700 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1902. | 3 | 6 | _ | 7,100,00C | 1910. | 3 | 13 | - | 21,740,700 |
| 1903. | 3 | 6 | - | 8,580,000 | 1911. | 4 | 15 | - | 25,700,400 |
| 1904. | 3 | 7 | - | 13,422,000 | 1912. | 4 | 15 | - | 25,700,400 |
| 1905. | 3 | 10 | - | 17,912,000 | 1913'. | 4 | 20 | - | 29,380,000 |
| 1903. | 3 | 9 | - | 18,580,000 | $1914^{1} \ldots$ | 4 | 23 | - | 41,455,000 |
| 1907. | 3 | 8 | - | 18,075,000 | 1915 ${ }^{\text {c... }}$ | 4 | 25 | - | 42,180,000 |
| 1908. | 3 | 10 | - | 17,058,700 | 19161... | 4 | 25 | - | $43,085,000$ $45,325,000$ |

ONTARIO MILLING ELEVATORS.

| 1906. | 1 | 1 | - | 550,000 | 1912. | 2 | 3 | - | 1,700,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1907 | 1 | 1 | - | 550,000 | 1913. | 3 | 3 | - | 1,700,000 |
| 1908. | 2 | 3 | - | 1,700,000 | 1914. | 2 | 3 | - | 1,700,000 |
| 1909. | 1 | 2 | - | 1,300,000 | 1915. | 2 | 3 | - | 1,700,000 |
| 1910. | 2 | 3 | - | 1,700,000 | 1916. | 2 | 3 | - | 1,700,000 |
| 1911. | 2 | 3 | - | 1,700,000 | 1917. | 2 | 3 | - | 1,700,000 |

Including Hospital Elevators.

## GRAIN STATISTICS

32.-Number and Storage Capacity of Canadian Grain Elevators in the crop years 1901-1917-concluded.
ONTARIO COUNTRY ELEVATORS.

| Year. | Stations. | $\begin{gathered} \text { Ele- } \\ \text { vators. } \end{gathered}$ | Warehouses. | Capacity | Year. | Sta- | $\begin{gathered} \text { Ele- } \\ \text { vators. } \end{gathered}$ | Warehouses | Cspacity. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. |  | No. | Bush. 40,000 | 191 | No. | 0. | No. | Bush. 40,000 |
| 1. | _ | 1 | _ | 40,000 | 1915 | - | 1 | - | 40,000 |
| 1913. | - | 1 | - | 40,000 | 1916. | - | 1 | - | 40,000 |
|  |  |  |  |  | 1917. | $\checkmark$ | 1 | - | 40,000 |

PUBLIC ELEVATORS.

| 1909. | 14 | 18 | - | 14,826,000 | 1913. | 17 | 23 |  | 25,220,900 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1910. | 14 | 20 | - | 16,365,000 | 1914. | 16 | 22 | - | 29,850,000 |
| 1911. | 17 | 24 | - | 20,535,000 | 1915. | 15 | 22 |  | 29,250,000 |
| 1912. | 16 | 21 | - | 19,135,000 | 1916. . . | 15 | 22 | - | $29,250,000$ $30,700,000$ |

gRand total of canadian glevators.

| 1901. | 219 | 426 | 97 | 18,329,352 | 19091. | 647 | 1,446 | 41 | 78,016,100 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1902. | 243 | 544 | 87 | 22,549,000 | 19101. | 788 | 1,802 | 38 | 94,266,100 |
| 1903. | 285 | 740 | 82 | 29,806,400 | 1911.. | 863 | 1,909 | 32 | 105,462,700 |
| 1904. | 323 | 919 | 64 | 40,636,000 | 1912 $\ldots$ | 937 | 2,037 | 31 | 108,649,900 |
| 1905. | 359 | 977 | 46 | 46,403,630 | 1913¹.. | 1,048 | 2,319 | 37 | 127,224,550 |
| 1906. | 415 | 1,059 | 50 | 50,453,200 | 1914¹.. | 1,217 | 2,607 | 24 | 154,765,000 |
| 1907 | 491 | 1,221 | 52 | 55,222,200 | 19151.. | 1,247 | 2,813 | 28 | 168,624,000 |
| 1908. | 526 | 1,318 | 36 | 58,535,700 | 1916. | 1,334 | 3,059 | 19 | 180,988,000 |
|  |  |  |  |  | 1917... | 1,400 | 3,360 |  | 193,844,000 |

Note.-The present average capacity of railway cars for the carriage of grain is for Wheat 1,150, Oats 1,950, Barley 1,300, Flax 1,100 and Rye 1,000 bushels for the crop of 1916.

Including Public Elevators in the Eastern Inspection Division.
33.-Quantities of Grain inspected during the fiscal years 1914-1916.


TRADE AND COMMERCE
33.-Quantities of Grain inspected during the fiscal years 1914-1916-con.

| Grades of Grain. | 1914. |  | 1915. |  | 1916. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eastern Division | Western Division. | Eiastern Division | Western Division | Eastern Division | Western Division. |
| Wheat,spring-con. Commercial | Bush. | Bush. | Bush. | Bush. | Bush. | Bush. |
| No. 1 White. ${ }^{\text {grades, }}$ | - | - | - | - | 245,607 | - |
| No. 2 White. | - | - | - | - | 59,384 | - |
| No. 3 White. | - | - | - | - | 38,396 | - |
| No Grade.... | - | - | - | - | 2,887 | - |
| Rejected ... | - | 9785 | - | - | 8,681 | - |
| Cleanings. | - | 97,875 | - | - ${ }^{-}$ |  |  |
| Feed. | - | 132,750 | - | 102,375 | - | 189,000 |
| Other grades. | - | 55,125 | 2,350 | 14,625 | 7,129 | 59,475 |
| Total Spring Wheat... | - | 153,754,875 | 22,133 | 107,673,750 | 362,084 | 250,639,875 |
|  |  |  |  |  |  |  |
| U.S. RedWinter, No. 1 | - | - | 387,400 | - | - | - |
| Red Winter No. 2 | - | - | 1,282,200 | - | 24,000 | - |
| U.S. Hard Winter |  |  |  |  |  |  |
| No. 1 | 128,000 | - | 950,100 | - | 16,000 | - |
| U.S.Duram No. 1 |  | - | - | - | 448,000 | - |
| U.S. Maearoni | -1 |  | - | - | 645,500 | - |
| White Winter, |  |  |  |  |  |  |
| No. 1 |  | - | - | - | 2,000 | - |
| No. 2 | 39,342 | - | 64,696 | 2,250 | 97,940 | - |
| No. 3 |  | - |  |  | 9,719 | - |
| Rejected ..... | - | - | - | - | 81,646 | - |
| No Grade... | - | - | - | - | 14,991 | - |
| Mixed Winter $\text { No. } 2$ | 44,232 | 2,250 | 42,796 | 2,250 | 25,376 | 1,125 |
| No Grade.. ... |  |  |  | - | 11,716 | - |
| Rejected.... | - |  | - | - | 19,815 | - |
| Alberta Red Winter No. 1 | - | 51,750 | 1,000 | 84,375 | - | 11,325 |
| Alberta Red |  |  |  |  |  |  |
| Winter No. 2 | 7,607 | 625,500 | 18,524 | 99,000 | - | 66,825 |
| Alberta Red |  | 382,500 | 1,930 | 48,3:5 | - | 375,600 |
| $\begin{aligned} & \text { Commercial } \\ & \quad \text { grades, } \\ & \quad \text { White No. I } \end{aligned}$ |  |  |  |  |  |  |
|  | - |  | 24,825 | - | - | - |
| Commercial |  |  |  |  |  |  |
| grades No. 4 | - | 87,750 | - | 3,375 | - | - |
| Commercial grades No. 5 | - | 38,250 |  |  | - - | 182 |
| Other grades. | 55,377 | 52.875 | 11,194 | 3.375 | 30,236 | 182,250 |
| Total Winter Wheat. | 274,558 | 1,240,875 | 2,784,665 | 243,000 | 1,426,939 | 637,125 |
| Total Spring and Winter Wheat. | 274,558 | 154,995,750 | 2,806,798 | 107,916,750 | 1,789,023 | 251,277,000 |
| Indian Corn, Canadian. | 47,691 | - | 13,550 | - | 14,181 | - |
| Indian Corn, No. 2 |  |  |  |  |  |  |
| American..... | 7,500 | - | 5,299 | - | 3,000 | - |
| Indian Corn, No. 3 American. | 23,000 | - | 67,809 | - | 77,087 | - |
| IndianCorn, American, other | 15.929 | - | 41,348 | - - | 36,305 | - |
| Total Corn.. | 94.120 | - | 128,006 | - - | 130,573 | - |

## GRAIN STATISTICS

33.-Quantities of Grain inspected during the fiscal years 1914-1916—concluded.

| Grades of Grain. | 1914. |  | 1915. |  | 1916. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eastern Division. | Western Division. | Eastern Division. | Weatern Division. | Eastern Division. | Western Division. |
| Oats, Extra Na. 1. | Bush. |  | Bush | Bush. 1,906 | Bush. ${ }_{\text {12, }}$ | Bush. <br> 380,550 |
|  | 254,781 | 30,214,500 | 849,558 | $11.099,800$ | 462,770 | 583,500 |
| " "3. | 199, 656 | 14,521,650 | 1,175,288 | 6.891,300 | 1,530,546 | 12,746,500 |
| " "4.. |  |  | 153,450 | , | 527,704 |  |
| * U.S. No. 2 white clipped |  |  | 145,300 | - | - | - |
| $\text { " U.S. No. } 2 . .$ |  |  | 102,863 | - | - |  |
| a Feed extra | 1,900 | 5,159,780. | - | 3,971,000 | - | 4,530,450 |
| " Feed, No. 1.. |  | 2,460,900 |  | 4,504,900 |  | 2,555,450 |
| " Feed, No. 2.. |  | 5,385,906 | - | 3,401,000 |  | 6,459,300 |
| " Rejected. | 134,677 | 1,226,550 | 123,321 | 1,364,200 | 364,765 | 10,095,250 |
| " No grade.. | $63,35 i$ | 3,001,050 | 197,097 | 4,130,600 | 144,213 | 1,416,400 |
| " Condemned.. |  | 109,200 |  | 32,300 | - | 9,650 |
| Other grades | 2,478 | 1,474,200 | 2,750 | 294,500 | 58,300 | 871,950 |
| Total Osts. | 679,439 | 73,035,800 | 2,749,417 | 35,837,800 | 3,100,512 | 68,649,000 |
| Buckwheat, No.1. | - | - | - | - |  | - |
| " $\begin{aligned} & \text { " } \\ & \\ & \end{aligned}$ | 133,059 | - | 311,385 | - | 415,172 |  |
| " No No.3. |  | - | 3,629 | - | 5,880 |  |
| " $\quad \begin{aligned} & \text { No.grade } \\ & \text { Rejected }\end{aligned}$ | 521 | - | 3,518 |  | 9,813 | - |
| " Rejected | 5,129 | - | 17,565 | - | 34,529 |  |
| Total. | 132,609 | - | 336,092 | - | 467,255 | - |
| Barley, No.1.. | - | - | 838 | - | - | - |
| " No.2.. ${ }^{\text {a }}$ | - ${ }^{-}$ | 800, ${ }^{-}$ | 20,720, | - | 1,250 | 200500 |
| " No. 3,ertre | 17,250 | 889,200 | 123,528 | 125,200 | 8,750 | 220,500 |
| " No.3.. | 10,264 | 7,676,504 | 102, 110 | i,614,600 | 150,617 | 4,291,150 |
| No. 4 | - | 4,659,200 | 800 | 1, 351,200 | 95,642 | 2,432,250 |
| " Feed. |  | 447,200 | - | 410,800 |  | 301,859 |
| " Rejectad. | 22,100 | 1,921,400 | 6,577 | 319,800 | 87,996 | 514,350 |
| " No grade |  | 280,800 | 800 | 620,100 | 8,342 | 1,812,650 |
| Other.. | 85,375 | 70,200 |  | 1,300 | , | 1,350 |
| Total | 135,189 | 15,944,500 | 255,368 | 4,953,000 | 352,587 | 9,574,100 |
| Rye, all grades.. | 179,737 | 72,000 | 246,797 | 123,000 | 553,989 | 116,000 |
| Khaxseed, No. 1 , N.W | - | 15,183,000 | - | 3,331,250 | - | 3,038,475 |
| Fhaxseed, No. 1 M . | - | 2,081,1001 | - | 539,1501 | - | 171,375 |
| "No.3, C.W. | - | 661,500 | - | 68,675 | - | 51,650 |
| " Nograde | - | 3688.600 | - | 32,800 | - | 16,750 |
| * Rejected. | - | 113,400 | - | 28,70c | - | 25,350 |
| ned. | - | 24,150 | - | 1,025 | - | - |
| Total. | - | 18,432,750 | - | 4,001,600 | - | 3,303,600 |
| Peas, all grades... | 4,567 | - | 12,3000 | - | 15,344 | - |

${ }^{1}$ No. 2. C. W.

TRADEAND COMMERCE.
34.-Quantities of Grain inspected during the fiscal years ended March 31, 1914, 1915 and 1916.

| Grair. | Eastern Division. |  |  |  |  | Western Division. | Grand Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Kingston. | Peterboro. | Toronto. | Montreal. | Total. |  |  |
|  | Bush. | Bush. | Bush. | Bush. | Bush. | Bush. | Bush. |
| Wheat... 1914 | 1,000 | 40,968 | 104,590 | 128,000 | 274,558 | 154,995,750 | 155,270,308 |
| 1915 |  | 38,402 | 139,702 | 2,628,670 | 2,806,774 | 107,916,750 | 110,723,524 |
| 1916 | - |  | 376,777 | 1,412,246 | 1,789,023 | 251,277,000 | 253,066,023 |
| Corn. . 1914 | - | - | 21,130 | 72,990 | 94,120 | - | 94,120 |
| 1915 | - | - | 16,405 | 111,501 | 127,006 | - | 127.906 |
| 1916 | - | - | 18,552 | 112,321 | 130,573 | - | 130,573 |
| Oats.. . 1914 | - | 62,200 | 543,657 | 73,582 | 679,439 | 73,035,300 | 73,714,739 |
| 1915 | - | 109,388 | 933,680 | 1,706,349 | 2,749,417 | 35,837,800 | 38,587,217 |
| 1916 |  | , | 1,376,546 | 1,723,966 | 3,100,512 | 68,649,000 | 71,749,512 |
| Buckwheat. 1914 | - | 62,771 | 72,730 | 4,108 | 139,609, | - | 139,609 |
| 1915 | - | 23,760 | 284,324 | 28,008 | 336,092 |  | 336,092 |
| 1916 | - | - | 339,747 | 127,508 | 467,255 | - | 467,255 |
| Barley.. 1914 | - | - | 125,812 | 9,297 | 135,109 | 15,944,500 | 16,079,609 |
| 1915 | - | 1,100 | 230,122 | 24,146 | 255,368 | 4,953,000 | 5,208,368 |
| 1916 | - |  | 322,367 | 30,220 | 352,587 | 9,574,100 | 9,926,687 |
| Rye. . 1914 | - | 11,857 | 4,980 | 162,900 | 179,737 | 72,000 | 251,737 |
| 1915 | - | 4,854 | 144,765 | 97,178 | 246,797 | 123,000 | 369,797 |
| 1916. | - | - | 374,782 | 179,157 | 553,939 | 116,000 | 669,939 |
| Flaxseed.. 1914 | - | - | - | - | - | 18,432,750 | 18,432,750 |
| 1915 | $\rightarrow$ | - | - | - | - | 4,001,600 | 4,001,600 |
| 1916 | - | - | - | - | - | 3,303,600 | 3,303,600 |
| Peas. . 1914 | - | - | ,667 | 2,900 | 4,567 | - | 4,567 |
| 1915 | - | - | 12,300 |  | 12,300 | - | 12,300 |
| 1916 | - | - | 14,944 | 400 | 15,344 | - | 15,344 |
| $\begin{aligned} & \text { Sereen- } \\ & \text { ings. . } 1916 \end{aligned}$ | - | - | - | - | - | 281,000 | 281,000 |
| Total. . 1914 | 1,000 | 177,796 | 874,566 | 453,777 | 1,507,139 | 262,667,3001 | 264,174,439 ${ }^{1}$ |
| " 1915 | - | 177,504 | 1,761,298 | 4,674,160 ${ }^{2}$ | 6,612,000 | 153,038,150 ${ }^{3}$ | 159,651,112 |
| 1916 | - | - | 2,823,415 | 3,585,818 | 6,409,233 | 333,200,700 | 339,609,933 |

${ }^{1}$ Includes 186,000 bushels of screenings and 1,000 bushels of speltz.

| ₹ | " | 78,308 | " | Argentina corn. |
| :--- | :--- | :--- | :--- | :--- |
| 3 | " | 206,000 | " | screenings. |

GRAIN STATISTICS.
35.-Shipments of Grain by vessels from Fort William and Port Arthur for the navigation seasons 1915 and 1916.

| Vessels. | 1915. |  |  | 1916. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | To Canadian ports. | To American ports. | Total shipments. | To Canadian ports. | To American ports. | Total shipments. |
| Canadian vessels- | Bush. | Bush. | Bush. | Bush. | Bush. | Bush. |
| Wheat.. | 60,594,318 | 7,764,081 | 68,358,389 | 74,870,289 | 106,815,702 | 181,685,991 |
| Oats. | 22,608,366 | 291,173 | 22,899,539 | 39,984,439 | 17,836,800 | 57,821,239 |
| Barley | 2,551,251 | 354,997 | 2,906,248 | 5,671,877 | 3,215,405 | 8,887,282 |
| Flaxseed.. | 831,652 | 136,178 | 967,830 | 1,018,524 | 4,556,463 | 5,574,957 |
| Screenings. | 65,862 | 266,280 | 332,142 | 19,633 | 1,574,523 | 1,594,156 |
| Mixed grains. | 128,845 | - | 128,845 | 250,711 | 71,644 | 322,355 |
| Foreign ves-sels- |  |  |  |  |  |  |
| Wheat. | 176,703 | 98,857,699 | 99,034,402 | - | - | - |
| Oats. | 527,951 | 3,797,160 | 4,325,111 | - | - |  |
| Barley | 232,686 | 1,832,629 | 2,065,315 | - | - |  |
| Flaxseed... | , | 1,436,548 | 1,436,548 | - | - |  |
| Screenings. | - | 1,345,182 | 1,345,182 | - |  |  |
| Total. . | 87,717,634 | 116,081,927 | 203,799,561 | 121,815,473 | 134,070,537 | 255,886,010 |

Note-For 1916 the Shipments of Grain were not separately distinguished as between Canadian and Foreign vessels.
36.-Shipments of Grain by vessels and all rail ronte from Fort William and Port Arthur for the crop years ended Aagust 31, 1915 and 1916.

| Grain. | 1914-15. |  |  | 1915-16. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Vessels. | Rail. | Total. | Vessels. | Rai | Total. |
| Wheat- | Bush. | Bush. | Bush. | ush | Bush. | Bush |
| No. 1 Hard | 30,611 | 3,134 | 33,745 | 2,056,976 | 138,031 | 2,195,007 |
| No. 1 | 14,782,266 | 1,007,808 | 15,790,074 | 137,919,099 | 7,658,147 | 145,577,246 |
| No. ${ }^{2}$ |  |  |  |  |  |  |
| Northerm No. 3 |  | 2, | 27,920,669 | 45,36 | 3,877, | 49,244,553 |
| Northern | 18,517,590 | 1,192,191 | 19,709,781 | 35,346,003 | 4,299,006 | 39,645,009 |
| Sundry grades. | 13,387,963 | 2,077,170 | 15,465,133 | $36,216,532$ | 6,421,160 | 42,637,692 |
| Screenings. | 1,039,047 | 277,196 | 1,316,243 | , 21, 532 | 6,21,100 | 12,037,0.2 |
| Total wheat. | 73,332,302 | 6,903,343 | 80,235,645 | 256,905,541 | 22,393,966 | 279,299,507 |
| Oats. | 15,897,695 | 1,224,195 | 17,121, 890 | 60,255,979 | 14,975,499 | 75,231,478 |
| Barley | 2,524,081 | 125,481 | 2,649,562 | 9,039,159 | 886,471 | 9,925,630 |
| Flaxseed. | 4,305,528 | 107,897 | 4,413,425 | 4,573,581 | 516,356, | 5,089,037 |
| Rye. | 1,040 | 2,540 | 3,580 | - | 5,396 | 5,396 |
| mixedgrain | 88,960 | 21,674 | 110,634 | - | - | - |
| Total grain. | 96,149,606 | 8,385,130 | 104,534,736 | 330,774,260 | 38,777,688 | 369,551,948 |

## TRADEAND COMMEROE

## EOUNTIES.

The only bounties now being paid are for crude petroleum. Pountios on lead have temporarily ceased owing to the fact that the fice in London exceeds the amount below which botunties are payable linder the Lesd Bounties Act. In 1916 a sam of $\$ 59.88$ on $99,797 \mathrm{lh}$. was paid, which brought the total paid in lead bounties from 1899 to 1916 to $\$ 1,979,164$ for $1,187,083,350 \mathrm{lb}$. as in Table 37 For crude Fetroleum the smount paid in 1916 was $\$ 109,177$ for $7,278,452$ gallons, the total from 1905 to 1916 being $\$ 2,537,012$ on $169,134,123$ gallons, as slown in Tcble 38. The total amount of bounties paid from 1896 to 1916 is $\$ 21,669,965$. Of this amcunt $\$ 16,785,827$ was for iron and steel, $\$ 1,979,164$ for lead, $\$ 2,537,012$ for crude petroleum and $\$ 367,962$ for Menila fire. The Year Book of 1915, pages 459 and 460, gave a cescription of the bounties that have been payable since 1883, as well as Tables showing for each commodity the quantities on which bounties were annually raid, and the anounts of such bounties, for the years 1896 to 1915 inclusive.
37.-Bararties paid in Carada car Lead, 1999-1916.

| Fiscal Year. | Quantity. | Bounty. | Fiscal Yer. | Quantity. | Bounty. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1899. | chay | 76,665 | 1999. | $\stackrel{16 .}{42,53,287}$ | $\begin{gathered} 8 \\ 50^{\circ}, 434 \end{gathered}$ |
| 1900. | 177,990,000 | 43,335 | 1910. | 45,467,545 | 340,542 |
| 1901. | 245,792,000 | 30,000 | 1911 | 33,351,909. | 248,535 |
| 1902. |  | - | 1912. | 27,823,221 | 179,288 |
| 1903. | 2,576,000 | 4,380 | 1913 | 23,985,569, | 68,065 |
| 1904. | 26,748,104 | 195,627 | 1914. | 7,197,038 | 8,179 |
| 1905. | 56,489,523 | 330,645 | 1915 | 3,237,897 | 3,217 |
| 1906. | 28,708,428 | 90,190. | 1916 | 99,797 | 60 |
| 1907. | 15,425,552 | 51,995 | Total | 1,187,083,350 | 1,979,164 |
|  | 15, |  |  | 1,187,0<2,as0 | ,07,164 |

38.-Hourdies paid in Capada on Crude Petroleuns, 1205-1915.

| Fiscal Year. | Quantity. | Bómety. | Fiscal Year. | Quantity. | Bounty. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1905. |  | $\stackrel{\$}{50,047}$ | 1912. | 9,469 gal | - ${ }_{1+1,986}$ |
| 1306. | 19,410,4180 | 291,157 | 1913. | $8,616,767$ | 129,252 |
| 1907 | 17,770,205 | 266,553 | 1914. | 7,834,219 | 117,513 |
| 1908 | $26,081.139$ | 391,217 | 1915. | 7,685,127 | 115,277 |
| 1909 | 17,379,871 | 260,698 | 1916. | 7,278,452 | 109,177 |
| 1910. | $10,70 \mathrm{c}, 418$ | 203,589 | Total | 169,134,123 | 2,537,012 |
| 1911. | 10,706,418 | 160,596 | Total. | 169,134,123 | 2,537,012 |

## PATENTS.

Applications for patents in Canada from inventors in other countries were first received in 1872 . In that year the total number of applicatimas for patents made to the Canadian Patert Office, Department of Agriculture, was 752, and the total fees amounted to $\$ 18,652$. The busimess of the Office has continued gradually to expand, and the number of applications and total fees have increased each year without a break since the begiming of the present century until the fiscal year ended March 31, 1913, when 8,681 applications were received, and the total fees amounted to $\$ 218,125$. The number of patents granted in the fiscal year $1915-16$ was 6,812 , as compared with 6,867 in 1914-15. Of the total number of patents granted in the fiseal years $1915-16,4,972$ were issued to inventors or assignees resident in the United States, this number being 73 p.c. of the total. Patents to Camadian inventers numbered 1,125 , the other principal countries in order of the number of patents granted being Great Britain 360, Australia 76, France 55, and Sweden 44. Table 39 ghows the distribution of the Canadian patentees by province of residence for the years 1908 to 1916.
39.-Number of Canadian Patentees by Province of Residence for the fiscal years 1908-1916.

| Provinces. | 1908. | 1909. | 1910. | 194. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No., | No. | No. | No. | No. |
| Prince Edward Istand | 2 | 3 | 2 | - | - | 4 | 2 | 2 | 3 |
| Nova Scotia. | 27 | 24 | 29 | 31 | 30 | 20 | 39 | 33 | 21 |
| New Brunswick. | 25 | 18 | 30 | 23 | 17 | 25 | 30 | 20 | 17 |
| Quebec. | 178 | 205 | 267 | 271 | 283 | 277 | 278 | 278 | 237 |
| Ontario.... | 424 | 487 | 610 | 610 | 531 | 584 | 607 | 586 | 540 |
| Manitoba... | 61 | 71 | 88 | 102 | 72 | 105 | 115 | 97 | 89 |
| Gaskatchewan. | 15 | 32 | 40 | 47 | 47 | 58 | 59 | 66 | 65 |
| Alberta. | 25 | 28 | 39 | 54 | 56 | 61 | 46 | 71 | 60 |
| Britimh Columbia . | 52 | 51 | 90 | 108 | 97 | 122 | 157 | 126 | 92 |
| Teariteries and Yukion | 6 | 4 | 3 | $\rightarrow$ | - | - | 1 | 2 | 1 |
| Totals. | 8 85 | 908 | 1,198 | 1,246 | 1,083 | 1,256 | 1,384 | 1,281 | 1,123 |

## TRANSPORTATION AND COMMUNICATIONS

It will be seen from the table that the more populous provinces of Ontario and Quebec obtained the largest absolute number of patents: but a calculation of the number of patentees in relation to population shows that for the fiscal year 1916 the greatest relative inventiveness was displayed in British Columbia. Thus in this province, in 1916. one patent was granted to every 3,943 persons, the other provinces as regards the number of persons to each patent granted being placed in order as follows: Ontario 4,666, Manitoba 5,109, Alberta 6,215, Saskatchewan 7,577, Yukon 8,000, Quebec 8,441, New Brunswick 20,695, Nova Scotia 21,992 and Prince Edward Island 31,240.

## COPYRIGHT, TRADE MARKS, ETC.

The report for the year ended March 31, 1916, of the Copyright and Trade Marks Branch of the Department of Agriculture shows that the fees received for copyrights, trade marks, industrial designs and timber marks amounted to $\$ 35,653$ for the fiscal year 1915-16, as compared with $\$ 39,600$ in 1914-15. Registrations of copyright in 1915-16 numbered 1,477 against 1,675 in 1914-15, of trade marks 1,019 against 1,106, of industrial designs 215 against 224 and of timber marks 27 against 24.

## VIII.-TRANSPORTATION AND COMMUNICATIONS.

Statistics of transportation and communications comprise those of steam and electric railways, express companies, shipping, canals, telegraphs, telephones and the Post Office. ${ }^{1}$

## RAILWAYS.

Steam Railways.-The increase in the railway mileage of Canada for the year ended June 30, 1916, was 1,852, as compared with 4,788 in 1915, 1,491 in 1914 and 2,577 in 1913, the increases respectively over the mileage of the previous year. The total railway mileage in actual operation on June 30, 1916, was 37,434 . The railway year runs from July 1 to June 30, and the railway statistics throughout this section are for the years ended June 30. About 3,150 miles of new line were under construction on June 30, the new roads and extensions being almost wholly in the western provinces. Table 1 records the steam railway mileage in Canada annually from 1835 to 1916, and Table 2 the steam railway mileage of Canada by provinces for each of the seven years 1910 to 1916.

Capital Liability of Steam Railways.-During the year ended June 30,1916 , the sum of $\$ 17,314,886$ was added to the capital liability of steam railways in operation in Canada, including stocks $\$ 178,387$ and funded debt $\$ 17,136,544$. These changes bring the total capitalization

[^20]
## RAILWAYS.

of Canadian steam railways in operation to $\$ 1,893,125,774$ on June 30, 1916 , as compared with $\$ 1,875,810,888$ in 1915 (Table 3). If the capitalization of railways under construction be added to that of the operating railways the total is increased to $\$ 1,974,607,278$, of which $\$ 877,236,943$ are stocks, $\$ 176,284,882$ are consolidated debenture stock, and $\$ 921,085,449$ are funded debt.

Statistics of Individual Companies.-Table 5 gives the mileage, capital, aid paid up, earnings and operating expenses of the steam railways of Canada for the year ended June 30, 1916. It shows that the aggregate earnings were $\$ 261,888,654$, an increase compared with 1915 of $\$ 62,045,582$, or 31 p.c. Operating expenses in 1916 amounted to $\$ 180,542,259$, an increase of $\$ 32,811,160$, or 22.2 p.c. The ratio of operating expenses to gross earnings was 68.9 p.c., as compared with 73.9 p.c. in 1915 . The total aid paid up, as given in Table 5, amounting to $\$ 159,410,343$, includes $\$ 116,297,938$ paid by the Dominion Government, $\$ 30,441,565$ paid by the Provincial Governments and $\$ 12,670,838$ paid by municipalities.

Passengers and Freight.-Table 6, giving the statistics of steam railways from 1875 to 1916, shows that in 1916 the steam railways of Canada carried $49,027,671$ passengers and $109,659,088$ tons of freight, an increase of $2,705,636$ passengers, or 5.8 p.e., and of $22,454,250$ tons of freight, or 25.7 p.c., as compared with 1915 . The volume of passenger and freight traffic in 1916 was the largest in the history of Canadian railways. The distribution of freight as between different classes of products is shown in Table 15. The proportions p.c. are for 1916 as follows: Agriculture, 24.72; animals, 3,56; mines, 34.52; forests, 15.10 ; manufactures, 15.38 ; merchandise, 4.22 and miscellaneous, 2.50 .

Government Aid to Railways.-The railways of Canada have been built largely under different forms of Government aid. Tables 4 and 9 to 11 show its nature and extent. The principal forms of aid granted have consisted in land grants, cash subsidies, loans, the issue of debentures and the guarantee of bonds or interest. Aid has been granted both by the Dominion and Provincial Governments and also by municipalities. Table 4 shows the areas of the land granted as subsidies to steam railway companies by the Dominion and Provincial Governments, with the names of the companies in the case of the Dominion Government. The total area so granted up to June 30 , 1916, extends to $55,740,249$ acres.

Government Railways and Subsidies.-The Dominion Government has itself undertaken the construction of the eastern portion of the new National Transcontinental Railway from Moncton, N.B., to Winnipeg, Man., and the expenditure on this line up to March 31, 1916, was $\$ 159,881,197$ (Table 13). Also the Dominion Government owns and operates the Intercolonial Railway, which extends from ocean ports in Nova Scotia and New Brunswick to Montreal, and the Prince Edward Island Railway. From 1851 up to June 30, 1916, as shown analytically in Table 10, the total value of public aid granted to steam railways in Canada, exclusive of the capital of the two government railways (I.C.R. and P.E.I.R.), amounted to $\$ 240,072,359$. Of this sum $\$ 184,719,628$ represents aid granted by the Dominion Government, $\$ 37,437,895$ that

## TRANSPORTATION AND COMMUNICATIONS

granted by the Provincial Governments, and $\$ 17,914,836$ that granted by mumiripalities. During 1916 the total cash subsidies paid to railways smounted to $\$ 1,240,435$, paid wholly by the Deminion Government.

Aid to Rairways by Dominion Government.-Table 11 shows for each year from 1875 to 1916 the amount of aid to date given to steam railways by the Dominion Government. The total at June 30, 1916, of $\$ 311,796,726$ is macle up of the capital of the two government-owned lines, smounting to $\$ 127,077,098$, and $\$ 184,719,628$, representing the aid granted by the Dominion Govermment to other railways. The laster includes in 1912 the sum of $\mathbf{w 4 , 9 9 4 , 4 1 7}$ paid to the Grand Trunk Pacific Railway Co. under the Implement Clause of the agreement between the Govermment and the Company, increased in 1816 to \$6,263,716. This clause provides that the Government shall make up the difference between the amount realized by certain bonds and their par value. In each year since 1886 the air granted to other railways includes the sum of $\$ 10,189,521$ paid by the Govermment to the Canadian Pacific Railway Company for land taken over by the Government from the Company's land subsidy. From 1885 to 1909 .the amounts in the third column represent the accumulated annual payment by the Domimion to the Quebec Government of interest at 5 p.c. on a sum of $\$ 2,394,000$ and amounting to $\$ 119,700$ on account of the tranefer of the Quebec, Montreal, Ottawa and Occidental Railway. The item of $\$ 5,160,054$ in 1909 includes the payment of the principal. From 1910; the amounts include the loan of $\$ 10,000,090$ made to the Grand Trunk Pacific Railway Company under federal legislation of 1909 (8-9. E.dw. VII, c. 19).
1.-Record of Steam Railway Mileage, 1835-1916.

| Year. | Number of miles in operation. | Year. | Number of miles in operation | Year. | Number of miles in operation. | Year. | Number of miles in operation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1835. | - | 1856. | 1,414 | 1877 | 5,782 | 1898. | 16,870 |
| 1836. | 16 | 1857 | 1,444 | 1878. | 8,226 | 1899. | 17,250 |
| 1837. | 16 | 1858. | 1,963 | 1879. | 6,858 | 1900. | 17,657 |
| 1838. | 16 | 1859. | 1,994 | 1880. | 7,194 | 1901. | 18,140 |
| 1839. | 16 | 1860. | 2,065 | 1881. | 7,331 | 1902. | 18,714 |
| 1840. | 16 | 1861. | 2,146 | 1882. | 8,697 | 1903. | 18,988 |
| 1841. | 16 | 1862. | 2,189 | 1883. | 9,577 | 1904. | 19,431 |
| 1842. | 16 | 1863. | 2,189 | 1894 | 10,273 | 1905. | 20,487 |
| 1843. | 16 | 1864. | 2,189 | 1885 | 10,773 | 1906. | 21,353. |
| 1844. | 16 | 1865. | 2,240 | 1886. | 11,793 | 1007 | 22,452 |
| 1845. | 16 | 1866. | 2,278 | 1887 | 12,184 | 1908. | 22,966 |
| 1846. | 16 | 1867 | 2,278 | 1888 | 12,163 | 1909. | 24,104 |
| 1847 | 54 | 1868. | 2,270 | 1889. | 12,628 | 1910. | 24,731 |
| 1848. | 54 | 1869. | 2,524 | 1890. | 13,151 | 1911. | 25,409 |
| 1849. | 54 | 1870. | 2,617 | 1891. | 13,838 | 1912. | 26,727 |
| 1850. | 66 | 1871. | 2,695 | 1892. | 14,564 | 1913. | 29,304 |
| 1851. | 159 | 1872. | 2,899 | 1893. | 15,005 | 1914. | 30,795 |
| 1852. | 205 | 1873. | 3,882 | 1894. | 15,627 | 1945. | 35,582 |
| 1853. | 506 | 1874. | 4,331 | 1895. | 15,977 | 1916. | 37,434 |
| 1854. | 764 | 1875. | 4,804 | 1896. | 16,270 |  |  |
| 1855. | 877 | 1876 | 5,218 | 1897. | 16,550 |  |  |

RAILWAYS
2:-Steam Railway Mileage by Prowineeo, 1910-1916.

| Provinces. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ontario. | 8,230 | 8,322 | 8,546 | 9,000 | 9,255 | 10,702 | 11,320 |
| Quebec. | 3,795 | 3,882 | 3,882 | 3,986 | 4,043 | 4,677 | 4,733 |
| Manitoba. | 3,221 | 3,466 | 3,520 | 3,993 | 4,076 | 4,498 | 4,309 |
| Saskatchewan. | 2,932 | 3,121 | 3,754 | 4,651 | 5,089 | 5,327 | 5,378 |
| Alberta. | 1,488 | 1,494 | 1,897 | 2,212 | 2,545. | 3,174 | 3,894 |
| British Columbia. | 1,832 | 1,842 | 1,855 | 1,951 | 1,978 | 3,100 | 3,604 |
| New Brunswick. | 1,522 | 1,548 | 1,5455 | 1,545 | 1,830 | 1,962 | 1,957 |
| Nova Sootia. | 1,351 | 1,354 | 1,35\% | 1,360 | 1,365 | 1,367 | 1,436 |
| P. Edward Island. | 269 | 269 | 269 | 279 | 278 | 275 | 275 |
| Yukon. | 91 | 102 | 102 | 102 | 102 | 102 | 102 |
| In United States. |  |  |  | 22 | 224 | 398 | 426 |
| Canada. | 24,731 | 25,400 | 25,727 | 29,304 | 30,795 | 35,582 | 37,434 |

Nore. - The mileage shown in the United States relates entirely to limes which cross American territory in passing from one point in Canada to amother; such lines, although not heretofore included in Canadian mileage, are operated wholly for the purposes of Canadian traffic. There is a large additional mileage in the United States, which is owned and operated by Canadian Railways, bat of whieh no account is taken in these statistics.
3.-Capital Liability of Steam Railways, 1876-1916.

| Year | Stocks. | Funded Debt. | Total. | ar | Stocks. | Funded Debt. | Totai. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 180,955 | 76,079 | 257,035,188 | 1897 | 367,611,048 | $834,086$ | 6,445,134 |
| 1877 | 182,578,994 | 79,676,382 | 262,255,376 | 1898 | 378,151,796 | 354,946,865 | 733,098,655 |
| 1878 | 191,331,767 | 83,710,938 | 275,042,705 | 1899 | 391, 300, 360 | 362,053,495 | 753,353,855 |
| 1879 | 192,674,553 | 81,151,628 | $273,826,181$ | 1900 | 410,326,095 | 373,716,704 | 784,042,799 |
| 1880 | 189,956,177 | 80,661,316 | 270,617,493 | 1901 | 424,414;314 | 391,696,523 | 816,110,837 |
| 1881 | 199 | 8 | 284,419 |  | 460,401,863 |  | 865,208,710 |
| 1882 | 216,408,465 | 92,487,932 | 306,956 | 1963 | 488,770,312 | 424,100,762 | 907,871,074 |
| 1883 | 269,092,615 | 102,134,295 | 371,226,910 | 1904 | 492,752,530 | 449,114,035 | 941,866,565 |
| 188 | 285,077,822 | 109,310,963 | 394,388,785 | 1905 | 526,353,951 | 465,543,967 | 991,897,918 |
| 1885 | 312,183, 162 | 141,370,963 | 453,553,125 | 190 | 561,655,395 | 504,226,234 | 1,065,881,629 |
| 18 | 317 | 16 | 486 | 907 | 588,563,591 | 583,369,217 |  |
| 18 | 324,128,73 | 194,801,553 | 518,930,291 | 19 | 607,891,349 | 631,869,664 | 1,239,761,013 |
| 18 | 327,493,882 | 228,617,728 | 556,111,610 | 1909 | 647,534,647 | 660,946,769 | 1,308,481,416 |
| 1889 | 332,559,672 | 261,675,226 | 584,234,898 | 191 | 687,557,387 | 722,740,300 | 1,410,297,687 |
| 1890 | 338,177, 386 | 266,886,707 | 605,063,093 | 191 | 749,207,687 | 779,481,514 | 1,528,689,201 |
| 1891 | 339,769,786 | 292,291,654 | 632,061,440 | 1912 | 770,459,351 | 818,478,175 | 526 |
| 189 | 344,400,282 | 305,120,200 | 649,520,482 | 1913 | 755,316,516 | 613,256,952 | 1,531,830,6921 |
| 18 | 371,877,287 | 307,255,888 | 679,103,175 | 1914 | 853,110,653 | 782,402,638 | 1,808,820,761 ${ }^{1}$ |
| 18 | 361,760,508 | 327,003,803 | 688,764,311 | 1915 | $847,801,101$ | 851,724,905 | $1,875,810,588{ }^{\text {a }}$ |
| 18 | 361,440,59 | 330,785,546 | 692,235,136 | 1916 | 847,979,443 | 868,861,449 | 1,893,125,774 ${ }^{3}$ |
|  | 361,075,34 | 336,137,60 | 697 |  |  |  | 1, 1 , |

[^21]
## TRANSPORTATION AND COMMUNICATIONS

4,-Areas of Land Subsidies granted to Steam Railways by the Dominion and Provincial Governments up to June 30, 1916.

| By the Dominion Government to- | Acres. |
| :---: | :---: |
| Alberta Railway and Irrigation Co. (formerly Northwest Coal and Navigation Co.). | 1,114,368 |
| Calgary and Edmonton Railway Co. . . . . ... . | 1,888,448 |
| Canadian Northern Railway Co. (from points on C. P. R. to Hudson Bay).. | 2,624,128 |
| Canadian Northern Railway Co. (formerly Lake Manitoba Ry. and Canal Co.). | 798,400 |
| Canadian Pacific Railway Co. (main line).... | 18,206,986 |
| C. P. R. Pipestone extension, Souris Branch. | 200,320 |
| C. P. R. Souris Branch. | 1,408,704 |
| Great Northwest Central Railway Co. (formerly Northwest Central Railway Co.)... | 320,000 |
| Manitoba and Northwestern Railway Co. .̈. | 1,501,376 |
| Manitoba Southwestern Colonization Railway Co. | 1,396,800 |
| C. N. Railway (formerly Manitoba and Southeastern Railway Co.) | 680,320 |
| Qu'Appelle, Long Lake and Saskatechewan Railroad and Steamboat Co. .. <br> Saskatchewan and Western Railway Co.... | $\begin{array}{r} 1,625,344 \\ 98,880 \end{array}$ |
| Total by Dominion Government. | 31,864,074 |
| By Provincial Governments: |  |
| Quebec | 13,324,950 |
| British Columbia. | 8,119,221 |
| New Brunswick. | 1,647,772 |
| Nova Scotia. | 160,000 |
| Ontario. | 624,232 |
| Total by Provincial Govermments..... . ... . | $23,876,175$ |
| Total area of Dominion and Provircial land grants to steam railways. | $55,740,249$ |

5.-Mileage, Capital, Earnings and Operating Expenses of Steam Railways, 1916.

| Name of Railway. | Miles operated. | Capital. | Aid paid up. | Earnings. | Operating expenses. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \$ | \$ | \$ | \$ |
| Alberta Central ${ }^{1}$ | - ${ }^{-7}$ | 770,000 | 404,480 |  |  |
| Algoma Eastern. ${ }^{\text {a }}$ a | 88.77 | 5,770,000 | 812,648 113,694 | 528,005 | 247,820 |
| Alberta Southern (aband.). | - |  | 113,694 |  |  |
| Algoma Central and Hudson Bay. | 347.71 | 21,542,000 | 2,248,324 | 739,271 | 574,829 |
| Atlantic, Quebec, and Western. | 103.08 | 4,548,675 | 902,800 | 102,765 | 119,913 |

${ }^{1}$ Under construction.

RAILWAYS.
5.-Mileage, Capital, Earmings and Operating Expenses of Steam Railways, 1916
-con.

| Name of Railway. | Miles operated. | Capital. | Aid paid up. | Earnings. | Operating expenses. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bedlington and Nelson | $\begin{aligned} & \text { No. } \\ & 12.04 \end{aligned}$ | $1, \$ 00,000$ | \$ | * | 8 |
| British lukon. | 101.12 | 4,438,879 |  | 270,104 | 104,133 |
| Bruce Mines and Algoma |  |  | 105,338 |  |  |
| Buctouche and Moncton. | 32.00 | 310,000 | 196,100 | 34,664 | 31,527 |
| Brandon, Saskatchewan and Hudson Bay | 69.45 | 2,150,000 |  | ,159 | 128,902 |
| Canada and Gulf T | 35.80 | 1,340,000 | 230,654 | 49,329 | 40,177 |
| Canada Southern | 380.54 | 37,630,000 | 521,559 | 11,422,273 | 6,415,172 |
| Canadian Government Railways- |  |  |  |  |  |
| Intercoloni | 1.514.1 | $-$ | 927,616 ${ }^{2}$ | 15,686,662 | 13,323,183 |
| Prince Edward Island | 274.60 |  |  | 436,728 | 575,515 |
| Canadian Northern System | 9.647.23 | 427,928,765 | 38,550,965 | 35,476,275 | 25,244,186 |
| Canadian Pacific, including leased lines. | 12.899 .70 | 582,490,139 | 65,461,733 ${ }^{3}$ | 124,654,571 | 78,237,828 |
| Cape Breton | 31.00 | 1,000,000 | 306,000 | 15,100 | 21,971 |
| Caraquet. | 84.78 | 1,750,000 | 499,649 | 81,218 | 75,494 |
| Central Ry. of Can |  |  | 30,145 |  |  |
| Central Vermont | 125.20 | - |  | 41,672 | 255,770 |
| Colchester Coal \& Ry |  | 4,210,000 | 12,800 |  |  |
| Crows Nest Southern. | 74.18 | 4,210,000 |  | 112,642 | 169,121 |
| Coal Co.... | 32. |  | 213,500 | 87,454 | 76,257 |
| Detroit River Tunne | 1.45 | 21,000,000 |  | - $\square^{-7}$ |  |
| Dominion Atlantic. | 274.16 | 8,431,499 | 3,358,422 | 962,067 | 685,303 |
| Eastern British Columbia. | 14. | 420 | - | 31,338 | 32,559 |
| Edmonton, Dunvegan and British Columbia. | 287.00 | 7,250,000 | - | 427,413 | 333,256 |
| Essex Terminal. | 10.00 | 720,000 | - | 84,311 | 55,857 |
| Elgin and Havelock. | 27.00 | 94,900 | 203,153 ${ }^{4}$ | 10,997 | 10,700 |
| Esquimalt and Nanaimo | 199.20 | 7,332,000 | 1,520,560 | 529,913 | 358,802 |
| Fredericton and Grand Lake.... | 35.0 | 605,000 | 216,576 | 69,807 | 45,532 |
| Grand Trunk Pacific. | 1.963 .91 | 198,724,100 | 6,990,036 ${ }^{3}$ | 6,963,189 | 5,902,843 |
| Grand Trunk. | 3.555.85 | 444, 290,651 | 12,993,059 | 39,155,040 | 28,782,013 |
| Hereford. | 52.18 | 1,600,000 | 254,786 | 97,083 | 106,443 |

[^22]TRANSPORTATION AND COMMUNICATIONS.
5.-Mileage, Capital, Earnings and Operating Expenser of Steam Railways, 1916
-con.

| Name of Railway. | Miles operated. | Capital. | Aid paid up. | Earnings. | Operating expenses. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | $\$$ | * | \% | \$ |
| International Bridge Coy. |  | 2,012,260 | - | - |  |
| International of New Brunswick. . | 111.30 |  | 1,006,080 | 116,227 | 119,431 |
| Inverness Railway and |  |  |  |  |  |
| Coal Co. (C.N.R.)... | 60.91 |  |  |  |  |
| Kent Northern. | 27.003 | 107,000 | 236,734 ${ }^{3}$ | - | - ${ }^{-}$ |
| Kettle Valley | 302.92 | 375,000 | 2,993,988, | 330,427 | 329,254 |
| Kootenay Central ${ }^{1}$ |  |  | 1,065,856 |  |  |
| Klondike Mines. | 31.81 | 2,466,250 | 197,184 | - |  |
| Lake Erie and Northern'. |  |  | , 320,191 |  |  |
| Lake Erie \& Detroit Fiver | - | 4,400,000 | 1,011,351 |  |  |
| L'Assomption (road abandoned) |  |  | 11,200 | - |  |
| Lake Champlain and St. Lawrence Junction. |  | 978,000 | 286,280 |  |  |
| Lotbinière and Megantic. | 30.00 | 50,000. | 222,994 | 36,074 | 29,561 |
| Maganatawan River.. | 1.91 |  | 13,552 |  |  |
| Maine Central (Princeton) | 5.10 | 173,900 | - | 18,363 | 14,590 |
| Midland Railway of Manitoba. | 6.46 | 4,300,000 | - | 266,305 | 303,670 |
| Maritime Coal and Ry. Co. | 15.00 | 3,661,500 | 80,488 | 90,342 | 53,580 |
| Massawippi Valley | 35.46 | 800,000 | 10,376 | 224,520 | 208,399 |
| Montreal and Atlantic. | 184.40 | 4,265,000 | 315,892 | 1,291,420 | 946,632 |
| Montreal \& Province Line. |  | 1,200,000 | 314,682 |  |  |
| Montreal and Vermont Junction. | - | 1,000,000 | - | - |  |
| Morrissey, Fernie and |  |  |  |  |  |
| Micbel... | 10.85 | 1,263,000 | - | 120,589 | 89,427 |
| Manitolat Great Northern. | 91.77 | 2,086,000 | - ${ }^{-1}$ | 38,087 | 114,690 |
| Minudie Coal and Ry. Co.. | ${ }^{-}$ |  | 18,544 |  | ${ }_{58} \overrightarrow{4}$ |
| Napiervilie Junction.. | 27.08 | 600,000 | 183,440 | 129,417 | 58,476 |
| National Tranecontinental. | 2.002 .08 |  | - | 5,798,516 | 5,369,062 |
| Nelson and Fort Sheppard. | 55.42 | 2,846,800 | - | 42,909 | 88,839 |
| New Brunswick Coal and Ry. Co. | 58.00 | z | 414,400 | 44,950 | 44,650 |
| New Brunswick and Prince Edward Island. | 36.05 | - | 213,149 | 42,624 | 62,876 |
| New Westminster Southern | 15.18 | 600,000 |  | 35,203 | 28,458 |
| North Shore, N.B. | 8.63 | 133,000 | 43,816 | - |  |
| Northern New Brunswick and Seaboard!. | 19.80 | 595,500 | 108,160 | - |  |
| Nosbonsing and Nipissing. . | 5.50 |  |  |  | 282820 |
| Ottawa and New York. | 56.90 | $2,600,000$ | 382,384 | 250,237 $2,987,10$ | 282,820 $1,586,697$ |
| Pere Marquette in Canada | 198.81 | 5,870,000 |  | 2,987,10. | 1,586,697 |

[^23]
## RATLWAYS

5.--Mileage, Capital, Earninge and Operating Eispensef of Steam Railvays, 1916 -concluded.

| Nante of Raitway | Miles operated. | Capital. | Aid paid up. | Earnings. | Operating expenses. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \$ | \$ | * | 8 |
| Phillipsburg Ry. and Quarry Co. | 6.60 | 164,500 | 49,379. |  |  |
| Pontiac and Renfrew |  |  | 31,034 |  |  |
| Quebec Bridge and Ruilway Co . . |  | - |  |  |  |
| Quebec Certral. | 27300 | 9,615,009 | 1,764,162 | 1,506,348 | 973.5 |
| Quebec Oriental. | 100.00 | 2,104, 400 | 1,803,084 | 138,689 | 153, ${ }^{\text {dis }}$ |
| Quebee Ry., Light and Power Co. | 30.82 | - | 402,946 | 87,476 | 67,124 |
| Quebec, Montreal and |  |  |  |  |  |
| Southern. . . | 102.18 | 7,000,000 | 1,491,762 | 383,654 | 471,1:0 |
| Quebee and Saguenay ${ }^{\text {L }}$ |  |  | 248,801 |  |  |
| Roberval and Saguenay | 66.80 | 3,272,000 | 244,153 | 160,033 | 94,132 |
| Red Moumtain. | 9.50 | 412,600 |  | 14,596 | 27,269 |
| Rutiand and Noyan | 3.39 | 200,600. | - | 14,956 | 12,06? |
| Salisbury and Albert. | 45.00 | 150,000 | 554,391 ${ }^{3}$ | 42,677 | 32,984 |
| Schombers and Aurora. | - | 550,000 | 46,144 |  |  |
| Stanstead, Shefford and. Chambly | - | 764,615 | - | - |  |
| Southampton (N.B.) ${ }^{1}$ | - |  | 81,280 | - |  |
| St. John \& Quebec ${ }^{1}$ | 119.87 |  | 508,320 | 69,847 | 99,556 |
| St. Clair Tumel. | 1.23 | 3,200,000 | 375,060 |  |  |
| St.Lawrence \& Adirondack | 46.12 | 2,145,073 | 219,88? | 743,192 | 424,332 |
| Gt. Martins. | 30.00 | 189,000 | 229,213 ${ }^{3}$ | 21,506 | 20,588 |
| Sydney and Louisburg (Dom. Coal Co.)... | 70.24 | 2 | 169,808 | 821,386 | 631,272 |
| Temiscouata. . | 113.00 | 4,099,669 | 1,099,200 | 222,778 | 174,262 |
| Timiskaming and Northerr Ontario ${ }^{4}$ | 328.50 | - | 2,134 | 1992,372 | 1530,021 |
| Thessalon \& Northern (Ont. ${ }^{11}$. |  |  | 6,112 | 1,0,2,3072 | 1,530,021 |
| Thousand Islands. | 6.33 | 118,090 | 39,840 | 38,001 | 26,696 |
| Toronto, Hamilton and Buffalo. | 95.65 | 8,842,500 | 323,100 | 1,649,513 | 988,53.1 |
| Vancouver, Victoria and Eastern. | 224.12 | ,850;000 | - | 540, 128 | 711851 |
| Victoria and Stydney, B. ${ }_{\text {B }}$. | 15.79 | 403,000 | - | 31,935 | 27,275 |
| Victoria Terminel Ry. and Ferry Co. | 0.99 | 500 | - | 2,518 | 1,775 |
| Wabash Ry. Co. in Canada. |  |  | - | 3,118,317 | 2,395,144 |
| York and Carleton... | 10.50 | 105,900 | 58,143 | 4,98t | 3,835 |
| Total. | 37,434.05 | 1,893,125,774 | 159,410,343 | 261,888,654 | 180,542,259 |

${ }^{1}$ Under constraction. ${ }^{5}$ General capital of Dominim Coal Co. ${ }^{3}$ Includes wahe of used iron rails. ${ }^{4}$ Genstruated and operated ky Ontario Govemment Commission.

TRANSPORTATION AND COMMUNICATIONS
6.-Steam Railway Statistics, 1875-1916.

| Year. | $\begin{gathered} \text { Miles } \\ \text { in } \\ \text { opera- } \\ \text { tion. } \end{gathered}$ | Total Train miles. | Passengers. | Freight. | Gross Earnings. | Working Expenses. | Ratio of expenses to receipts. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | Tons. | \$ | \$ | p.c. |
| 1875. | 4,804 | 17,680,178 | 5,190,416 | 5,670,836 | 19,470,539 | 15,775,532 | 81.02 |
| 1876 | 5,218 | 18,103,628 | 5,544,814 | 6,331,757 | 19,358,080 | 15,802,721 | 81.68 |
| 1877 | 5,782 | 19,450,813 | 6,073,233 | 6,859,796 | 18,742,053 | 15,290,091 | 81.58 |
| 1878 | 6,226 | 19,669,447 | 6,443,924 | 7,883,472 | 20,520,078 | 16,100,102 | 78.46 |
| 1879. | 6,858 | 20,731,689 | 6,523,816 | 8,348,810 | 19,925,066 | 16,188,282 | 81.24 |
| 1880. | 7,194 | 22,427,449 | 6,462,948 | 9,938,858 | 23,561,447 | 16,840,705 | 71.47 |
| 1881. | 7,331 | 27,301,306 | 6,943,671 | 12,065,323 | 27,987,509 | 20,121,418 | 11.89 |
| 1882. | 8,697 | 27,846,411 | 9,352,335 | 13,575,787 | 29,027,790 | 22,390,709 | 77.13 |
| 1883. | 9,577 | 36,726,238 | 9,579,948 | 13,266,255 | 33,244,585 | 24,691,667 | 74.27 |
| 1884. | 10,272 | 29,280,919 | 9,982,358 | 13,712,269 | 33,421,705 | 25,595,341 | 76.58 |
| 1885. | 10,773 | 31,623,689 | 9,672,599 | 14,659,271 | 32,227,469 | 24,015,351 | 74.51 |
| 18 | 11,793 | 30,481,088 | 9,861,024 | 15,670,460 | 33,389,382 | 24,177,582 | 72.49 |
| 1887 | 12,184 | 33,638,748 | 10,698,638 | 16,356,335 | 38,842,010 | 27,624,683 | 71.12 |
| 1888 | 12,163 | 37,391,206 | 11,416,791 | 17,172,759 | 42,159,153 | 30,652,048 | 72.70 |
| 1889. | 12,628 | 38,819,380 | 12,151,105 | 17,928,626 | 42,149,615 | 31,038,045 | 73.63 |
| 1890. | 13,151 | 41,849,329 | 12,821,272 | 20,787,469 | 46,843,826 | 32,913,350 | 70.26 |
| 1891. | 13,838. | 43,399,178 | 13,222,568 | 21,753,021 | 48,192,099 | 34,960,449 | 72.56 |
| 1892. | 14,564 | 44,448,468 | 13,583,414 | 22,189,923 | 51,685,768 | 36,488,228 | 70.60 |
| 1893. | 15,005 | 44,385,953 | 13,618,027 | 22,003,599 | 52,042,397 | 36,616,033 | 70.36 |
| 1894. | 15,627 | 43,573,837 | 13,983,620 | 20,721,116 | 49,487,965 | 35,166,202 | 71.06 |
| 1895. | 15,977 | 40,418,324 | 12,520,585 | 21,524,421 | 46,655,883 | 32,678,035 | 70.04 |
| 1896 | 16,270 | 43,940,155 | 13,059,023 | 24,248,294 | 50,374,295 | 34,893,337 | 69.27 |
| 1897 | 16,550 | 44,447,97\% | 13,742,454 | 25,230,470 | 52,109,518 | 34,949,432 | 68.38 |
| 1898. | 16,870 | 48,627,453 | 14,766,859 | 28,699,997 | 59,359,930 | 28,909,877 | 65.55 |
| 1899. | 17,250 | 50,086,993 | 15,451,082 | 31,068,159 | 61,831,235 | 40,468,361 | 65.45 |
| 1900. | 17,657 | 42,647,684 | 17,122,193 | 35,764,970 | 70,231,979 | 47,405,596 | 67.50 |
| 1901. | 18,140 | 53,349,394 | 18,385,722 | 36,999,371 | 72,898,749 | 50,368,726 | 69.06 |
| 1902. | 18,714 | 55,729,856 | 20,679,974 | 42,376,527 | 83,666,503 | 57,343,592, | 68.54 |
| 1903. | 18,988 | 60,382,920 | 22,148,742 | 47,373,417) | 96,064,527 | 67,481,524 | 70.25 |
| 1904. | 19,431 | 61,312,002 | 23,640,765 | 48,097,519 | 100,219,436 | 74,563,162 | 74.40 |
| 1905. | 20,487 | 65,934,114 | 25,288,723 | 50,893,957 | 106,467,198 | 79,977,573 | 75.12 |
| 1906. | 21 | 72,723,482 | 27,989,782 | 57,966,713 | 125,322,865 | 87,129,434 | 69.52 |
| 1907 | 22,452 | 75,115,765 | 32,137,319 | 63,866,135 | 146,738,214. | 103,748,672 | 70.70 |
| 1908. | 22,966 | 78,637,526 | 34,044,992 | 63,071,167 | 146,918,314 | 107,304,143 | 73.04 |
| 1909. | 24,104 | 79,662,216 | 32,683,309 | 66,842,258 | 145,056,336 | 104,600,084 | 72.11 |
| 1910. | 24,731 | 85,409,241 | 35,894,575 | 74,482,866 | 173,956,217 | 120,405,440 | 69.22 |
| 1911. | 25,400 | 89,716,533 | 37,097,718 | 79,884,282 | 188,733,494 | 131,034,785 | 69.43 |
| 1912. | 26,727 | 100,930,271 | 41,124,181 | 89,444,331 | 219,403,753 | 150,726,540 | 68.70 |
| 1913. | 29,304 | 113,437,208 | 46,230,765 | 106,992,710 | 256,702,703 | 182,011,690 | 70.90 |
| 1914. | 30,795 | 107,895,272 | 46,702,280 | 101,393,989 | 243,083,539 | 178,975,259 | 73.63 |
| 1915. | 35,582 | 93,218,479 | 46,322,035 | 87,204,838 | 199,843,072 | 147,731,099 | 73.92 68.94 |
| 1916. | 37,434 | 111,075,890 | 49,027,671 | 109,659,08 | 261,888,6 | 180,542,259 | 68.94 |

## RAILWAYS

7.-Earnings and Operating Expenses of Steam Railways per mile of line, 1908-1916.

| Year. | $\begin{gathered} \text { Gross } \\ \text { Earnings. } \end{gathered}$ | Operating Expenses. | Net Earnings. | Earnings. | Expenses. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | per mile of line. |  |  | per train mile. |  |
| 1908. | \$ ${ }_{6}$ cts. ${ }^{\text {cts. }}$ | \$ cts. | $\begin{array}{cc} \hline \$ & \text { cts. } \\ 1,723.91 \end{array}$ | $\stackrel{8}{8}$ | $\begin{gathered} \$ \\ 1.364 \end{gathered}$ |
| 1909. | 6,017.89 | 4,339.53 | 1,678.36 | 1.816 | 1.309 |
| 1910. | 7,033.93 | 4.868 .60 | 2,165.33 | 2.036 | 1.409 |
| 1911. | 7,430.45 | 5,158.85 | 2,271.60 | 2.103 | 1.460 |
| 1912. | 8,209.07 | 5,639.48 | 2,569.59 | 2.173 | 1.493 |
| 1913. | 8,760.50 | 6,211.38 | 2,549.12 | 2.263 | 1.604 |
| 1914. | 7,893.60 | 5,811.83 | 2,081.77 | 2.253 | 1.659 |
| 1915. | 5,616.41 | 4,151.57 | 1,464.84 | 2.144 | 1.585 |
| 1916. | 6,996.01 | 4,822.94 | 2,173.07 | 2.358 | 1.623 |

## 8.-Distribution of Operating Expenses of Steam Railways, 1914-1916.

| Items of Expenditure. | 1914. |  | 1915. |  | 1916. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Way and struc- | \$ | p.c. | \$ | p.c. | \$ | p.c. |
| tures. | 35,292,226.82 | 19.71 | 28,762,906.91 | 19.47 | 36,040,945.06 | 19.96 |
| Equipment... | 36,375,330.87 | 20.32 | 28,156,261.08 | 19.06 | 35,822,484.20 | 19.84 |
| Traffic expenses | 6,546,602.45 | 3.65 | 5,853,632.65 | 3.96 | 5,560,515.12 | 3.08 |
| Transportation. | 94, 119, 066.73 | 52.58 | 77,985,272.92 | 52.79 | 93,067,485.37 | 51.55 |
| General expenses | 6,642,032.03 | 3.74 | 6,973,025.91 | 4.72 | 10,050,829.23 | 5.57 |
| Total....... | $\overline{178,975,258.90}$ | 100.00 | 147,731,099.47 | 100.00 | 180,542,258.98 | 100.00 |

9.-Aid to Railways in the form of Guarantees of Bonds, Interest, etc., by the Dominion and Provincial Governments, 1916.

| Government. | Authorized. | $\begin{gathered} \text { Bonds } \\ \text { executed. } \end{gathered}$ | Guarantees earned. |
| :---: | :---: | :---: | :---: |
| Dominion. | $\frac{\$}{\mathbb{\$}}$ | $\begin{array}{\|c} \hline \$ \\ 183,532,523 \end{array}$ | $\begin{gathered} \mathrm{\$} \\ 183,532,523 \end{gathered}$ |
| Manitoba. | 25, 22 2,580 | 25,221,580 | 25,221,580 |
| Alberta. | 58,736,750 | 42,700,450 | 42,700,450 |
| Saskatchewan. | 47,725,000 | $24,655,507$ | 23,670,450 |
| Ontario.. | 7,860,000 | 7,860,000 | 7,860,000 |
| British Columbia. | 80,332,072 | 60,978,802 | 60,978,802 |
| New Brunswick.. | 7,763,000 | 7,763,000 | 6,431,562 |
| Quebec. | 308,000 | 308,000 | 308,000 |
| Total... | 417,612,941 | 353,019,862 | 350,703,367 |

10.-Analysis of the Total Financial Aid given to Steam Railways up to June 30,1916.

By the Dominion Government.

| Cash subsidies. <br> Loans. | $\frac{\$}{109,934,005}$ | Cash subsidies. | $\begin{gathered} \$ \\ 29,940,865 \end{gathered}$ |
| :---: | :---: | :---: | :---: |
|  | 25 | Loans. | 7,197,030 |
|  |  | Subscriptions to shares. | 300,000 |
| Paid to Quebec Government <br> Cost of lines handed over to C.P.R. | 5,160,054 | Total . | 37,437,895 |
|  | 37,785,320 | By Municipalities. |  |
|  | 6,263,716 | Cash subsidies. | 12,670,837 |
| Implement Clause of Grand Trunk Pacific. |  | Loans. ${ }^{\text {Subscriptions to shares. }}$ | $\begin{array}{r} 2,404,499 \\ 2,839,500 \end{array}$ |
|  |  | Total. | 17,914,836 |
| Total. . . . . . ....... | 184,719,628 | Grand Total..... | $\overline{240,072,359}$ |

TRANSPORTATION AND COMMUNICATIONS
II.-Total Amount of Dominion Government Aid paid to Steam Reailways up to June 30 of each yeax. 1875-1916.

| Year. | Capital of Government Railways. | Aid to Other Railways. | Paid by <br> Dominion Government to Quebec Government. | Total aid pxid to Railways other than Govertament Bailways. | Grand Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Up to 1875... | $\stackrel{\$}{24,785,540}$ | $\begin{gathered} \$ \\ 16,233,608 \end{gathered}$ | \$ | $\begin{gathered} \$ \\ 16,233,608 \end{gathered}$ | $\stackrel{\$}{41,019,148}$ |
| 1876. | 33,381, 177 | 18,564,352 |  | 18,564,352 | 51,048,529 |
| 1877 | 39,085,617 | 16,235,185 |  | 16,235,185 | 55,320,802 |
| 1878. | 39,500,986 | 26,438,915 |  | 26,438,915 | 65,989,901 |
| 1879. | 39,727,625 | 26,438,915 |  | 26,438,915 | 66,166,540 |
| 1880.. | 41,858,527 | 32,761,921 | - | 32,761,921 | 74,620,448 |
| 1881.. | 42,441,041 | 37,629,207 | - | 37,629,207 | $89,070,248$ |
| 1882. | 43,026,352 | 37,731,208 |  | 37,731,208 | 80,757,560 |
| 1883. | 44,700,347 | 49,548,648 |  | 49,548,640 | 94,248,987 |
| 1884.. | 46,236,588 | 78,123,918 |  | 78,123,918 | 124,360,500 |
| 1885.. | 47,358,907 | 92,703,117 | 59,850 | 92,762,967 | 140,121,874 |
| 1886. | 47,908,724 | 87,247,285 | 179,550 | 87,428,815 | 135,335,539 |
| 1887. | 48,737,763 | 90,929,424 | 299,250 | 91,228,674 | 139,968,437 |
| 1888. | 52,119,442 | 90,285,624 | 418,950 | 90,644,574 | 142,764,016 |
| 1889. | 54,733,984 | 91,349,841 | 538,650 | 91,888,491 | 146,622,475 |
| 1890. | 56,704,283 | 93,230,928 | 658,350 | 93,889,278 | 150,593,561 |
| 1891. | 57,372,827 | 95,751,474 | 778,050 | 96,529,524 | 153,902,351 |
| 1892. | 57,700,015 | 96,703,890 | 897,750 | 97,601,640 | 155,301,655 |
| 1898. | 57,997,416 | 99,404,715 | 1,017,450 | 100,422,165 | 158,419,581 |
| 1894. | 58,431,470 | 100,950,140 | 1,137,150 | 102,087,290 | 160,518,760 |
| 1895. .. | 58,758,505 | 102,194, 299 | 1,256,850 | 103,451,149 | 162,209,654 |
| 1896.. | 59,017,610 | 100,585,214 | 1,376,550 | 101,961,764 | 160,979,374 |
| 1897.... | 59,166,723 | 100,962,185 | 1,496,250 | 102,458,435 | 161,625,158 |
| 1898. | 59,437,021 | 102,262,312 | 1,615,930 | 103,878,262 | 163,315,283 |
| 1899. | 60,540,951 | 105,294,989 | 1,735,650 | 107,030,639 | 167,571,590 |
| 1900. | 63,849,845 | 105,905,446 | 1,855,350 | 107,760,796 | 171,610,641 |
| 1901. | 68,097,799 | 108,205,453 | 1,975,050 | 110,225,503 | 178,323,302 |
| 1902. | 72,910,445 | 110,229,341 | 2,094,750 | 112,324,091, | 185,234,536 |
| 1903. | 76,290,546 | 111,576,663 | 2,214,450 | 113,791,113 | 190,081,659 |
| 1904. | 78,870,281 | 113,541,518 | 2,334,150 | 115,875,668 | 194,745,949 |
| 1905. | 84, 193,801 | 114,701,648 | 2,442,864 | 117,145,512 | 201,339,313 |
| 1906. | 88,454,383 | 115,923,722 | 2,550,594 | 118,474,316 | 206,928,699 |
| 1907. | 90,387,853 | 126,169,324 | 2,658,324 | 128,827,648 | 219,215,501 |
| 1908.. | 95,273,779 | 130, 283,332 | 2,766,054 | 133,049,376 | 228,323,155 |
| 1909.. | 95,714,248. | 130,389,934 | 5,160,054 | 135,549,988 | 231,264, 236 |
| 1910. | 100,738,439 | 146,932, 180 | - | 146,932, 180 | 247,670,619 |
| 1911. | 101,595,694 | 148,217,072 | - | 148,217,072 | 249,812,766 |
| 1912. | 103,434, 184 | 154,075,235 | - | 154,075,235 | 257,509,419 |
| 1913. | 105,929,173 | 163,251,469 | - | 163,251,469 | 269,180,642 |
| 1914. | 111,956,203 | 178,834,529 | - | 178,834,529 | 290,790,732 |
| 1915. | 118,717,647 | 183,479,193 | - | 183,479,193 | 302,196,840 |
| 1916. | 127,077,088 | 184,719,620 | - | 184,719,628 | 311,796,726 |

RAILWAYS
12.-Cost of Constuuction, Working Expenses and Revenue of Government Railwaye, 1868-1916, and before Confederation.

${ }^{1}$ Less $\$ 40,000$ received from St. John City for the Carleton Branch Rail way $=\$ 366,617,792 .{ }^{2}$ Includes Windsor Branch.

## TRANSPORTATION AND COMMUNICATIONS

## 13.-Capital Expenditure by Dotminion Government for construction of Government

 Steam Railways to March 31, 1916.| Railways. | \$ |
| :---: | :---: |
| Intercolonial. | 106,015,832 |
| Now forming parts of the Intercolonial: |  |
| Cape Breton. | 3,860,679 |
| Oxford and New Glasgow | 1,949,063 |
| Eastern Extension. | 1,3>4,043 |
| Drummond County | 1,464,000 |
| Montreal and European Short Line. | 333,943 |
| Canada Eastern. | 819,000 |
| Prince Edward Island. | 10,841, 372 |
| National Transcontinental. | 159,881,197 |
| Canadian Pacific..... | 62,789,776 |
|  | 660,683 |
| Yukon Territory Works (Stikine-Teslin Ry.) | 283,324 |
| Carleton Branch. | 48,411 |
| Hudson Bay Railway $\because \quad \dot{\text { a }}$ ( ${ }^{\text {a }}$ | 15,749,908 |
| International Railway of New Brunswick. | 3,938 |
| New Brunswick and Prince Edward Island Railway | 224,211 |
| Miscellaneous (Governor-General's Cars). | 71,539 |
| Add Capital I. C. R. transferred to Consolidated Fund....... | 296,873 |
| Totals. . . . | 366,617,792 |

14.-Mileage and Rolling Stock of Steam Railways, 1911-1916.

| Mileage and Engines. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Miles in operation. | No. 25,400 | No. 26,727 | No. 29,304 | No. 30,795 | No. 35,582 | No. 37,434 |
| Miles of sidings.... | 5,573 | 6,172 | 6,977 | 7,560 | 7,852 | 8,456 |
| Miles of iron rails in main line | 34 |  |  |  |  | - |
| Miles of steel rails in main line | 25,366 | 26,718 | 29,301 | 30,795 | 35,582 | 37,434 |
| Miles of steel rails in double track. | 1,610 | 1,752 | 1,984 | 2,298 | 2,451 | 2,489 |
| Engines in use... | 4,219 | 4,484 | 5,119 | 5,447 | 5,486 | 5,490 |
| Passenger Cars. |  |  |  |  |  |  |
| First Class. | 1,601 | 1,788 | 2,058 | 2,167 | 2,213 | 2,187 |
| Second Class. | 517 | 550 | 627 | 627 | 632 | 708 |
| Combination. | 434 | 453 | 492 | 491 | 486 | 409 |
| Emigrant. | 357 | 389 | 437 | 466 | 509 | 519 |
| Dining. . | 137 | 159 | 176 | 204 | 215 | 215 |
| Parlour | 80 | 89 | 117 | 130 | 138 | 138 |
| Sleeping. | 306 | 353 | 440 | 500 | $\begin{array}{r}538 \\ 1.457 \\ \hline\end{array}$ | 556 1,458 |
| Baggage, express and postal Other. | 1,045 36 | 1,132 33 | 1,275 74 | 1,378 39 | 1,457 138 | 1,458 138 |
| Freight Cars. |  |  |  |  |  |  |
| Box.... | 79,412 | 89,982 | 128,511 | 146,607 | 145,307 | 144,696 |
| Flat. | 21,069 | 22,000 | 25,117 | 26,151 | 25,315 | 25,542 |
| Stock. | 5,809 | 6,322 | 6,745 | 7,589 | 7,638 | 7,775 |
| Coal. | 13,768 | 14,715 | 14,746 | 15,955 | 15,703 | 15,598 |
| Tank. | 277 | 390 | 479 | 496 | ${ }^{563}$ | 416 4740 |
| Reírigerator | 2,807 | 3,082 | 3,911 | 4,716 | 4,713 <br> 2,551 | 4,740 2847 |
| Other | 4,016 | 4,427 | 2,712 | 2,676 | 2,551 | 2,847 |

RA1LWAYS
15.-Freight hauled on Steam Railways, 1912-1916.

| Products. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tone | Ton | Tons. | Tons. | Tons. |
| Products of Agriculture-Grain... |  |  |  |  |  |
|  | $9,741,671$ <br> 2,303607 | $10,386,282$ $2,374,198$ | $11,473,733$ $2,432,673$ | $9,159,793$ $2,514,600$ | $18,057,627$ $3,184,922$ |
| Flour. Other mill products | 2,303,607 | $2,374,198$ $1,310,167$ | 2,432,673 1 $1,347,491$ | 2,514,600 | $3,184,922$ $1,685,147$ |
| Other mill products. | 2,1387,803 | 1,310,167 | 1,347,491 | 1,486,685 | 1,685,1974 |
| Tobacco. | 68,737 | 65,489 | 49,819 | 38,580 | 47,694 |
| Cotton | 135,277 | 93,807 | 105,429 | 108,877 | 143,950 |
| Fruit and vegetables | 1,135,082 | 1,295,568 | 1,374,992 | 1,474,314 | 1,299,063 |
| Other products of agri- culture. | 398,144 | 499,269 | 403,539 | 391,236 | 463,354 |
| Products of animalsLive stock. Dressed meats. . |  |  |  |  |  |
|  | 1,345,182 | 1,226,24? | 1,424,528 | 1,387,103 | 1,428,887 |
|  | 591,232 | 616,274 | 587,174 | 608,062 | 630,992 |
| Other packing house products. |  | 371, | 358,607 | 95, | 1 |
| Poultry, game and fish | 204,421 | 263,760 | 292,734 | 282,856 | 360,892 |
| Wool. | 34,320 | 40,684 | 38,867 | 41,15¢ | 105,912 |
| Hides and leather | 227,745 | 205,583 | 183,646 | 211,411 | 277,580 |
| Other products of ani- mals. | 364,334 | 449,356 | 457,944 | 430,705 | 486,395 |
| Products of mines- |  |  |  |  |  |
| Anthracite coal. | 5,938,466 | 8,485,652 | 6,624,763 | 6,477,642 | 7,057,628 |
| Bituminous coal | 15,027,311 | 17,930,653 | 18,384,819 | 16,114,480 | 18,122,835 |
| Coke. | 1,166,874 | 2,010,198 | 1,552,298 | 1,171,427 | 1,772,854 |
| Ores. | 3,190,470 | 4,348,666 | 4,570,745 | 3,524,211 | 5,610,548 |
| Stone, sand, etc | 5,186,763 | 6,350,395 | 6,211,671 | 4,841,415 | 3,801,874 |
| Other products of mines | 957,915 | 1,104,978 | 915,874 | 998,360 | 1,484,345 |
| Products of forestsLumber. Other products of forests.... |  |  |  |  |  |
|  |  |  |  |  |  |
|  | 6,023,407 | 7,019,032 | 7,202,525 | 5,990,670 | 8,007,442 |
| Manufactures- |  |  |  |  |  |
| Petroleumandotberoils | 728,643 | 807,062 | 901,324 | 868,214 | 1,117,315 |
| Sugar | 635,757 | 820,252 | 779,276 | 707,714 | 744,866 |
| Naval stores. | 9,472 | 19,898 | 17,195 | 28,961 | 81,768 |
| Iron, pig and bloom. | 1,104, 177 | 1,394,725 | 1,227,528 | 488,216 | 1,259,343 |
| Iron and steel rails. | 859,897 | 1,304,551 | 1,031,361 | 450,764 | 749,993 |
| Castings and machinery | 1,214,709 | 1,499,084 | 1,258,886 | 891,063 | 1,316,572 |
| Bar and sheet metal. | 970,091 | 1,305,682 | 904,859 | 635,150 | 1,213,797 |
| Cement, brick and lime | 2,996,992 | 3,958,419 | 3,479,186 | 2,419,240 | 2,216,868 |
| Agricuttural implements. | 552,470 | 593,470 | 468,15 | 285 | 66,461 |
| Wagons, carriages, tools etc.... | 252,638 | 286,069 | 275,060 | 339,749 | 516,368 |
| Wines, liquorsandbeers. | 325,412 | 372,495 | 349,635 | 247,944 | 269,271 |
| Household goods and furniture. | 434,242 | 493,629 | 459,990 | 295,496 | 366,399 |
| Other manufactures. | $6.156,581$ | 6,838,904 | 5,681,670 | 4,928,391 | 6,648,762 |
| Merchandise.. | 2,711,963 | 4,365,852 | 5,113,603 | 5,272, 163 | 4,622,224 |
| Miseellaneous. | 4,410,542 | 4,161,154 | 3,397,697 | 2,393,123 | 2,748,398 |

TRANSPORTATION AND COMMUNICATIONS 15.-Freight hauled on Steam Railways, 1912-1916-concluded.

Stmmafy.

| Products. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tons. | Tons. | Tons. | Tons. | Tons. |
| Products of aprictiture. | 17,300,045 | 17,196,802 | 18,370,480 | 16,385,909 | 27,105,711 |
| Products of animats. | 3,159,280 | 3,173,563 | 3,343,500 | 3,356,657 | 3,906,359 |
| Products of mines. | 31,467,790 | 40,230,542 | 38,260,170 | 33,127,535 | 37,850,084 |
| Products of forests. | 14,152,7:1 | 16,609,100 | 16,012,097 | 13,976,555 | 16,558,529 |
| Manufactures | 16,241,081 | 19,694, 240 | 16,834,126 | 12,586,393 | 16,867,783 |
| Merchandise. | 2,711,903 | 4,365,85 | 5,113,403 | 5,272,163 | 4,622,224 |
| Miscellaneous. | 4,410,542 | 4,161,154 | 3,397,601 | 2,303,123 | 2,748,398 |
| Totals . | 89,444,351 | 106,992,710 | 101,394,753 | 87,204,838 | 109,659,088 |

${ }^{1}$ Includes as not distributed, $1,561,457$ toms in 1913, $63,176 \cdot$ tons in 1914 and 106,503 tons in 1915.
16.-Total Salaries and Wages, with Ratios of same to Gross Eamings and Operating Expenses on Steam Railways, 1907-1916.

| Year. | Salaries and wages. | Ratio to gross earninge. | Ratio to operating expenses: | Year. | Salaries and wages. | Ratio to gross earninge. | Ratio to operating expenses. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | p.c. | p.e. |  | \$ | p.c. | p.e. |
| 1907. | 58,719,493 | 40.01 | 50.76 | 1912. | 94,237,623 | 39.79 | 57.92 |
| 1908. | 60,376,607 | 41.09 | 56.26 | 1913. | 115,749,825 | 45.09 | 63.59 |
| 1909. | 63,216,662 | 43.58 | 60.43 | 1914. | 111,762,972 | 45.97 | 62.43 |
| 1910. | 67,167,793 | 88.61 | 55.78 | 1915. | 90,215,727 | 45.15 | 61.09 |
| 1911. | 74,613,738 | 39.58 | 50.94 | 1916. | 104,300,647 | 39.82 | 57.95 |

17.-Distribution af Salapies and Wages and Number of Employees on Steam Rail ways, 1915-1916.

| Description. | 1915. |  | 1916. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No. | Salaties and Wages. | No. | Salaries and Wages. |
| General offices. | 4,417 | 3,948,190 | 4,252 | 3,938,256 |
| Road. | 40,031 | 20,637,239 | 48,937 | 22,835,182 |
| Equipment. | 29,265 | 19,994,685 | 33.560 | 23,907, 250 |
| Traffic. | 2,103 | 2,440, 347 | 2,223 | 2,317,186 |
| Transportation. .. .. | 48,326 | 43,594,766 | 55,798 | 51,212,773 |
| Totale. | 124,142 | 90,215,727 | 144,770 | 104,380,647 |

## RAILWAYS.

18.-Number of Employees by Groups and Classes, with Number of Days Worked and amount of Salaries and Wages .Faid on Stean Railways, 1916.

| Group and Class. | Number. | $\begin{gathered} \text { No. of } \\ \text { days } \\ \text { worked. } \end{gathered}$ | Salaries and Wages. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Yearly | Daily average. |
|  |  |  | \$ | \$ c. |
| 1. General offices:- |  |  |  |  |
| General officers. | $30 ¢$ | 91,406 | 1,192,544 | 13.04 |
| Chief clerks | 174 | 55,777 | , 243,073 | 4.35 |
| Other clerks | 2,714 | 876,833 | 1,745,803 | 1.99 |
| Stenographers and typists | 541 | 171,685 | 311,709 | 1.23 |
| Telephone and telegraph operators. | 83 | 28,356 | 65,274 | 2.30 |
| Mespengers and attendants. | 151 | 53,678 | 74,151. | I. 40 |
| Other general office employees. | 281 | 84,114 | 305,702 | 3.49 |
| Tetal. | 4,252 | 1,361,849 | 3,938,256 | - |
| 11. Road:- |  |  |  |  |
| Officers. | 490 | 157,848 | 851,835 | 5.39 |
| Clerks. | 37.3 | 115,534 | 287,304 40,084 | 2.48 |
| Shop foremen... | 45 | 15,053 | 40,088 | $\frac{2}{2} .66$ |
| Structaral iron-workers. | 72 | $\begin{array}{r}15,467 \\ 2,072 \\ \hline\end{array}$ | 40,109 6,019 | 2.90 |
| Masons amd bricklayers. | 98 | 15,171 | 49,504 | 3.26 |
| Carpenters. | 1,681 | 401,888 | 1,111,454 | 4.76 |
| Painters | 816 | 96,602 | 251,429 | 2.61 |
| Other M.W.S. ${ }^{\text {P }}$ shopmen. | 110 | 19,775 | 41,603 | 2.10 |
| Other stilled labouvers | 1,551, | 332,178 | 899,929 | 2.70 |
| Section forernen .. | 5,728 | 1,772,237 | 4,619,926 | 2.60 |
| Watchmen and trachwalkers. | 447 | 133,980 | 264,772 | 1.97 |
| Othar sectionmen. | 24,119 | 5,518,493 | 10,014,953 | 1.81 |
| Unatilled lahouners., | 6,046 | 907,440 | 1,578,530 | 1.73 |
| All other M.W.S. ${ }^{\text {I employees. }}$ | 1:674 | 432,865 | 1,001,442 | 2.31 |
| Fonemen of canstruation gangs. .. | 288 | 600750 | 208,380 | 3.43 |
| Other men in construction gangs. | 5,385 | 861,367 | 1,567,860 | 1.82 |
| Total.... | 48,937 | 10,858,720 | 22,835,182 | - |
| II. Equipment:- |  |  |  |  |
| Officers. | 202 | 60,569 | 418,601 | 6.91 |
| Clerks and attendants. | 1,267 | 371,600 | 865,853 | 2.33 |
| Shop fonemen. | 964 | 332,703 | 1,235,418 | 3.71 |
| Machinists... | 3,723 | 1,004,434 | 3,647,400 | 3.33 |
| Caspenters. | 3,977 | 970,430 | 2,684,432 | 2.76 |
| Painters and upholsterers. | 1,054 | 242,927 | 708,656 | 2.91 |
| Other shopmen. | 14,408 | 3,875,940 | 9,675,635 | 2.49 |
| Car Inqpectons. | 1,388 | 473,584 | 1,169,682 | 2.51 |
| Watchmen. | 237 | 76,466 | 142,725 | 1.86 |
| All ather M. Ex. ${ }^{1}$ employers. | 6,340 | 1,645,790 | 3,448,848 | 2.09 |
| Total: | 33,569 | 9,054,443 | 23,997,250 | - |

' Note-M.W.S. signifies " Maintenance of Way and Structures." M.E. significs "Mointenance of Equipment."

TRANSPORTATION AND COMMUNICATIONS
18.--Number of Employees by Groups and Classes, with Number of Days Worked, and amount of Salaries and Wages Paid on Steam Railways, 1916-concluded.

| Group and Class. | Number. | No. of days worked. | Salaries and wages. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Yearly. | Daily average |
|  |  |  | \$ | \% c. |
| IV. Traffe:Officers | 177 | 53,848 |  | 10.02 |
| Clerks and attendants. | 1,005 | 325,071 | 799,320 | 2.45 |
| Travelling solicitors. | 88 | 28,697 | 109,812 | 3.82 |
| Employees in outside agencies. | 742 | 237,237 | 723,892 | 3.05 |
| All other traffic employees. | 211 | 67,580 | 144,340 | 2.13 |
| Total.... | 2,223 | 712,383 | 2,317,186 | - |
| V. Transportation:- |  |  |  |  |
| Officers. | 370 | 122,080 | 926,681 | 7.59 |
| Clerks and attendants. | 2,593 | 855,527 | 1,773,314 | 2.07 |
| Dispatchers. | 463 | 153,501 | 778,579 | 5.07 |
| Station agents.... | 3,366 | 1,125,645 | 3,270,804 | 2.90 |
| Operators, not agents.. | 2,031 | 691,703 | 1,883,525 | 2.72 |
| Other station employees. | 11,657 | 3,344,515 | 6,569,226 | 1.96 |
| Yardmasters and yard clerks. | 820 | 275,049 | 761,064 | 2.76 |
| Yard enginemen. ${ }^{\text {a }}$, | 1,384 | 563,694 | 2,098,467 | 3.72 |
| Yard conductors and brakemen. | 2,838 | 873,609 | 3,264,938 | 3.73 |
| Yard switchmen... | 422 | 138,787 | 289,980 | 2.09 |
| Other yard employees. | 318 | 91,285 | 158,715 | 1.73 |
| Engine-house employees. | 4,177 | 1,207,085 | 2,404,372 | 1.99 |
| Road enginemen and motormen. | 8,951 | 2,551,365 | 11,709,345 | 4.58 |
| Passenger conductors. | ${ }_{2} 899$ | 295,726 <br> 888 | $1,339,081$ $3,977,887$ | 4.52 4.53 |
| Freight conductors. | 2,644 | 888,758 | 3,977,887 | 4.53 |
| Other road trainmen.... ${ }^{\text {O }}$ d ${ }^{\text {a }}$ | 7,092 | 2,462,313 | 7,188,303 | 2.91 |
| Operators, interlockers and signals. | 448 | 152,647 180,143 | 287,790 | 1.88 |
| Crossing flagmen and gatemen. | 513 137 | 180,143 36,410 | 266,559 67,467 | 1.48 |
| Employees on floating equipment. | 298 | 88,684 | 221,153 | 2.49 |
| Employees in express service... | 199 | 59,819 | 96,156 | 1.60 |
| Employees in claim department. | 92 | 31,305 | 78,851 | 2.51 |
| All other transportation employees. . | 3,486 | 878,814 | 1,800,516 | 2.05 |
| Total.... | 55,770 | 17,068,464 | 51,212,733 | - |
| Grand Total . | 144,770 | 39,055,859 | 104,300,647 | - |



## TRANSPORTATION AND COMMUNICATIONS

## 20.-Number of Persons Killed and Injuxed on Steam Railmays, 1914 -1916.

(A) In Accidents Resulting frem Movenemet of Tratns, Locomotives or Cars.

| Description of Persons. | 1914. |  | 1915. |  | 1916. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Killed. | Injured. | Killed. | Injured. | Killed. | Injured. |
| Passengers. | 25 | 402 | 17 | 304 | 20 | 291 |
| Employees. | 200 | 1,475 | 102 | 946 | 149 | 1,455 |
| Trespassers. | 289 | 279 | 168 | 147 | 191 | 141 |
| Non-trespassers. | 48 | 114 | 73 | 167 | 77 | 158 |
| Postalclerks, expressmen, etc. | 3 | 17 | - | 14 | - | 13 |
| Total. | 565 | 2,287 | 360 | 1,578 | 437 | 2,058 |
| Description of Accident- |  |  |  |  |  |  |
| Coupligg and uncoupling... | 16 | 129 | 9 | 78 | 12 | 13: |
| Collisions. | 39 | 137 | 12 | 167 | 50 | 179 |
| Derailments. | 20 | 262 | 9 | 107 | 14 | 12 |
| Parting of trains. ... |  | 11 | 1 | 12 | - | ¢8 |
| Lacomotives or cars breaking down.: | 2 | 24 | 1 | 17 | - | 14 |
| Falling fram trains or cars. | 46 | 325 | 35 | 229 | 35 | 297 |
| Jumping on or off. . | 39 | 256 | 23 | 237 | 29 | \% |
| Struck by trains, ete. | 336 | 414 | 252 | 280 | 209 | 337 |
| Overhead obstruction. |  | 21 | 1 | 28 | 1 | 27 |
| Other causes. .. | 67 | 708 | 17 | 423 | 27 | 688 |
| Total. . | 565 | 2,287 | 360 | 1,57B | 437 | 2,058 |

(B) In Acgdents gifer than thoee Resuling frem Movement of Trarna, Locomotives or Cars.

| Descriptian of Persons. | 1914. |  | 1915. |  | 1916. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Killed. | Enjured. | Eilled. | mjured | Killed. | Injured. |
| Statiommen. | 1. | 148 | - | 136 |  | 287 |
| Shopmen... | 2 | 574 | 1 | 574 | 1 | 1,181 |
| Trainmen and Trackmen. | 6 | 492 | 4 | 429 | 8 | 520) |
| Other employees. | 15 | 477 | 8 | 488 | 16 | 936 |
| Pamsengers. .. | 2 | 13 | - | 32 | - | 18 |
| Others. .. | 0 | 53 | 6 | 34 | 6 | 25 |
| Total. | 35 | 1,752 | 19 | 1,693 | 31 | 2,920 |
| Description of AccidentHandling traffic. | 4 | 233 | 1 | 185 | 2 | 243 |
| Handling tools, machinery; etc. | 3 | 583 | 4 | 558 | 6 | 990 |
| Handling supplies, etc. | 2 | 257 | 1 | 248 | - | 419 |
| Getting on or off engines or cars. | - | 68 | 2 | 81 | 23 | 113 |
| Other causes. | 26 | 611 | 11 | 641 | 23 | 1,155 |
| Total. | 35 | 1,752 | 19 | 1.693 | 31 | 2,920 |

RAILWAYS
21.-Electric Railway Statistics, 1901-1916.

| Year. |  | Total Car Mileage. | Passengers. | Freight. | Gross Earnings. | Working Expenses. | Ratio of Expenses to receipts. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | Tons. |  |  | p.c. |
| 1901 | 674. | 31,750,754 | 120,934,656 | 287,926 | $5,768,283$ | $3,435,162$ | 59.55 |
| 1902. | 557.59 | 35,833,841 | 135,681,402 | 266,182 | 6,486,438 | 3,802,855 | 58.63 |
| 1903. | 759.36 | 38,028,529 | 155,662,812 | 371,286 | 7,233,677 | 4,472,858 | 61.83 |
| 1904. | 766.50 | 42,066,124 | 181,689,998 | 400,161 | 8,453,609 | 5,326,516 | 63.01 |
| 1905. | 793.12 | 45,959,101 | 203,467,217 | 510,350 | 9,357,125 | 5,918,194 | 63.25 |
| 1906. | 813.74 | 50,618,836 | 237,655,074 | 506,024 | 10,966,871 | 6,675,037 | 60.87 |
| 1907 | 814.52 | 53,361,227 | 273,999,404 | 479,731 | 12,630,430 | 7,373,251 | 58.38 |
| 1908. | 992.03 | 56,964,881 | 299,099,309 | 732,475 | 14,007,049 | 8,695,880 | 62.08 |
| 1909. | 988.97 | 60,152,846 | 314,026,671 |  | 14,611,484 | 8,885,235 | 60.81 |
| 1910. | 1,047.07 | 65,249,166 | 360,964,876 | 852,294 | 17,100,789 | 10,121,781. | 59.19 |
| 1911. | 1,223.73 | 72,618,806 | 426,296,792 | 1,228,362 | 20,356,952 | 12,096,134 | 59.42 |
| 1912. | 1,308.17 | 82,070,064 | 488,865,682 | 1,435,525 | 23,499,250 | 14,266,675 | 60.71 |
| 1913. | 1,356.63 | 89,005,216 | 597,863,801 | 1,957,930 | 28,216,11I | 17,765,372 | 62.96 |
| 1914. | 1,560.82 | 98,917,808 | 614,709,819 | 1,845,923 | 29,691,007 | 19,107,818 | 64.36 |
| 1915. | 1,590.29 | 96,964,829 | 562,302,373 | 1,433,602 | 26,922,900 | 18,131,842 | 67.35 |
| 1916. | 1,673.77 | 82,516,612 | 580,094,167 | 1,936,674 | 27,416,285 | 18,099,906 | 66.02 |

22.-Mileage and Equipment of Electric Railways, 1914-1916.

23.-Capital Liability of Electric Railways, 1908-1916.

| Yеar. | Stocks. | Funded Debt. | Total. | Year. | Stacks. | Funded Debt. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | - |  | \$ | * | \$ |
| 1908.. | 50,295,266 | 37,114,619 | 87,409,885 | 1913. . | 62,079,767 | 79,155,864 | 141,235,631 |
| 1909.. | 51,946,433 | 39,658,556 | 91,604,989 | 1914. | 66,311,098 | 81,284,244 | 147,595,342 |
| 1910.. | 58,653,826 | 43,391,153 | 102,044,979 | 1915. | 66,696,675 | 83,647,327 | 150,344,002 |
| 1911. | $62,251,203$ $70,829,118$ | $49,281,144$ $52,012,828$ | $111,532,347$ 120,841 946 | 1916 | 67,738,275 | 87,157,309 | 154,895,584 |

## TRANSPORTATION AND COMMUNICATIONS

24.-Mileage, Capital, Earnings and Operating Expenses of Electric Railways, 1916.

| Name of Railway. | Miles operated. | Capital. | Earnings. | Operating expenses. |
| :---: | :---: | :---: | :---: | :---: |
|  | No. | * | 5 | \$ |
| Berlin and Waterloo Street. | 3.28 | 155,609 | 51,657 | 36,011 |
| Berlin and Northern. | 3.15 | 19,800 | 8,271 | 6,060 |
| Berlin, Waterloo, Wellesley and Lake Huron... | 17.81 |  |  |  |
| Brandon Municipa | 10.31 | 450,000 | 29,259 | 28.660 |
| Brantford Municip | 29.96 | 270,000 | 99,718 | 64,938 |
| Brantford and Hamilt | 23.00 | 960,000 | 141,647 | 109.233 |
| British Columbia | 242.55 | 16,000,000 | 2,468,143 | 2,448,896 |
| Cape Breton and leased | 30.52 | 2,455,000 | 220,412 | 135,932 |
| Chatham, Wallaceburg and Lake Erie. | 36.94 | 1,455,100 | 148,164 | 81,212 |
| Cornwall Street. | 4.00 | 200,000 | 33,555 | 22,359 |
| Calgary Municipal | 55.00 | 2,280,210 | 548,495 | 375,778 |
| Canadian Resources Developroent | 1.75 | 486,000 | 332 | 1,479 |
| Edmonton Radial. | 52.37 | 2,996,816 | 534,163 | 367,895 |
| Edmonton Interurban (not operated) | 8.19 | 600,000 |  |  |
| Fort William... ${ }^{\text {a }}$. ${ }^{\text {a }}$, | 19.88 | 1,112,000 | 113,421 | 87,643 |
| Fort William Terminal Ry, and Bridge Co. |  | 125,090 |  |  |
| Grand Valley (now Brantford Mun.) |  | 1,788,800 |  |  |
| Guelph Radial. | 8.50 | 169,000 | 45,143 | 33,628 |
| Halifax Tramway Co. | 12.29 | 2,000,000 | 350,077 | 212,271 |
| Hamilton and Dundas | 7.00 | 200,000 | 75,600 | 56,059 |
| Hamilton, Grimsby and Beamsville. | 22.00 | 385,000 | 136,420 | 124,280 |
| Hamilton Radial. | 25.00 | 271,150 | 171,407 | 155,042 |
| Hamilton Street | 30.06 | 1,645,000 | 659,709 | 414,301 |
| Hull. | 15.67 | 292,000 | 157,801 | 124,537 |
| International Transit Co | 4.30 | 370,000 | 97,386 | 64,204 |
| Kingston, Portsmouth and Cata | 8.00 | 182,350 | 43,230 | 30,763 |
| Lethbridge Municipal. | 11.00 | 408,877 | 46,853 | 41,039 |
| Levis County. | 11.75 | 564,000 | 94,977 | 84,103 |
| London Street. | 35.19 | 1,255,000 | 422,641 | 282,250 |
| London and Lake Erie Ry | 28.00 | 2,840,000 | 82,410 | 85,594 |
| London and Port Stanley | 23.60 | 900,000 | 281,058 | 180,620 |
| Moncton Tramway Co. | 4.47 | 1,512,400 | 16,809 | 18,532 |
| Montreal Tramways. | 124.26 | 35,735,457 | 6,609,765 | 3,707,053 |
| Montreal and Southern Counties. | 52.20 | 1,949,627 | 217,379 | 215,435 |
| Moosejaw | 9.00 | 751,227 | 89,600 | 73,989 |
| Nelson Street, B.C | 2.13 | 81,000 | 11,635 | 13,128 |
| Nipissing Central. | 15.37 | 530,000 | 108,215 | 72,635 |
| Niagara Falls, Park and River | 11.91 | 600,000 | 121,243 | 240,982 |
| Niagara, St. Catharines and Toronto. | 63.07 | 2,023,000 | 691,594 | 443,636 |
| Niagara, Welland and Lake Erie. | 1.87 | 311,500 | 25,739 | 10,569 |
| Oshama. | 9.00 | 118,452 | 105,391 | 61,826 |
| Ottawa. | 28.11 | 2,331,900 | 1,081,303 | 646,578 |
| Peterborough Radial. | 6.39 | 292,753 | 56,702 | 37,171 |
| Port Arthur. | 12.43 | 886,647 | 96,375 | 81,040 |
| Pictou County |  | 600,000 |  |  |
| Quebec Railway, Light and Power Co. (Citadel division) | 19.91 |  | 523,525 | 322,695 |
| Quebec Railway, Light and Power Co. (Montmorency division). | 28.60 | 5,763,434 ${ }^{1}$ | 210,398 | 144,971 |
| Regina Municipal... . . . | 31.35 | 1,475,000 | 192,866 | 186,948 |
| Sandwich, Windsor and Amherstburg. . | 40.78 | 897,000 | 331,109 | 191,138 |
| Sarnia. | 8.25 | 170,000 | 62,937 | 44,712 116,624 |
| Saskatoon Municipal | 12.63 | 739,644 | 167,873 | 116,624 38,086 |
| Sherbrooke Street. St John, N. B.... | 9.00 | $\xrightarrow{2,251,400} 1$ | 49,621 | 38,086 |

${ }^{1}$ Including capital for lighting, power and gas plants.

## RAILWAYS

24.-Mileage, Capitai, Earnings and Operating Expenses of Electric Railways, 1916 -concluded.

| Name of Railway. | Miles operated. | Capital. | Earnings. | Operating expenses. |
| :---: | :---: | :---: | :---: | :---: |
|  | No. | \$ | \$ | 3 |
| St. Stephen, N.B. | 7.00 | 200,000 | 40,530 | 29,622 |
| St. Thomas Street. | 7.00 | 85,028 | 22,263 | 27,238 |
| Suburban Rapid Transit (Winnipeg). | 21.02 | 600,000 | 48,085 | 67,642 |
| Sydney and Glace Bay | $\square$ | 902,000 |  |  |
| Toronto Street. | 59.48 | 16,912,066 | 5,839,393 | 3,227,963 |
| Toronto Suburban. | 18.79 | 4,128,000 | 164,640 | 80,667 |
| Toronto and York Radial... | 72.43 | 3,640,000 | 547,850 | 382,607 |
| Windsor, Essex and Lake Shore Rapid. | 36.17 | 1,500,000 | 165,195 | 103,829 |
| Winnipeg, Selkirk and Lake Winnipeg. | 39.40 | 515,000 | 129,236 | 82,717 |
| Winnipeg Street ${ }^{1}$. | 110.14 | 18,380,000 | 2,121,653 | 1,401,578 |
| Yarmouth Street ${ }^{1}$. | 3.00 | 432,000 | 39,341 | 21,666 |
| Windsor and Tecumseh. |  | 289,000 |  |  |
| Schomberg and Aurora. | 14.40 | 550,600 | 13,686 | 15,638 |
| Three Rivers Traction Co. | 4.00 | 500,700 | 21,493 | 19,270 |
| Toronto Civic Railway., | 9.14 | 2,082,737 | 212,859 | 193,389 |
| Totals.... | 1,673.77 | 154,895,584 | 27,416,284 | 18,099,906 |

${ }^{1}$ Capitalization covers outside operations.
25.-Number of Passengers, Employees and others Killed and Injured on Electric Railways, 1894-1916.

| Year. | Passengers. |  | Employees. |  | Others. |  | Totals. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Killed. | Injured. | Killed. | Injured. | Kilied. | Injured. | Killed. | Injured. |
| 1894-1899.. | 1 | 23 | 2 | 9 | 9 | 12 | 12 | 44 |
| 1900 | - | 6 |  | - | 2 | 7 | 2 | 13 |
| 1901 | 3 | 158 | 1 | 58 | 11 | 98 | 15 | 314 |
| 1902. | 9 | 410 | 1 | 33 | 22 | 120 | 32 | 563 |
| 1903 | 10 | 504 | 7 | 62 | 22 | 212 | 39 | 778 |
| 1904. | 10 | 508 | 3 | 64 | 40 | 272 | 53 | 844 |
| 1905. | 30 | 862 | 3 | 87 | 23 | 347 | 56 | 1,296 |
| 1906. | 11 | 1,085 | 2 | 127 | 34 | 441 | 47 | 1,653 |
| 1907 | 27 | 988 | 7 | 216 | 37 | 532 | 71 | 1,736 |
| 1908. | 18 | 1,156 | 6 | 188 | 43 | 539 | 67 | 1,883 |
| 1909 | 11 | 1,303; | 7 | 218 | 50 | 618 | 68 | 2,139 |
| 1910. | 14 | 1,595 | 13 | 227 | 68 | 716 | 95 | 2,538 |
| 1911 | 11 | 1,784 | 8 | 300 | 83 | 586 | 102 | 2,670 |
| 1912. | 16 | 1,950 | 8 | 442 | 86. | 736 | 110 | 3,128 |
| 1913. | 17 | 1,662 | 12 | 392 | 44 | 490 | 73 | 2,544 |
| 1914. | 9 | 1,757 | 13 | 469 | 42 | 581 | 64 | 2,807 |
| 1915. | 14 | 1,554, | 6 | 413 | 44 | 638 | 64 | 2,605 |
| 1916. | 18 | 1,905 | 4 | 305 | 28 | 819 | 50 | 3,029 |
| Totals. . | 229 | 19,210: | 103 | 3,610 | 688 | 7,764 | 1,020 | 30,584 |

## TRANSPORTATION AND COMMUNICATIONS

Electric Railways.-During 1916 the total capital liability of electric railways, which for the most part consist of urban street tramways, was increased from $\$ 150,344,002$ to $\$ 154,895,584$. Of this amount $\$ 67,738,275$ are in stocks, and $\$ 87,157,309$ are in funded debt. The number of passengers carried was $580,094,167$, as compared with $562,302,373$ in 1915. The freight hauled in 1916 was $1,936,674$ tons, as compared with $1,433,602$ tons in 1915. Gross earnings were $\$ 27,416,285$, as against $\$ 26,922,900$ in 1915 , and operating expenses were $\$ 18,099,906$ against $\$ 18,131,842$ in 1915. These and other particulars, with comparative figures, are set out in Tables 21-25. The number of employees in the service of electric railways on June 30, 1916, was 10,622 , as compared with 14,795 in 1915 . The total salaries and wages for the year 1916 were $\$ 8,767,734$, as against $\$ 10,781,199$ in 1915. The total mileage of electric railways computed as single track in 1976 was 2,192, as compared with 2,103 in 1915.

## MOTOR VEHICLES.

The use of motor vehicles has increased so rapidly during recent years that this means of transportation is now become one of the most important in Canada. In 1904, the number of motor vehicles registered in Ontario was only 535 ; in 1916 the number was 54,375 . In Quebee province the number has grown from 254 in 1907 to 15,335 in 1916 . For Alberta the number of registered cars in 1906 was 41 ; in 1916 the number was 9,516 . As will be seen from Table 26 there has been a great increase in the number of motor vehicles registered in each of the provinces, whilst the total number of motor vehicles registered for all Canada in 1916 is 123,464 as compared with 69,598 in 1914, an increase of 77 p.c. in three years. The following is a brief synopsis of the laws and regulations in force in each province, and Table 27 summarizes the legal speed limits by provinces under the varying conditions specified.

Prince Edward Island.-Under the Motor Vehicles Act, 1913, with amendments and regulations, all cars must be registered in the office of the Provincial Secretary. In addition to the registration fee an annual tax is payable on the 1st of May, but this is not required of non-residents unless the car is used in the province during more than four weeks in one year. All drivers of cars, owners included, must be eighteen years old and must be licensed. Every car must have a lock or other device to prevent it from being operated when left unattended. The use of motor vehicles is forbidden on Sunday between 9 a.m. and 1 p.m. and. between 6 p.m. and $9 \mathrm{p} . \mathrm{m}$. The speed limits are, in cities, towns and villages, $7 \frac{1}{2}$ miles an hour, in places which are closely built up, 10 miles, where there is not a clear view of the road for at least 200 yards, 12 miles, and in all other places 15 miles an hour. The number of cars registered in 1917 is 300 .

Nova Scotia.-The Motor Vehicles Act, 1914, and amending Acts, require cars to be registered by the Provincial Secretary, who issues permits renewable annually on January 1 . Cars belonging to persons residing out of Nova Scotia need not be registered if cars are registered

## MOTOR VEHICLES

in place where owners reside, and if owners do not reside or carry on business in Neva Scotia for more than three months in each year. No person under 16 may operate a motor vehicle, and paid chauffeurs must be at least 18 and must take out licenses. Cars must have devices which will prevent their operation when left unattended and must also have muffiers. The speed limits are, in cities, towns and villages and in places where there is no clear view of the road for at least 200 yards, 15 miles an hour, at cross-roads and bridges, 8 miles, and in other places, 20 miles an hour. On September 30, 1917, the number of permits to use cars was 5,087

New Brunswick.-Under the Motor Vehicle Law, 1915, as amended May, 1917, the registering and licensing authority is the Department of Public Works. Cars must be re-registered every third year, and, besides the registration fee, an annual fee is payable on January 1. Non-residents may operate cars registered in another province or state during not more than 21 daysin any year without registration in New Brunswick. The driver of a car must be 18 years old, and must be the owner or a member of his household, a licensed chauffeur or a person accompanied by a chauffeur; all chauffeurs must take out licenses. The speed limits are, in cities, towns and villages, 12 miles an hour, in places which are closely built up, 15 miles an hour, and in places where the road cannot be seen clearly for 200 yards, 20 miles an hour.

Quebec.-The law as to motor vehicles is contained in the Revised Statutes 1909 , ch. Fourth, s. xxi, and amending Acts. Cars must be registered in the office of the Provincial Treasurer and re-registered annually on March 1. No registration in the province is required of cars registered outside the province, provided that similar exemption is granted by law of the state or province in which the tourist resides. All drivers of cars must be licensed and must be not less than 18 years old. Cars, when left unattended must be locked in such a way as to prevent their use, and all cars must have mufflers. The speed limits are, in cities, towns and villages, 16 miles an hour, on highways where the land is closely built up, 16 miles an hour, at bridges and cross-roads, 4 miles an hour and in open country 25 miles an hour. Motors must stop for street cars which are standing to take on or discharge passengers.

Ontario.-The acts concerning motor vehicles are the Motor Vehicles Act, R.S.O., 1914, ch. 207, the Highway Travel Act, R.S.O., 1914, ch. 206, with amending Acts, and the Load of Vehicles Act, 1916. The registering authority is the Department of Public Highways, which issues permits that remain in force for the calendar year. Cars may be used without registration for not more than three months in one year, if registered in some other province, or for 30 days in one year if registered in certain of the United States which have entered into agreement with the province of Ontario. No person less than 16 years old may drive a car, and those between the ages of 16 and 18, as well as all paid chauffeurs, must be licensed. Cars must be equipped with mufflers. The speed limit in cities, towns and villages is 15 miles an hour, in other places 20 miles an hour. A motor may not pass a street car which has stopped for passengers to get on or off.

## TRANSPORTATION AND COMMUNICATIONS

Manitoha.--Under the Motor Vehicles Act, 1916, cars must be registered in the office of the Municipal Commissioner, and the registration is renewable annually on April 1. A person not resident in the province may operate an unregistered car for not more than thirty days. Chauffeurs must be not less than 18 years old, and must have licenses; other drivers must be not less than 16, if male, or 18 if female. Cars must have muffers and devices to prevent their use when left unattended. The speed limits in cities, towns or villages are 10 miles an hour at street intersections and 15 miles an hour elsewhere. There is also a limit of 20 miles an hour in certain rural municipalities. Motors must stop when behind standing street cars.

Saskatchewan.-The licensing authority under the Vehicles Act, 1912, and amending Acts, is the Provincial Secretary. Licenses expire annually on December 31. Non-residents may use cars for 30 days, under permit from the Provincial Secretary, without registration in the province. No person under the age of 16 may drive a car, and paid chauffeurs must take out licenses. Cars must have muffers. A car meeting a horse must not pass at a greater speed than 7 miles an hour, but there are no other speed limits. Motor vehicles must stop for street cars which are taking on or discharging passengers.

Alberta.-The law relating to motor vehicles is contained in the Motor Vehicle Act, 1911, and amending Acts, and the Highways Act, 1911. Cars must be registered in the office of the Provincial Secretary, who issues certificates which are renewable annually on January 1. A person not residing in the province may operate an unregistered car during not more than 20 days. Paid chauffeurs must be licensed, and all drivers must be not less than 16 years old, if male, or 18 years if female. Cars must be equipped with muffers. The speed limits are, 20 miles an hour in cities, towns and villages, and 10 miles an hour at street crossings and bridges. A motor car may not pass a street car which has stopped for passengers to get on or off.

British Columbia.-Under the Motor Traffic Regulation Act, 1911, and amending Acts, cars are required to be registered with the Superintendent of Provincial Police. Licenses expire on December 31. Unregistered cars may be used for touring in the province under a touring license issued by the Superintendent of Provincial Police. Cars registered outside the province may be used for 60 days free. No person under the age of 17 may drive a car, and paid chauffeurs must take out licensts. Every car must have a lock or device to preven ${ }^{1}$ its use when left unattended. The speed limits are, in cities, towns and villages 15 miles an hour in wooded country 15 miles and in open country 25 miles an hour. A motor may not pass a standing street car at more than 4 miles an hour and must stop if it overtakes the car while taking on or discharging passengers.

Yukon Territory.-The Motor Vehicle Ordinance, No. 14, 1914, requires all cars to be registered in the office of the Territorial Secretary, who issues certificates, renewable annually on July 15. A non-resident may operate an unregistered motor for not more than 90 days. No male under 16 and no female under 18 years of age may drive a motor In cities, towns and villages the speed limit is 15 miles an hour, or 10 miles an hour $\boldsymbol{t}$ strect intersections.

MOTOR VEHICLES
26.-Number of Motor Vehicles registered in Canada by Provinces, 1914-16.

${ }^{1}$ Number of permits in foree on September 30 in each year.
27.-Speed Limits in miles per hour for Motor Vehicles by Provinces.

| Province. | In cities, towns or villages. | At street intersections, bridges, etc. | Where closely built up. | Open country. | Wooded country or obstructed view. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | miles per hour. | miles per hour. | miles per hour. | miles per hour. | miles per hour. |
| Prince Edward Island. | $7 \frac{1}{1}$ | - | 10 | 15 | 12 |
| Nova Scotia. | 15 | 8 | 5 | 20 | 15 |
| New Brunswick. | 12 | $\cdots$ | 15 | - | 20 |
| Quebec. | 16 | 4 | 16 | 25 |  |
| Ontario. | 15 15 | $\overline{10}$ | $50^{\text {a }}$ | 20 | - |
| Alberta. | 20 | 10 | - | - | - |
| British Columbia. | 15 | - | - | 25 | 15 |
| Yukon Territory | 15 | 10 | - | - | - |

${ }^{1}$ Limit in certain specified rural munjcipalities.

## EXPRESS COMPANIES.

There are four distinctly Canadian express companies, viz., the Canadian Express Co., the Canadian Northern Express Co., the Dominion Express Co. and the British America Express Co. They are organized under powers conferred by Acts of the Dominion Parliament, and their business consists in the forwarding of parcels through the railway companies, in the transfer of luggage, and in the issue of money orders, travellers' cheques, letters of credit and other forms of financial paper. Four other express companies situated in the United States also do business in Canada. The total capital liability of the four

## TRANSPORTATION AND COMMUNICATIONS

Canadian companies on June 30, 1916, stood at $\$ 4,842,200$. The total operating mileage of all eight express companies in Canada for the year ended June 30, 1916, was 41,994 , as compared with 38,611 in 1915. The gross operating receipts were $\$ 12,860,629$, compared with $\$ 11,311,797$ in 1915 , an increase of $\$ 1,548,832$. A deduction of $\$ 6,146,399$ for express privileges, that is, the amount paid to railways, steamboat and stage lines for the carrying of express matter, leaves $\$ 6,714,230$ as the operating revenue for the year. Operating expenses amounted to $\$ 5,794,517$, as compared with $\$ 5,632,904$ in 1915 , and the net operating revenue to $\$ 919,713$, as compared with $\$ 68,669$ in 1915.
28.-Operating Mileage of Express Companies in Canada, 1913, 1914, 1915 and 1916.

|  | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: |
| By routes over- | Miles. | Miles. | Miles. | Miles. |
| Steam Roads. | 29,476.62 | 33,551.13. | 35,572.73 | $38,538.91$ |
| Electric lines. | 212.61 | 212.61 | 254.41 | 338.70 |
| Steamboat lines. | 2,743.50 | 2,770.00 | 2,706.00 | 3,055.00 |
| Stage lines. | 122.00 | 112.00 | 75.00 | 59.00 |
| Miscellaneous. | 2.75 | 2.75 | 2.75 | 2.75 |
| Totals | 32,557 48 | 36.648 .49 | 38,610.89 | 41,994.36 |
| By Provinces-- | 558.90 | 483.80 | 568.80 |  |
| Nova Scotia. | 1,464.19 | 1,483.19 | 1,438.98 | 1,509.55 |
| New Brunswick. | 2,103.28 | 2,086.08 | 2,043.86 | 2,015.26 |
| Quebec. | 4,686.68 | 4,623.28 | 4,655.93 | 5,980.87 |
| Ontario. | 10,333.56 | 11,080.05 | 10,519.90 | 11,135.74 |
| Manitoba. | 3.598 .71 | 3,936.51 | 4,181.01 | 4,321.46 |
| Saskatchewan. | 4,174.36 | 5.597.26 | 5,845.96 | 5,993.30 |
| Alberta. | 1,879.50 | 2,807.00 | 3,405.80 | 3,704.40 |
| British Columbia. | 2,941.10 | 3,477. 10 | 4,866.43 | 5,660.36 |
| Yukon. | 692.70 | 692.70 | 692.70 | 692.70 |
| Foreign. | 124.50 | 381.52 | 411.52 | 411.52 |
| Totals. | 32,557.48 | 36,648.49 | 38,610.89 | 41,994.36 |
| By Companies- |  |  |  |  |
| American Express Co. | 1,175.09 | 1,127.99 | 1,290.29 | 1,224.14 |
| British Americs Express Co...... | 89.00 6.51 | 368.59 9.419 .51 | [ 414.249 .13 | 414.38 12.049 .93 |
| Canadian Express Co. | 6,926.51 | 9,419.51 | 10,249.13 | $12,049.93$ $8,251.62$ |
| Canadian Northern Express Co... | 5,762.25 $16,765.73$ | $6,343.21$ $17,168.77$ | $6,589.25$ $18,421.43$ | $8,251.62$ $18,493.81$ |
| Great Northern Express Co. . | 672.76 | 672.76 | 710.38 | 624.12 |
| United States Express Co.. | 224.84 | 224.84 |  |  |
| Wells Fargo \& Co. ....... .. .. | 941.30 | 941.30 | 936.36 | 936.36 |
| Totals. | 32,557.48 | 36,266.97 | 38,610.89 | 41,994.36 |

Nore.-In addition to the above mileage, outside operations in 1914 covered 16,811 miles, chiefy in connection with ocean-going steamers.
iThe total unavoidably omits 381.52 mites, attaching to operations outside of Cainada.

EXPRESS COMPANIES

## 29.--Operating Expenses of Express Companies, 1913-1916.


${ }^{1}$ Including National Express Co.
30.-Business transacted by Express Companies in financial paper, 1913-1916.

| Description. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: |
|  | \$ | * | \$ | 1 |
| Money orders, domestic. | 49,773,324 | 49,670,865 | 42,516,429 | 43,385,566 |
| Money orders, foreign. | 3,510,668 | 3,131,908 | 1,460,910 | 1,402,027 |
| Travellers', cheques, domestic... | 1,771,905 | 1,666,630 | 1,405,110 | 514,170 |
| Travellers' cheques, foreign... | 1,416,201 | 1,825,702 | 7382,292 | 282,834 |
| "C.O.D." cheques. | 7,309,889 | 8,011,832 | 7,642,035 | 9,330,731 |
| Telegraphic transfers. | 286,853 | 370,969 | 202,991 | 215,444 |
| Otetters of credit issued | 69,802 | 21,919 | 23,301 | 1,980 |
| Other forms.. | 905,551 | 1,197,514 | 656,668 | 1,368,099 |
| Total.... | 65,044,193 | 65,897,339 | 54,289,736 | 56,500,851 |

TRANSPORTATION AND COMMUNICATIONS
31.-Earnings of Express Companies, 1913-1916.

| Companies. | Revenue from transportation. | Money Orders, domestic. | Money Orders, foreign. | Travellers' Cheques, domestic. | Travellers' Cheques. foreign. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\leqslant$ | $\$$ | \$ | \$ | * |
| American Express ${ }^{1}$ | 398,078 | 10,131 | - | 1,049 |  |
| British America Express. | 17,419 |  | - | - |  |
| Canadian Express. | 3,882,748 | 63,551 | - | 918 |  |
| Canadian Northern Express | 1,155,211 | 15,695 |  | - |  |
| Dominion Express. . | 6,887,6344 | 111,650 | 23,669 | -288 | 429 |
| Great Northern Express. | 76,884 | 727 |  | - |  |
| Wells Fargo Express. | 15,671 | 701 | - | 260 | - |
| Total, $1916 .$. | 12,428,645 | 202,458 | 23,670 | 4,515 | 429 |
| Total, 1915. . | 10,917,619 | 186,580 | 15,239 | 3,429 | 1,704 |
| Total, 1914. | 12,210,260 | 207,605 | 20,650 | 190 | 9,203 |
| Total, 1913. | 12,434,321 | 173,261 | 21,137 | 23,145 | 2,892 |
| Companies. | $\begin{aligned} & \text { "C.O.D." } \\ & \text { Cheques. } \end{aligned}$ | Other earnings. | Total earnings. | Total expenses. | Net eamings. |
|  | \$ | \$ | \$ | 1 | \$ |
| American Express ${ }^{1}$ | - | 13,633 | 417,891 | 432,081 | - 14,190 |
| British America Express... | - |  | 17,419 | 9,901 | 7,518 |
| Canadian Express... | 32,659 | 24,496 | 4,004,375 | 3,739,781 | 264,594 |
| Canadian Northern Express | 18,323 |  | 1,189,22, | 962,134 | 227,094 |
| Dominion Express.... | 65,075 | 45,540 | 7,136,285 | 6,840,747 | 295,538 |
| Great Northern Express... | 298 | 443 | 78,354 | 85,618 | - 7,264 |
| Wells Fargo Express. . | 425 | 20 | 17,077 | 16,948 | 129 |
| Total, 1916. | 116,780 | 84,132 | 12,874,902 ${ }^{5}$ | 12,087,210 | 787,692 |
| Toial, 1915. | 110,829 | 76,398 | 11,338,752 ${ }^{4}$ | 11,366,157 | - 27,405 |
| Total, 1914... | 114,791 | 83,751 | 12,671,681 ${ }^{3}$ | 12,387,057 | 284,624 |
| Total, 1913... | 98,780 | 73,943 | 12,873,370 ${ }^{2}$ | 11,555,091 | 1,318,279 |

${ }^{\text {I Including National Express Co. }}$
${ }^{2}$ Includes $\$ 45,891$ revenue from outside operations.
${ }^{3}$ Includes $\$ 25,229$ revenue from outside operations.
+Includes $\$ 26,955$ revenue from outside operations.
${ }^{8}$ Includes $\$ 14,273$ revenue from outside operations.

## CANALS.

Canal Systems.-There are six canal systems under the control of the Dominion Government in connection with navigable lakes and rivers. They consist of the canals (1) between Port Arthur or Fort William and Montreal; (2) from Montreal to the international boundary near Lake Champlain; (3) from Montreal to Ottawa; (4) from Ottawa to Kingston and Perth; (5) Trenton, Lake Ontario, to Lake Huron (not completed); and (6) the St. Peter's canal from the Atlantic ocean to Bras d'Or Lakes, Cape Breton. The total length of the waterways comprised within these systems is about 1,594 statute miles, the actual mileage of canals constructed being 117.2.

Canal Traffic.-For the calendar year 1916 the total volume of traffic through the canals of the Dominion amounted to $23,583,491$ tons, as compared with $15,198,803$ tons in 1915, $37,023,237$ tons in 1914 and $52,053,913$ tons in 1913, the record year. The increase of $8,384,688$ tons in 1916, as compared with 1915, is at the rate of 55 p.c., whilst in 1915 the decrease of $21,824,434$ tons, as compared with 1914, was one of 58.9 p.c. This decrease was mainly due to a diversion of both Canadian and American traffic to the American canal at Sault Ste. Marie, owing to the availability on the American side of a new and larger lock. The total tonnage in 1916 was made up of $16,096,529$ tons of American traffic, as compared with $8,409,380$ tons in 1915, and of $7,486,962$ tons of Canadian traffic, as compared with $6,789,423$ tons in 1915. In 1916 the American traffic represented 68.3 p.c. of the total, as compared with 55.3 p.c. in 1915 , and the Canadian traffic represented 31.7 p.c. of the total, as against 44.7 p.c. in 1915. The movement of Canadian grain by canal in 1916, following the excellent harvest of 1915, was the largest on record. Of Canadian wheat the total quantity moved through the canals of Canada and the United States at Sault Ste. Marie was $185,003,667$ bushels, of which $82,807,342$ bushels passed through the Canadian canal and $102,196,325$ bushels passed through the American canal. In addition, $3,805,384$ barrels of wheat flour representing, at $4 \frac{1}{2}$ barrels per bushel, $17,124,228$ bushels of wheat passed through the canals; so that the total movement of Canadian wheat by canal in 1916 was $202,127,895$ bushels. Of oats $57,743,636$ bushels, of barley $8,679,607$ bushels and of flaxseed $4,931,569$ bushels passed through the Canadian and American canals at Sault Ste. Marie in 1916.

Expenditure and Revenue for Canals.-In Table 39 is given the annual expenditure and revenue for canals from the beginning up to the year 1916. The column of expenditure chargeable to capital includes all the items for canals specified, and also certain items which apply to the canals as a whole; but the other columns do not include certain sums which are mostly common to all the canals, as, for instance, in 1916, $\$ 49,491$ chargeable to income, $\$ 103,445$ for staff and $\$ 36,507$ for repairs. If these items be added, the total expenditure on the Dominion canals for the year ended March 31, 1916, was $\$ 7,956,354$, comprising $\$ 6,142,149$ charged to capital, $\$ 447,156$ charged to income,

## TRANSPORTATION AND COMMUNICATIONS

 $\$ 800,977$ for staff and $\$ 566,072$ for repairs. The total capital expenditure on the canals up to March 31, 1916, was $\$ 118,614,726$, which, as shown in Table 38 , includes a sum of $\$ 34,967$ chargeable to all as apart from any particular canals.Panama Canal.-In the Year Book of 1914, page 680, particulars were given of the Panama Canal in connection with its formal opening to commercial traffic on August 15 of that year. In Tables 41 and 42, of this section are given statistics of the traffic through the canal from the date of opening to February, 1917 Table 41 shows that for the calendar year 1916 there passed through the canal from the Atlantic to the Pacific and from the Pacific to the Atlantic, a total of $4,931,911$ long tons of cargo, as compared with 4,966,560 tons in 1915.

$$
\text { 32.-Canal Traffic during the Navigation Season } 1916 .
$$



## CANALS

32.-Canal Traffic during the Navigation Season 1916-concluded.

| Canals. | From United States to Canadian Ports. |  | Total Freight. |  | Total. | Origin of Cargo. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Up. | Domu. | Up. | Down. |  | Canadian | United States. |
| Sault Ste. Marie. | Tons. $704,378$ | Tons. $141,656$ | $\begin{gathered} \text { Tons. } \\ 1,430,543 \end{gathered}$ | Tons. 15,383,106 | Tons. 16,813,649 | Tons. | $\begin{gathered} \text { Tons. } \\ 12,657,738 \end{gathered}$ |
| Weliand. | 1,350 | 1,311,643 | 499,621 | 2,045,343 | 2,544,964 | I, 054,480 | 1,490,484 |
| St. Lawrence. | 5,405 | 1,787,743 | 698,522 | 2,669,542 | 3,365,064 | 1,581,195 | 1,786,869 |
| Chambly. |  | 141,796 | 246,677 | 152,300 | 398,977, | 257,181 | 141,796 |
| St. Peter's. | - |  | 5,471 | 4,158 | 9,629 | 9,629 |  |
| Murray.... |  | 1,575 | 42,563 | 4,117 | 46,680 | 45,085 | 1,595 |
| Ottawa. | 10,572 | - | 22,368 | 215,283 | 237,651 | 226,381 | 11,270 |
| Rideau. |  | 6,777 | 58,488 | 46,942 | 105,430 | 98,653 | 6,777 |
| Trent....., |  | - | 17,767 | 27,242 | 45,009 | 45,009 | - |
| St. Andrew's. |  |  | 12,913 | 525 | 13,438 | 13,438 |  |
| Total. | 721,705 | 3,391,190 | 3,034,933 | 20,548,558 | 23,583,491 | 7,486,962 | 16,096,529 |

33.-Distribation of Total Canal Traffic by Months, 1912-1916.

| Months. |  | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jamuary... |  | Tons. $181$ | Tons. 397 | Tons. 494 | Tons. | Tons. |
| April. |  | 77,871 | 875,226 | 554,111 | 398,350 | 474,710 |
| May |  | 6,134,122 | 7,260,227 | 5,307,123 | 1,426,805 | 2,967,906 |
| June. |  | 6,851,248 | 7,647,189 | 6,136,657 | 1,472,670. | 4,232,338 |
| July |  | 7,054,060 | 8,137,169 | 6,339,831 | 1,587,611 | 3,655,110 |
| August.. |  | 7,159,871 | 7,625,782 | 6,261,380 | 1,829,021 | 3,643,436 |
| September. |  | 6,983,913 | 7,531,379 | 6,069,946 | 2,424,717 | 3,318,774 |
| October... | . | 7,321,846 | 7,350,914 | 4,660,484 | 3,354,829 | 2,754,812 |
| November |  | 5,369,493 | 4,891,143 | 1,470,471 | 2,278,245 | 1,967,168 |
| December. |  | 634,640 | 734,487 | 222,740 | 426,555 | 569,237 |
| Total. |  | 47,587,245 | 52,053,913 | 37,023,237 | 15,198,803 | 23,583,491 |

34.-Distribution of Canal Traffic in Canada, 1916.

| Canal System. | Tons. | $\begin{gathered} \text { Increase } \\ (+) \\ \text { or } \\ \text { decrease } \\ (-) \end{gathered}$ | Canal System. | Tons. | Increase (+) or decrease (一) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sault Ste. Marie. | 16,813,649 | +9,062,692 | Murray.. | 46,680 | +15,952 |
| Welland. .. | 2,544,964 | $[-516,048$ | Ottawa. | 237,651 | -34,719 |
| St. Lawrence, . | 3,368,064 | -41,403 | Rideau. | 105,430 | -15,351 |
| Chambly. .. .. | 398,977 | $-79,730$ | Trent..... | 45,009 | -4,895 |
| St. Peter's...... | 9,629 | +6,734 | St. Andrews. | 13,438 | -8,544 |

## TRANSPORTATION AND COMMUNICATIONS

35.-Tonnage of Traffic by Canals and Classes of Products, 1915-1916.

| Canals. | $\begin{gathered} \text { Agricul- } \\ \text { tural } \\ \text { Products. } \end{gathered}$ | Animal Products. | Manufactures. | Forest Products | Mine Products. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 1915 . \\ \text { Sault Ste. Marie. } \end{gathered}$ |  | Tons. 655 | Tons. <br> 441,293 | Tons. | Tons. 456400 | Tons. <br> 7750,957 |
| Welland.... | 1,306,803 | 1 | 320,442 | 308,660 | 1,125,106 | 3,061,012 |
| St. Lawrence. | 1,204,523 | 4,685 | 276,713 | 601, 255 | 1,322,291 | 3,409,467 |
| Chambly | 7,163 | 784 | 21,605 | 280,117 | 169,038 | 478,707 |
| St. Peter's. | 381 | 10 | 322 | 179 | 2,003 | 2,895 |
| Murray | 153 | 271 | 6,523 | --1 | 23,781 | 30,728 |
| Ottawa. | 4,202 | 2,889 | 16,089 | 155,669, | 93,521 | 272,370 |
| Rideau | 1,521 | 1,690 | 10,186 | 10,211 | 97,173 | 120,781 |
| Trent. | 1,990 | 299 | 2,751 | 44,575 | 289 | 49,904 |
| St. Andrew's. |  | 5 | 187 | 4,894 | 16,896 | 21,982 |
| Total. | 5,182,525 | 11,289 | 1,096,111 | 1,494,778 | 7,414,100 | 15,198,803 |
| 1916. <br> Sault Ste. Marie.. | Tons. $3,8 \subset 3,288$ | Tons. 522 | Tons. 373,664 | Tons. 39,245 | Tons. 12,596,929 | $\xrightarrow{\text { Tons. }}$ |
| Welland.... | 603,57: | - | 184,779 | 265,563 | 1,4C1,644 | - 544,964 |
| St. Lawrence. | 660,555 | 4,45? | 211,530 | 650,59 | 1,840,93! | 3,368,064 |
| Chambly..... | 10,134 | 210 | 19,679 | 242,654 | 126,301 | 398,977 |
| St. Peter's. | 4,518 | 330 | 964 | 3. | 3,787 | 9,629 |
| Murray | 60 |  | 9,738 | 2 | 36,88: | 46,680 |
| Ottawa. | 3,383 | 2,940 | 20,168 | 139,16 | 71,992 | 237,651 |
| Rideau. | 523 | 2,583 | 10,554 | 9,912 | 81,65 | 105,430 |
| Trent. | 2,766 | 298 | 2,776 | 38,841 | 328 | 45,009 |
| St. Andrew's. | - |  | 214 | 2,86: | 10,35i | 13,438 |
| Total. | 5.178,806 | 11.342 | 834,266 | 1,388,873 | 16,170,204 | 23.583491 |

## 36.-Principal Articles carried through Canadian Canals during the Navigation

 Seasons 1915 and 1916.| Articles. | 1915. | 1916. | Increase. | Decrease. |
| :---: | :---: | :---: | :---: | :---: |
|  | Tons | Tons. | Tons. | Tons. |
| Barley | 161,590 | 266,439 | 104,849, |  |
| Buckwbeat... |  | 12 |  | 35.20 |
| Corn.. | 163,52: | 123,30 | 376175 | 35,220 |
| Oats. | 637,420 | 1,013,505 | 376,175 | - |
| Rye. | 11, 878 | 21,950 | 10,072 | - |
| Flax. | 59,771 | 96,316 | 36,545 |  |
| Peas. | 1,001 | 161 | $\sim$ | 840 |
| Wheat. | 3,807,722 | 3,279,121 | - $\square^{-}$ | 528,601 |
| Flour | 310,385 | 341,579 | 31,194 | - |
| Hay | 9,874 | 15,285 | 5,411 | - |
| Other mill products. | 8,988 | 8,366 | - | 622 |
| Fruit and vegetables. | 8,878 | 4,505 | - | 4,373 |
| Potatoes. | 1,479 | 3,170 | 1,691 | - |
| Live stock. | 1,205 | 988 | $\stackrel{-}{1}$ | 217 |
| Poultry, game and fish. | 625 | 768 | 143 | - |
| Dressed meats. | 79 | 185 | 108 | -18 |
| Other packing house products. | 1,677 | 861 | $55^{\circ}$ | 816 |
| Hides and leather | 26 | 576 | $55^{\circ}$ | - |
| Wool. | 183 | 139 | 331 | 4 |
| All other animal products. | 7,494 | 7,825 34,238 | 12,668 | - |
| Agricultursl products. | 21,570 | 34,238 | 12,668 | - |

CANALS.
36.-Principal Articles carried through Canadian Canals during the Navigation Seasons 1915 and 1916 -concluded.

| Articles. | 1915. | 1916. | Increase. | Decrease. |
| :---: | :---: | :---: | :---: | :---: |
|  | Tons. | Ton | Tons. | Tons. |
| Cement, bricks and lime. | 34,996 | 29,331 |  | 5,665 |
| Household goods and furniture. | 2,158 | 2,465 | 307 |  |
| Iron, pig and bloom. | 30,918 | 12,943 |  | 17,975 |
| Iron and steel, all other. | 174,641 | 72,395 | - | 102,246 |
| Petroleum and other oils. | 134,877 | 147,510 | 12,633 |  |
| Sugar. | 61,975 | 35,115 |  | 26,860 |
| Salt. | 11,490 | 12,884 | 1,394 |  |
| Wines, liquors and beer. | 6,241 | 4,846 | - | 1,395 |
| Merchandise not enumerated. | 617,245 | 482,539 | - | 134,706 |
| Pulpwood. | 910,774 | 862,363 | - | 48,411 |
| Sawed lumber. | 487,709 | 485,784 | - | 1,925 |
| Squared timber | 37,844 | 4,643 | - | 33,201 |
| Shingles. | 9,229 | 3,326 | - | 5,903 |
| Other woods. | 49,222 | 32,757 |  | 16,465 |
| Hard coal.. | 780,629 | 702,304 |  | 78,325 |
| Soft coal. | 1,988,531 | 3,388,421 | 1,399,890 | - |
| Coke...... | 324 |  |  | 324 |
| Copper Ore. | 20,331 | 3,972 | 7, $\square^{-}$ | 16,359 |
| Iron ore... | 4,133,360 | 11,558,835 | 7,425,475 |  |
| Other ore. | 29,518 461,407 | 7,048 509,624 | 48,217 | 22,470 |
| Total.. | 15,198,803 | 23,583,491 | 9,467,651 | 1,082,963 |

## 37.-Traffic through the Canadian Sault Ste. Marie Canal duriag the Navigation Seasons 1897 to 1916.

| Year | Canadian Vessels. |  | U. S. Vessels. |  | Total No. | Total <br> Vessel Tonnage. | Tonnage of Freight. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | $\begin{gathered} \text { Vessel } \\ \text { Tonnage } \end{gathered}$ | No. | Vessel Tonnage. |  |  | Canadian. | United States. | Total. |
| 1897 |  |  | 2,359 | 3,391,936 | 4,268 | 3,797,4 |  | 4,609,917 | 析 |
| 1898 | 1,811 | 403,931 | 1,364 | 2,353,699 | 3,675 | 2,757,630 | 146,539 | 2,908,748 | $3,055,287$ |
| 1899 | 2,000 | 558,552 | 1,769 | 2,389,457 | 3,769 | 2,948,009 | 299,975 | 2,706,689 | 3,006,664 |
| 1900 | 1.790 | 577,310 | 1,291 | 1,617,438 | 3,081 | 2,194,748 | 255,264 | 1,780,413 | 2,035,677 |
| 1901 | 2,796 | 775,15], | 1,408 | 1,674,597 | 4,204 | 2,449,748 | 494,613 | 2,325,781 | 2,820,394 |
| 1902 | 3,080 | 1,366,930 | 1,964 | 3,237,372 | 5,044 | 4,604,302 | 1,140,623 | 3,588,645 | 4,729,268 |
| 190 | 2,711 | 1,615,939 | 1,640 | 3,146,807 | 4,351 | 4,762,746 | 1,362,820 | 4,149,048 | 5,511,868 |
| 1904 | 2,637 | 1,555,042 | 1,325 | 2,675,663 | 3,962 | 4,230,705 | 1,212,145 | 3,818,560 | 5,030.705 |
| 1905 | 3,970 | 1,803,288 | 1,692 | 3,734,349 | 5,662 | 5,537,637 | 1,304,355 | 4,169,051 | 5,473,406 |
| 1906 | 3,922 | $1,959,252$ | 1,758 | 4,399,872 | 5,680 | 6,359,124 | 1,632,683 | 4,941,363 | 6,574,046 |
| 1907 | 3,217 | 2,154,688 | 3,132 | 9,961,281 | 6,349 | 12,115,969 | 1,957,334 | 13,630,831 | 15,588,165 |
| 1908 | 3,289 | 2,603,232 | 2,004 | 7,035,655 | 5,293 | 9,638,887 | 2,092,231 | 10,666,985 | 12,759,216 |
| 1908 | 2,597 | 2,988,936 | 3,734 | 14,850,738 | 6,331 | 17,839,674 | 3,366,495 | 24,494,750 | 27,861,245 |
| 1910 | 2,744 | 3,173,494 | 5,228 | 20,187,704 | 7,972 | 23,361,19 | 3,345,619 | $33,050,068$ | 36,395,687 |
| 1911 | 2,713 | 3,108,880 | 4,068 | 16,252,340 | 6,781 | 19,361,220 | 3,177,581 | 27,774,128 | 30,951,709 |
| 1912 | 2,643 | 3,296,229 | 5,213 | 22,536,015 | 7,856 | 25,832,244 | 4,090,362 | 35,579,293 | 39,669,655 |
| 1913 | 3,279 | 3,793,434 | 5,006 | 22,181,007 | 8,285 | 25,974,441 | 4,954,734 | 37,744,590 | 42,699,324 |
| 1914 | 3,011 | 3,473,292 | 2,966 | 13,827,870 | 5,977 | 17,301,162 | 3,609,747 | 23,989,437 | 27,599,184 |
| 1915 | 3.000 | 3,041.003 | 1,331 | 5,443,812 | 4,331 | 8.484,815 | 2,561,734 | 5,189.223 | 7.750.957 |
| 19 | 4,595 | 4,089,987 | 2,094 | 8,703,187 | 6,689 | 12,793,124 | 7,486,962 | 16,496,52? | 23,583,491 |

TRANSPORTATION AND COMMUNICATIONS.
38.-Trafic through Canadian Canals during the Navigation Seasons of 1910. 1911, 1912, 1913, 1914, 1915 and 1916.

SAPLT STE. MARIE CANAL.

| Year | Canadian Vessels. |  |  |  | United States Vessels. |  |  |  | Passen gers. | Freight carried. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Steamers. | Sail. | Total. | Vessel Tonnage. | Steamers. | Sail. | Total. | Vessel Tonnage. |  |  |
|  | No. | No. ${ }_{92}$ | No. | ${ }_{3}$ Tons. | No. | No. | No. | Tons. | No. | Tons. |
| 1911 | 2,652 2,493 | 220 | 2,743 | 3,108,880 | 4,000 | 128 | 5,228 4,068 | 20,187, ${ }^{1625}$ | 33,291 39 | 36,395,687 |
| 1912 | 2,492 | 151 | 2,643 | $3,296,229$ | 5,190 | 23 | 5,213 | 22,536,015 | 37,549 | 39,669,659 |
| 1913 | 3,003 | 276 | 3,279 | 3,793,434 | 4,996 | 10 | 5,006 | 22,181,007 | 36,872 | 42,699,325 |
| 1914 | 2,674 | 337 | 3,011 | 3,473,292 | 2,955 | 11 | 2,966 | 13,827,870 | 30,446 | 27,599,184 |
| 1915 | 2.742 | 258 | 3,000 | 3,041,003 | 1,327 | 4 | 1,331 | 5,443,812 | 25,047 | 7,750,957 |
| 1916 | 3,908 | 687 | 4,595 | 4,089,937 | 2,072 | 22 | 2,094 | 8,708,187 | 31,734 | 16,813,649 |

WELLLAND CANAL.

| 1910] 1,316] | 53 | 1,852 | 999 | 646 | 46 | 692 | 687,018 | 1,655 | 2,326,290 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1911 1,375 | 289 | 1,664 | 1,541,548 | 701 | 115 | 816 | 755,631 | 1,288 | 2,537,629 |
| 1912 1,613 | 333 | 1,946 | 1,814,965 | 867 | 92 | 959 | 864,535 | 1,317 | 2,851,915 |
| 1913 2,111 | 300 | 2,411 | 2,376,778 | 756 | 62 | 818 | 787,752 | 1,620 | 3,570,714 |
| 1914 2,592 | 310 | 2,902 | 2,878,483 | 735 | 55 | 790 | 757,212 | 25 | 3,860,969 |
| 1915 1,760 | 366 | 2,126 | 2,032,348 | 758 | 38 | 796 | 822,847 | 7 | 3,061,012 |
| 1916 1,658 | 434 | 2,092 | 1,794,722 |  | 61 | 847 | 718,897 |  | 2,544,964 |

ST. LAWRENCE CANALS.

| 1910 4,251 | 4,583 | 8,834 | 2,910,395 | 772 | 620 | 1,392] | 482,144 | 2, 75 | 2,760,752 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1911 4,106 | 4,261 | 8,367 | 3,103,957 | 1,033 | 523 | 1,556 | 819,078 | 101,750 | 3,105,708 |
| 1912 4,382 | 4,819 | 9,201 | 3,496,502 | 1,164 | 641 | 1,805 | 846,333 | 106,492 | 3,477,188 |
| 1913 4,997 | 4,848 | 9,845 | 4,240,399. | 1,208 | 603 | 1,811 | 961,371 | 127,638 | 4,302,427 |
| 1914 5,304 | 3,678 | 8,982 | 4,505,235 | 854 | 409 | 1,263 | 776,490 | 106,618 | 4,391,493 |
| 1915 4,474 | 2,695 | 7,099 | $3,422,991$ | 981 | 561 | 1,542 | 841,792 | 78,303 | 3,409,467 |
| 1916 4,258 | 2,388 | 6,647 | 3,122,072 | 1,194 | 484 | 1,678 | 1,016,367 | 81,623 | 3,368,064 |

CHAMBLY CANAL.

| 1910 | 299 | 3201 | 619 | 97,7971 | - 3 3,600 | 3,600 | 369,449 | 2,399 | 669,299 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1911 | 208 | 289 | 497 | 51,451 | 2 2 3,509 | 3,511 | 367,978 | 2,708 | 599,829 |
| 1912 | 279 | 207 | 486 | 45,550 | 1 3,318 | 3,319 | 344,435 | 2,422 | 618,415 |
| 1913 | 290 | 182 | 472 | 62,140 | - 2,725 | 2,725 | 273,671 | 2,507 | 555,602 |
| 1914 | 167 | 179 | 346 | 52,736 | - 2,348 | 2,348 | 241,672 | 2,677 | 436,905 |
| 1915 | 308 | 180 | 488 | 58,998 | 1 2,300 | 2,301 | 235, 193 | 2,640 | 478,707 |
| 1916 | 247 | 261 | 508 | 64,064 | 11,810 | 1,811 | 186,298 | 1,669 | 328,977 |

ST. PETER'S CANAL.

| 1910 | 310 | 1,156 | 1,4661 | 106,242 | 2 | 2 | 4 | 811 | 633 | 85,951 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1911 | 269 | 991 | 1,260 | 89,270 | - | - |  | - | 709 | 75,298 |
| 1912 | 353 | 852 | 1,205 | 88,519 | 2 | 6 | 8 | 626 | 1,240 | 74,809 |
| 1913 | 382 | 942 | 1,324 | 94,890. | 6 | 7 | 13 | 1,048 | 1,582 | 71,514 |
| 1914 | 451 | 741 | 1,192 | 80,252 | 1 | 7 | 8 | 41 | 351 | 54,180 |
| 1915 | 37 | 34 | 71 | 5.650 | - | - | - | - | 8 | 2,895 |
| 1916 | 30 | 103 | 133 | 9,201 | - | - | - |  | 6 | 9,629 |

## CANALS

38.-Traßfe through Canadian Canals during the Navigation Seasons of 1910, 1911, 1912, 1913, 1914, 1915 and 1916-concluded.

MURRAY CANAL.

| Year | Canadian Vessels. |  |  |  | United States Vessels. |  |  |  | Passen- <br> gers. | Freight carried. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Steamers | Sail, | Total. | Vessel Tonnage | Steamers. | Sail. | Total. | Vessel Tonnage. |  |  |
| 1910 | No. <br> 845 | $\mathrm{No}_{\substack{\text { No. } \\ 395}}$ | No. | Tons, 378,037 | No. <br> 47 | No. | No. 68 | Tons. ${ }_{\text {1,413 }}$ | $\begin{gathered} \text { No. } \\ 33,782 \end{gathered}$ | Tons. 177,941 |
| 1911 | 940 | 416 | 1,356 | 368,189 | 69 | 15 | 84 | 3,021 | 26,187 | 163,457 |
| 1912 | \$34 | 176 | 1,010 | 386,302 | 65 | 10 | 75 | 2,761 | 20,679 | 170,081 |
| 1913 | 887 | 337 | 1,224 | 395,494 | 51 | 2 | 53 | 2,133 | 20,210 | 180,576 |
| 1914 | 656 | 258 | 914 | 210,747 | 47 | 10 | 57 | 2,889 | 15,893 | 83,907 |
| 1915 | 478 | 74 | 552 | 124,506 | 48 |  | 48 | 1,407 | 12,223] | 30,728 |
| 1916 | 514 | 135 | 649 | 108,260 | 30 | - | 30 | 1,025 | 4,86 ${ }^{\text {- }}$ | 46,680 |
|  |  |  |  |  | tawa | can | AL. |  |  |  |
| 1910 | 972 | 1,217 | 2,1891 | 410,907 | 6 | 406 | 412 | 41,963 | 26,485 | 385,261 |
| 1911 | 981 | 1,128 | 2,109 | 377,925 | - | 304 | 304 | 30,536 | 25,497 | 320,071 |
| 1912 | 1,007 | 1,655 | 2,662 | 480,751 | - | 397 | 397 | 40,598 | 27,271 | 392,350 |
| 1913 | 1,007 | 1,640 | 2,647 | 497,649 | - | 291 | 201 | 29,718 | 24,759 | 365,438 |
| 1914 | 930 | 1,267 | 2,197 | 392,516 | - | 275 | 275 | 27,257 | 23,835 | 335,132 |
| 1945 | 788 | 861 | 1,649 | 297,434 |  | 391 | 391 | 39,464 | 27,258 | 272,370 |
| 1916 | 782 | 877 | 1,659 | 302,012 | - | 328 | 328 | 33,851 | 22,812 | 237,651 |

RIDEAU CANAL.

| 1910 2, 105 | 644 | 2,7491 | 176,447 | 2 | 64 | 66 | 6,795 | 26,040 | 134,881 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1911 2,361 | 670 | 3,031 | 222,562 | 1 | 30 | 31 | 3,038 | 25,298 | 172,227 |
| 1912 2,257 | 703 | 2,960 | 208,689 | - | 9. | 9. | 887 | 20,534 | 160,133 |
| 1913 2,185 | 613 | 2,798 | 200,898 | - | 22 | 22 | 2,088 | 19,653 | 171,223 |
| 1914 2,208 | 392 | 2,600 | 176,904 | 22 | 13 | 35 | 2,611 | 19,730 | 151,739 |
| 19151,817 | 253 | 2,070 | 144,787 | - | 6 | 6 | 586 | 18,664 | 120,781 |
| 19161,512 | 160 | 1,672 | 117,341) | - | 12. | 12 | 1,214 | 12,544 | 105,430 |
| TRENT CANAL. |  |  |  |  |  |  |  |  |  |
| 1910 2,794 | 648 | 3,442 | 172,085 | - | - | - | - | 69,186 | 46,263 |
| 19113,088 | 1,077 | 4,165 | 196,973 | - | - | $=$ | - | 77,078 | 57,280 |
| 1912 3,227 | 771 | 3,998 | 208,855 | - | $\sim$ | - | - | 73,861 | 77,150 |
| 1913 3,021 | 645 | 3,666 | 217,081 | - | - | - | $\rightarrow$ | 99,162 | 55,800 |
| 1914 2,915 | 732 | 3,64 ${ }^{3}$ | 174,647 | - | - | - | - | 85,218 | 67,715 |
| 1915 2,855 | 578 | 3,433 | 172,780 | - | - | - | - | 82,391 | 49,904 |
| $\underline{1916} 3$ 3,011 | 484 | 3,4951 | 165,489 | - | $-1$ | - | - | 104,736 | 45,009 |

sT. ANDRFW's CANAL.

| 1910 | 186 | 22 | 202 | 44,887 | - | - | - | 6,394 | 8,283 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1911 | 341 | 82 | 423 | 111,437 | - | - | - | - | - |
| 1912 | 743 | 517 | 1,260 | 210,973 | - | - | - | 5,345 | 47,135 |
| 1913 | 616 | 372 | 988 | 199,278 | - | - | - | - | 902 |
| 1914 | 197 | 137 | 334 | 106,044 | - | - | - | - | 1,796 |
| 1915 | 664 | 423 | 1,087 | 97,710 | - | - | - | - | 2,532 |
| 1916 | 302 | 250 | 552 | 58,934 | - | - | - | - | 4,295 |

## SOMMARY.

| 1910115,72 | 9,613, $25,3,37$ | 8,51,750 6.57 4, |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 191116,162 | 9,423 25,585 | 9,172,192 5,806 4, |  |  |  |  |
| 1912 17,187 | 10,184 27,371 | 10,237,335 7,2894 4,496 | 11,785 |  | 292,207 |  |
| 1913 18,499 | 10,155 28,654 | 12,078,041 7,017 3,722 | 10.739 | 24,238,78 | 335,799 | 52,053,913 |
| 1914 18,094 | 8,031 26,125 | 12,050,850 4, 614 3, 3 , 28 | 7,742 | 15,636,414 | 287,326 | 37,023,237 |
| 1915 15,92 | 5,652 21,575 | 9,398,207 3.115 [3,300 | 6,415 | 7,385,101 | 250,836 | 15,198,803 |
| 1916,16,22 | 5,780 22,0 | $9,839,029^{4,08312,7}$ |  | 10,660,8 | 263,6 | 23,583,491 |

TRANSPORTATION AND COMMUNICATIONS
39.-Total Expenditure and Revenue of Canals 1868-1916 and before Confederation.

| Fiscal Year. | Expenditure Chargeable- |  |  |  |  | Revenue of Canals. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | To Capital. | To Income. | To Revenue. | For Staff. | For Repairs. |  |
| Before Confederation. | $\left\|\begin{array}{c} \$ \\ 20,593,866 \end{array}\right\|$ | $\$ 98,378$ |  | \$ | $\$$ | \$ |
| 1868. | 33,784 | 95,348 | 12,000 | 113,084 | 101,646 | 403,879 |
| 1869. | 126,898 | 55 | 12,000 | 116,070 | 118,579 | 400,263 |
| 1870. |  | 90,356 | 18,699 | 120,403 | 150,177 | 414,687 |
| 1871. |  | 116,430 | 12,019 | 135,041 | 140,468 | 488,539 |
| 1872. | 255,646 | 33,289 | 12,209 | 124,137 | 152,086 | 466,848 |
| 1873. | 256,547 | 127,370 | 12,099 | 148,581 | 186,573 | 486,433 |
| 1874. | 1,189,592 | 51,037 | 12,959 | 167,194 | 213,614 | 510,756 |
| 1875. | 1,714,830 | 479 | 12,047 | 168,401 | 203,227 | 414,980 |
| 1876. | 2,388,733 | 811 | 86 | 178,412 | 190,578 | 390,337 |
| 1877 | 4,131,374 | 22 | 52 | 179,661 | 138,449 | 390,857 |
| 1878. | 3,843,339 | 1,860 | 556 | 187,521 | 122,252 | 373,814 |
| 1879. | 3,064,099 |  |  | 191,892 | 115,350 | 337,675 |
| 1880. | 2,123,366 | 2,562 | 323 | 195,039 | 147,168 | 341,598 |
| 1881. | 2,075,892 | 9,585 | 5,535 | 197,574 | 154,654 | 361,558 |
| 1882. | 1,593,174 | 55,025 | 9,826 | 224,573 | 187,399 | 325,232 |
| 1883. | 1,763,002 | 74,284 | 6,979 | 269,415 | 178,618 | 361,604 |
| 1884. | 1,577,295 | 68,481 | 8,305 | 280,657 | 192,219 | 372,562 |
| 1885. | 1,504,622 | 75,023 | 1,211 | 280,226 | 201,708 | 321,289 |
| 1886. | 1,333,325 | 52,308 | 776 | 282,324 | 198,252 | 328,977 |
| 1887 | 1,783,698 | 89,495 | 649 | 285,173 | 198,889 | 321,785 |
| 1888. | 1,033,118 | 155,095 | 5,800 | 292,459 | 201,929 | 317,902 |
| 1889. | 972,919 | 172,107 | 5,208 | 301,040 | 240,261 | 333,189 |
| 1890. | 1,026,364 | 163,281 | 49,550 | 290,517 | 176,089 | 354,817 |
| 1891. | 1,318,092 | 182,769 | 56,922 | 294,562 | 204,768 | 349,432 |
| 1892. | 1,437,149 | 200,671 | 65,074 | 293,116 | 231,090 | 324,475 |
| 1893. | 2,069,573 | 204,684 | 63,966 | 291,049 | 204,759 | 357,090 |
| 1894. | 3,027,164 | 113,395 | 60,265 | 294,446 | 179,630 | 387,789 |
| 1895. | 2,452,274 | 220,190 | 60,770 | 281,477 | 164,034 | 339,891 |
| 1896. | 2,258,779 | 96,713 | 70,340 | 292,121 | 209,322 | 339,539 |
| 1897 | 2,348,637 | 104,143 | 62,777 | 287,970 | 178,385 | 384,781 |
| 1898. | 3,207,250 | 84,120 | 56,284 | 280,872 | 203,479 | 407,653 |
| 1899. | 3,899,877 | 83,525 | 66,850 | 280,629 | 202,312 | 369,044 |
| 1900. | 2,639,565 | 132,527 | 58,837 | 292,609 | 227,627 | 322,643 |
| 1901. | 2,360,570 | 147,768 | 61,939 | 314.095 | 262,876 | 315,426 |
| 1902. | 2,114,690 | 216,703 | 65,771 | 317,839 | 263,768 | 300,414 |
| 1903. | 1,823,274 | 277,596 | 63,175 | 390,282 | 294,114 | 230,213 |
| 1904. | 1,880,787 | 302,409 | 66,067 | 381,017 | 350,279 | 79,537 |
| 1905. | 2,071,594 | 354,353 | 64,515 | 431,500 | 401,743 | 78,009 108,068 |
| 1906. | 1,552,121 | 319,877 | 62,172 | 447,963 | 375,889 | 108,068 105,003 |
| 1907 (9 months) | 887,839 | 264,111 | 66,251 | 329,630 | 287,231 | 105,003 |
| 1908. | 1,723,156 | 508,010 | 105,519 | 473,639 | 411,661 | 144,882 |
| 1909. | 1,873,869 | 728,125 | 106,066 | 475,515 | 433,958 | 199,501 |
| 1910. | 1,650,707 | 489,256 | 111,756 | 515,585 | 491,793 | 193,384 |
| 1911. | 2,349,474 | 440,270 | 103,398 | 511,306 | 471,530 | 221,138 |
| 1912. | 2,560,939 | 442,012 | 110,049 | 585,900 | 555,710 | 264,114 |
| 1913. | 2,259,257 | 331,987 | 1217, 729 | ${ }_{642,845}^{605}$ | 574,039 | 307,568 380,188 |
| 1914. | 2,829,661 | 389,285 | 147,729 | $\begin{aligned} & 642,845 \\ & 675,771 \end{aligned}$ | 574,089 562,599 | 380,188 427,763 |
| 1915. | $5,490,796$ $6,142,149$ | 444,730 397,665 | 140,236 139,952 | 675,771 697,532 | 562,599 529,565 | 427,763 446,722 |
| 1916. | 6,142,149 | 397,665 | 139,002 | , |  |  |
| Totals... | 118,614,726 | 9,009,575 | 2,356,939 | 15,413,912 | 12,717,482 | 16,208,848 |

40.-Capital Expenditure for Construction and Enlargement of Canals 1868-1916 and before Confederation.


[^24]41.-Traffic through the Panama Canal, August 1914 to February 1917.

From the Panama Canal Record. (Tonme2,240 lb.)

| Month and Year. | Atlantic to Pacific. |  |  |  | Pacific to Atlantic. |  |  |  | Total. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Vessels. | Canal Tonnage. |  | Cargo. Tons. | Vessels. | Canal Tonnage. |  | Cargo. Tons. | Vessels. | Canal Tonnage. |  | Cargo. Tont. |
|  |  | Gross. | Net. |  |  | Gross. | Net. |  |  | Gross. | Net. |  |
| 1914 |  |  |  |  |  |  |  |  |  |  |  |  |
| August..... | 13 | 58,233 | 41,931 | 49,106 | 11 | 62,948 | 44,043 | 62,178 | 24 | 120,282 | 85,978 | 111,284 |
| September. | 27 | 151,878 | 109,684 | 141,762 | 30 | 151,508 | 111,375 | 180,276 | 57 | 303,446 | 221,058 | 322,038 |
| October.. | 44 | 240,925 | 174,472 | 168,069 | 40 | 220,179 | 153,744 | 253,288 | 84 | 481,104 | 328,216 | 421,357 |
| November. | 54 | 247,479. | 172.825 | 206,510 | 38 | 205,071 | 149,506 | 242,291 | 92 | 452,550 | 322,731 | 448,801 |
| December. | 43 | 204,776 | 148,876 | 179,235 | 57 | 280,896 | 108,818 | 271,219 | 100 | 485,672 | 347,294 | 450,454 |
| Total | 181 | 903,291 | 647,588 | 744,682 | 176 | 919,763 | 657,690 | 1,009,252 | 357 | 1,823,054 | 1,305,278 | 1,759,934 |
| 1915 |  |  |  |  |  |  |  |  |  |  |  |  |
| January. | 44 | 239,486 | 169,228 | 208,082 | 54 | 251,085 | 177,984 | 240,925 | 98 | 400,57I | 347,212 | 449,007 |
| February.. | 38 | 209,822 | 149,339 | 150,087 | 53 | 245,522 | 175.523 | 276,078 | 91 | 455,344 | 324,862 | 427,065 |
| March. | 57 | 269,901 | 187,568 | 217,447 | 80 | 405,380 | 288,416, | 417,810 | 137 | 675,281 | 475,084 | 635,057 |
| April. | 59 | 279,139 | 199,213 | 237,384 | 60 | 290,738 | 205,326 | 285,457 | 119 | 569,877 | 404,589 | 522,841 |
| May. | 67 | 343,701 | 240.098 | 246,534 | 75 | 360,104 | 252,252 | 332,174 | 142 | 703,805 | 492,350 | 578,708 |
| June. | 83 | 412,525 | 296.694 | 320.619 | 60 | 286,330 | 201,1]6. | 282,561 | 143 | 698,855 | 497,810 | 603,180 |
| July... | 93 | 465,726 | 297,324 | 316,773 | 77 | 356,145 | 250,041 | 888,696 | 170 | 821,871 | 547,370 | 705,469 |
| August. | 89 | 416,463 | 288,194 | 249,119 | 72 | 353.298 | 238,857 | 326,218 | 161 | 769,761 | 525,051 | 575,337 |
| September. | 49 | 235,397 | 186,751 | 181,380 | 51 | 254.064 | 178,819 | 274,937 | 100 | 489,461 | 345,370 | 456,317 |
| October. | - | - | - | - | - | - | - | - | - | - | - | - |
| November. . | - | - | - | - | - | - | - | - | - | - | - | - |
| December. | 3 | 1,548 | 851 | 671 | 6 | 12,446 | 8,967 | 12,008 | 9 | 13,904 | 9,808 | 13,579 |
| Total. | 582 | 2,873,708 | [,995,265 | 2,128,996 | 588 | 2,815,112 | 1,975,091 | 2,837,564 | 1,170 | 5,688,820 | 3,970,356 | 4,966,560 |

41.-Traffic through the Panama Canal, August 1914 to February 1917-concluded. From the Panama Canal Record. (Ten=2,240 lb.)

| Month and Year. | Atlantic to Pacific. |  |  |  | Pacifio to Atlantic. |  |  |  | Total. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Vessels. | Canal Tounage. |  | Cargo. <br> Tons. | Vessels. | Canal Tonnage. |  | Cargo. Tons. | Vessels. | Canal Tonnage. |  | Cargo. <br> Tons. |
|  |  | Gross. | Net. |  |  | Grosg. | Net. |  |  | Groge. | Net. |  |
| 1916 |  |  |  |  |  |  |  |  |  |  |  |  |
| January.................. | - | - | - | - | 2 | 814 | 600 | 550 | 2 | 814 | 600 | 550 |
| February.................... | 4 | 699 | 694 | 1,100 | 1 | 2,685 | 1,790 | - | 5 | 3,379 | 2,484 | 1,100 |
| March....................... | 2 | 387 | 203 | - | 5 | 18,407 | 11,605 | 7,000 | 7 | 18,794 | 11,808 | 7,000 |
| April........................ | 32 | 142,642 | 102,378 | 144,183 | 48 | 107,193 | 140.306 | 224,620 | 80 | 339,835 | 242,684 | 368,753 |
| May........................ | 69 | 311,881 | 215,473 | 248,280 | 60 | 257,157 | 179,070 | 245,861 | 129 | 569,038 | 394,543 | 494,150 |
| Jane........................ | . 70 | 338,108 | 238,358 | 292,771 | 54 | 231,474 | 183,686 | 225,020 | 124 | 569,582 | 400,044 | 517.791 |
| July. | 76 | 369,678 | 280,521 | 296,004 | 73 | 319,338 | 228,437 | 352.863 | 148 | 689,017 | 488,958 | 648,057 |
| August. | 77 | 372,042 | 261,638 | 248,149 | 65 | 295,032 | 203,340 | 270,672 | 142 | 667,074 | 464,978 | 516,821 |
| September. | 69 | 318,815 | 219,398 | 224,661 | 85 | 412,175 | 204,580 | 437,509 | 254 | 728,990 | 513,978 | 662.170 |
| October.. | 74 | 317,826 | 221,610 | 231,016 | 84 | 377,457 | 272.164 | 416,877 | 158 | 605,283 | 498,774 | 047,898 |
| Noveruber. | 72 | 314,179 | 220,806 | 198,718 | 76 | 303,517 | 215,398 | 320,325 | 148 | 617,696 | 436,204 | 519,043 |
| December | 82 | 362,154 | 261,181 | 241,987 | 73 | 313,005 | 222,633 | 305,696 | 155 | 675,189 | 483,814 | 647,683 |
| Total.,1917 | 627 | 2,846,406 | 2,000,260 | 2,124,918 | 636 | 2,728,255 | 1,933,609 | 2,806,993 | 1,253 | 6,574,661 | 3,933,869 | 4,931,911 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| January..................... | 78 | 368,253 | 258,317 | 246,139 | 98 | 406,554, | 303,131 | 425,254 | 176 | 774,807 | 581,448 | 671,383 |
| February. | 68 | 324,918 | 226,247 | 244,307 | 72 | 361,947 | 251.356 | 313,462 | 140 | 686,865 | 477,603 | 557,769 |
| Tatal $\qquad$ <br> Grand Total | 146 | 693,171 | 484,564 | 480,446 | 170 | 768,501 | 554,487 | 738,716 | 316 | 1,461,672 | 1,039,051 | 1,229,162 |
|  | 1,586 | 7,316,576 | 5,127,767 | 5,489,042 | 1,560 | 9,231,631 | 5,120,877 | 7,392,525 | 3,0\%6 | 14,548,207 | 10,248,554 | 12,881,567 |

42.-Traffic through the Panama Canal by Nationality of Vessels for the fiscal years ended June 30, 1915 and 1916.

From the Panama Canal Record. (Ton=2,240 lb.)

| Nationality. | 1915 |  |  |  |  |  | 1916. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Atlantic to Pacific. |  |  | Pacific to Atlantic. |  |  | Atlantic to Pacific. |  |  | Pacific to Atlantic. |  |  |
|  | Number. | $\left\lvert\, \begin{gathered} \text { Net } \\ \text { Canal } \\ \text { Tonnage. } \end{gathered}\right.$ | Cargo. Tons. | Number. | Net Canal Tonnage. | Cargo Tons. | Number. | Net Canal Tonnage | Cargo Tons. | Number. | Net Canal Tonnage | Cargo Tons. |
| British. | 226 | 705,153 | 896,379 | 238 | 838,036 | 1,306,092 | 193 | 654,514 | 758,202 | 165 | 500,899 | 790,258 |
| United States. | 231 | 866,121 | 1,037,854 | 239 | 880,967 | 1,224,209 | 114 | 338,022 | 380,76E | 124) | 399,147 | 513,355 |
| Norwegian. | 16 | 58,801 | 48,866 | 26 | 72,035 | 121,706 | 19 | 74,280 | 41,320 | 26 | 103,078 | 196,835 |
| Japanese. | 4 | 16,999 | 30,154 | 2 | 7,958 | 14,000 | 19 | 68,421 | 101,472 | ${ }^{6}$ | 13,097 | 19,945 |
| Chilean. | 16 | 40,178 | 17,104 | 19 | 53,610 | 39,493 | 16 | 45,228 | 26,876 | 17 | 46,014 | 31,442 |
| Peruvian. | 2 | 3,662 | 1,000 | 2 | 5,756 | 6,202 | 16 | 38,671 | 24,365 | 14 | 35,758 | 38,251 |
| Dutch. | 5 | 15,173 | 17,182 | 2 | 5,902 | 8,846 | 11 | 25,2-8 | 35,250 | 4 | 14,364 | 25,565 |
| Danish... | 10 | 39,949 | 34,520 | 13 | 49,781 | 80,357 | 10 | 41,566 | 57,959 | 8 | 26,430 | 44,865 |
| Swedish. | 8 | 19,970 | 10,176 | 10 | 34,057 | 36,352 | 5 | 16,134 | 8,023 | 8 | 25,299 | 38,828 |
| Panaman. | - |  |  | 2 |  |  | 5 | 551 |  | 1 | 212 |  |
| Ltalian. | 1 | 2,079 | 900 | 1 | 2,079 | - | 1 | 3,861 | - |  |  | - |
| Russian. | 5 | 18,539 | 22,431 | , | 3,861 | - | 1 | 1,475 | - | 2 | 255 | 290 |
| Nicaraugan. | 2 | 46 | 6 | $-$ | 5 | - | $\bigcirc$ | 228 | - | 2 | 2.5 |  |
| Argentine.. | - |  |  | - |  |  |  | - |  | 1 | 2,335 | 0-7 |
| French... | 2 | 6,556 | 9,163 | 1 | 4,147 | 6,800 | - | - |  | 1 | 4,343 | 6,176 |
| Canadian. | 1 | 1,430 |  |  |  |  | - | - | - |  |  |  |
| Total. | 530 | 1,884,728 | 2,125,735 | 558 | 1,958,310 | 2,844,057 | 411 | 1,308,230 | 1,434,236 | 376 | 1,171,531 | 1,705,810 |

[^25]
## SHIPPING.

Administration of the general shipping interests of Canada is divided between the Marine Department and the Department of the Naval Service. ${ }^{1}$ The Marine Department includes the control, regulation, management and supervision of various services, chief amongst which are (1) administration of the Canada Shipping Act and other Acts of the Dominion Government relating to marine transportation; (2) pilotage; (3) the construction and maintenance of lighthouses, lightships, fog alarms, buoys and beacons; (4) ports, harbours, piers, wharves and breakwaters; (5) the Meteorological Service of Canada; (6) sick and distressed seamen, and the establishment, regulation and management of marine and seamen's hospitals; (7) river and harbour police; (8) inquiries into the causes of shipwrecks and casualties and the collection of wreck statistics; (9) the inspection of steamboats; (10) the construction and maintenance of the St. Lawrence River Ship Canal, and (11) the maintenance of winter communication between Prince Edward Island and the mainland. The net revenue of the Marine Department for the fiscal year ended March 31, 1916, derived principally from fees, was $\$ 461,457$, and the expenditure for the same period was \$5,621,611.

Of the following statements, Tables $\mathbf{4 3 - 5 0}$ are compiled from the Reports of the Department of Customs, and Tables 51 to 58 are from the Reports of the Department of Marine.

[^26]| Nationalities. | Number of Vessels. | Tons Register. | Freight. |  | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { Men. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Weight. | Tons Measure- ment. |  |
| Entered. |  |  |  |  |  |
| British. | 3,564 | 6,506,118 | 772,949 | 259,529 | 184,360 |
| Canadian. | 6,104 | 1,909,633 | 345,020 | 3,266 | 94,180 |
| Foreign..... | 9,478 | 4,201,176 | 1,681,994 | 106,690 | 163,661 |
| Total. | 19,146 | 12,616,927 | 2,799,963 | 369,485 | 442,201 |
| Cleared. |  |  |  |  |  |
| British. . | 3,253 | 5,911,826 | 4,096,798 | 1,341,439 | 164,783 |
| Canadian.. | 6,282 | 1,985,098 | 912,687 | 131,678 | 97,357 |
| Foreign.... | 9,081 | 4,313,799 | 1,655,411 | 882,839 | 165,937 |
| Total. | 18,616 | 12,210,723 | 6,664,846 | 2,355,956 | 428,077 |
| Total Entered and Cleared. |  |  |  |  |  |
| British | 6,817 |  | 4,869,747 | 1,600,968 | 349,143 |
| Canadian. | 12,386 | 3, 894,731 | 1,257,657 | 134,944 | 191,537 |
| Foreign. ... | 18,559 | 8,514,975 | 3,337,405 | 989,520 | 329,598 |
| Total | 37,762 | 24,827,650 | 9,464,809 | 2,725,441 | 870,278 |

TRANSPORTATION AND COMMUNICATIONS
44.-Sea-going Vessels Entered and Cleared at the Principal Ports of Canada, 1916.

| Ports. | British. |  | Foreign. |  | Total. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Tonnage. | No. | Toncage. | No. | Tonnage. |
| Anyox, B.C. | 147 | 63,608 | 165 | 148,020 | 312 | 211,628 |
| Arichat, N.S. | 155 | 3,960 | 60 | 5,088 | 215 | 9,048 |
| Baddeck, N.S. | 160 | 8,579 | 58 | 27,235 | 216 | 35,814 |
| Bathurst, N.B | 6 | 2,236 | 27 | 18,914 | 33 | 21,150 |
| Bridgewater, N.S. | 60 | 12,797 | 100 | 46,868 | 160 | 59,665 |
| Campbellton, N.B. | 8 | 3,347 | 65 | 68,244 | 76 | 71,591 |
| Campo Bello, N.B. | 367 | 51,726 | 538 | 12,690 | 905 | 64,422 |
| Canso, N.S.... | 336 | 44,750 | 607 | 40,815 | 913 | 85,565 |
| Charlottetown, P.E.I... | 109 | 67,016 | 22 | 21,642 | 131 | 88,658 |
| Chatham, N.B. | 73 | 83,24] | 158 | 78,450 | 231 | 161,691 |
| Chemainus, B.C. | 33 | 4,071 | 104 | 15,065 | 137 | 19,136 |
| Chicoutimi, Que.. | 40 | 66,118 | 4 | 6,515 | 44 | 72,633 |
| Dalhousie, N.B. | 11 | 10,561 | 75 | 59,884 | 86 | 70,445 |
| Gaspe, Que... | 3 | 24,821 | 58 | 38,225 | 91 | 63,046 |
| Hsilifax, N.S | 1,508 | 1,874,900 | 591 | 431,207 | 2,099 | 2,306,197 |
| Hillsboro, N.B | 43 | 35,877 | 31 | 18,473 | 74 | 54,350 |
| Ladysmith, B.C. | 167 | 28,387 | 267 | 108,647 | 434 | 137,034 |
| La Have, N.S. | 211 | 18,367 | 12 | 2,243 | 223 | 20,610 |
| Liverpool, N.S. | 82 | 20,896 | 482 | 32,619 | 564 | 53,515 |
| Lockport, N.S. | 126 | 7,172 | 160 | 8,758 | 286 | 15,930 |
| Lord's Cove, N.B. | 629 | 28,733 | 344 | 3,860 | 973 | 32,593 |
| Louisburg, N.S. | 411 | 420,186 | 848 | 353,018 | 1,259 | 773,204 |
| Lower East Pubnico, N.S. | 88 | 5,487 | 81 | 4,787 | 169 | 10,274 |
| Lumenburg, N.S. | 645 | 54,055 | 61 | 4,569 | 706 | 58,624 |
| Moncton, N.B... | 22 | 4,557 | 38 | 40,626 | 60 | 45,183 |
| Montreal, Que. | 916 | 3,205,798 | 40 | 70,214 | 956 | 3,276,012 |
| Nanaimo, B.C. | 300 | 88,429 | 988 | 535,841 | 1,288 | 624,270 |
| Newcastle, N.B. | 12 | 13,916 | 92 | 40,241 | 104 | 54,157 |
| Newport, B.C.. | 77 | 21,082 | 125 | 24,592 | 202 | 45,674 |
| New Westminster, B.C. | 47 | 15,107 | 32 | 6,302 | 79 | 21,409 |
| North Head, N.B. | 388 | 53,401 | 40 | 1,241 | 423 | 54,642 |
| North Sydney, N.S. . | 1,342, | 498,596 | 371 | 209,645 | 1,713 | 708,241 |
| Parrsboro, N.S. | 159 | 41,190 | 124 | 62,546 | 283 | 103,736 |
| Paspebiac, Que. | 12 | 4,927 | 36 | 26,428 | 48 | 41,355 |
| Pictou, N.S. | 18 | 18,847 | 61 | 69,050 | 79 | 87,897 |
| Powell River, B.C. | 31 | 50,951 | 205 | 101,466 | 236 | 152,417 |
| Port Hawkesbury, N.S. | 124 | 47,225 | 92 | 12,579 | 216 | ? 59,804 |
| Port Simpson, B.C. | 23 | 28,315 | 60 | 2,178 | 83 | - 30,493 |
| Prince Rupert, B.C.. | 718 | 273,194 | 1,257 | 274,192 | 1,975 | 547,386 |
| Quebec, Que.. | 240 | 788,2¢88 | 39 | 101,591 | 279 | 889,879 |
| Rimouski, Que. | 101 | 329,332 | 13 | 16,709 | 114 | 346,041 |
| St. Andrews, N.B. | 624 | 42,931 | 1,923 | 105,174 | 2,547 | 148,105 |
| St. George, N.B. |  | 124 | 253 | 20,294 | 260 | 20,418 |
| St. John, N.B | 848 | 1,385,160 | 1,313 | 951,454 | 2,161 | 2,336,614 |
| St. Martins, N.B. | 53 | 21,795 | 74 | 14,008 | 127 | 35,803 |
| St. Stephens, N.B. | 375 | 40,105 | 220 | 12,334 | 595 | 52,439 |
| Sandy Point, N.S. | 36 | 3,198 | 455 | 40,623 | 491 | 43,819 |
| Shelburne, N.S. | 69 | 9,838 | 160 | 13,575 | 229 | 23,413 |
| Stevestod B.C. | 189 | 11,355 | 474 | 15,204 | 663 | 26,559 |
| Sydney, N.S. | 745 | 956,971 | 295 | 621,078 | 1,040 | 1,578,049 |
| Three Rivers, Que.. | 46 | 109,792 | 4 | 5,442 | 50 | 115,234 |
| Union Bay, B.C. | 100 | 253,359 | 128 | 96,842 | 228 | 350,201 3,481761 |
| Vancouver, B.C. | 1,772 | 2,359,558 | 1,202 | 1,122,203 | 2,974. | $3,481,761$ $4,168,908$ |
| Victoria, B.C. | 1,721 | 2,115,441 | 1,578 | $\begin{array}{r}2.053,467 \\ 12685 \\ \hline 17\end{array}$ | 3, 308 |  |
| Windsor, N.S. | 143 | 136,599 30.451 | 165 <br> 260 | 126,855 <br> 17,237 | 308 833 | 263,454 322,688 |
| Yarmouth, N.S. | 573 | 305,451 | 260 | 17,237 | 833 | 322,688 |

## SHIPPING

45.-Sea-going Vessels Entered Inwards and Outwards by Countries, 1916.

VESSELS ENTERED INWARDG.


## TRANSPORTATION AND COMMUNICATIONS

45.-Sea-going Vessels Entered Inwards and Outwards by Countries, 1916concluded.
vessels entered outwards-concluded.

| Countries to which departed concluded. | British. |  |  | Canadian. |  |  | Foreign. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of Vessels. | Tons Register. | Crew <br> No. | No. of Vessels. | Tons Register. | Crew No. | $\left\lvert\, \begin{gathered} \text { No. } \\ \text { of } \\ \text { Ves- } \\ \text { sels. } \end{gathered}\right.$ | Tons Register. | Crew <br> No. |
| Argentina. | 1 | 503 | 8 | - | 5 | - | 17 | 25,207 | 298 |
|  | 5 | 1,524 | 35 | 1 | 256 | 8 | 5 | 6,465 | 83 |
| China. | 26 | 126,018 | 4,383 |  |  |  | 30 | 119,727 | 2,518 |
| Cuba. | 10 | 5,384 | 121 | 9 | 2,500 | 57 | 18 | 9,210 | 199 |
| France. | 187 | 593,783 | 9,974 | 16 | 16,787 | 306 | 53 | 74,060 | 1,525 |
| Italy | 22 | 52,989 | 516 | - | - |  | 6 | 18,205 | 276 |
| Japan. | 2 | 5,612 | 73 | - | - | $\vec{\square}$ | 53 | 194,162 | 4,731 |
| St. Pierre | 16 | 1,173 | 75 | 31 | 2,969 | 174 | 69 | 14,894 | 1,518 |
| Porto Rico | - |  |  | 21 | 2,547 | 123 | - |  | - |
| United States. | 927 | 1,433,236 | 52,063 | 3,722 | 1,700,586 | 70,142 | 5,840 | 2,821,355 | 108,326 |
| Sea |  |  |  |  |  |  |  |  |  |
| fisheries. | 228 | 29,286 | 4,868 | 1,891 | 86,741 | 20,522 | 2,211 | 122,081 | 31,378 |
| Russia | 12 | 31,260 | 497 | 3 | 6,423 | 119 | 50 | 115,991 | 1,977 |
| Other countries | 28 | 102,677 | 1,667 | 6 | 745 | 40 | 11 | 10,338 | 172 |
| Sea, Cable and Admiralty.. | 123 | 401,767 | 9,447 | 1 | 2,771 | 34 | 15 | 12,335 | 901 |
| Total. | 3,253 | 5,911,826 | 164,783 | 6,282 | 1,985,098 | 97,357 | 9,081 | 4,313,799 | 165,937 |

46.-Sea-going Vessels Entered and Cleared at Canadian Ports with Cargo and in Ballast, 1902-1916.

| Fiscal Years. | British. |  | Canadian. |  | Foreign. |  | Total Tonnage. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Tons Register. | No. | Tons. Register. | No. | Tons Register. |  |
| 1902. | 4,363 | 6,865,924 | 11,413 | 1,937,227 | 14,530 | 5,928,337 | 14,731,488 |
| 1903. | 4,647 | 7,753,788 | 11,282 | 2,085,568 | 12,403 | 6,001,819 | 15,841,175 |
| 1904. | 4,997 | 8,045,817 | 11,045 | 1,979,808 | 14,002 | 5,801,085 | 15,826,705 |
| 1905. | 4,614 | 8,034,652 | 11,279 | 2,269,834 | 11,904 | 5,283,969 | 15,588,455 |
| 1906. | 5,104 | 9,059,435 | 12,201 | 2,304,942 | 12,511 | 5,479,034 | 16,843,429 |
| 1907 (9 mos.). | 4,488 | 7,576,721 | 7,880 | 1,899,141 | 8,107 | 4,429,012 | 13,904,874 |
| 1908. | 6,356 | 10,329,515 | 10,562 | 2,606,660 | 12,886 | 6,555,096 | 19,491,271 |
| 1909. | 5,795 | 10,405,370 | 10,946 | 2,806,278 | 13,441 | 6,554,228 | 19,765,876 |
| 1910. | 5,780 | 11,038,709 | 10,875 | 3,498,361 | 13,147 | 6,267,243 | 20,804,313 |
| 1911. | 6,870 | 12,712,337 | 10,607 | 3,341,998 | 12,467 | 6,242,851 | 22,297,186 |
| 1912. | 6,766 | 13,342,929 | 10,966 | 4,618,163 | 15,134 | 6,628,513 | -4,589,605 |
| 1913. | 7,307 | 13,896,353 | 11.810 | 4,530,835 | [ 6,549 | 7,803,910 | 26,231,498 |
| 1914. | 7,418 | 15,711,849 | 12,786 | 5,160.799 | 15,811 | $8,695,838$ | 29,568,486 |
| 1915. | 6,949 | 13,931,091 | 11,903 | 4,005,011 | 15,060 | 7,466,484 | 25,402,586 |
| 1916. | 6,817 | 12,417,944 | 12,386 | 3,894,731 | 18,559 | 8,514,975 | 24,827,650 |

## SHIPPING

47.-Sea-going and Inland Vessels (exclusive of Coasting Vessels) arrived at and departed from Canadian Ports, 1901-1916.

| Fisoal Years. | British. |  | Canadian. |  | Foreign. |  | Total Tonnage. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Tons Register. | No. | Tons Register. | No. | Tons Register. |  |
| 1901. | 4,319 | 6,694,133 | 0,211 | 8,540,089 | 33,302 | 10,795,586 | 26,029,808 |
| 1902. | 4,363 | 6,865,924 | 33,202 | 9,654,528 | 40,148 | 13,504,952 | 30,025,404 |
| 1903. | 4,647 | 7,753,788 | 31,534 | 10,482,940 | 53,545 | 15,418,315 | 33,655,043 |
| 1904. | 4,997 | 8,045,817 | 30,934 | 9,955,290 | 35,739 | 13,201,098 | 31,202,205 |
| 1905. | 4,614 | 8,034,652 | 29,729 | 11,047,447 | 35,647 | 13,195,721 | 32,277,820 |
| 1906. | 5,104 | 9,059,453 | 32,239 | 11,241,915 | 37,644 | 14,430,804 | 34,732,172 |
| 1907 (9 mos.) | 4,408 | 7,576,721 | 30,654 | 11,582,409 | 25,263 | 11,436,761 | 30,595,891 |
| 1908. | 6,356 | 10,329,515 | 28,795 | 11,717,846 | 40,461 | 17,527,670 | 39,575,031 |
| 1909. | 5,795 | 10,405,370 | 29,247 | 13,805,790 | 38,677 | 16,490,443. | 40,701,603 |
| 1910. | 5,780 | 11,038,709 | 28,635 | 15,680,534 | 41,650 | 17,848,748 | 44,567,991 |
| 1911. | 6,870 | 12,712,337 | 29,670 | 16,380,146 | 40,892 | 18,337,062 | 47,429,545 |
| 1912. | 6,766 | 13,342,929 | 27,949 | 18,069,983 | 45,399 | 21,560,215 | 52,973,127 |
| 1913. | 7,307 | 13,896,353 | 42,624 | 20,677,938 | 47,303 | 23,275,492 | 57,849,783 |
| 1914. | 7,418 | 15,711,849 | 30,234 | 17,026,121 | 55,835 | 29,181,513 | 61,919,483 |
| 1915. | 6,949 | 13,981,091 | 29,359 | 17,504,751 | 48,635 | 22,168,311 | 53,604,153 |
| 1916. | 6,817 | 12,417,9 | 37, m (1) | 17,372,83 | 75,411) | 27,930,31 | 57,721,098 |

## 48.-British and Fereign Vessels employed in the Coasting Trade of Canada, 1912-1916.

| Vessels Arrived. |  | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| British- |  |  |  |  |  |  |
| Steam. | No. | 68,841 | 69,468 | 72,470 | 68,505 | 66,415 |
| Tons register |  | 29,467,280 | 32,674,896 | 36,914,752 | 32,856,755 | 32,051,456 |
| Number of crew |  | 1,403,593 | 1,519,500 | 1631,917 | 1,436,800 | 1,378,957 |
| Sail. | No. | 21,566 | 21,797 | 20,717 | 19,914 | 18,239 |
| Tons register |  | 4,289,056 | 4,393,786 | 3,718,813 | 3,509,585 | 2,915,808 |
| Number of crew |  | 84,303 | 84,824 | 82,190 | 78,221 | 72,213 |
| Foreign |  |  |  |  |  |  |
| Steam. | No. | 669 | 493 | 466 | 880 | 452 |
| Tons register |  | 1,175,516 | 718,005 | 774,356 | 1,587,007 | 562,311 |
| Number of crew |  | 16,918 | 10,791 | 12,374 | 23;826 | 11,198 |
| Sail. | No. | 106 | 269 | 308 | 355 | 457 |
| Tons register |  | 43,824 | 86,230 | 70,480 | 97,205 | 94,490 |
| Number of crew |  | 774 | 2,343 | 2,148 | 2,605 | 3,627 |
| Description of vessels |  |  |  |  |  |  |
| Steam, screw | No. | 60,268 | 61,656 | 62,615 | 61,948 | 59,659 |
| Steam, paddle. |  | 7,217 | 6,323 | 8,099 | 6,128 | 5,821 |
| Steam sternwheel. | " | 2,025 | 1,982 | 2,222 | 1,309 | 1,387 |
| Sail, ships. | * | 3 | 12 | 5 | 4 | 28 |
| Sail, barks. | * | 21 | 22 | 17 | 22 | 16 |
| Sail, barkentines. | " | 8 | 7 | 7 | 4 | 12 |
| Sail, brigantines. | $\approx$ | 18 | 9 | 15 | 14 |  |
| Sail, schooners. | " | 15,215 | 15,178 | 15,258 | 15,428: | 14,990 |
| Sail, sloops, barges, canal boats, etc. | " | 6,398 | 6,838 | 5,717 | 4,797 | 3,649 |

TRANSPORTATION AND COMMUNICATIONS.
18.- British and Foreign Vessels employed in the Coasting Trade of Canada, 1912-1916-concluded.

| Vessels Departed. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| British- |  |  |  |  |  |
| Steam. No. | 62,828 | 64,542 | 66,017 | 63,029 | 60,950 |
| Tons register... | 25,743,368 | 30,540,676 | 32,233,008 | 30,083,292 | 29,606,475 |
| Number of crew | 1,269,203 | 1,452, 445 | 1,515,052 | 1,332,671 | 1,255,655 |
| Sail. : No. | 21,486 | 21,647 | 20,845 | 20,205 | 18,311 |
| Tons register | 4,308,367 | 4,400,192 | 3,743,733 | 3,208,071 | 2,801,400 |
| Number of crew. | 84,771 | 81,006 | 78,934 | 76,213 | 71,473 |
| Foreign- Steam. . | 656 | 476 | 489 | 961 | 429 |
| Tons register.... | 1,203,322 | 741,846 | 831,337 | 1,663,222 | 585,053 |
| Number of crew.. | 17,550 | 12,451 | 14,674 | 25,018 | 10,657 |
| Sail. : No. | 151 | 347 | 340 | 401 | 418 |
| Tons register.... | 36,929 | 89,082 | 70,330 | 94,845 | 92,422 |
| Number of crew. | 881 | 2,895 | 2,489 | 4,104 | 3,782 |
| Description of Vessels- |  |  |  |  |  |
| Steam, screw ${ }_{\text {Steam, paddle }}$ No. | 55,621 5,526 | $\begin{array}{r}58,056 \\ 4,977 \\ \hline\end{array}$ | 57,636 6,651 | 57,398 5,283 | 54,975 |
| Steam, sternwheel | 2,037 | 1,985 | 2,219 | 1,309 | 1,353 |
| Sail, ships. |  |  |  | 1, | 7 |
| Sail, barks..... | 17 | 20 | 16 | 21 | 24 |
| Sail, barkentines... | 21 | 7 | 7 | 1 | 5 |
| Sail, brigs. . . . . | 8 |  | , |  |  |
| Sail, brigantines... | ${ }^{123}$ | 15.12 | 11 | 30 | - |
| Sail, schooners... | 14,987 | 15,008 | 15,259 | 14,705 | 15,216 |
| Sail, sloops, barges, canal boats, etc... | 6,477 | 6,959 | 5,882 | 5,845 | 3,477 |

49.-Canadian and American Vessels trading on Rivers and Lakes between Canada and United States, exclusive of ferriage, 1912-1916.

| Vessels Arrived. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Canadian- |  |  |  |  |  |
| Steam. : .. No. | 7.667 | 9,476 | 7,863 | 8,398 | 12,191 |
| Tons register.... | 6,872,839 | 6,284,121 | 5,830,926 | 7,104,254 | 6,590,696 |
| Number of crew | 219,901 | 217,275 | 211,317 | 236,161 | 242,201 |
| Sail... No. | 969 | 765 | 1,028 | 718 | 804 |
| Tons register... | 340,531 | 226,781 | 244,778 | 224,902 | 228,199 |
| Number of crew | 4,699 | 3,735 | 4,741 | 3,531 | 3,675 |
| American- |  |  |  |  |  |
| Steam. : ... No. | 10,346 | 16,478 | 16,270 | 13,893 | 25,821 |
| Tons register.. | 6,458,095 | 8,798,388 | 9,378,264 | 6,340,243 | 9,104,989 |
| Number of crew. | 156,135 | 212,936 | 238,010 | 218,230 | 276,539 |
| Sail. No. | 4,253 | 4,095 | 3,155 | 2,459 | 2,187 |
| Tons register..... | 825,450 | 837,813 | 752,322 | 504,437 | 562,894 7,113 |
| Number of crew.. | 11,179 | 11,268 | 8,962 | 5,856 | 7,113 |
| Description of vessels- |  |  |  |  |  |
| Steam, screw... No. | 14,905 | 22,377 | 20,564 | 18,892 | 34,828 |
| Steam, paddle.. | 3,049 | 3,461 | 3,481 | 3,282 | 3,124 |
| Steam, sternwheel. . | 59 | 116 | 88 | 117 | 60 |
| Sail, schooners. | 1,208 | 1,157 | 1,183, | ${ }^{701}$ | 801 |
| Sail, sloops.... | 18 3,967 | [ $\begin{array}{r}61 \\ 3,642\end{array}$ | 2,961 | 2,450 | 2,171 |

SHIPPING.
49.-Canadian and American Vessels trading on Rivers and Lakes between Canada and United States, exclusive of ferriage, 1912-1916-concluded.

| Vessels Departed. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Canadian- |  |  |  |  |  |
| Steam. No. | 7,295 | 8,871 | 7,548 | 7,540 | 11,754 |
| Tons register. | 5,929,860 | 5,916,549 | 5,586,139 | 5,944,096 | 6,446,516 |
| Number of crew.. | 199,304 | 201,851 | 191,672 | 187,139 | 231,211 |
| Sail.. . No. | 1,052 | 792 | 1,009 | 800 | 765 |
| Tons register... | 308,590 | 222,603 | 303,479 | 226,398 | 212,694 |
| Number of crew.. | 4,995 | 3,686 | 4,270 | 3,454 | 3,541 |
| American- |  |  |  |  |  |
| Steam. . . No. | 10,649 | 16,368 | 16,454 | 14,05? | 25,410 |
| Tons register. | 6,757,973 | 8,350,949 | 9,526,231 | 7,269,706. | 9,076,845 |
| Number of crew.. | 163,626 | 201,321 | 235,933 | 212.239 | 270,449 |
| Sail.... : No. | 5,017 | 4,723 | 4,145 | 3,171 | 3,434 |
| Tons register .. | 890,184 | 981,471 | 728,858 | 587,440 | 670,615 |
| Number of crew. | 12,862 | 16,397 | 10,707 | 7,761 | 9,320 |
| Description of vessels- |  |  |  |  |  |
| Steam, screw... No. | 14,689 | 22,034 | 20,907 | 18,484 | 34,156 |
| Steam, paddle. | 3,199 | 3,095 | 2,983 | 2,990 | 2,945 |
| Steam, sternwheel. . | 50 | 110 | 112 | 118 | 63 |
| Sail, schooners. | 1,253, | 1,154 | 1,145 | 808 | 778 |
| Sail, sloops... | 41 | $6 \mathrm{cis}^{5}$ | $7{ }^{7}$ | $2^{6 .}$ | 22 |
| Sail, barges. | 4,775 | 4,293 | 3,932 | 3,133 | 3,399 |

50.-Vessels built and registered in Canada and Vessels sold to other Comentries, 1901-1916.

| Fiscal Year. | Built and Registered. |  | Sold to other Countries. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Tonnage. | No. | Value. | Tonnage. |
| 1901.. | 327 | 35,156 | 5 | 66,46S | 4,490 |
| 1902.. | 316 | 34,236 | 27 | 235,865 | 11,360 |
| 1903. | 312 | 41,405 | 21. | 220,602 | 11,172 |
| 1904. | 243 | 33,192 | 11 | 87,115 | 7,208 |
| 1905. | 335 | 27,583 | 21 | 100,363 | 3,690 |
| 1906.. | 420 | 37,639 | 45 | 187,725 | 9,487 |
| 1907 (9 months) | 257 | 31,635 | 17 | 68,190 | 3,855 |
| 1908. | 357 | 78,144 | 28 | 132,900 | 4,515 |
| 1909. | $27 \%$ | 32,89? | 16 | 98,643 | 3,644 |
| 1910. | 220 | 33,383 | 14 | 133,800 | 5,047 |
| 1911. | 234 | 50,006 | 17 | 201,50 | 5,885 |
| 1912. | 302 | 30,021 | 18 | 140.350 | 4,265 |
| 1913.. | 328 | 30,225 | 20 | 610.650 | 7,976 |
| 1914.. | 230 | 46,909 | 27 | 169,618 | 8,258 |
| 1915.. | 327 | 55,384 | 21 | 1,150.950 | 17,044 |
| 1916............... | 325 | 102,239 | 21 | 192,575 | 4,529 |

Note-For 1874-1900, see Canada Year Book, 1911, p. 383.

## TRANSPORTATION AND COMMUNICATIONS

51.-Number and Net Tonnage of Vessels on the Registry of Shipping, Canada, 1912-1915.

| Description. | 1912. |  | 1913. |  | 1914. |  | 1915. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Tonnage | No. | Tonnage | No. | Tonnage | No. | Tonnage |
| Steamers ${ }^{1}$ | 3,667 | 389,376 | 3,847 | 430,117 | 4,054 | 453,171 | 4,132 | 459,182 |
| Ships. | 5 | 9,157 | 3 | 5,207 | 4 | 4,589 | , 3 | 2,791 |
| Barks. | 18 | 21,607 | 16 | 19,141 | 16 | 20,765 | 16 | 20,236 |
| Barkentines. | 14 | 10,014 | 13 | 9,361 | 10 | 5,862 | 11 | 6,006 |
| Brigantines. | 10 | 1,504 | 9 | 1,405 | 9 | 1,390 | 7 | 914 |
| Schooners. . | 2,808 | 172,660 | 2,721 | 173,768 | 2,650 | 164,276 | 2,614 | 159,142 |
| Sloops. | 710 | 27,180 | 702 | 27,459 | 702 | 27,182 | 644 | 23,895 |
| Barges. | 608 | 101,503 | 624 | 110,191 | 641 | 115,701 | 610 | 109,397 |
| Scows. | 349 | 46,925 | 392 | 51,688 | 451 | 64,420 | 478 | 68,869 |
| Yachts. | 1 |  | 1 |  | 1 | 3 | 1 | ${ }^{3}$ |
| Yawls | 10 | 154 | 12 | 269 | 14 | 359 | 14 | 359 |
| Cutters. | 9 | 87 | 10 | 100 | 10 | 100 | 10 | 100 |
| Drill boats. | 3 | 1,088 | 4 | 1,379 | 4 | 1,379 | 4 | 1,379 |
| Dredges.... | 135 | 34,891 | 155 | 46,359 | 169 | 52,509 | 178 | 56,336 |
| House-boats. | 11 | 1,035 | 11 | 1,035 | 11 | 1,035 | 11 | 1,035 |
| Horse-ferries. | 5 | 59 | 5 | 59 | 5 | 59 | 4 | 49 |
| Floating ligits. | 6 | 331 | 6 | 331 | 6 | 331 | 6 | 331 |
| Pile Drivers. | 1 | 17 | 1 | 17 | 1 | 17 | 1 | 17 |
| Light ships. ${ }^{\text {d }}$ | 4 | 472 | 4 | 472 | 4 | 472 | 4 | 472 |
| Cat boats and luggers. | 5 | 13 | 5 | 13 | 5 | 13 | 4 | 10 |
| I ighters.. $\quad$. | 2 | 238 | 2 | 238 | 2 | 238 | 2 | 238 |
| Floating Dry Dock |  | 17,964 | 1 | 17,964 | 1 | 17,964 | 1 | 17,964 |
| Rock Breaker | - | - | 1 | 389 | 2 | 587 | 2 | 587 |
| Totals. | 8,380 | 836,278 | 8,545 | 896,965 | 8,772 | 932,422 | 8,757 | 929,312 |

${ }^{\prime}$ Embracing 346 paddle-wheel steamers with a registered tonnage of 63,082 tons and 3,786 screw steamers with a registered tonnage of 395,200 tons for the year 1915.
52.-Steamboat Insnection during the Fiscal Year 1915-1916.

| Division. | Number of Vessels Inspected. |  |  |  | Number of Vessels not Inspected. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Vessels registered or owned in the Dominion. |  | Vessels registered or owned elsewhere. |  |  |  |
|  | No. | Gross Tonnage. | No. | Gross <br> Tonnage. | No. | Gross Tonnage. |
| Nova Scotia | 170 | 49,843 | 15 | 40,440 | 29 | 4,971 |
| New Brunswick | 152 | 31,362 | 14 | 21,880 | 47 | 14,850 |
| Quebec and Sorel. | 168 | 60,585 | 1 | 1,452 | 15 | 2,803 |
| Montreal. | 198 | 41,648 | 8 | 26,323 | 38 | 4,269 4091 |
| Kingston.. | 143 | 50,370 | 22 | 14,035 | 31 | +1,991 |
| Toronto. | 368 | 211,201 | 59 | 72,696 | $\stackrel{66}{26}$ | 11, ${ }_{2,167}$ |
| Collingwood. | 117 | 20,505 | $\stackrel{2}{7}$ | 4,012 11,075 | 42 | 2,167 |
| Port Arthur. | 65 | 30,285 | 7 | $\stackrel{11,075}{-}$ | $\stackrel{42}{26}$ | 2,205 |
| Kenora. | 56 | 8,784 | - | - | 13 | 1,177 |
| Edmonton | $\stackrel{25}{232}$ | 2,72. 56,509 | -8 | 2,868 | 52 | 7,107 |
| Victoria. | 117 | 46,332, | 22 | 33,925 | 48 | 24,324 |
| Total. | 1,812 | 610,052 | 158 | 228,706 | 429 | 83,823 |

SHIPPING.
52.-Steamboat Inspection during the Fiscal Year 1915-1916-concluded.

| Division. | Number of Vessels subject to Inspection when in Commission. |  | Number of Vessels added to the Dominion. |  | Number of Vessels lost, broken up or destroyed. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | $\begin{gathered} \text { Gross } \\ \text { Tonnage. } \end{gathered}$ | No. | $\begin{gathered} \text { Gross } \\ \text { Tonnage. } \end{gathered}$ | No. | Gross Tonnage. |
| Nova Scotia | 214 | 95,254 | 1 | 151 | 5 | 5,480 |
| New Brunswick. | 213 | 68,092 | 2 | 110 | 2 | 1,303 |
| Quebee and Sorel. | 184 | 64,840 | 14. | 7,476 | 11 | 2,247 |
| Montreal.... | 245 | 72,240 | 7 | 724 | 9 | 256 |
| Kingston... | 196 | 69,396 | 5 | 679 | 3 | 4,666 |
| Toronto.... | 493 | 295,735 | 24 | 13,154 | 7 | 796 |
| Collingwood. | 141 | 26,684 | 7 | 1,172 | 14 | 1,654 |
| Port Arthur. | 114 | 44,481 | 1 | 1,476 | 7 | 192 |
| Kenora. | 82 | 10,889 | 4 | 701 | 1 | 44 |
| Edmonton. | 38 | 3,905 | 5 | 899 | 4 | 521 |
| Vancouver | 292 | 66,484 | 3 | 591 | 10 | ${ }^{900}$ |
| Victoria. | 187 | 104,581 | 5 | 1,927 | 2 | 1,009 |
| Total. | 2,399 | 922,581 | 78 | 29,060 | 75 | 19,068 |

Seamen Shipped and Discharged.-Table 53 shows, for eacb year from 1908 to 1915. the number of seamen shipped and discharged at Canadian ports under the provisions of the Canada Shipping Act (R.S. 1906, c. 113, ss. 141-143).
53.-Number of Seamen Shipped and Discharged at Canadian Ports, 1908-15.

| Year. | Seamen Shipped | Sermen Discharged. | Year. | Seamen Shipped. | Seamen Discharged |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1808. | 13 | 11,542 | 1912. |  |  |
| 1909. | 20,502 | 11,573 | 1913. | 16,975 | 13,749 |
| 1910. ${ }_{1911 . . .}$ | 16,735 13.748 |  | ${ }_{1915} 193$. | ${ }_{22,797}^{18,987}$ | 14,989 14,319 |

Wrecks and Casualties.-The statement in Table 54, supplied by the Department of Marine, applies to vessels of every nationality in respect of wrecks and casualties in Canadian waters and to Canadian vessels in respect of wrecks and casualties in other waters. The returns in some years cover wrecks and casualties of previous years.
54.-Canadian Wrecks and Casualties for the years ended June 30, 1901-1916.

| Year. | Casualties. | $\begin{aligned} & \text { Ton- } \\ & \text { nage. } \end{aligned}$ | Lives | Damages. | Year. | Casu- alties. | Ton- nage. | $\begin{aligned} & \text { Lives } \\ & \text { lost. } \end{aligned}$ | Damages. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | , 67 | 3 | 5000 |  |  | , | Ton | 101 |  |
| 900 | 9,670 | 3,577,3 | 5,096 | 61,525, | 1910. | 321 | 211,565 | 101 | 1,569,580 |
| 901 | 136 | 47,181 | 126 | 285,782 | 1911 | 271 | 122,6 | 48 | 942,093 |
| 1902 | 222 | 105,814 | 132 | 835,916 | 1912 | 29 | 269,569 | 59 | 1,053,768 |
| 1903 | 237 | 162,297 | 32 | 409,991 | 1913. | 27 | 270,905 | 160 | 1,963,870 |
| 1904 | 192 | 81,143 | 9 | 489,699 | 1914. | 255 | 210,368 | 1,083 | 4,983,775 |
| 05 | 178 | 79,588 | 15 | 621,267 | 1915. | 28 | 234,036 | 63 | 1,459,012 |
| 1906 | 220 | 139,586 | 149 | 573,420 | 1916 | 3 C | 242,906 | 67 | 1,377,442 |
| 1907 | 317 | 131,441 | 55 |  |  |  |  |  |  |
| 1908 | 307 | 120,269 | 34 | 1,390,891 | Totals | 13,825 | 6,176,650 | 7,260 | 81,2\&6,698 |
| 1909 | 343 | 189,906 | 24 | 1,131,966 |  |  |  |  |  |

[^27]
## TRANSPORTATION AND COMMUNICATIONS

55.-Comparative Statement of Marine Danger Signals, 1906-1916.

| Description. | 1906. | 1907. | 1908. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914 | 1915 | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No. | No. | No. | No. | No. | No. | No. |
| Light stations. | 838 | 901 | 957 | 946 | 969 | 952 |  |  |  |  |  |
| Lights. | 1,053 | 1,145 | 1,162 | 1,193 | 1,227 | 1,291 | 1,452 | 1,393 | 1,461 | 1,521 | 1,555 |
| Lightships. |  |  |  | 11 | 12 | 13 | 12 | 12 |  | 12 | 12 |
| Lightboats. | $\stackrel{\square}{\circ}$ | 0 |  | 2 | 2 | 1 | 1 |  | 1 |  | 1 |
| Light Keepers. | 883 | 908 | 914 | 923 | 961 | 976 | 975 | 1,020 | 1,040 | 1,066 | 1,099 |
| Fog whistles.. Sirens. | 53 | 54 | 13 | 15 | 14 | 14 | 13 | 14 | 13 | 11 | 11 |
| Diaphones. | - | - | 51 | 65 | 72 | 82 | 83 | 89 | 98 | 105 | 110 |
| Fog bells.. | 16 | 18 | 19 | 20 | 20 | 23 | 29 | 26 | 26 | 29 | 31 |
| Hand fog horns. | - | - | 111 | 108 | 121 | 129 | 137 | 145 | 150 | 148 | 151 |
| Hand fog bells.. | - | - |  | 4 | 4 | 3 | 2 | . | 3 | 2 | 3 |
| Gas and whistling buoys | 151 | 183 | 213 | 234 | 254 | 260 | 281 | 299 | 319 | 336 | 327 |
| Whistling buoys.. | 53 | 30 | 20 | 23 | 24 | 28 | 27 | 29 | 30 | 31 | 31 |
| Bell buoys. | 69 | 52 | 52 | 58 | 50 | 55 | 65 | 71 | 82 | 86 | 89 |
| Submarine bells. | - | - | 9 |  |  | 10 | 10 | 10 | 13 | 21 | 22 |
| Fog guns or bombs | , | - 9 | 7 | 7 | 7 | 8 | 9 |  | 9 | 9 | 8 |
| Fog horns. : $:$ | 41 | 41 | 24 | 20 | 17 | 12 | 14 | 11 | 12 | 10 | 7 |
| Fog alarm stations | - | - | 8 | 9 | 2 | 9 | 9 | 12. | 11 | 12 | 13 |
| Gas beacons. |  |  |  |  | 32 |  |  | - |  |  | - |

Nore.-Besides the foregoing, in 1916 there were 188 lighted spar-buoys, floats and dolphins.
56.-Revenue of the Department of Marine, 1912-1916.

| Heads of Revenue. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | * | \$ |
| Harbours, piers and wharves | 24,761 | 34,161 | 31,802 | 34,013 | 57,829 |
| Earnings of Dominion steamers. | 36,035 | 38,017 | 28,653 | 35,579 | 35,071 |
| Decayed pilots' fund. | 4,228 | 4,816 | 5,697 | 5,949 | 5,669 |
| Steamboat inspection fund.. | 4,141 | 4,293 | 3,556 | 4,065 | 3,677 |
| " engineers ${ }^{\text {f }}$ (ees. | 1,756 | 1,705 | 1,865 | 1,642 | 1,415 |
| Sick mariners' fund. . | 60,457 | 63,663 | 70,541 | 72,525 | 72,546 |
| Examination masters and mates. | 3,803 | 3,639 | 5,549 | 4,546 | 4,828 |
| Casual revenue, sundries. ${ }^{\text {a }}$, | 49,229 | 34,442 | 68,188 | 143,588 493,000 | 279,678 |
| Sale of Steamer " Earl Grey" Miscellaneous... | 1,169 | 989 | 1,183 | 493,000 <br> 643 | 744 |
| Total revenue. | 185,579 | 185,725 | 217,034 | 795,550 | 461,457 |

SHIPPING.
57.-Expenditure of the Department of Marine, 1912-1916.

| Heads of Expenditure. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ocean and River Service- | \$ | \$ | \$ | \$ | \$ |
| breakers. | 943,031 | 940,121 | 990,187 | 995,546 | 1,124,708 |
| Rewards for saving life, etc. | 68,755 | 95,844 | 139,885 |  |  |
| Wrecking plants (subsidy). | 30,000 | 35,000 | 34,281 | 45,000 | 45,000 |
| Patrolling northern waters, etc. | 40,048 | 10,732 |  |  |  |
| Other items of expenditure.... | 47,074 | 39,503 | 42,925 | 70,403 | 44,210 |
| Total. | 1,128,908 | 1,121,200 | 1,216,278 | 1,110,949 | 1,213,918 |
| lighthouse and Coast Service- |  |  |  |  |  |
| Agencies, rent and contingencies. | 89,559 | 116,505 | 136,528 | 141,075 | 143,881 |
| Salaries and allowances to lightkeepers. | 419,645 | 415,294 | 420,616 | 449,990 | 449,961 |
| Maintenance and repairs to lighthouses, etc. | 596,463 | 687,813 | 699,786 | 712,448 | 604,625 |
| Construction of lighthouses, etc. . | 762,489 | 642,417 | 851,965 | 996,638 | 564,665 |
| Breaking ice in Lake Superior. | 23,296 | 54,172 | 29,856 | 38,062 | 30,600 |
| New steamer forSt. Lawrence. |  | 103,896 |  | 130,957 | 14,377 |
| Lighthouse buoy steamer for the St. Lawrence... | - | - | 45,270 |  |  |
| New steamer for Pacific Coast. | - | 133,024 | - | - | - |
| New steamer to replace Maisonneuve. | - |  | - | - | 10,021 |
| New lighthouse and buoy steamer for B.C. | 137,018 | - |  | - |  |
| Wireless telegraph stations. Other items of expenditure.. | $99,772$ | 109,614 | 140,082 | 113,981 | 119,629 |
| Total. | 2,128,242 | 2,262,735 | 2,324,103 | 2,583,160 | 1,937,759 |
| Public Works, chargeable to capital- |  |  |  |  |  |
| Ship Channel, River St. Lawrence.. | 749,284 | 651,571 | 1,004,145 | 999,762 | 981,762 |
| Dredging plant, River St. Lawrence, Montreal to Father Point... | 418,178 | 673,019 | 695,614 | 578,621 | 767,078 |
| New ice-breaking steamer for River St, Laxrence |  |  |  |  |  |
| New sweeping testing steamer St. Lawrence. |  | - | - | 62,577 | 86,561 |
| Total. | 1,167,462 | 1,324,590 | 1,699,999 | 1,892,042 | 1,987,090 |

'IRANSPORTATION AND COMMUNICATIOAQ
57.-Expenditure of the Department of Marine, 1912-1916-concluded.

| Heads of Expenditure. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | * | \$ | \$ | 5 |
| Meteorological Service. | 145,077 | 146,449 | 199,134 | 201,805 | 172,390 |
| Other items of expenditure.. . | 3,067 | 997 | 892 |  |  |
| Total | 148,144 | 147,446 | 200,026 | 201,805 | 172,390 |
| Marine hospitals, etc.. | 57,016 | 53,690 | 55,910 | 65,801 | 66,741 |
| Steamboat inspection. | 45,353 | 54,147 | 63,714 | 65,063 | 64,884 |
| Departmental salaries ${ }^{1}$ | 200,139 | 213,418 | 231,237 | 239,932 | 205,4962 |
| Contingencies... | 35,875 | 35,997 | 36,760 | 44,156 | 23,333 |
| Total expenditure. | 4,911,139 | 5,213,223 | 5,828,027 | 6,202,908 | 5,621,611 |

${ }^{1}$ Including salaries of Fisheries Branch.
2Salarifs of Marine Department only.
58.-Total Revenue and Expenditure of the Department of Marine, 1868-1916.

| Year. | Revenue. | Expenditure. | Year. | Revenue. | Expenditure. | Year. | Revenue. | Expenditure. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ |  | \$ | \$ |  | \$ | 5 |
| 1868. | 71,811 | 371,071 | 1884 | 118,080 | 927,242 | 1900. | 130,229 | 982,562 |
| 1869. | 75,351 | 360,900 | 1885. | 101,268 | 1,129,901 | 1901 | 144,919 | 1,029,925 |
| 1870. | 71,490 | 367,189 | 1886. | 91,885 | 980,121 | 1902. | 148,607 | 1,501,619 |
| 1871 | 70,254 | 389,537 | 1887 | 102,238 | 917,557 | 1903. | 139,876 | 1,671,495 |
| 1872. | 79.324 | 518,958 | 1888. | 99,920 | 883,251 | 1904. | 128,507 | 2,150,940 |
| 1873 | 114,756 | 706,818 | 1889. | 99,940 | 1,023,801 | 1905. | 121,815 | 4,747,723 |
| 1874 | 108,350 | 845,151 | 1890. | 113,507 | 807,417 | 1906 | 139,475 | 5,066,253 |
| 1875. | 91,235 | 844,586 | 1891. | 104,248 | 885,410 | $1907^{3}$. | 106,260 | 3,637,600 |
| 1876. | 107,984 | 970,146 | 1892. | 106,582 | 861,427 | 1908. | 177,591 | 5,374,774 |
| 1877 | 105.907 | 820,054 | 1893 | 107,390 | 808,720 | 1909. | 169,502 | 5,498,531 |
| 1878. | 100,850 | 786,156 | 1894. | 165,870 | 905,654 | 1910. | 156,957 | 4,692,771 |
| 1879 | 84,144 | 755,359 | 1895 | 99,557 | 895,828 | 1911. | 154,492 | 4,197,420 |
| 1880. | 91,942 | 723,391 | 1896 | 103,012 | 793,634 | 1912. | 185,579 | 4,911,139 |
| 1881 | 108,304 | 761,731 | 1897 | 111,009 | 867,773 | 1913. | 185,725 | $5,213,223$ |
| 1882. | 109,125 | 774,832 | 1898. | 120,602 | 1856,192 | 1914. | 217,034 | 5,828,027 <br> 6.200.008 |
| 1883. | 104,383 | 825,011 | 1899. | 126,528 | 1,102,602 | $\begin{aligned} & 1915 . \\ & 1916 . \end{aligned}$ | $\begin{array}{r} 795,550^{2} \\ 461,457 \end{array}$ | $\begin{aligned} & 6.202,908 \\ & 5,621,611 \end{aligned}$ |

[^28]
## SHIPPING

59.-Shipping in the United Kingdom and British Possessions, 1910-14, exclusive of Coasting Trade.
(From the Statistical Abstracts of the United Kingdom and Colonial and Other Possessions.)

| Countries. | Net Tonnage of Vessels entered and cleared. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1910. | 1911. | $191{ }^{1}$ | 1913. | $1914 .{ }^{2}$ |
|  | Tons. | Tons. | Tons. | Tons. | Tons. |
| United Kingdom. | 134,080,000 | 138,910,000 | 152,457,000 | 164,810,000 | 140,089,000 |
| British India ${ }^{\text {a }}$ | 14,993,701 | 16,616,435 | 17,484,391 | 17,386,408 | 12,857, 585 |
| Aden ${ }^{3} 4$ | 6,901,768 | 7,247,268 | 7,449,398 | 7,932,564 | 6,189,590 |
| Straits Settlements and | 21,407,490 | 21,932,231 | 23,665,291 | 25,065,291 | 23,134,121 |
| Ceylon ${ }^{6}$. | 14,769,208 | 14,926,764 | 15,420,142 | 16,126,254 | 14,272,694 |
| Mauritius | 986,267 | 877,691 | 773,092 | 833,027 | 874,969 |
| Seychelles. | 373,394 | 413,240 | 349,830 | 323,287 | 248,702 |
| Hong Kong ${ }^{7}$ | 20,956,504 | 20,490,520 | 21,614,995 | 22,939,134 | 22,069,879 |
| Australia. | 9,333,146 | 9,984,801 | 10,275,314 | 10,601,948 | 10,732,854 |
| Territory of Papua | 256,286 | 253,122 | 275,803 | 306,478 | 358,506 |
| New Zealand. | 2,756,288 | 2,949 780 | 3,340,722 | 3,438,792 | 3,506,830 |
| Fiji | 515,662 | 584,935 | 613,343 | 711,696 | 664,250 |
| Falkland Islands | 325,583 | 350,685 | 375,996 | 500,449 | 516,794 |
| Union of South Africa. | 10,231, 687 | 10,856,610 | 10,039,907 | 10,631,118 | 9,961,583 |
| E. Africa Protectorate ${ }^{349}$ | 2,566,729 | 2,886,331 | 2,998,314 | 3,201,939 | 2,052,276 |
| Zanzibar Protectorate ${ }^{10}$... | 1,215,056 | 1,420,837 | 1,565,638 | 1,668,200 | 1,259,566 |
| Somaliland. | 111,918 | 123,759 | 103,202 | 113,561 | 156,365 |
| St. Helena ${ }^{9}$ | 344,716 | 369,138 | 377,547 | 400,924 | 428,467 |
| West Africa:- |  |  |  |  |  |
| Nigeria | 1,601,045 | 1,610,668 | 1,656,913 | 1,738,459 | 1,423,641 |
| Gold Coast. | 2,599,388 | $\stackrel{2}{2}, 676,440$ | 2,849,248 | 2,986,553 | 2,811,274 |
| Sierra Leone. | 1,994,290 | 2,493,439 | 2,676,471 | 2,931,085 | 2,780,118 |
| Gambia. | 506,914. | 480,911 | 583,458 | 625,132 | 571,940 |
| Total West Africa. | 6,701,637 | 7,261,458 | 7,766,090 | 8,281,229 | 7,586,973 |
| North America:Canada ${ }^{4}$ | 22,297,186 | 24,589,605 | 26,231,098 | 29,568,486 | 25,402,586 |
| Newfoundland ${ }^{8}$ | 2,099,698 | 2,251,595 | 2,194,103 | 2,561,975 | 2,781,278 |
| Total North America. | 24,396,884 | 26,841,200 | 28,425,201 | 32,130,461 | 28,183,864 |
| West India Islands:Bahamas. | 1,722,340 | 1,739,957 | 1,247,844 | 1,647,778 | 1,250,762 |
| Turks' and Caicos Islands | 385,763 | 338,112 | 378,753 | 1,406,326 | 1,35,101 |
| Jamaica. | 3,823,93] | 4,319,112 | 4,688,438 | 5,118,123 | 4,305,818 |
| Cayman Islands ${ }^{1 /}$. | 23,732 | 34,259 | 45,737 | 42,536 | 65,372 |
| Windward Fslands:st Lucia | 2,792,359 |  |  |  |  |
| St. Vincent. | 290,917 | -298,976 | 3, 322,449 | 278,789 | 3,352,564 |
| Barbados. | 3,395,080 | 3,475,511 | 3,653,784 | 3,771,598 | 3,528,130 |
| Gremada. | 590,451 | 535, 161 | 565,788 | 656,191 | 867,798 |
| Leeward Islands ${ }^{12}$ | 2,338,322 | 2,379,894 | 2,183,292 | 2,028,056 | 2,603,266 |
| Trinidad and Tobago. | 2,771,364 | 3,657,695 | 3,526,354 | 3,736,607 | 3,778,346 |
| Total West Indies | 18,134,259 | 20,774,840 | 20,102,481 | 21,232,695 | 20,330,618 |

N.B.-For Notes see foot of table on page 480.

## TRANSPORTATION AND COMMUNICATIONS

59.-Shipping in the United Kingdom and British Possessions, 1910-14, exclusive
of Coasting Trade-concluded.
(From the Statistical Abstracts of the United Kingdom and Colonial and Other Possessions.)

| Countries. | Net Tonnage of Vessels entered and cleared. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1910. | 1911. | 1912. | 1913. | 1914. |
|  | Tons. | Tons. | Tons. | Tons. | Tons. |
| Bermuda. | 1,388,987 | 1,402,920 | 1,273,936 | 1,255,866 | 1,211,002 |
| British Honduras. | 1,979,427 | 588,367 | 629,064 | 816,858 | , 923,979 |
| British Guiana. | 1,006,199 | 988,663 | 934,745 | 921,385 | 1,039,582 |
| Gibraltar. | 10,940,218 | 11,704,163 | 11,999,002 | 12,476,079 | 12,213,230 |
| Malta ${ }^{2}$ | 8,667,037 | 8,240,820 | 10,398,948 | 11,097,612 | 7,705,015 |
| Cyprus. | 742,584 | 758,502 | 644,363 | 721,515 | 581,926 |


#### Abstract

${ }^{1}$ The figures from 1912 onward have been compiled on a somewhat different basis from those of previous years. ${ }^{2}$ Figures for 1914 exclude vessels employed by the Government in connection with the war. ${ }^{3}$ Including native craft. ${ }^{4}$ For the 12 months ended March 31 of the year following that stated in the column. ${ }^{5}$ Excluding the tonnage of vessels engaged in trade between the settlements. ${ }^{6}$ Excluding the tonnage of vessels calling to coal, amounting to $1,720,35 \mathrm{~S}$ tcns in 1914. TExcluding Cbinese junks. The tonnage of these junks entered and cleared in the foreign trade was $3,209,745$ tons in $1914 .{ }^{8}$ For the 12 months ended June 30 of the years stated in the column. ${ }^{9}$ Gross Tonnage. ${ }^{10}$ Excluding native craft. "For the 12 months ended September 30 of the years stated in the column. ${ }^{12}$ Including Inter-Presidency Shipping.


## TELEGRAPHS.

The Canadian Telegraph Systems include lines owned and operated by the Dominion Government and the lines owned and operated by railway and telegraph chartered companies. The Government telegraph service for the year ended March 31, 1916, had a total length of 11,843 miles of lines of which 331 knots ( 382 miles), calculated as statute miles, were submarine cables. During the vear 1915-16 about 298 miles of new lines were constructed. The number of offices was 1,001 , and the messages sent numbered 371,833 . Details as to the location of the lines and points connected are given in the Report for March 31, 1916, of the Minister of Public Works (No. 19, 1917). The total expenditure on the Government telegraph lines for the year was $\$ 680,361$, and the receipts were $\$ 1 \$ 1,227$, signal service messages, meteorological service messages and fisheries bulletins being handled free. Table 60 gives the telegraph statistics for the years ended June 30, 1910-16, of the chartered companies, as compiled from information supplied to the Census and Statistics Office.

Telegraph Statistics.-The report on telegraph statistics for 1916, issued by the Department of Railways and Canals, shows that the number of land messages handled by telegraph organizations in the

## TELEGRAPHS AND TELEPHONES

year ended June 30, 1916, was 10,835,936, as compared with $9,952,135$ in 1915. Cablegrams numbered $1,134,905$, as compared with $977,389 \mathrm{in}$ 1915. Employees in the service of telegraph organizations numbered 6,581, of whom 3,935 were male and 479 were female operators; other officers and employees numbered 2,167 Salaries and wages amounted to $\$ 2,898,230$, as compared with $\$ 2,946,327$ in 1915 . The aggregate of salaries and wages in 1916 was equal to 68.9 p.c. of operating expenses, as compared with 71.3 p.c. in 1915.

Wireless Telegraph Coast Stations.-Table 61 shows the name, situation and range in nautical miles of the radiotelegraph or wireless telegraph coast stations, as operated by the Department of the Naval Service, and Table 63 the number of messages and words handled and the cost of maintenance for the stations of the east and west coasts and of the Great Lakes. For the year 1915-16 the total number of messages was 161,477 , as compared with 179,276 in 1914-15, and of words handled $2,797,062$, as compared with $3,381,504$ in 1914-15. Table 62 gives the names of the Canadian Government steamers that are equipped with radiotelegraphic apparatus, with the range of miles for each steamer. The range is from 100 to 200 miles in the case of the Car adian Government steamers, whilst the two war vessels, the Niobe and the Rainbow, have a range respectively of 400 and 250 miles.

## TELEPHONES.

The Report for 1916 of the Department of Railways and Canals on Telephone Statistics shows that the number of telephones in Canada in 1916 was 548,421 , as compared with 533,090 in 1915, and the wire mileage was $1,600,564$ in 1916, as compared with $1,452,360$ in 1915. In 1916 the gross revenue from telephones was $\$ 18,594,268$, as against $\$ 17,601,673$, and the net revenue $\$ 7,447,067$, as against $\$ 4,764,958$. The number of telephone employees was 15,247 , as compared with 15,072 , and the salaries and wages amounted to $\$ 7,852,719$, as compared with $\$ 8,357,029$. The general progress of telephones in Canada since 1913 is shown in Table 64.
60.-Telegraph Statistics of Chartered Companies, 1910-1916.

| Companies. | Year. | Miles of line. | Miles of wire. | $\left\lvert\, \begin{gathered} \text { Number } \\ \text { of } \\ \text { messages. } \end{gathered}\right.$ | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { offices. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Great Northwestern Telegraph Co.. | 1910 | 11,134 | 50,092 | 2,907,494 | 1,183 |
|  | 1911 | 10,726 | 50,568 | 3,812,159 | 1,194 |
|  | $1912^{2}$ | 9,582 | 46,311 | 4,400,443 | 1,175 |
|  | 1913 | 9,582 | 30,134 | 4,559,972 | 993 |
|  | ${ }_{1914}{ }^{2}$ | 9,563 16,337 | 30,134 | 4,756,322 | 993 |
|  | $1916{ }^{2}$ | 17,696 | 53,881 | 5,580,956 | 1,393 |

[^29]TRANSPORTATION AND COMMUNICATIONS
69.-Telegraph Statistics of Chartered Companies, 1910-1916-con.

| Companies. | Year. | Miles of line. | Miles of wire. | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { messages. } \end{gathered}$ | $\underset{\text { of }}{\text { Number }}$ offices. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Canadian Pacific Railway Co.. | 1910 | 12,257 | 75,758 | 3,431,493 ${ }^{2}$ | 1,372 |
|  | 1911 | 12,866 | 87,703 | 3,921,477 ${ }^{3}$ | 1,424 |
|  | 1912 | 13,182 | 96,2964 | 4,642,820 ${ }^{3}$ | 1,524 |
|  | 1913 | 13,824 | 102,857 | 4,831,119 ${ }^{3}$ | 1,532 |
|  | 1914 | 14,561 | 105,780 | $4,225,000^{3}$ | 1,520 |
|  | 1915 | 14,633 | 106,066 | 3,965, 142 ${ }^{3}$ | 1,564 |
|  | 1916 | 14,617 | 106,143 | 4,914,519 ${ }^{3}$ | 1,663 |
| Western Union. | 1910 | 2,639 | 11,244 | 551,764 | 217 |
|  | 1911 | 2,598 | 11,599 | 572,081 | 219 |
|  | 1912 | 2,576 | 11,674 | 618,214 | 218 |
|  | 1913 | 2,278 | 12,504 | 621,423 | 235 |
|  | 1914 | 2,832 | 17,463 | 694,447 | 235 |
|  | 1915 | 2,819 | 17,130 | 677,976 | 235 |
|  | 1916 | 3,082 | 18,106 | 647,445 | 241 |
| Timiskaming \& Northern Ontario Railway. | 1910 | 265 | 1,865 | 131,106 | 22 |
|  | 1911 | 294 | 2,299 | 211,920 | 25 |
|  | 1912 | 300 | 2,670 | 167,326 | 26 |
|  | 1913 | 343 | 1,407 | 147,634 | 27 |
|  | 1914 | 343 | 1,407 | 136,258 | 27 |
|  | 1915 | 332 | 1,413 | 120,170 | 28 |
|  | 1916 | 332 | 1,670 | 111,225 | 28 |
| Algoma Central Railway ${ }^{\text {s }}$. | 1910 | 130 | 174 |  |  |
|  | 1911 | 214 | 517 | 4,497 | 6 |
|  | 1912 | 378 | 700 | - | 7 |
|  | 1913 | 314 | 413 | - | 8 |
|  | 1914 | 424 | 799 | - | 8 |
|  | 1915 | 424 | 799 799 | - | 8 |
| Algoma Eastern Railway ${ }^{5}$ | 1913 | 85 | 89 | - | 3 |
|  | 1914 | 85 | 89 | - | 4 |
|  | 1915 | 85 | 171 | - | 4 |
|  | 1916 | 85 | 171 | - | 4 |
| Grand Trunk Pacific Telegraph Co. | 1910 | 1,699 | 5,081 | 71,154 | 73 |
|  | 1911 | 1,963 | 6,004 | 101,048 | 92 |
|  | 1912 | 2,310 | 8,780 | 133,677 | 112 |
|  | 1913 | 2,948 | 10,728 | 155,027 | 120 |
|  | 1914 | 3,185 | 14,894 | 146,689 | 134 |
|  | 1915 | 4.639 | 13,229 | 182,003 | 213 |
|  | 1916 | 5,190 | 20,052 | 218,606 | 233 |
| The North American Telegraph Co. Ltd. | 1910 | 44 | 783 | 38,015 | 63 |
|  | 1911 | 44 | 783 | 40,508 | 62 |
|  | 1912 | 44 | 783 | 46,999 | 61 |
|  | 1913 | 44 | 783 | 49,308 | 61 59 |
|  | 1914 | 44 | 783 | 43,180 | 59 |
|  | 1915 | 44 | 664 664 | 45,451 53,340 | 54 <br> 50 |

[^30]
## TELEGRAPHS

60.-Telegraph Statistics of Chartered Companies, 1910-1916-concluded.

| Companies. | Year. | Miles of line. | Miles of wire. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { messages. } \end{aligned}$ | Number of offices. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Canadian Northern Railway Co. | 1910 | 3,685 | 7,841 | - | 191 |
|  | 1911 | 4,367 | 13,073 | - | 227 |
|  | 1912 | 5,232 | 15,195 | - $\square^{-}$ | - |
|  | 1913 | 5,457 | 17,209 | 1,120,676 | 352 |
|  | 1914 | 5,924 | 18,233 | 1,040,846 | 373 |
| National Transcontinental Railway. | 1911 | 313 | - | - | - |
|  | 1912 | 1,171 | - | - | - |
|  | 1913 | 1,429 | - | - | - |
|  | 1914 | 1,798 | - | $\rightarrow$ | - |
|  | 1915 | 1,990 | 4,834 | - | - |
|  | 1916 | 2,003 | 5,08) | - | - |

61.-Coast Stations for Communication by Wireless Telegraphy with Ships at Sea, fiscal year 1916.

| Name of Station. | Situation. | Range <br> nautical miles. |
| :---: | :---: | :---: |
| EAST COASt. |  |  |
| Belle Isle, Nfid... | Belle Isle Straits... | 250 |
| Point Armour, Nfld. | Belle Isle Straits... | 150 |
| Point Riche, Nfld. | Gulf of St. Lawrence. | 250 |
| Harrington, Que. | Gulf of St. Lawrence.. : | 150 |
| Heath Point, Que. | Gulf of St. Lawrence (Anticosti Island) | 250 |
| Cape Ray, Nfld. | Cabot Straits. | 350 |
| Cape Race, Nfid. | North Atlantic.... | 400 |
| Grindstone Island, Que. | Gulf of St. Lawrence (Magdalen Island) | 200 |
| Fame Point, Que. | Gulf of St. Lawrence. | 250 |
| Clark City, Que. | Gulf of St. Lawrence. | 250 |
| Father Point, Que. | St. Lawrence River | 250 |
| Grosse Isle, Que... | St. Lawrence River | 100 |
| Quebec, Que. | St. Lawrence River | 150 |
| Three Rivers, Que. | St. Lawrence River | 150 |
| Montreal, Que. | St. Lawrence River | 200 |
| Cape Sable, N.S....... ... | North Atlanitic. | 250 |
| Partridge Island, St. John, N.B. | Entrance St. John, N.B., Harbour | 250 |
| Cape Bear, P.E.I. | Northumberland Strait... | 150 |
| Pictou. N.S. | Northumberland Strait. | 100 |
| North Sydney, C.B... | North Sydney, C.B. ${ }^{\text {Entrance to Halifax Harbour }}$ | 100 250 |
| Sable Island, N.S.. | North Atlantic.... | 300 |
| Halifax, N.S. | Halifax Dockyard. | 100 |

## WIRELEGS TELEGRAPHY

61.-Coast Stations for Commanication by Wireless Telegraphy with Ships at Sea, fiscal year 1916-concluded.

| Name of Station. | Situation. | $\begin{aligned} & \text { Range } \\ & \text { in } \\ & \text { nautical } \\ & \text { miles. } \end{aligned}$ |
| :---: | :---: | :---: |
| great lafes. |  |  |
| Port Arthur, Ont. | Port Arthur, Ont. | 350 |
| Sault Ste. Marie, Ont. | Sault Ste. Marie, Ont, | 350 |
| Tobermory, Ont. . | Entrance Georgian Bay, Ont. . | 350 |
| Midland, Ont.... | Georgian Bay, Ont. | 350 |
| Point Edward, Ont. | Lake Furon.... | 350 |
| Port Burwell, Ont. | Lake Erie. | 350 |
| Toronto, Ont... | Toronto Island, Ont... | 350 |
| Kingston, Ont.. | Barriefield Common... | 350 |
| west coast. <br> Gonzales Hill, B.C. (Victoria). | Victoria, B.C. | 250 |
| Point Grey, Vancouver, B.C. | Entrance Vancouver Harbour. | 150 |
| Cape Lazo, B.C. | Strait of Georgia, near Comox, B.C. | 350 |
| Pachena Point, B.C. | West Coast Vancouver Island, B.C.. | 500 |
| Estevan Point, B.C. | West Coast Vancouver Island, B.C.. | 500 |
| Triangle Island, B.C. | South of Hecate Strait. . ..... | 450 |
| Ikeda Head. B.C. | South of Moresby Island, Q.C.I..... | 250 |
| Dead Tree Point, B.C. | South ef Graham Island, Q.C.I. ... | 200 |
| Digby Island, B.C., Prince Rupert. | Digby Island, Entradce Prince Rupert Harbour. | 250 |
| Alert Bay, B.C. | Cormorant Island, B.C... | 350 |
| hUdSON bay. <br> Port Nelson. | Hudson Bay | 5 |
| Le Pas, Man. | For communication with Port Nelson only | 750 |
| Lucensed commergial stations. |  | 3,000 |
| Neweastle, N.B. | New Brunswiek. | 2,500 |
| Louisburg, C.B... | Cape Breton. | Reception |
|  |  | only. |
| Ocean Falls, B.C. | Ocean Falls, B.C... | 150 30 |
| well River, B.C.. | Powell River, B.C. ${ }^{\text {Plengarry Sub. Caigary }}$ | 50 |
| Section 11, Township 23. | Section 11, Township 23. ${ }^{\text {a }}$ | 50 |

62.-Canadian Government Steamers Equipped with the Radiotelegraph.

| Name. | Range. | Name. | Range. |
| :---: | :---: | :---: | :---: |
|  | Miles. |  | Miles. |
| Niobe.. | 400 | Quadra. | 100 |
| Rainbow. | 250 | Estevan. | 200 |
| Canada. | 150 | Dollard. | 150 |
| Acadia. | 200 | Newington. | 100 |
| Malaspina. | 200 | Lurcher Lightship. .. | 100 |
| Galiano. | 200 | Simcoe. | 100 |
| Stanley. . | 150 | Arnmore. | 200 |
| Lady Laurier | 150 | P.E. Island. | 100 |
| Aberdeen | 100 | Durly Chine. | 200 |
| Druid. | 100 |  | 200 |
| Montcalm. | 150 | Lady Evelyn. .. | 100 200 |
| Lady Grey | 100 | Margaret....... | 200 |

TRANSPORTATION AND COMMUNICATIONS
63.-Busimess and Cest of Maintenance of Radietelegraph Stations for the fiscal years 1915 and 1916.

| Stations. | 1915. |  |  | 1916. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Messages handled. | Words handled. | Cost of maintenance. | Messages handled. | Words handled. | Cost of maintenance. |
| East Coast. | No. 59,846 | $\begin{aligned} & \text { No. } \\ & 1,196,512 \end{aligned}$ | $\stackrel{\$}{64,312}$ | No. 45,195 | $\begin{aligned} & \text { No. } \\ & 864,020 \end{aligned}$ | $\stackrel{\$}{68,140}$ |
| Great Lakes | 15,785 | 1,326,505 | 27,947 | 13,617 | 259,366 | 28,185 |
| West Coast. | 98,386 | 1,532,526 | 44,239 | 95,048 | 1,103,395 | 47,048 |
| Hudson Bay | 5,259 | 325,961 | 1. | 7,617 | 570,281 | 1 |
| Totals......... | 179,276 | 3,381,504 | 136,498 | 161,477 | 2,797,062 | 143,373 |

${ }^{1}$ Borne by Department of Railways and Canals.
64.-Pregress of Telephones in Canada, 1913-1916.

| Iterns. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: |
| Capitalization. | $\begin{gathered} \$ \\ 59,847,004.83 \end{gathered}$ | 70,291,884.15 | 74,284,991.51 | $\begin{gathered} \$ \\ 76,920,314.37 \end{gathered}$ |
| Cost. | 69,214,971.45 | 80,258,356.00 | 83,792,583.06 | 88,520,020.22 |
| Revenue. | 14,879,278.23 | 17,297,268.98 | 17,601,672.86 | 18,594,267.85 |
| Operating Expenses. | 11,175,689.47 | 12,882,402.32 | 12,836,715.12 | 11,147,200.86 |
| Remuneration. | 6,839,308.85 | 8,250,253.19 | 8,357,029.27 | 7,852,719.41 |
|  | No. 1,075 | No. 136 | No., 396 | No. |
| Telephone Companies.... | 1,075 | 1,136 $1,343,090$ | 1,452,360 | 1,592 $1,600,564$ |
| Wire Mileage.. | $1,092,586$ 463,671 | 1,343,090 | $1,452,360$ 533,090 | $1,600,564$ 548,421 1 |
| Employees... | 12,867 | 16,799 | 15,072 | 15,247 |
| Persons per Telephone... | 16.2 | 15.5 | 15.1 | 14.6 |
| Persons per mile of wire.. | 6.8 | 6.0 | 5.6 | 5.0 |

65.-Number of Telephone Companies reporting to the Department of Railways and Canals, by Provinces, June 30, 1916, with totals for 1913-14-15.

| Provinces. | Govern ment. | Municipal. | Stock. | Co-oper ative. | Partnership. | Private | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PrinceEdwardIsl'd. | No. | No. | No. | No. | No. | No. | No. 30 |
| Nova Scotia. | - | - | 24 | 106 | 2 | $\overline{7}$ | 139 |
| New Brunswick. | - | - | 20 | 5 | 2 | 2 | 29 |
| Quebec. ..... | $\overline{7}$ | - | 69 | 54 | 2 | 37 | 162 |
| Ontario.... .. | 1 | 54 | 163 | 210 | 15 | 59 | 502 |
| Manitoba... | 1 | 6 | 6 | 17 | 2 | 5 | 37 |
| Saskatehewan... | 1 | 5 | 318 | 344 | - | 5 | 668 |
| Alberta...... . | 1 | 1 | 5 | 3 | - | - | 10 |
| British Columbia. . | - | 1 | 11 | 1 | - | 1 | 14 |
| Yukon... | - | - | 1 | - | - | - | 1 |
| Totals 1916.. | 4 | 67 | 622 | 765 | 23 | 111 | 1,592 |
| Totals 1915.... | 4 | 62 | 584 | 601 | 28 | 117 | 1,396 |
| Totals 1914..... | 4 | 58 | 611 | 297 | 48 | 118 | 1,136 |
| Totals 1913.... | 4 | 52 | 543 | 262 | 53 | 151 | 1,075 |

TRANSPORTATION AND COMMUNICATIONS
66.-Telephones in use and Mileage of Wire by Provinces, June 30, 1916, with totals for 1913-14-15.

| Provinces. | Telephones in use. |  |  | Mileage of wire. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Central Energy. | $\begin{gathered} \text { Magne- } \\ \text { to. } \end{gathered}$ | Total. | Urban. | Rural. | Total. |
| Prince Edward Island. | No. | No. 1038 | No. ${ }_{2}, 351$ | Miles. | Miles. | Miles. |
| Nova Scotia. | 14,437 | 8,812 | 23,249 | 1,304 |  |  |
| New Brunswick | 10,414 | 8,361 | 18,775 | 19,330 | 9,922 | 42,934 |
| Quebec. | 65,686 | 30,954 | 96,640 | 245,922 | 59,693 | 305,615 |
| Ontario. | 136,650 | 112,330 | 248,980 | 423,055 | 180,562 | 603,617 |
| Maditoba. | 29,410 | 18,493 | 47,903 | 1c9,688 | 64,658 | 174,341 |
| Saskatchewan. | 9,906 | 20,314 | 30,220 | 61,330 | 85,313 | 146,643 |
| Alberta. | 18,269 | 16,757 | 35,026 | 102,906 | 45,070 | 147,976 |
| British Columbia. | 37,024 | 7,898 | 44,922 | 134,729 | 11,197 | 145,926 |
| Yukon. |  | 355 | 355 | 232 | 367 | 599 |
| Totals 1916. | 323,109 | 225,312 | 548,421 | 1,125,365 | 475,199 | 1,600,564 |
| Totals 1915. | 313,225 | 219,865 | 533,090 | 1,009,147 | 443,213 | 1,452,360 |
| Totals 1914. | 310,166 | 210,978 | 521,144 | 962,947 | 380,143 | 1,343,090 |
| Totals 1913. | 269,843 | 193,828 | 463,671, | 755,588 | 336,999 | 1,092,587 |


| Class of Wire. | 1915. |  |  | 1916. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban. | Rural. | Total. | Urbad. | Rural. | Total. |
|  | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. |
| Galvanized | 28,230 | 373,393 | 401,623 | 29,419 | 406,621 | 436,040 |
| Copper. | 21,001 | 60,237 | 81,238 | 17,837 | 63,3791 | 81,216 |
| Cable-Overhead. | 358,715 | 8,521 | 367,236 | 395.042 | 4,014 | 399,056 |
| Underground... | 600, 213 | 149 | 600,362 | 682,118 | 145 | 682,263 |
| Submarine., | 988 | 913 | 1,901 | 949 | 1,04c | 1,989 |
| Totals.. | 1,009,147 | 443,213 | 1,452,360 | 1,125,365 | 475,198 | 1,600,564 |

68.-Capital Liability, Cost, Revenue and Operating Expenses of Telephones, June 30, 1916, with totals for 1913, 1914 and 1915.

| Provinces. | Capital Stock. | Funded Debt. | Cost of Property and Equipment. | Revenue. | Operating Expenses. | Net <br> Revenue. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prince Edward | \$ | \$ | ${ }^{5}$ | I | , | \$ |
| Island. | 112,362 | 51,000 | 254,982 | 81,501 | 50,332 | 31,169 |
| Nova Scotia | 1,929,244 | 1,502,355 | 3,727,336 | 756,166 | 509,601 | 246,565 |
| New Brusswick. | 1,456,433 | 63,150 | 1,928,805 | 517,831 | 294,832 | 222.999 |
| Quebec. | 19,453,041. | 11,866,523 | 40,190,776 | $10,344,232$ | 5,811,941 | 4,532,291 |
| Ontario. | 2,089,924 | 2,012,699 | 5,503,713 | 1,042,729 | 681,726 | 361,003 |
| Manitoba. | 23,177 | 11,103,026 | 11,137,815 | 1,903,447 | 1,353,985 | 549,462 |
| Saskatchewan. | 914,844 | 7,132,962 | 7,984,304 | I,108,868 | 648,953 | 459,915 |
| Alberta | 125,244 | 11,258,560 | 10,820,920 | 1,292,035 | 683,437 | 608,598 |
| Brit. Columbia. | 3,247,687 | 2,513,083 | 6,801,190 | 1,511,389 | 1,092,936 | 418,453 |
| Yukon. | 65,000 |  | 170,180 | 36,070 | 19,458 | 16,612 |
| Totals 1916 | 29,416,956 | 47,503,358 | 88,520,021 | 18,594,268 | 11,147,201 | 7,447,067 |
| Totals 1915. | 28,947,122 | 45,337,869 | 83,792,583 | 17,601,673 | 12,836,716 | 4,764,957 |
| Totals 1914. | 28,644,340 | 41,647,554 | 80,258,356 | 17,297,269 | 12,882,402 | 4,414,867 |
| Totals 1913. | 26,590,501 | 33,256,503. | 69,214,971 | 14,897,278 | 11,175,689, | 3,721,589 |

## POSTAL STATISTICS.

The Post Office Department reports an increase in the fiscal year 1915-16 of 2,007 miles in the system over which the mails are carried by railway, thus bringing the total actual track mileage for the carriage of mails to 33,363 on March 31, 1916. The total mileage of mail conveyance in the fiscal year 1916 was $62,785,323$, of which $37,137,564$ was by railway, $2,308,512$ was by water, and $23,339,247$ was by stage or road. The total represents a net increase in mileage, as compared with 1915, of 966,923 , of which 423,024 was by railway, 676,355 was by road, and a decrease by water of 132,456 . The expenditure of the Department increased by $\$ 47,948$, and there was a surplus from the operations of the Service of $\$ 2,849,271$. At the end of the calendar year 1916 there were 3,894 rural'mail delivery routes, on which were erected 178,083 boxes; the corresponding figures for the calendar year 1915 were 3,432 routes and 154,183 boxes.
69.-Revenue and Expenditure of the Post Office Department for quinquennial periods 1890-1910, and for the years 1911-16.

| Fiscal Years. | Net revenue. | Expenditure. | Deficit. | Surplus. |
| :---: | :---: | :---: | :---: | :---: |
| 1890. | \% ${ }_{\text {\$ }}$ | 3,074,470 | $\stackrel{\$ 17,081}{ }$ | \$ |
| 1895. | 2,792,790 | 3,593,647 | 800,857 |  |
| 1900. | 3,183,984 | 3,645,646 | 461,662 | - |
| 1905. | 5,125,373 | 4,634,528 | - | 490,845 |
| 1910. | 7,958,547 | 7,215,337 | - | 743,210 |
| 1911 | 9,146,952 | 7,954,223 | - | 1,192,729 |
| 1912. | 10,482,255 | 9,172,035 | - | 1,310,220 |
| 1913. | 12,060,476 | 10,882,805 | - | 1,177,671 |
| 1914. | 12,956,216 | 12,822,058 | - | 134,158 |
| 1915. | 13,046,650 | 15,961,191 | - | - |
| 1916.................... | 18,858,410 | 16,009,139 | - | 2,849,271 |

70.-Mail Subsidies and Steamship Subventions, 1914-1916.

| Service. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ |
| Casada and Cuba. |  |  | 2,000 |
| Canada and Great Britain. | 951,484 | 645,899 | 421,276 |
| Canada and South Africa. -i ${ }^{\text {Com }}$ | 146,000 | 146,000 | 146,000 |
| Canada and Australia or New Zealand or both on Pacific Ocean. | 180,509 | 173,566 | 180,509 |
| Canada (Atlantic) and Australia and New Zealand. | 125,000 | 128,333 | 116,667 |
| Canada and Mexico and Atlantic and Pac. Oceans. | 4,167 |  |  |
| Canada and France ${ }^{\text {l }}$... | 195,458 | 105,428 | 88,669 |

## TRANSPORTATION AND COMMUNICATIONS

70.-Mail Subsidies and Steamship Subventions 1914-1916-continued.

| Service. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ |
| Canada, Ching and Japan ${ }^{1}$. | 118,850 | 137,019 |  |
| Canada and Newfoundland. ... .. | 66,142 | 62,670 | 54,233 |
| Canada and Manchester, England. | 35,000 | 35,000 | 34,271 |
| St. John and Glasgow. | 10,875 | 7,450 | 7,125 |
| St. Johm, Dubtin and Belfast. | 6,750 | 7,500 | 7,500 |
| St. John, Halifax and London. | 40,000 | 30,354 | 18,750 |
| St. John and Digby | 19,549 | 20,000 | 20,000 |
| St. John, Digby, Annapolis and Granville. | 1,500 | 2,000 | 2,000 |
| St. John and Minas Basin. | 7,812 | 7,547 | 5,915 |
| St. John, Westport and Yarmouth. | 5,500 | 8,202 | 7,414 |
| St. John, Halifax, West Indies and South America.. | 161,602 | 330,897 | 340,666 |
| St. John and Cumberland Basin. | 2,694 | 3,000 | 3.000 |
| St. John and Bridgetown. | 2,000 | 2,500 | 2,500 |
| Halifax and Sherbrooke | 2,000 | 2,000 | 2,000 |
| Halifax, Mahone, Tancook Isle, etc | 2,834 | 2,655 | 3,481 |
| Halifax, St. John, Newfoundland and Liverpool. | 20,000 | 17,167 | 13,500 |
| Halifax and Newfoundland. . | 10,000 | 10,000 | 10,000 |
| Halifax and Canso. | 5,000 | 5,000 | 5,000 |
| Halifax and Spry Bay | 2,000 | 4,000 | 3,680 |
| Halifax and West Coast of C.B. | 1,556 | 3,059 | 3,000 |
| Halifax, South Cape Breton and Bras d'Or Lake ports. | 3,667 | 3,167 | 2,666 |
| Halifax and Liverpool, or Glasgow .... |  | 4,000 |  |
| Magdalen Islands and Mainland. | 15,000 | 18,000 | 17,769 |
| Moncton and Way Ports and a Port or Ports on West Coast of Cumberland Co. |  |  | 2,500 |
| Grand Manan and Mainland. | 9,904 | 10,000 | 10,000 |
| P. E. Island and Mainland. | 12,500 | 12,500 | 12,500 |
| P. E. Island, Cape Breton and Newfoundland. | 16,500 | 14,279 | 10,417 |
| Quebec and Gaspe Basin... | 8,500 | 8,500 | 8,500 |
| Quebec and Blanc Sablon. . | 16,212 |  | - |
| Quebec and Isle of Orleans. | 500 | - | - |
| Quebee and North Shore Isle of Orleans... | 4,500 | 4,500 | 4,500 |
| Mabone Bay and Taneook Island. | 1,000 |  |  |
| Pictou, Murray Harbour, etc., and Georgetown. | 6,000 | 6,000 | 6,000 |
| Pictou and New Glasgow and Antigonish County Ports.. | 50 C | 1,00e | 1,000 |
| Pt. Mulgrave and Guysboro. | 5,236 | 5,500 | 5,500 |
| Pt. Mulgrave, St. Peter, etc. | 5,920 | 6,500 | 6,500 |
| Pt. Mulgrave and Canso. | 6,375 | 6,500 | 6,500 |
| Pictou, Mulgrave and Cheticamp | 7,000 | 5,943 | 6,673 |
| Petit de Grat and Mulgrave I. C. R. Terminus. | 5,839 | 7,000 | 7,000 |
| Baddeck and Iona. | 5,825 | 5,825 | 5,728 |
| Gaspe, Dalhousie and Campbellton. | 20,000 | 9,615 | 20,000 |
| Sydney and sround C. B. Island. | 5,500 | 5,506 | 5,500 |
| Sydney and Whyeocomagh. | 3,000 | 3,000 | 3,000 |
| Sydney and Bay St. Lawrence Ports. | 6,000 | 6,000 | 6,000 |
| St. Steplren, St. Croix, etc. | 6,000 | 6,000 | 6,000 |
| St. Catharines Bay and Tadousac.... | 3,431 | 3,297 | 2,392 |
| Victoria, Vancouver and Skagway. | 12,506. | 12,500 | $\begin{array}{r}12,500 \\ \hline, 500\end{array}$ |
| Charlottetown, Vietoria and Holiday's Wharf. | 2,500 | 2,50\% | 2,500 |

[^31]
## POST OFEICE

70.-Mail Subsidies and Steamship Subventions, 1914-1916-concluded.

| Service. | 1914. | 1915. | 1916 |
| :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ |
| Victoria and Vancouver Island (west coast). | 5,000 | 5,000 | 5,000 |
| Victoria and San Francisco. | 3,1000 | 2,971 | 3,000 |
| Petitcodiac River and Camberland Co., N.B.. | 2,000 | 2,500, |  |
| North Shore River St. Lawrence, between Quebec and Harrington. | - | 25,983 | 28,000 |
| Newcastle, Neguac and Escouminae, Miramichi River. | 2,500 | 2,263 | 2,500 |
| Pclee Island and Mainland. | 5,000 | 8,000 | 8,000 |
| Froudes Point and Lockport.... | 600 | 600 | 600 |
| Prince Rupert, B.C., and Queen Charlotte Islands. . | 8,000 | 8,000 | 11,333 |
| Rivière du Loup and Tadousae .. | 12,000 | 12,000 | 10,855 |
| St. John and St. Andrews, N.B | 4,000 | 4,000 | 4,000 |
| Kenora, Rainy River and Fort Frances. | 8,000 | 7,051 | 5,017 |
| Vancouver and Northern ports of B.C. : $\quad$. | 16,800 | 16,800 | 16,800 |
| Expenses in connection with the supervision of sub sidized steamship services... | 2,596 | 2,593 | 2,852 |
| Total subsidies and subventions. | 2,383,687 | 2,162,633 | 1,768,757 |

Nors--The figures in the above table are taken from the ${ }^{\text {n }}$ Canada Public Accounts", as issued by the Finance Department: they represent the amounts paid in connection with contracts made under statutory authority by the Department of Trade and Commerce for trade services, ideluding the conveyance of mails.
71.-Operation of the Money Order System in Canada, 1901-1916.

| Fiscal Years. | Orders issued in Canada. | Value of orders issued in Cansda. | Payable in |  | Value of orders issued in other countries payable in Canada. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Canada. | Other countries. |  |
| 1901. | No. ${ }_{\text {No. }}^{1,151,024}$ | 17,956,258 | $\stackrel{8}{14,324,289}$ | $\begin{gathered} \stackrel{8}{3,631,969} \end{gathered}$ | 2,592,845 |
| 1902. | 1,171,024 | 23,519,402 | $\begin{aligned} & 14,3,4,289 \\ & 18,423,035 \end{aligned}$ | $\begin{aligned} & 3,631,969 \\ & 5.126367 \end{aligned}$ | 2,592,845 |
| 1903. | 1,668,705 | 26,868,202 | 20,761,078 | 6,107,124 | 4,604,528 |
| 1904. | 1,869,233 | 29,652,811 | 21,706,474 | 7,946,337 | 5,197,122 |
| 1905. | 1,924,130 | 32,349,476 | 23,410,485 | 8,938,991 | 5,602,257 |
| 1906. | 2,178,549, | 37,355,673 | 26,133,565 | 11,222,108 | 6,533,201 |
| 1907 (9 mos.). | 1,845,278 | 32, 160,098 | 21,958,855 | 10,201,243 | 5,393,042 |
| $1908 .$ | 2,990,691 | 49,974,007 | 31, 836,629 | 18,137,378 | 7,933,361 |
| 1909... | 3,596,299 | 52,627,770 | 36,577,552 | 16,050,218 | 7,794,751 |
| 1910.. | 4,178,752 | $60,967,162$ | 41,595,205 | 19,371,957 | 8,048,467 |
| 1911... | 4,840,896, | 70,614,862 | 45,451,425 | 25,163,437 | 8,664,557 |
| 1912. | 5,777,757 | 84,065,891 | 52,568,433 | 31,497,458 | 8,712,667 |
| 1913. | 6,866,563 | 101,153,272 | 61,324,030 | 39,829,243 | 9,081,627 |
| 1914., | 7,228,369 | 109,500,670 | $6,6,113,221$ | 43,387,449 | 9,807,313 |
| 1915... | 6,990,813 | 89,957,906 | 64,723,941 | 25,233,966 | 9,707,383 |
| 1916... | 7,161,375 | 34,469,871 | 75,781,582 | 18,688,289 | 9,858,137 |

[^32]TRANSPORTATION AND COMMUNICATION:
72.-Money Orders by Provinces, 1912-1916.

| Provinces. | 1912. | 1913. | 1914. | 19.5. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Money order offices in- | No. | No. | No. | No. | No. |
| Canada. | 3,673 | 3,923 | ,274 | 4,499 | 4690 |
| Prince Edward Island. | 33 | 35 | 39 | 40 | 43 |
| Nova Scotia. | 296 | 307 | 313 | 320 | 327 |
| New Brunswick. | 180 | 188 | 205 | 209 | 213 |
| Quebec. | 847 | 873 | 923 | 976 | 1,022 |
| Ontario. | 1,242 | 1,313 | 1,418 | 1,463 | 1,480 |
| Manitoba | 250 | 271 | 289 | 299 | 316 |
| Saskatchewan | 314 | 355 | 418 | 470 | 530 |
| Alberta. | 225 | 261 | 307 | 341 | 367 |
| British Columbia. | 280 | 312 | 356 | 375 | 386 |
| Yukon Territory .- | 6 | 8 | 6 | 6 |  |
| Money orders issued in- |  |  |  |  |  |
| Canada. | 5,777,757 | 6,866,563 | 7228,369 | 6,990,813 | 7,161,375 |
| Prince Edward Island. | 27,027 | 30,632 | 31,142 | 37,255 | 36,066 |
| Nova Scotia | 362,180 | 416,417 | 414,347 | 426,561 | 436,651 |
| New Brunswick. | 167,684 | 190,460 | 193,225 | 207,584 | 211,126 |
| Quebec. | 872,343 | 1,009,494 | 1,058,370 | 992,127 | 944,912 |
| Ontario. | 1,943,540 | 2,249,400 | 2,314,853 | 2,194,782 | 2,165,167 |
| Manitoba. | 511,167 | 579,927 | 609,469 | 617,520 | 646,214 |
| Saskatchewan | 669,926 | 858,219 | 968,725 | 1,040,816 | 1,277,599 |
| Alberta. | 535,250 | 696,877 | 781,838 | 757,890 | 810,246 |
| British Columbia. | 679,017 | 823,505 | 842,980 | 702,899 | 623,149 |
| Yukon Territory | 9,623 | 11,632 | 13,420 | 13,379 | 10,245 |
| Receiptsfor money orders issued in- | ${ }^{\text {\$ }}$ | ${ }^{\$}$ | * | \% |  |
| Canada. | 84,065,891 | 101,153,272 | 109,500,670 | 89,957,906 | 94,469,871 |
| Prince Edward Island. | 398,236 | 448,844 | 504,712 | 562,370 | 515,805 |
| Nova Scotia. | 4815,748 | 5,370,698 | 5,566,825. | 5,376,556 | 5,687,850 |
| New Brunswick. | 2,430,285 | 2,697,473 | 2,912,633 | 2,954,844 | 3,042,197 |
| Quebec. | 12,713,948 | 14,614,485 | 16,013,433 | 13,621,392 | 12,664,737 |
| Ontario. | 25,146,215 | 29,642,799 | 32,641,571 | 25,663,488 | $25,310,065$ |
| Manitoba. | 7,328,677 | 8,230,479 | 8,636,161 | 7,710,849 | 8,525,258 |
| Saskatchewan. | 10,455,057 | 13,980,386 | 15,712,547 | 14,239,241 | 19,896,903 |
| Alberta | 8,142,612 | 11,182,136 | 12,253,076 | 9,594,82] | 10,656,188 |
| British Columbia. | 12,269,040 | 14,577,704 | 14,793,581 | 9,856,32] | 7,836,706 |
| Yukon Territory | 366,073 | 408,268 | 466,131 | 378,024 | 334,162 |
| Number of money orders paid in- | No. | No. | No. | ${ }_{5} \mathrm{No}$ |  |
| Canada. | 4,259,166 | 4,904,577 | 5,139,923 | 5,642,999 | 6,227,684 |
| Prince Edward Island | 22,020 | 24,494 | 24,932 | 26,433 | 24,674 019 |
| Nova Scotia. | 200,293 | 221706 | 219,642 | 222,702 | 219,196 |
| New Bruswick. | 118,936 | 129,856 | 131,350 | 136,266 | 135,922 |
| Quebec. | 730,111 | 810,632 | 785,336 | 800,563 2 | 754,062 |
| Ontario. | 1,860,610 | 2,121,518 | 2,157,346 | 2,395,813 | 2,674,697 |
| Manitoba. | 784,343 | 904,324 | 992,678 | 1,187,630 | $1,501,300$ 317,353 |
| Saskatchewan. | 157,720 171,136 | 197,708 | 246,137 <br> 271,489 | 274,098 293,393 | 317,353 297,858 |
| Alberta. ${ }_{\text {British Columbia. }}$ | 171,136 212,967 | 122,963 270,169 | 271,489 309,741 | 304,537 | 301,341 |
| Yukon Territory | 1,030 | 1,207 | 1,272 | 1,563 | 1,341 |

POST OFFICE
72.-Money Orders by Provinces, 1912-1916-concluded.

| Provinces. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Amount of money orders paid in-.. | 1 | \$ | \$ | \$ | \$ |
| Canada... | 60,883,536 | 69,440,073 | 75,887,652 | 75,810,351 | 84,858,956 |
| Prince Edward Island. | 388,473 | 447,169 | 574,074 | 546,558 | 424,791 |
| Nova Scotia. | 3,239,592 | 3,501,067 | 3,615,078 | 3,615,894 | 3,642,033 |
| New Brunswick. | 1,944,676 | 2,076,110 | 2,214,650 | 2,276,618 | 2,249,360 |
| Quebec. | 10,143,294 | 10,813,901 | 11,372,038 | 11,187,216 | 10,678,293 |
| Ontario. | 22,356,135 | 24,909,663 | 26,506,701 | 27,070,523 | 30,733,388 |
| Manitoba. | 11,069,176 | 12,895,357 | 14,288,363 | 14,697,989 | 19,214,676 |
| Saskatchewan. | 3,606,320 | 4,645,201 | 5,608,279 | 5,395,096 | 7,029,022 |
| Alberta | 3,476,690 | 4,594,132 | 5,456,194 | 5,414,080 | 5,683,951 |
| British Columbia. . | 4,620,405 | 5,518,917 | 6,206,510 | 5,553,925 | 5,163,194 |
| Yukon Territory. | 38,775 | 38,556 | 45,765 | 52,452 | 40,248 |

73.-Number and Total Values of Postal Notes, 1911-1916.

| Value. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ c. | No. | No. | No. | No. | No. | No. |
| 0.20 . | 125,880 | 134,440 | 148,718 | 191,419 | 245,240 | 235,354 |
| 0.25 . | 237,435 | 270,160 | 339,222 | 364,104 | 457,129 | 353,452 |
| 0.30 . | 160,891 | 174,426 | 187,980 | 238,523 | 314,789 | 271,804 |
| 0.40 . | 147,058 | 161,395 | 176,395 | 219,835 | 285,225 | 252,862 |
| 0.50 . | 316,664 | 350,800 | 393,687 | 441,807 | 528,091 | 464,551 |
| 0.60 . | 128,502 | 143,081 | 155,363 | 194,554 | 250,343 | 234,171 |
| 0.70. | 74,018 | 81,299. | 89,514 | 108,315 | 139,791 | 125,914 |
| 0.75 . | 157,494 | 176,759 | 199,060 | 229,502 | 276,22A | 249,645 |
| 0.80 . | 105,952 | 114,110 | 125,124 | 153,957 | 199,226 | 192,601 |
| 0.90. | 95,485 | 107,140 | 116,458 | 147,936 | 193,437 | 202,720 |
| 1.00 . | 528,172 | 586,094 | 640,647 | 776,118 | 942,981 | 923,004 |
| 1.50. | 178,854 | 195,092 | 220,692 | 275,541 | 343,322 | 371,291 |
| 2.00. | 307,378 | 337,298 | 366,995 | 443,097 | 535,497 | 564,010 |
| 2.50. | 108,334 | 117,835 | 128,487 | 154,083 | 189,991 | 220,709 |
| 3.00 . | 183,133 | 203,688 | 227,278 | 275,050 | 312,147 | 347,682 |
| 4.00. | 122,487 | 133,647 | 143,019 | 165,680 | 192,501 | 216,076 |
| 5.00. | 274,747 | 297,875 | 321,547 | 353,766 | 394,012 | 400,618 |
| 10.00. | 179,183 | 199,996 | 220,378 | 236,800 | 247,986 | 237,401 |
| Total notes received.... <br> No. | 3,441,667 | 3,785,135 | 4,200,564 | 4,970,067 | 6,047,882 | 5,863,865 |
| Total value. \$ | 6,665,502 | 7,344,614 | 8,053,507 | 9,231,326 | 10,603,894 | 10,766,951 |
| Commission ceived. | 73,100 | 80,650 | 80,018 | 104,311 | 124,360 | 122,508 |
| Postal notes issued to postmasters. No. Value of notes issued. | 3,551,065 | 3,908,295 | 4,463,995 | 5,368,125 | 6,193,120 | 6,068,140 |
|  | 6,927,153 | 7,634,746 | 8,569,462 | 10,170,355 | 10,754,438 | 11,251,125 |
|  |  |  | -560,46, | 10,10, |  | 1,251,125 |

TRANSPORTATION AND COMMUNICATIONS
74.-Issue of Pestage Stamps, etco, 1915-1916.

| Denominations. | Issue 1915. |  | Issue 1916. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number. | $\nabla$ alue. | Number. | Value. |
|  | No. | \$ | No. | \$ |
| 1 cent postage stampe. | 365,217,400 | 3,652,174 | 400,949, 800 | 4,000,498 |
| 5 * * | 323,542,400 | 6,531,448 | 376,128,400 | 7,522,408 |
| 7 " 4 | 6,770, 600 | 473 | 15,590 | -173508 |
| 10 " | 6,351,925 | 635,192 | $8,656,600$ | 86,6,660 |
| 20 | 2,546,500 | 509,300 | 3,832,900 | 766,580 |
| 50 | 315,480 | 157,740 | 450,425 | 225,212 |
| 10 cent special delivery stamps... | 149,715 | 14,971 | 167,455 | 16,746 |
| 1 cent postage due stamps. | 572,100 | 5,721 | 586,100 |  |
| 2 " " | 1,679,100 | 33,582 | 1,355,700 | 27,114 |
| 5 | 548,100 | 27,405 | 268,400 | 13,420 |
| 1 cent war tax stamps. | 19,000,000 | 190,000 | 192,035,000 | 1,920,350 |
| $2{ }^{2}$ " ${ }^{\text {a }}$ | 450,000 | 9,000 | 41,639,300 | 832,786 |
| 3 cent postage and war tax stamps |  |  | 68,744,600 | 2,062,358 |
| 1 cent stamp books. | 367,134 | 91,784 | 856,668 | 214,167 |
| 2 " * | 1,833,908 | 458,477 | 863,780 | 215,945 |
| 1 " post bands.. | 642,800 | 7,714 | 570,500 | 6,846 |
| 1 * post cards.. | 26,850,300 | 268,503 | 5,302,500 | 53,025 |
| 1 " " advt. (16 on sheet) | 800,000 | 8,000 | 524,000 | 5,240 |
|  | 5,391,000 | 53,910 | 775,000 | 7,750 |
| 1 " * * (single).. ... | 378,200 | 3,782 | 815,900 | 8,159 |
| 2 cent post cards.... ............ |  | - | 13,434,500 | 268,690 |
| 2 " ${ }^{2}$ advt., 16 on sheet. | - | - | 460,000 | 9,200 |
| 2 " " " 8 " | - | - | 1,588,000 | 31,760 |
| 2 " " " single | - | - | 75,600 | 1,512 |
| 2 " Postal Union cards. | 54,350 | 1,087 | 29,200 | 584 |
| 2 * reply cards. | 331,850 | 6,637 | 98,050 | 1,961 |
| 1 * stamped envelopes. | 2,190,300 | 26,294 | 826,500 | 9,918 |
| 2 * " | 4,042,200 | 88,928 | 3,286,800 | 72,310 |
| 1 * special newspaper wrappers- | 822,100 | 8,221 | 796,300 | 7903 |
| 6 " International reply coupons | 13,995 | 840 | 15,580 | 935 |
| STAMPS IN ROLLS |  |  |  |  |
| 1 cent sidewise at $\mathbf{\$ 5 . 0 6}$. | 46,951 | 237,572 | 48,863 | 247,247 |
| $2{ }_{4}{ }_{4}{ }^{\text {a }}$ \$ $\$ 0.06$. | 46,531 | 468,102 | 55,366 | 556,962 |
| 3 ecut postage and war tax at \$15.06 | - | - | 7,408 | 111,564 |
| 1 " endwise 5.06 . | 401 | 2,089 | 109 | 531 |
| 2 c * \$10.06. | 280 | 2,817 | 238 | $2,3,94$ |
| Totals. | 790,743,370 | 14,783,049 | 1,149,012,588 | 21,455,177 |

## IX.-LABOUR.

The Department of Labour of the Dominion Government was establisbed in 1900 under the authority of the Conciliation Act, 1900 (63-64 Vict., c. 24), its chief duties originally comprising the administration of certain provisions of this statute designed to aid in the prevention and settlement of labour disputes, the administration of the Government's fair wage policy for the protection of workmen employed on Dominion Government contracts and works aided by grant of public funds, the collection and classification of statistical and other information relative to conditions of labour and the publication of a monthly journal known as the "Labour Gazette." From 1900 to 1909 , the Department was administered by the Postmaster-General, who was also Minister of Labour. It was constituted a separate Department under the Labour Department Act, 1909 (8-9 Edw. VII, c. 22).

The work of the Department was greatly increased in 1907 by the passage of the Industrial Disputes Investigation Act, 1907 (6-7 Edw. VII, c. 20), which was designed to aid in the prevention and settlement of strikes and lockouts in mines and industries connected with public utilities. The Department is also charged with the administration of the Combines Investigation Act, 1910 (9-10 Edw. VII, c. 9). The seope of the Department has increased in other directions, especially in the investigation of the wholesale and retail prices of Canadian commodities and of questions affecting the cost of living. A change has been made in the "Labour Gazette" year, which terminates on December 31 instead of on June 30 as formerly.

Labour Conditions in 1916.-According to a review of industrial conditions which appeared in the January, 1917, issue of the "Labour Gazette," the close of the year 1915 showed a return to almost normal activity after the depression which began in 1913, and which was accentuated for a time on the outbreak of war. In 1916, with enlistments continuing and with industry speeded up still further, the supply of labour became quite inadequate, and efforts were made to dilute the labour supply with women workers. Some relief also came from the release of interned aliens and the slackening of municipal and other public works; and at the close of 1916 a year of almost abnormal activity has to be reported. Almost every group of manufacturing industries worked at high speed. Metals, machinery and conveyances, the group of industries on which of course the effeet of the war was most marked, were greatly speeded up, larger outputs being reported from steel plants, locomotive works and zatomobile establishments. Shipbuilding was also active. In the textile and clothing groups the mills had to meet heavy war orders, and much overtime was worked. The transportation systems of the country were so heavily taxed by the vast increase in the export trade that the shortage of rolling stock and tonnage became serious towsrds the end of the year, and the question of cancelling some of the passenger services was raised. Metallic mining and ore refining were stimulated by the demand from munition plants, and coal mines worked to the capacity of the labour force to meet the heavier calls from raitroads amd manufactories. In building and construction there was improvementy as manufacturers made extensions to plant, but

## LABOUR

railroad construction was quiet. Agriculture was adversely affected by the labour shortage, but as production was much smaller than in 1915 the demand for labour was not so great. Lumbering revived remarkably, but fishing fell off, especially on the west coast. Immigration for 1916 showed a gain over 1915, the increase being about 36 p.c. Wages were almost uniformly upward in 1916; of the 136 changes in wages and hours, affecting approximately 93,540 workpeople reported to the Department as taking effect during the year, one only showed a decline in the wage scale, four an increase in wages and reduction in hours, two a reduction in hours, while in 129 cases wage increases were indicated. Of these wage changes the greatest number occurred in steam railway service, and there were more workpeople affected in this occupation than in any other. The large number of changes in this service is accounted for in some degree by the fact that several of the organizations of railway employees had intended asking the companies for new agreements in 1914, but postponed this action on account of the war until the year 1916, when the sharp advance in the cost of living prompted them to take action.

Labour Organization.-The total trades union membership reported at the end of 1916 was 160,407 , being comprised in 1,842 local branches of trade union organizations of all types. The membership reported at the close of 1915 was 143,343 , comprised in 1,883 branches. There was, therefore, an increase of 17,064 members and a decrease of 41 branches during the year. Of the total trades union membership for 1916, 129,123 were members of international organizations, which have 1,626 local branches in Canada. The remaining 31,284 were members of national and independent bodies. There was a gain of 14,401 in the membership of international organizations, a gain of 3,443 among independent bodies and a decrease of 780 in national unions. From the outbreak of the war to the end of the year, it was reported to the Department of Labour by 1,287 local trade union branches that 21,599 trade unionists in Canada had enlisted for the war and 593 reservists rejoined the colours, making a total of 22,192 members who had joined the army.

Industrial Disputes.- The number of strikes and lockouts in Canada reported to the Department of Labour during 1916 was seventy-five, as compared with forty-three in 1915, which was the lowest on record since 1901, when the Department first collected statistics relating to strikes. The seventy-five strikes of 1916 involved 271 employers and 21,157 workpeople, with resultant time losses to the latter estimated at 208,277 working days. There was an increase in 1916 over 1915 of 175 in the number of employers and of 12,017 in the number of employees involved. The increase in time losses was 102,128 working days. The number of strikes which began in 1916 was seventy-four, one strike having been carried over from 1915. The industry most affected by strikes during 1916 was transportation, nineteen strikes, involving thirty-three concerns and 2,340 workers, whose time losses were estimated at 27,288 working days, being recorded. Fifteen strikes affecting fortyfour employers and 2,883 workers, with time losses reckoned at 33,133 working days, were reported as affecting the metal, engineering and shipbuilding trades. Ten strikes involving the greatest number of

## LABOUR CONDITIONS IN 1916 .

workers $(11,814)$ and occasioning the greatest loss of time $(88,634$ days) occurred in the mining industry. Eleven strikes, involving eleven employers and 1,176 workers in the clothing and garment-making industry, were reported. A feature of the strike situation in 1916 may be noted with regard to the duration of strikes. The building trades were those most affected by prolonged disputes; the aggregate duration in working days of disputes under this heading was 351 days, although there were only seven strikes affecting these trades recorded by the Department. The settlement of five of these strikes resulted in favour of the workers. The majority of the strikes, also those causing the greatest loss of time, occurred in localities in Ontario, in which province thirty-three strikes, causing time losses estimated at 62,686 working days were reported. Quebec comes next with thirteen strikes, British Columbia follows with ten strikes affecting 9,835 workers, more than double the number affected in any other province, due to the large number of miners involved in the strikes occurring in the Crowsnest pass district. There were seven strikes in Manitoba, six in Saskatchewan, four in Alberta, one in Nova Scotia and one in New Brunswick.

Table 1 shows the time losses involved in the various classes of industries from 1901 to 1916, Table 2 the number of disputes year by year from 1901 to 1916, the classes of industries affected, the number of establishments and of employees concerned, and the approximate time losses in working days, and Table 3 the number of disputes, classified by industries, from 1901 to 1916. The figures in these tables are also shown graphically in the charts on page 496.

## 1.-Time Losses by Industries in Working Days, 1901-1916.

| Industry. | 1901-12. | 1913. | 1914. | 1915. | 1916. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No. | No. |
| Fishing. | 203,488 | 49,600 | - | - | - | 253,088 |
| Lumbering. | 75,347 | 137,300 |  | - |  | 212,647 |
| Mining. | 3,839,447 | 702,726 | 169,200 | 16,794 | 88,634 | 4,816,801 |
| Buildiog. | 1,485,742 | 105,510 | 34,056 | 16,600 | 4,124 | 1,645,932 |
| Metal. | -193,072 | 79,479 | 51,573 | 40,812 | 33,133 | 698,069 |
| Printing and allied... | 17,311 |  |  | 903 | 1,875 | 106,662 |
| Woodworking. | 75,842 | 30,020 | 800 |  | 1,875 | 20,189 |
| Textile... | 298,823 | 7,351 |  | 450 |  | 306,624 |
| Clothing, | 620,205 | 107,052. | 160,270 | 2,540 | 19,341 | 909,408 |
| Food and tobacco. | 34,717 | 14,420 | 10,120 | 4,427 | 22,977 | 86,661 |
| Leather. | 17,330 |  | 2,270 | $\stackrel{-}{\square}$ | - | 19,600 |
| General transport... | 1,153,665 | 23,988 | 300 | 19,360 | 27,288 | 1,224,601 |
| Unskilled labour... . | 493,589 | 20,382 |  |  | 7,660 | 521,681 |
| Miscellaneous. | 79,803. | 9,850 | 1,465 | 4,263 | 3,245 | 98,626 |
| Total Working Days | 8,888,381 | 1,287,678 | 430,054 | 106,149 | 208,277 | 10,920,539 |

## LABOUR

Strikes and Lockouts in Canada, 1901-1916.


Number of Strikes and Lockouts.


Number of Employees involved ("000" omitted).


Time Losses in Number of Working Days_(" 000 " omitted).

## LABOUR CONDITIONS IN 1916

2.-Number of Dispntes, Estahilshmentr, Employees and Time Losses, 1901-1916.

| Fiscal Year. | Disputes. | Establish ments con-cerned. | Emaffect ed. | Approximaste Time Losses. | Fiscal Year. | Disputes. | $\begin{gathered} \text { Estab- } \\ \text { fish } \\ \text { ments } \\ \text { con- } \\ \text { cenr- } \\ \text { ed. } \end{gathered}$ | Employees atiect ed. | Approxi- <br> mate Time Losses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | $\begin{aligned} & \text { Work- } \\ & \text { ing } \\ & \text { days. } \end{aligned}$ |  | No. | No. | No. | Working days |
| 1901. | 104 | 273 | 28,096 | 632,317 | 1909. | 69 | 397 | 17,332 | 871,845 |
| 1902. | 121 | 420 | 12,264 | 120,940 | 1910. | \$4 | 1,335 | 21,280 | 718,635 |
| 1903. | 146 | 927 | 50,041 | 1,226,500 | 1911. | 99 | 475 | 30,094 | 2,046,650 |
| 1904. | 99 | 575 | 16,482 | 265,004 | 1912. | 150 | 989 | 40,511 | 1,099,208 |
| 1905. | 89 | 437 | 16,233 | 217,244 | 1913... | 113 | 1,015 | 39,536 | 1,287,678 |
| 1906. | 141 | 1,015 | 26,050 | 359,797 | 1914. | 44 | 205 | 8,678 | 430,054 |
| 1907 | 149 | 825 | 36,229. | 621,0\% | 1915. | 43. | 9.9 | 9,146 | 106,149 |
| 1908. | 68 | 175 | 25,293 | 708,285 | 1916. | 75 | 271 | 21,157 | 208,2\% |
|  |  |  |  |  | Total. | 1,594 | 9,430 | 398,401 | 10,920,539 |

3.-Disputes Classified by Industries, 1901-1916.

| Industries. | 1901-10 | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No. | No. | No. | No. |
| Fishing. | 10 | - | 1 | 3 | - | - | - | 14 |
| Lumbering.... | 28 | - | 4 | 3 | - | - | - | 35 |
| Mining. | 87 | 7 | 6 | 6 | 3 | 6 | 10 | 125 |
| Building. | 266 | 29 | 52 | 31 | 12 | 4 | 7 | 401 |
| Metal. | 170 | 18 | 29 | 29 | 14 | 13 | 15 | 288 |
| Woodworking. | 47 | 2 | - | 3 | 1 | - | 1 | 54 |
| Printing and allied. | 28 | - | 3 | - | - | 1 | - | 32 |
| Textile. | 36 | 4 | 1 | 3 | - | 1 | - | 45 |
| Ciothing.... | 107 | 13 | 19 | 10 | 5 | 4 | 11 | 169 |
| Food and tobacco.. | 62 | 3 | 2 | 4 | 2 | 3 | 7 | 83 |
| Leather | 20 | 1 | - | - | 2 | - | - | 23 |
| General transport. | 97 | 12 | 14 | 8 | 1 | 4 | 49 | 155 |
| Unskilled labour. . | 73 | 4 | 9 | 7 | - | - | 3 | 96 |
| Miscellaneous... | 39 | 6 | 10 | 6 | 4 | 7 | 2 | 74 |
| Total. .. | 1,070 | 99 | 150 | 113 | 44 | 43 | 75 | 1,594 |

Proceedings under the Industrial Disputes Investigation Act.A review of the proceedings which have occurred under the Industrial Disputes Investigation Act from the time of its enactment in March, 1907, to the end of the year 1916 shows that 217 applications were received for the establishment of Boards of Conciliation and Investigation, as a result of which 184 boards were established. In thirty-two cases the matters in dispute were adjusted by mutual agreement whilst steps were pending for the establishment of Boards or the necessity for procedure disappeared. In the remaining case a board was established early in the year 1917 The number of employees affected by these 217 disputes was approximately 350,000 . During this period there were only twenty-one cases in which strikes were neither averted nor ended through the instrumentality of the Act. Eleven of these twenty-one strikes occurred in the mining industry, nine in connection with transportation, and one in the operation of municipal electric work. During the calendar year 1916 twenty-seven applications were received for boards, certain proceedings also taking place in connection with two applications received prior to the beginning of the year. In sixteen cases boards were established, and in ten cases the matters were adjusted without the necessity of establishing boards. In the remaining case a board was established early in the year 1917 Only one strike occurred after the matters in dispute had been referred to a board under the provisions of the Act.

Fair Wages Branch.-The Fair Wages Branch of the Department of Labour is charged with the preparation of sehedules of minimum wage rates, which are inserted in Dominion Government contracts, and must be adhered to by contractors in the execution of the respective works. The number of Fair Wages Schedules prepared since the adoption of the Fair Wages Resolution in 1900 up to the end of the year 1916 is 3,561 , of which seventy-eight were prepared during the calendar year 1916.

## PRICES OF COMMODITIES IN CANADA.

Wholesale Prices.-The Special Report on Wholesale Prices in Canada during the twenty years 1890-1909, issued by the Department of Labour in 1910, has been followed by similar annual reports for each year, 1910 to 1916. The changes in prices are measured by index numbers which are precentages of the average prices during the decade 1890 to 1899. The list includes 230 commodities from 1890 to 1909 and

## PRICES OF COMMODITIES IN CANADA

Course of Wholesale Prices in Canada, 1890-1916.


Number of Commodities: 272. Average Prices, $1890-1899=100$

## LABOUR.

272 commodities from 1910 to 1916, and is divided into thirteen groups. The tables and diagrams show the course of prices by groups for each year back to 1890, and by months during 1916.

It will be seen that the advance in 1916 was very mueh greater than during 1915, which was greater than in any previous year. All groups showed great increases except lumber and the miscellaneous sub-groups. In farm products and foods the rise was particularly steep in the latter part of the year as a result of crop shortage.

Retail Prices.-The " Labour Gazette" published each month the retail prices of some thirty foods, coal, wood and coal oil and the prevailing rates for the rent of a six-roomed house, in some sixty localities in Canada having a population of 10,000 or over. Similar returns have been published monthly since January, 1910, and additional returns for December, 1900 and 1905, were published in the Report of the Board of Inquiry into the Cost of Living, 1914 and 1915. From these figures calculations of typical weekly expenditures have been made in terms of the average prices for each year and each month. The figures for the years 1910 to 1914 were given in the Canada Year Book, 1914, page 534. Table 6 shows the expenditures for 1900, 1905, 1915, each month for 1916 and the average for the year. Table 7 shows the weekly cost ${ }^{\text {P }}$ of staple foods, fuel and lighting in cities by provinces.

Course of Wholesale Prices in Canada, 1916.


INDEX NUMBERS OF COMMODITIES.
4.-INDEX NUMBERS OF ALL COMMODITIES BY GROUPS, 1890-1916. (Average Prices 1890-1890 $=100$.)

| GROUPS. | 1890 | 1891 | 1892 | 1893 | 1894 | 1895 | 1896 | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Grains and fodder.... | 7 |  | 106.7 | 99.1 | 94.3 | . 8 | 85.2 | . 6 | 98.8 | . 7 | 99. | 107. | 118. 1 | 106.5 | 15 | 116 | . 5 | 140.2 | 48 | 140 | 140.7 | 148 | 187. | 138.8 | 156.5 | 186.0 | 105.2 |
| als |  |  |  | 117.7 | 98.7 | 92.2 | 82.4 | 90.4 | 97.9 |  |  |  |  | 117.9 |  | 120. | 130.1 | 133.8 | 129.6 | 148.6 | 163.6 | 146.6 | 160.8 | 180.8 | 192. |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 120.2 |  |  | 133.6 | 135.7 | 136.2 | 169.0 |  | 154 |  | 183.5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 143.6 | 155.7 |  |  |  |  |
| 5. Other f |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 118.7 | 126.0 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ote. |  |  |  |  | 8.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| B. Metals and imple- <br> (a) Metals....... |  |  |  |  | 91.1 | 87.0 | 87.5 | 85.7 |  |  |  |  |  | 105.5 | 99.7 | 108.4 |  |  | 1 |  |  |  |  |  |  | 152. | 198.9 |
| ) In | 8 |  |  |  |  | 101.0 | 98.5 | 1 | 94.3 |  |  | 2 |  |  | 106.2 |  |  |  |  |  | 104.5 | 104.5 |  |  |  |  | 179.6 |
| Fuel and |  |  |  |  | 97.5 |  | 98.9 | 96.4 | . 5 |  |  |  |  |  |  |  |  |  |  |  | 103.0 | 100.5 |  | 18.2 | 110 | 108.8 | 132.6 |
| 10. Building materials:- <br> (a) Lumber. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 182.1 |
| (b) Miscellaneous. . |  |  |  |  |  |  |  |  |  |  |  |  |  | 107.7 |  | 106.8 |  |  |  |  | 109.2 |  |  |  |  |  | 9 |
| Paints,oile, | 109.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 135.2 | 145.5 |  |  |  |  |  |  |
| House |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 157.1 |
| 12. Drugs and chemicals.. |  |  |  |  |  | 100.3 | 89.8 | 96.5 | 96.8 | 3.3 |  |  |  |  |  | 100.4 |  | 108.5 | 107.1 |  |  | 12. |  | 113.8 |  |  | 22.2 |
| 13. Miscellaneous:- <br> (a) Furs. | 88.5 | 9 |  |  | . 5 | 80.5 | 80.2 |  | 11. | 1 |  | 140.9 | 145.2 | 168.1 | 171.3 | 17. | 229.2 | , | 23 | 227.2 | 234.5 | 262.9 | 297.3 | 307.8 |  | 161.0 |  |
| $\begin{gathered} \text { Liquors, to } \\ \text { cos...... } \end{gathered}$ | . 9 |  |  | 99.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 151. |  |  |  |  | 4 |
| (c) Sundry |  | 106.7 |  | . 3 | 93.7 | 91.3 | 92.6 | 91.2 | 103.3 | 109.5 |  |  |  |  |  |  | 120. |  |  |  |  | 110. |  |  |  |  | 143.0 |
| All Commodities...... |  | 108.5 |  | , | 97.2 | 95.6 | 92.5 | 92.2 | 96.1 | 100.1 | 108.2 | . | 109.0 | 110.5 | 111. | 113 | 120.0 | 126.2 |  | 121.2 | 124.2 | 127.4 | 134.4 | 135.5 |  |  |  |

(Average Prices 1890-1899 = 100.)

| GROUPS. | Jan. | Feb. | Mar. | April. | May. | June. | July. | Aug. | Sept. | Oet. | Nov. | Des. | Year. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Grains and fodder. | 181.0 | 179.1 | 172.5 | 177.0 | 184.0 | 178.4 | 179.0 | 187.9 | 200.5 | 220.7 | 246.1 | 238.4 | 195.2 |
| 2. Animals and meats. | 196.3 | 202.4 | 200.1 | 218.1 | 229.2 | 234.4 | 231.7 | 228.1 | 213.8 | 211.5 | 217.5 | 234.5 | 217.7 |
| 3. Dairy products | 186.7 | 175. S | 1711 | 170.1 | 153.8 | 154.1 | 100.5 | 169.4 | 184.8 | 211.4 | 227.8 | 245.7 | 183.5 |
| 4. Fish. | 163.7 | 160.1 | 161.9 | 171.4 | 168.1 | 169.1 | 155.9 | 157.7 | 174.6 | 168.2 | 171.3 | 180.0 | 184.8 |
| 5. Other foods- <br> (a) Fruits and vegetahles.. | 169.6 | 171.0 | 169.3 | 173.5 | 172.8 | 178.1 | 170.5 | 155.6 | 152.7 | 165.8 | 214.2 | 330.1 | 155.7 |
| (b) Miscellaneous | 143.2 | 145.0 | 145.2 | 147.3 | 153.7 | 152.4 | 153.6 | 157.0 | 161.2 | 168.4 | 1785 | 174.1 | 156.6 |
| 6. Textiles | 174.2 | 179.8 | 183.7 | 186.1 | 188.1 | 188.2 | 102.7 | 195.6 | 197.4 | 202.3 | 230.5 | 216.3 | 193.4 |
| 7. Hides, leather, boots and shoes. | 193.5 | 194.9 | 203.1 | 207.6 | 229.5 | 242.1 | 2402 | 234.8 | 235.4 | 237.8 | 272.6 | 309.0 | 233.4 |
| S. Metals and imploments- <br> (a) Metals. | 198.4 | 222.1 | 222.0 | 215.3 | 221.1 | 199.9 | 191.9 | 1844 | 192.6 | 192.6 | 188.1 | 208.3 | 198.9 |
| (b) Implements | 116.6 | 122.0 | 137.9 | 134.8 | 134.4 | 136.1 | 136.7 | 136.7 | 139.1 | 141.2 | 145.0 | 151.5 | 135.2 |
| 9. Fuel and lighting | 122.0 | 124.2 | 129.6 | 124.4 | 128.0 | 126.8 | 123.6 | 126.1 | 128.2 | 1343 | 156.9 | 163.4 | 132.5 |
| 10. Ruilting materials(ti) Lumber... | 178.1 | 177.3 | 180.2 | 182.4 | 182.4 | 182.2 | 182.2 | 1822 | 182.9 | 185.5 | 184.1 | 185.3 | 182.1 |
| (b) Miscellaneous | 132.4 | 136.6 | 141.1 | 152.5 | 153.8 | 155.2 | 153.6 | 154.0 | 160.8 | 165.3 | 171.9 | 181.6 | 184.9 |
| (c) Paints, oils and glass | 193.9 | 192.5 | 190.1 | 198.9 | 196.8 | 193.7 | 197.4 | 199.9 | 199.7 | 2037 | 215.1 | 2220 | 200.5 |
| 51. Htoree farnishing | 146.7 | 147.4 | 148.7 | 148.7 | 152.3 | 153.3 | 152.6 | 162.3 | 163.0 | 186 t | 169.0 | 171.8 | 157.1 |
| 12. Drugs and chemeads | 250.4 | 255.8 | 261.4 | 260.9 | 263.5 | 262.1 | 249.0 | 249.4 | 2519 | 243.9 | 239.2 | 238.5 | 252.2 |
| 13. Miscellaneous- <br> (a) Furs, raw. | 269.6 | 273.7 | 287.4 | 295.7 | 307.8 | 300.8 | 292.3 | 292.3 | 2923 | 292.3 | 342.7 | 351.0 | 299.8 |
| (h) Liquors and tolacco. | 136.7 | 143.5 | 143.5 | 143.5 | 143.6 | 143.6 | 13 f .7 | 139.0 | 141.3 | 143.6 | 14.9.2 | 169.1 | 142.4 |
| (c) Sundries | 135.1 | 139.4 | 139.2 | 139.9 | 141.8 | 141.6 | 142.1 | 142.6 | 142.5 | 146.6 | 150.7 | 154.8 | 143.0 |
| All Commodities | 172.1 | 175.9 | 177.9 | 181.0 | 183.3 | 183.6 | 180.9 | 180.7 | 183.4 | 1882 | 200.5 | 2074 | 182.0 |


| Commodities. | Quantity. | 1000. | 1005. | 1915. | 1916. | 1916. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Jen. | Feb. | Mar. | April. | May, | June. | July. | Aug. | Sept. | Oet. | Nov. | Dec. |
|  | 2 lbs. | c. 27.2 | 30.4 | ${ }_{47.6}$ | $\stackrel{\text { c. }}{50.3}$ | ${ }_{47.2}$ | ${ }_{47.6}^{\text {c. }}$ | c. 44 | c. 48.4 | 50.8 | ${ }_{52.0}$ | ${ }_{52.6}$ | 53.4 | 52.4 | c. 4. | ${ }_{52.2}$ | 0. ${ }^{1}$ |
| Beet, shirlout | ${ }_{2}$ \% | 19.6 | 34.4 | 32.8 | 34.0 | 32.4 | 33.0 | 33.2 | 337 | 34.0 | 35.0 | 35.2 | 34.2 | 350 | 344 | 32.2 | 1.6 |
| Veal, roast.. |  | 19.0 | 11. |  |  |  |  |  |  |  |  |  |  | 19.8 | 31 | 31.2 | 31.8 |
| Veal, roast. | , | 10.0 | 11.3 | 27.5 | 18.7 | 17.8 | 18.2 | 179 | 18.1 | 18.4 | 18.8 | 19.2 | 19.1 | 19.8 | 19.7 | 18.8 | 19.3 |
| Mutton, roast | 1 | 11.8 | 12.2 | 20.9 | 28.3 | 21.1 | 21.7 | 22.1 | 22.6 | 23.3 | 24.2 | 23.9 | 23.8 | 23.8 | 24.2 | 24.3 | 24.2 |
| Pork, fresh, roast | 1 | 12.2 | 13.1 | 19.2 | 22.0 | 19.9 | 20.4 | 20.5 | 20.9 | 21.8 | 22.2 | 22.4 | 22.7 | 29.8 | 23.5 | 23.4 | 23.7 |
| Pork, salt, mess | 2 | 21.8 | 25.0 | 35.4 | 38.7 | 36.0 | 36.6 | 86.8 | 37.0 | 36.8 | 40.2 | 38.8 | 38.8 | 39.2 | 40.2 | 42.8 | 41.2 |
| Bacon; breakfast | 1 | 15.4 | 17.5 | 25.6 | 38.8 | 20.7 | 26.8 | 27.2 | 27.6 | 28.4 | 28.9 | 28.7 | 29.2 | 29.9 | 30.5 | 30.6 | 30.9 |
| Lard, pure leaf. |  | 26.2 | 2S 2 | 35.6 | 40.4 | 36.6 | 37.0 | 37.2 | 37.8 | 39.0 | 40.2 | 40.4 | 40.4 | 41.0 | 42.2 | 45.0 | 47.6 |
| Egges, tresh. | 1 doz . | 25.7 | 3010 | 32.7 | 38.0 | 46.4 | 42.2 | 33.9 | 266 | 26.2 | 28.6 | 31.0 | 33.3 | 37.2 | 43.6 | 50.1 | 56.7 |
| Etgs, storage | $1{ }^{1}$ | 2 i .2 | 23.4 | 28.6 | 32.7 | 313 | 34.7 | 29.1 | 26.0 | 24.4 | 26.2 | 28.0 | 29.7 | 33.7 | 38.3 | 41.3 | 44.9 |
| Milk..... | 6 gts . | 36.6 | 39.6 | 52.9 | 52 析 | 52.2 | 52.2 | 52.8 | 52.8 | 51.0 | 51.0 | 45.0 | 51.0 | 52.2 | 54.6 | 56.4 | 59.4 |
| Butter, dairy | 2 l ¢ | 44.2 | 494 | 61.6 | 88.7 | 66.6 | 65.8 | 67.0 | 66.5 | 64.2 | 61.2 | 60.4 | 62.6 | 68.4 | 74.2 | 82.8 | 84.2 |
| Rutter, creame |  | 23.5 | 277 | 35.3 | 38.5 | 38.1 | 38.5 | 38.7 | 38.3 | 36.8 | 35.1 | 34.5 | 35.6 | 38.9 | 42.4 | 45.6 | 49.0 |
| Cheese, old. | 1 | 16.1 | 17.6 | 23.8 | 26.0 | 24.4 | 24.4 | 24.3 | 24.7 | 25.1 | 25.5 | 25.6 | 23.5 | 26.3 | 27.8 | 28.7 | 29.9 |
| Cheese, new |  | 14.6 | 15.7 | 21.6 | 24.2 | 23.4 | 22.6 | 23.4 | 23.3 | 23.8 | 23.8 | 23.6 | 23.5 | 23.0 | 26.1 | 26.9 | 28.2 |
| Bread, plain, white | 15 | 55.5 | 58.5 | 70.7 | 74.8 | 66.0 | 67.5 | 69.0 | 69.0 | 70.5 | 70.5 | 70.5 | 73.5 | 78.0 | 84.0 | 87.0 | 91.5 |
| Flour, ifmily. | 10 | 25.0 | 28.0 | 39.5 | 41.7 | 37.0 | 38.0 | 38.0 | 37.0 | 37.0 | 37.0 | 37.0 | 40.3 | 43.0 | 48.0 | 54.0 | 54.0 |
| Rolled osts.. | 5 * | 18.0 | 195 | 25.1 | 24.6 | 24.0 | 24.0 | 24.0 | 24.0 | 33.5 | 24.0 | 24.0 | 24.0 | 24.5 | 25.0 | 27.0 | 27.0 |
| Rice, sood medium | 2 | 10.4 | 10.6 | 11.9 | 13.1 | 12.0 | 12.4 | 12.4 | 12.8 | 13.0 | 13.0 | 13.4 | 13.4 | 13.6 | 13.6 | 13.4 | 13.6 |
| Beans, handpicked. | 2 | 8.6 | 9.4 | 14.5 | 19.5 | 17.2 | 17.6 | 18.2 | 18.6 | 19.2 | 19.8 | 19.4 | 19.4 | 1.9 .8 | 20.8 | 22.4 | 23.8 |
| Apples, evaporated |  | 9.9 | 7.7 | 11.9 | 13.4 | 12.5 | 12.8 | 13.5 | 13.3 | 14.3 | 13.5 | 13.4 | 131 | 13.4 | 134 | 13.6 | 13.8 |
| Prunes, medium. | 1 | 11.5 | 9.6 | 13.8 | 13.1 | 12.7 | 12.9 | 12.8 | 13.0 | 12.9 | 13.2 | 13.1 | 181 | 13.1 | 13.2 | 13.3 | 13.3 |
| Susar, granulated | 4 | 21.6 | 22.0 | 31.4 | 35.8 | 31.2 | 31.6 | 32.8 | 34.4 | 37.2 | 38.0 | 38.4 | 38.0 | 36.4 | 36.8 | 37.6 | 37.2 |
| Sugar, yellow. | 2 | 10.0 | 9.8 | 14.4 | 16.6 | 14.4 | 14.6 | 15.0 | 16.0 | 17.0 | 17.6 | 17.6 | 17.4 | 17.0 | 16.8 | 17.6 | 17.6 |
| Ter, black, medium |  | 8.2 | 8.3 | 9.4 | 9.9 | 0.7 | 9.8 | 9.9 | 9.8 | 9.8 | 9.9 | 9.9 | 9.8 | 9.9 | 9.9 | 9.9 | 0.9 |
| Tea, green, medium. |  | 8.7 | \$.7 | 9.7 | 102 | 10.0 | 10.2 | 10.1 | 10.2 | 10.3 | [0.7 | 10.3 | 10.3 | 10.8 | 10.2 | 9.8 | 9.7 |
| Coffee, medium |  | 8.6 | 8.8 | 9.8 | 9.9 | 9.8 | 9.9 | 10.0 | 0.9 | 9.9 | 9.9 | 10.0 | 9.9 | 9.9 | 9.9 | 9.8 | 9.9 |
| Potatoes. | 2 pks . | 24.1 | 28.0 | 33.6 | 58.7 | 47.0 | 56.5 | 61.0 | 61.5 | 60.5 | 80.5 | 58.6 | 57.7 | 63.2 | 53.0 | 61.0 | 64.0 |
| Vinegar, white wine | $\frac{1}{1} \mathrm{pt}$. | .7 | . 7 | . 7 | . 8 | . 8 | . 8 | . 8 | . 8 | . 8 | . 8 | . 8 | . 8 | . 8 | 8 | . 8 | . 8 |
| All foods. |  | 35.48 | \$ 5.96 | 67.87 | \$8.79 | \$8.282 | \$8.404 | \$8.380 | \$8.342 | \$8.378 | \$8.513 | \$8.457 | \$8.627 | \$8.86\% | \$9.298 | $\$ 9.812$ | \$10.107 |
| Starch, laundry. | ! 1 b . | $\underline{9.9}$ | c. 3.0 | c. ${ }^{\text {c. }}$ | 0. 3.3 | c. 3.2 | c. ${ }_{3}$ | c. 3.8 | c. $3.3$ | $\begin{aligned} & \mathrm{e} . \\ & 3.3 \end{aligned}$ | c. $3.3$ | c. 3.3 | c. 8.8 | $\begin{aligned} & \text { c. } \\ & 3.32 \end{aligned}$ | $\begin{aligned} & \text { c. } \\ & 3.5 \end{aligned}$ | $\begin{aligned} & \text { e. } \\ & 3.3 \end{aligned}$ | $\stackrel{\text { e. }}{3.4}$ |
| Coal, anthrswite. | $\frac{1}{18}$ ton | 39.5 | 45.2 | 52.7 | 56.0 | 53.2 | 53.6 | 53.5 | 58.5 | 53.9 | 54.4 | 84.7 | 55.0 | 57.2 | 579 | 62.4 | - 83.1 |
| Coal, bjtuminous |  | 31.1 | 32.3 | 38.8 | 39.4 | 36.9 | 37.4 | 37.6 | 37.7 | 37.9 | 37.8 | 38.0 | 38.5 | 39.1 | 39.9 | 44.2 | 47.3 |
| Wood, bard. | ${ }^{*}$ cord | 32.5 | 35.3 | 38.8 | 42.9 | 41.6 | 41.5 | 41.6 | 41.6 | 41.6 | 41.8 | 41.9 | 42.6 | 43.1 | 43.9 | 48.5 | 44.5 |
| Wood, soft |  | 22.6 | 25.5 | 30.8 | 30.8 | 30.7 | 30.4 | 30.3 | 30.2 | 30.1 | 30.2 | 3 3. 2 | 30.3 | 31.0 | 31.6 | 32.7 | 32.2 |
| Cobl oil. | 1 gal . | 240 | 24.5 | 23.3 | 23.0 | 23.0 | 23.0 | 23.0 | 23.0 | 23.0 | 23.0 | 228 | 23.0 | 23.0 | 33.0 | 22.9 | 23.1 |
| Furl and lighting |  | \$1.50 | 81.63 | \%1.83 | 81.92 | \$1.854 | \$1.859 | $81.86{ }^{\text {m }}$ | \$1.850 | \$1865 | \$1.87\% | 81.876 | 81.806 | 8193 s | \$1.982 | \$2.140 | \$2.102 |
| Rent |  | \$2 37 | \$2.88 | \$4.12 | \$4.04 | \$3.975 | 83.975 | \$ 3.960 | \$3.A72 | 81.03 | \$1.060 | \$1.040 | 84. 1977 | \$1.081 | \$1.082. | \$1.100 | 84.055 |
| Grand total |  | \$9.38 | \$10.51 | \$13.85 | \$14.78 | \$14.143 | \$4.270 | \$14.213 | \$14.211 | \$14.301 | \$14.458 | \$14.406 | \$14.63? | \$55.013 | \$15.376 | 816.068 | \$36.328 |

## LABOUR

## 7.-Weekly Cost of a Family Budget of Staple Foods, Frel and Lighting, and Rent in terms of the average prices of the cities in each province of Canada, 1910-15, December 1914-16.

Staple Foods.

| PROVINCE | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | $\begin{aligned} & \text { Dee. } \\ & 1914 \end{aligned}$ | $\begin{aligned} & \text { Dec. } \\ & 1915 \end{aligned}$ | Dec. <br> 1916 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | $\leqslant$ | $\$$ | $\leqslant$ | 8 | \$ | \$ | 5 | \$ |
| Prince Edward Is. | 5,812 | 5, 295 | 6,107 | 6,338 | 6,693 | 6,617 | 6,894 | 6,953 | 8,294 |
| Nova Scotia. | 6.817 | 6.776 | 7.166 | 7.289 | 7.475 | 7.826 | 7.800 | 8.239 | 9.977 |
| New Brunswick. | 6.548 | 6.836 | 7.130 | 7.041 | 7.443 | 7.682 | 7.755 | 8.108 | 9.865 |
| Quebec. | 6.331 | 6.457 | 6.968 | 6.870 | 7.158 | 7.387 | 7.310 | 7760 | 9.738 |
| Ontario.. | 6.504 | 6.696 | 7.251 | 7.208 | 7.479 | 7.676 | 7.742 | 8.114 | 10.269 |
| Manitobs. | 7.462 | 7.405 | 7.884 | 7.873 | 8.149 | 8.071 | 8.269 | 8.427 | 9.980 |
| Saskatehewan. | 7.859 | 8.083 | 8.164 | 8.250 | 8.327 | 8.299 | 8.805 | 8.315 | 10.335 |
| Alberta. | 7.998 | 8.081 | 8.147 | 8.327 | 8.366 | 8.209 | 8.467 | 8.356 | 10.351 |
| British Columbia. | 8.321 | 8.789 | 9.028 | 9.128 | 7.606 | 8.807 | 9.796 | 8.649 | 10.657 |

Fuel and Lighting. ${ }^{1}$

| Prince Edward Is. | 1.278 | 1.278 | 1.494 | 1.470 | 1.504 | 1.508 | 1.486 | 1.548 | 1.908 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nova Scotis | 1.431 | 1.366 | 1.448 | 1.526 | 1.569 | 1. 5.54 | 1.552 | 1.553 | I. 955 |
| New Brunsw | 1.628 | 1.601 | 1.604 | 1.676 | 1.762 | 1.761 | 1.784 | 1.788 | 2.057 |
| Quebec. | 1.646 | 1.690 | 1.702 | 1.785 | 1.796 | 1. 767 | 1.793 | 1.752 | 2.057 |
| Ontario | 1.678 | 1.716 | 1. 743 | 1.814 | 1.802 | 1.78\% | 1.782 | 1.779 | 2,088 |
| Manitoba. | 2.330 | 2.333 | 2.373 | 9.335 | 2.362 | 2.306 | 2.320 | 2.228 | 2.523 |
| Saskatchewan. | 2.670 | 2.732 | 2.580 | 2.652 | 2.604 | 2.372 | 2.560 | 2.394 | 2.585 |
| Albert | 1.561 | 1.777 | 1.859 | 1. 649 | 1.706 | 1.695 | 1.726 | 1.706 | 1.710 |
| British Columbia | 2.103 | 2.182 | 2.220 | 2.245 | 2.567 | 2.301 | 2.367 | 2.180 | 2.179 |

Rent.

Prince Edward Is.
Nove Scotia.
New Brunswick.
Quebec.
Ontario..
Manitoba.
Saskatchewan.
Alberta.
British Columbia.

|  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2.00 | 2.00 | 1.92 | 1.75 | 1.750 | 1.750 | 1.750 | 1.750 | 2.250 |
| 4.02 | 3.40 | 3.70 | 3.92 | 4.258 | 4.150 | 4.150 | 4.100 | 4.150 |
| 2.85 | 2.87 | 2.90 | 3.08 | 3.374 | 3.459 | 3.450 | 3.452 | 3.500 |
| 2.85 | 2.98 | 3.38 | 3.52 | 3.617 | 3.556 | 3.500 | 3.545 | 3.783 |
| 3.48 | 3.62 | 3.92 | 4.10 | 4.215 | 3.857 | 4.042 | 3.780 | 3.957 |
| 6.20 | 6.12 | 6.90 | 7.38 | 6.677 | 4.593 | 5.812 | 4.870 | 4.750 |
| 8.18 | 8.75 | 9.15 | 9.58 | 7.682 | 5.468 | 6.095 | 5.150 | 5.310 |
| 5.68 | 6.42 | 6.60 | 7.58 | 7.430 | 5.608 | 6.130 | 5.217 | 5.125 |
| 5.35 | 5.92 | 6.12 | 7.12 | 5.306 | 4.535 | 4.725 | 4.017 | 3.928 |

${ }^{1}$ Coal, wood and coal oil. No allowance is made for the varying extent to which these are used in the different localities and provinces.

## X.-FINANCE.

Under the general heading of Finance in Section $X$ are grouped statistics relating to the public accounts of the Dominion Government, including revenue and expenditure, public debt, assets and liabilities, coinage and inland revenue. Tables bave been added showing the receipts and expenditure of each of the nine provincial governments of Canads, and these are followed by municipal statistics, values of building permits and statistics of banking, insurance and loan companies and building societies.

## PUBLIC ACCOUNTS.

Financial System and Public Revenue.-The Canadian system of public finance, which is based upon that of the British, includes a Consolidsted Fund to which are credited and out of which are paid the revenues and expenditures properly relating to the fiscal year ending March 31. There are also miscellaneous accounts dealing with loans, debt-redemption, railway administration, capital expenditure on public works and a variety of other subjects. For the fiscal year 1912-13 the total receipts on Consolidated Fund Account reached the then record total of $\$ 168,689,903$. In the following year, 1913-14, they receded to $\$ 163,174,395$; for $1914-15$, including the first eight months of the war, they fell to $\$ 133,073,482$, and for the first time since 1897 there was a deficit, the expenditure exceeding receipts by $\$ 2,449,725$. In the following year, 1915-16, with increase of taxation and improving conditions, the revenue rose to $\$ 172,147,838$, an amount higher than any previous total; and the account showed a surplus of $\$ 41,797,111$. For the fiscal year ended March 31, 1917, under the influence of an enormous expansion of trade, the revenue rose still higher to the record total of $\$ 232,601,294$, with a surplus of $\$ 84,001,951$, which is more than double the surplus of the previous year. The revenue exceeded $\$ 100,000,000$ for the first time in 1910, and it has in 1916-17 for the first time exceeded $\$ 200,000,000$. Table 1 shows that the greatest increase accrued in the item for customs, the receipts from which in 1916-17, viz., $\$ 134,043,842$, exceeded the total revenue of the country for the year 1914-15. In his Budget speech on April 24, 1917, the Minister of Finance stated that during the fiscal year 1916-17 the revenue had enabled the country to pay from income all current and capital expenditure, all interest charges upon the increased national debt, all pension outlays and, in addition, to devote the sum of $\$ 60,000,000$ to payment of the principal of the war expenditure.

Consolidated Fund.-Table 1 shows by principal items the receipts and expenditures and the surplus on Consolidated Fund Account for the fiscal years 1914 to 1917 . Table 2, for the period 1868 to 1917 , differentiatés between reeipts from castoms and excise (taxes) and receipts from other sources, and shows the surplus or deficit each year on Consolidated Fund Account. From this table it will be seen that during the 50 years that have elapsed since Confederation surpluses have accrued in 37 years and deficits were incurred in only 13 . Tables

## FINANCE

3-5 record details of the revenue and expenditure on Consolidated Fund Account. Tables 6 and 7 show the total annual expenditure and receipts, including the expenditure and receipts on Consolidated Fund Account and extraneous items not credited or debited to that account.

Public Debt.-Tables 9-12 relate to the Public Debt, showing in Tables 9-11 the amounts at which the various items stood in each year from Confederation, and in Table 12 particulars of the loans forming part of the Funded Debt. On March 31, 1917, the net public debt was $\$ 879,186,298$, which on the basis of the estimated population of $8,361,000$ in 1917 represents $\$ 105$ per head, an increase of $\$ 62$ per head as compared with 1914. As compared with 1914 the net public debt shows an increase of $\$ 543,189,448$, this increase being due to the war.

## 1.-Receipts and Expenditures on Consolidated Fund Account, 1914-1917.

RECEIPTS.

| Items. | 1914. | 1915. | 1916. | 1917. |
| :---: | :---: | :---: | :---: | :---: |
| Customs. | $\stackrel{8}{8}{ }_{104,691,28.43}$ | 75,941,219.72 | 98,649,409.48 | 3,842.14 |
| Excise. |  |  | 98,049,409.48 | 34,043,842.14 |
| Post Office | 12,954,529.92 | 13,046,664.68 | 18,858,690.10 | $24,412,348.06$ |
| Railways. | 13,394,317.37 | 12,149,357.32 | 18,427,908.65 | 23,539,758.61 |
| Miscellaneous. | 10,682,271.96 | 10,456,509.22 | 13,783,338.46 | 29,702,960.73 |
| Totals. | 163,174,394.56 | 133,073,481.73 | 172,147,838.27 | 232,601,294.00 |

EXPENDITURE.

| Char | 14 | 17,937 | 23,926,441.95 | 37,770,650.72 |
| :---: | :---: | :---: | :---: | :---: |
| Provincial Subsidies. | 11,280,468.67 | 11,451,673.28 | 11,451,673.28 | 11,469,148.48 |
| Civil Government | 5,607,794.95 | 6,157,966.62 | 6,408,856.63 | 6,466,358.63 |
| Public Works ${ }^{2}$ | 19,007,512.63 | 19,343,532.35. | 12,039,252.06 | 8,633,095.80 |
| Defence. | 11,151,398.63 | 10,060,617.74 | 4,681,502.99 | 4,301,784.90 |
| Collection of Revenue. | 39,084,656.79 | 42,232,952.94 | 47,902,301.26 | 53,800,203.09 |
| Other items. | 26,500,523.86 | $28,339,179.53$ | 23,940,698.73. | 26,158,101.61 |
| T | 127,384,472.99 | 135,523,206.54 | 130,350,726.90 | 148,599,343.23 |
| Surplus. | 35,789,921.57 | 2,449,724.8 | 41,797,111,3 | 84,001,950.77 |

lincludes charges of management, interest, sinking funds and premium discount and exchange. ${ }^{2}$ Expenditure from Income. ${ }^{3}$ Deficit.
2.-Receipts on Consolidated Fund Account, 1868-1917.

| Fiscal Year. | Receipts from Taxes. | Receipts from various sources. | Total receipts. | Surplus in year. | Deficit in year. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1868. | $\stackrel{\$ 11,700,681}{ }$ | $\stackrel{\$}{\$ 1,987,247}$ | $\stackrel{\$}{*}$ | \$ ${ }_{\text {\$01,835 }}$ | \$ |
| 1869. | 11,112,573 | 3,266,602 | 14,379,175. | 341,091 |  |
| 1870. | 13,087,883 | 2,424,343 | 15,512,226 | 1,166,716 |  |
| 1871. | 16,320,369 | 3,015,192 | 19,335,561 | 3,712,479 |  |
| 1872 | 17,715,552 | 2,999,262 | 20,714,814 | 3,125,345 |  |
| 1873. | 17,616,555 | 3,196,914 | 20,813,469 | 1,638,821 | - |
| 1874. | 20,129,185 | 4,075,908 | 24,205,093 | 888,776 | - |
| 1875. | 20,664,879 | 3,983,836. | 24,648,715 | 935.644 | - |

## PUBLICACCOUNTS

2.-Receipts on Consolidated Fund Account, 1868-1917-concluded.

| Fiscal Year. | Receipts from Taxes. | Receipts from various sources. | Total receipts. | Surplus in year. | Deficit in year. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1876. | $\stackrel{\text { \% }}{\text { 18,614,415 }}$ | \% \$ ${ }^{\text {3 }}$, 172 | $\begin{gathered} \$ \\ 22,587,587 \end{gathered}$ | 1 | $\stackrel{\$}{\$, 900,785}$ |
| 1877 | 17,697,925 | 4,361,349 | 22,059,274 |  | 1,460,028 |
| 1878. | 17,841,938 | 4,533,073 | 22,375,011 | - | 1,128,146 |
| 1879. | 18,476,613 | 4,040,769 | 22,517,382 |  | 1,938,000 |
| 1880. | 18,479,577 | 4,827,830 | 23,307,407 | - | 1,543,228 |
| 1881. | 23,942,139 | 5,693,159 | 29,635,298 | 4,132,744 |  |
| 1882. | 27,549,047 | 5,834,409 | 33,383,456 | 6,316,352 |  |
| 1883. | 29,269,699 | 6,524,951 | 35,794,650 | 7,064,493 |  |
| 1884. | 25,483,199 | 6,378,763 | 31,861,962 | 754,256 |  |
| 1885. | 25,384,529 | 7,412,472 | 32,797,001 |  | 2,240,059 |
| 1886. | 25,226,456 | 7,950,584 | 33,177,040 | -7 | 5,834,572 |
| 1887 | 28,687,002 | 7,067,991 | 35,754,993 | 97,313 |  |
| 1888. | 28,177,413 | 7,731,051 | 35,908,464 |  | 810,031 |
| 1889. | 30,613,523 | 8,169,347 | 38,782,870 | 1,865,035 |  |
| 1890. | 31,587,072 | 8,292,853 | 39,879,925 | 3,885,894 |  |
| 1891. | 30,314,151 | 8,265,160 | 38,579,311 | 2,235,743 |  |
| 1892. | 28,446,158 | 8,475,714 | 36,921,872 | 155,978 |  |
| 1893. | 29,321,367 | 8,847,242 | 38,168,609 | 1,354,556 |  |
| 1894. | 27,579,203 | 8,795,490 | 36,374,693 | - | 1,210,332 |
| 1895. | 25,446,199 | 8,531,930 | 33,978,129 | - | 4,153,876 |
| 1896. | 27,759,285 | 8,859,306 | 36,618,591 | - | 330,551 |
| 1897 | 28,648,626 | 9,181,152 | 37,829,778 |  | 519,981 |
| 1898. | 29,576,456 | 10,978,782 | 40,555,238 | 1,722,712 |  |
| 1899. | 34,958,069 | 11,783,180 | 46,741,249 | 4,837,749 | - |
| 1900. | 38,242,223 | 12,787,771 | 51,029,094 | 8,054,714 |  |
| 1901. | 38,743,550 | 13,771,151 | 52,514,701 | 5,648,333 | - |
| 1902. | 43,389,112 | 14,661,678 | 58,050,790 | 7,291,398 | - |
| 1903. | 49,015,506 | 17,021,563 | 66,037,069 | 14,345,166 | - |
| 1904. | 53,661,319 | 17,008,498 | 70,669,817 | 15,056,984 |  |
| 1905. | 54,020,124 | 17,162,649 | 71,182,773 | 7,863,090 | - |
| 1806. | 60,074,818 | 20,064,542 | 80,139,360 | 12,898,719 | - |
| 1907 (9 mos.)... | 51,565,586 | 16,403,742 | 67,969,328 | 16,427,167 | - |
| 1908. | 73,325,963 | 22,728,543 | 96,054,506 | 19,413,054 | - |
| 1909. | 62,353,093 | 22,740,311 | 85,093,404 | 1,029,172 | - |
| 1910. | 75,409,487 | 26,094,224 | 101,508,711 | 22,091,964 | - |
| 1911. | 89,835,231 | 27,945,178 | 117,780,409 | 30,006,211 | $\sim$ |
| 1912. | 105,847,804 | 30,260,413 | 136,108,217 | 37,946,776 | - |
| 1913. | 135,092,358 | 33,687,545 | 168,689,903 | 56,630,366 | - |
| 1914. | 127,478,067 | 35,696,328 | 163,174,395 | 35,789,922 | - ${ }^{-}$ |
| 1915. | 97,715,441 | 35,358,041 | 133,073,482 | , | 2,449,725 |
| 1916. | 121,046,187 | 51,101,651 | 172,147,838 | 41,797,111 | - |
| 1917............ | 158,543,115 | 74,058,179 | 232,601,294 | 84,001,951 | - |

508
FINANCE.

## 3.-Details of Receipts on Consolidated Fund Accomat, 1901-1917.



[^33]
## PUBLIC ACCOUNTS.

## 3.-Details of Recelipts on Consolidated Fund Account, 1901-1917-con.

| Fiscal Year. | Gas inspection and law stamps. | Interest on investments. | Insurance superintendence. | Militia. | Miscellaneous receipts. | Ordnance lands. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ | \$ |
| 1901. | 27,290 | 1,784,834 | 11,356 | 47,694 | 14,683 | 14,594 |
| 1902. | 28,297 | 1,892,224 | 12,844 | 41,687 | 20,106 | 16,967 |
| 1903. | 45,290 | 2,020,953 | 13,485 | 41,792 | 26,022 | 35,706 |
| 1904. | 43,961 | 2,236,256 | 14,628 | 43,217 | 24,436 | 12,344 |
| 1905. | 49,142 | 2,105,031 | 15,729 | 46,167 | 34,436 | 10,309 |
| 1906. | 52,805 | 2,140,312 | 16,669 | 55,262 | 40,680 | 10,841 |
| 1907 (9 mos.). | 39,228 | 1,235,746 | 18,169 | 40,987 | 26,938 | 6,663 |
| 1908... | 54,154 | 1,925,569 | 20,124 | 63,019 | 37,412 | 8,653 |
| 1909. | 55,841 | 2,256,643 | 25,424 | 55,810 | 39,200 | 5,713 |
| 1910. | 63,605 | 2,807,465 | 25,939 | 60,937 | 46,283 | 9,894 |
| 1911.. | 69,958 | 1,668,773 | 29,435 | 75,913 | 52,182 | 5,910 |
| 1912... | 58,441. | 1,281,317 | 33,482 | 94,115 | 59,792 | 11,485 |
| 1913.. | 70,648 | 1,430,511 | 37,499 | 88,145 | 74,396 | 60,600 |
| 1914. | 72,121, | 1,904,541 | 41,253 | 73,458; | 70,152 | 5,798 |
| 1915. | 66,630 | 2,980,247 | 45,562 | 96,878 | 63,280 | 4,410 |
| 1916 | 57,552 | 3,358,210 | 52,951 | 227,442 | 69,732 | 5,977 |
| 1917 | 63,977 | 3,094,012 | 172,743 | 131,810 | 76,119 | 5,553 |
| Fiscal Year. | Patent fees. | Penitentiaries. | Post and money orders. | Public works. ${ }^{1}$ | Premium and discount. | Steamboat inspection. |
|  | \$ | \$ | \$ | \$ | \$ | \$ |
| 1901.. | 130,894 | 30,211 | 3,441,505 | 5,770,071 | 64,922 | 33,877 |
| 1902... | 140,960 | 73,601 | 3,918,416 | 6,447,982 | 89,238 | 38,459 |
| 1903... | 152,372 | 39,636 | 4,397,833 | 7,088,502 | 129,609 | 28,888 |
| 1904... | 162,715 | 72,863 | 4,652,325 | 6,972,219 | 77,316 | 10,812 |
| 1905... | 165,756 | 55,880 | 5,125,373 | 7,395,377 | 40,356 | 6,170 |
| 1906. | 187,792 | 75,261 | 5,933,343 | 8,310,267 | 160,665 | 4,604 |
| 1907 (9 mos.). | 144,279 | 82,660 | 5,061,728 | 6,839,586 | 249,588 | 2,989 |
| 1908... | 203,012 | 71,933 | 7,107,887 | 9,973,523 | 101,181 | 4,860 |
| 1909... | 204,872 | 47,643 | $7,401,624$ | 9,362,272 | 7,061 | 7,967 |
| 1810..... | 223,233 | 43,840 | 7,058,548 | 10,114,990 | 26,130 | 6,497 |
| 1911. | 231,866 | 50,408 | 9,146,952 | 10,818,834 | 164,623 | 5,585 |
| 1912.. | 243,444 | 58,776 | 10,492,394 | 11,651,947 | 147,747 | 5,897 |
| 1913. | 257,833 | 64,529 | 12,051,729 | 13,158,078 | 416,745 | 5,998 |
| 1914. | 252,724 | 54,314 | 12,954,530 | 14,197,053 | 187,745 | 5,421 |
| 1915 | 219,011 | 44,547 | 13,046,665 | 12,953,487 | 268,572 | 5,707 |
| 1916... .. | 230,192 | 43,165 | 18,858,690 | 19,286,418 | 233,718 | 5,092 |
| 1917............ | 251,960 | 60,191. | 20,902,384 | 24,440,840 | 398,907 | 4,037 |

[^34]FINANCE.
3.-Details of Receipts on Consolidated Fund Account, 1901-1917-concluded.

| Fiscal Year. | War Tax. | Superannuation. | Inspection of Staples. | Tonnage dues (mariners' fund). | Weights and <br> Measures. | Total receipts. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ | \$ |
| 1901. |  | 50,475 | - | 59,784 | 54,351 | 52,514,701 |
| 1902. |  | 48,298 | 2,773 | 65,854 | 62,913 | 58,050,790 |
| 1903. |  | 47,402 | 102,881 | 64,852. | 64,278 | 66,037,069 |
| 1904. |  | 46,618 | 58,127 | 61,785 | 86,325 | 70,669,817 |
| 1905. | $\cdots$. | 45,937 | 63,163 | 58,372 | 65,030 | 71,182,773 |
| 1906. |  | 45,194 | 101,446 | 60,347 | 72,957 | $80,139,360$ |
| 1907 (9 mos.) |  | 33,321 | 70,939 | 44,705. | 54,848 | 67,969,328 |
| 1908. |  | 43,369 | 127,741 | 69,364 | 82,919 | 96,054,506 |
| 1909. | - | 42,408 | 140,669 | 66,249 | 80,184 | 85,093,404 |
| 1910. |  | 41,251 | 154,130 | 53,382 | 92,667 | 101,503,711 |
| 1911. |  | 39,250 | 178,476 | 55,430 | 97,668 | 117,780,409 |
| 1912. |  | 40,032 | 230,174 | 60,457 | 105,816 | 136,108,217 |
| 1913. | - | 38,435 | 330,430 | 63,663 | 100,641 | 168,689,903 |
| 1914. |  | 39,817 | 510,184 | 70,541 | 111,070 | 163,174,395 |
| 1915. | 98,057 | 37,366 | 517,035 | 72,525, | 103,322 | 133,073,482 |
| 1916... .. | 3,620,782 | 31,797 | 913,616 | 72,546 | 110,857 | 172,147,838 |
| 1917........... | 16,186,745 | 33,250 | 1,458,811 | 76,994 | 103,184 | 232,601,294 |

4.-Details of Expenditure on Consolidated Fund Account, 1901-1917.

| Fiscal Year. | Charges on public debt. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Interest on debt. | Charges of management. | Premium discount and exchange. | Sinking funds. | Total cbarges. |
|  | \$ | \$ | \$ | \$ | 5 |
| 1901. | 10,807,955 | 102,828 | 39,033 | 2,480,337 | 13,490,153 |
| 1902. | 10,975,935 | 210,865 | 52,385 | 2,569,381 | 13,808,566 |
| 1903. | 11,068,139 | 229,673 | 65,295 | 2,620,588 | 13,983,695 |
| 1904. | 11,128,637 | 282,244 | 6,740 | 2,315,066 | 13,732,687 |
| 1905. | 10,630,115 | 276,072 | - | 2,261,618 | 13,167,805 |
| 1906.. ${ }^{\text {a }}$ | 10,814,697 | 331,534 | 15,368 | 2,317,437 | 13,479,036 |
| 1907 (9 mos.). | 6,712,771 | 231,690 | 12,858 | 1,177,147 | 8,134,466 |
| 1908. | 10,973,597 | 350,690 | 33,130 | 2,234,263 | 13,591,680 |
| 1909. | 11,604,584 | 326,953 | 29,754 | 1,922,525 | 13,883,816 |
| 1910. | 13,098,160 | 358,294 | 679 | 1,441,031 | 14,898,164 |
| 1911. | 12,535,851 | 374,847 | 1,930 | 1,203,416 | 14,116,044 |
| 1912. | 12,259,396 | 447,457 | 7,554 | 1,156,456 | 13,870,863 |
| 1913. | 12,605,882 | 483,613 | 19,375 | 1,384,285 | 14,493,155 |
| 1914. | 12,893,505 | 460,014 | 27,170 | 1,371,428 | 14,752,117 |
| 1915. | 15,736,743 | 451,324 | 103,405 | 1,645,812 | 17,937,284 |
| 1916. | 21,421,585 | 435,527 | 296,309 | 1,773,021 | 23,926,442 |
| 1917....... | 35,802,567 | 496,387 | - | 1,471,697 | 37,770,651 |

PUBLICACCOUNTS
4.-Details of Expenditure on Consolidated Fund Account, 1901-1917-con.

| Fiscal Year. | Collection of Revenue. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Adulteration of cood. | Culling timber. | Customs. | $\begin{gathered} \text { Dominion } \\ \text { lands. } \end{gathered}$ | Excise. | Inspection of staples. |
|  | \$ | 3 | \$ | \$ | $\$$ | \$ |
| 1901. | 24,991 | 18,448 | 1,123,817 | 133,417 | 458,383 | 14,835 |
| 1902. | 24,957 | 17,101. | 1,176,024 | 158,844 | 463,405 | 13,510 |
| 1903. | 19,841 | 16,378 | 1,229,029 | 186,356 | 478,984 | 66,261 |
| 1904. | 20,995 | 14,722 | 1,357,184 | 247,282 | 522,361 | 73,510 |
| 1905. | 21,359. | 13,913 | 1,468,093 | 276,982 | 537,814 | 88,661 |
| 1906. | 27,356 | 13,134 | 1,548,384 | 433,135 | 555,923 | 109,940 |
| 1907 (9 mos.). | 21,777 | 9,822 | 1,222,949 | 385,074 | 456,774 | 88,532 |
| 1908. | 26,575 | 12,904 | 1,923,854 | 562,712 | 636,892 | 132,487 |
| 1909. | 20,504 | 13,277 | 1,994,951 | 548,608 | 643,705 | 160,185 |
| 1910. | 22,163 | 12,756 | 2,025,453. | 599,613 | 660,465 | 184,871 |
| 1911. | 21,245 | 12,016 | 2,187,175 | 1,804,250 | 703,660 | 203,594 |
| 1912. | 22,786 | 11,970 | 2,443,846 | 2,277,100 | 755,968 | 226,895 |
| 1913. | 22,520 | 12,090 | 3,150,777. | 2,462,624 | 843,685 | 340,295 |
| 1914. | 30,202 | 8,798 | 3,849,084 | 3,286,480 | 8.58,166 | 450,73S |
| 1915. | 47,239 | 7,912 | 3,775,364 | 3,701,180 | 830,175 | 2,354 |
| 1916. | 44,722 | 6,838 | 3,685,399 | 3,418,298 | 897,671 | 2,067 |
| 1917....... | 42,796 | 6,502 | 3,745,791 | 2,856,712 | 977,333 | 2,593 |


| Fiscal Year. | Collection of revenue. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Minor revenues. | Post offce. | Public works. | $\begin{aligned} & \text { Railways } \\ & \text { and } \\ & \text { canals. } \end{aligned}$ | Trade and Commerce. | Weights, <br> meas- <br> ures, gas <br> and elec- <br> tric <br> light. | Total collection of revenue |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 1901. | 1,718 | 3,931,446 | 272,809 | 6,377,961 | 41,699 | 103,725 | 12,503,249 |
| 1902. | 1,751 | 4,023,637 | 498,513 | 6,508,477 | 11,974 | 109,672 | 13,007,865 |
| 1903. | 2,659 | 4,105,178 | 562,404 | 7,221,705 | 30,671 | 121,575 | 14,041,041 |
| 1904.. | 1,113 | 4,347,541 | 454,700 | 8,397,434 | 38,484 | 118,195 | 15,593,521 |
| 1905. | 1,949 | 4,634,528 | 560,361 | 9,803,912 | 60,215 | 125,650 | 17,593,437 |
| 1906 | 1,777 | 4,921,577 | 560,170 | 8,779,678 | 63,625 | 130,430 | 17,145,129 |
| 1907 (9 mos.) | 1,246 | 3,979,557 | 456,814 | 7,011,858 | 62,535 | 100,243 | 13,797,181 |
| 1908. | 2,703 | 6,005,930 | 583,953 | 10,586,114 | 102,881 | 150,324 | 20,727,329 |
| 1909. | 1,987 | 6,592,386. | 625,034 | 10,780,126 | 91,448 | 100,495 | 21,632,704 |
| 1910. | 680 | 7,215,338 | 576,491 | 10,215,038 | 132,103 | 166,224 | 21,811,195 |
| 1911. | 523 | 7,954,223 | 594,869 | 11,123,251 | 165,865 | 180,965 | 24,951,636 |
| 1912. | 1 | 9,172,036 | 651,554 | 12,330,463 | 158,938 | 205,224 | 28,256,780 |
| 1913. | 1 | 10,882,804 | 686,37I | 13,766,180 | 614,509 | 224,345 | 33,006,200 |
| 1914. | 1 | 12,822,058 | 780,455 | 14,935,138 | 1,805,441 | 258,096 | 39,084,656 |
| 1915. | 1 | 15,961,191 | 799,152 | 13,876,060 | 2,943,495 | 288,831 | 42,232,953 |
| 1916 | 1 | 16,009,139 | 857,877 | 20,777,830 | 1,897,245 | 305,215 | 47,902,301 |
| 1917 | 1 | 16,300,579 | 849,341 | 27,124,004 | 1,588,247 | 296,306 | 53,800,203 |

[^35]FINANCE.
4.-Details of Expenditure on Consolidated Fund Account, 1901-1917-con.

| Fiscal Year. | Miscellaneous expeoditure. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Administration of justice. | Arts, agriculture, Census and Statistics. | Naval Service. | Civil government. | Fisheries. | $\underset{\text { Geo- }}{\text { logical }}$ <br> Strvey <br> (Mines) |
|  | 5 | \$ | * | \$ | \$ | \$ |
| 1901. | 873,233 | 697,206 | - | 1,474,919 | 491,351 | 61,941 |
| 1902. | 949,230 | 1,274,790 | - | 1,497,369 | 548,895 | 68,730 |
| 1903. | 959,948 | 543,012 | - | 1,554,792 | 527,829 | 78,746 |
| 1904. | 984,258 | 659,896 | - | 1,652,782 | 634,319 | 74,432 |
| 1905..... | 997,718 | 698,211 | - | 1,797,060 | 979,880 | 111,954 |
| 1906. | 1,171,359 | 603,590 | $\rightarrow$ | 1,911,611 | 958,702 | 108,148 |
| 1907 (9 mos.). | 867,798 | 625,812 | - | 1,487,405 | 693,685 | 94,984 |
| 1908.... | 1,224,510 | 1,218,242 | - | 2,088,416 | 956,196 | 180,399 |
| 1909. | 1,240,364 | 1,403,569 | - | 3,283,265 | 951,728 | 247,659 |
| 1910. | 1,246,695 | 983,380 | - | 4,288,390 | 1,148,048 | 236,455 |
| 1911. | 1,292,402 | 1,319,905 | 2,256,709 | 4,463,095 | 760,734 | 244,275 |
| 1912. | 1,300,514 | 2,771,636 | 1,901,494 | 4,774,678 | 843,857 | 261,719 |
| 1913. | 1,335,243 | 2,647,879 | 2,086,049 | 5,109,459 | 921,953 | 383,343 |
| 1914. | 1,399,457. | 3,224,780 | 2,006,150 | 5,607,795 | 1,229,519 | 470,507 |
| 1915. | 1,469,504 | 3,618,488 | 1,289,022 | 6,157,967 | 1,465,361 | 470,194 |
| 1916... | 1,477,238 | 3,452,154 | 1,154,426 | 6,408,857 | 1,115,303 | 462,787 |
| 1917... | 1,484,692 | 3,614,844 | 1,237,230. | 6,466,359 | 1,050,156! | 390,873 |
| Fiscal Year. | Miscellaneous expenditure. |  |  |  |  |  |
|  | Immigration. | Quarantine. | Indians. | Labour. | Legisla- tion. | Lighthouse and coast service. |
|  | \$ | \$ | \$ | \$ | \$ | \$ |
| 1901. | 444,730 | 170,166 | 1,019,329 | - | 1,172,726 | 578,618 |
| 1902. | 494,842 | 264,738 | 1,057,130 | - | -991,433 | 696,311 |
| 1903. | 642,914 | 263,331 | 1,077,815 | - | 789,205 | 964,144 |
| 1904. | 744,788 | 217,765 | 1,079,781 | - | 1,266,795 | 1,275,017 |
| 1905. | 972,357 | 302,758 | 1,173,864 | - | 1,713,172 | 2,507,307 |
| 1906. | 842,668 | 624,758 | 1,198,350 | - | 1,351,916 | 2,530,308 |
| 1907 (9 m08.)... | 611,201 | 395,907 | 940,680 | - | 1,322,075 | 2,026,642 |
| 1908. | 1,074,697 | 150,048 | 1,276,964 | - | 1,150,610 | 2,835,543 |
| 1909. | 979,326 | 121,685 | 1,307,245 | - | 1,543,328 | 2,721,802 |
| 1910. | 960,676 | 138,136 | 1,287,404 | - | 1,837,348 | 2,127,944 |
| 1911. | 1,079,130 | 237,999 | 1,449,961 | 93,402 | 1,655,419 | 1,979,838 |
| 1912. | 1,365,000 | 182,392 | 1,756,565 | 53,390 | 2,439,807 | $2,128,243$ |
| 1913. | 1,427,112 | 204,332 | 1,818,187 | 68,476 | 1,379,130 | 2,262,735 |
| 1914...... | 1,893,298 | 220,928 | 2,182,471 | 80,474 | 1,403,189 | $\begin{aligned} & \mathbf{2}, 324,103 \\ & 9520008 \end{aligned}$ |
| 1915...... | 1,658,182 | 232,875 | 2,400,630 | 63,441 | 2,376,984 | 2,583,026 |
| 1916.... | 1,307,480 | 203,309 | 2,190,333 | 56,742: | 1,180,363 | 1,987,759 |
| 1917............. | 1,181,991 | 266,098 | 1,951,495 | 57,565 | 1,651,743 | 1,769,289 |

PUBLICACCOUNTS.

## 4.-Details of Expenditure on Consolidated Fund Acconnt, 1901-1917-con.

| Fiscal Year. | Miscellaneous expenditure. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mail subsidies and steamship subventions. | Marine hospitals. | $\begin{aligned} & \text { Militia } \\ & \text { and } \\ & \text { defence. } \end{aligned}$ | Mounted police. | Northwest Territories government. | Ocean and river service. | Penitentiaries. |
|  |  | \$ | \$ ${ }^{\$ 1}$ | \$12 ${ }^{\text {\% }}$ | ${ }_{504}^{\$}$ | ${ }^{\$} 103$ | \$ |
| 1901. | 629,198 | 36,141 | 2,061,674 | 912,151 | 504,388 | 233,162 | 456,351 |
| 1902. | 624,956 | 51,827 | 2,000,979 | 948,216 | 491,924 | 496,191 | 438,073 |
| 1903. | 799,286 | 48,750 | 1,903,009 | 990,035 | 802,466 | 417,137 | 477,840 |
| 1904. | 851,748 | 50,302 | 2,252,030 | 949,784 | 894,151 | 566,547 | 448,846 |
| 1905. | 1,027,075 | 51,732 | 2,650,700 | 1,013,309 | 1,259,412 | 1,052,677 | 463,720 |
| 1906. | 1,227,560 | 50,731 | 4,294,125 | 1,004,079 | 259,520 | 1,013,683 | 527,884 |
| 1907 (9 mos.) | 1,128,877 | 38,156 | 3,347,038 | 647,836 | 4,236 | 679,155 | 423,263 |
| 1908. | 1,590,384 | 67,585 | 5,498,184 | 649,867 | 5,965 | 881,221 | 594,619 |
| 1909. | 1,684,683 | 56,994 | 5,221,645 | 663,788 | 4,305 | 1,201,805 | 545,113 |
| 1910. | 1,736,373 | 66,349 | 4,679,956 | 676,637 | 4,956 | 803,922 | 538,203 |
| 1911. | 1,918,941 | 56,164 | 6,868,651 | 713,813 | 5,744 | 869,164 | 527,761 |
| 1912. | 1,904,514 | 57,016 | 7,580,600 | 696,863. | 5,597 | 1,128,908 | 653,483 |
| 1913. | 1,952,525 | 53,690 | 9,112,475 | 783,888 | 3,494 | 1,121,200 | 704,831 |
| 1914. | 2,383,687 | 55,909 | 11,151,399 | 963,651 | 3,666 | 1,216,278 | 910,413 |
| 1915. | 2,162,633 | 65,801 | 10,060,618 | 952,018 | 2,870 | 1,133,717 | 860,031 |
| 1916. | 1,768,757 | 66,741 | 4,681,503 | 1,395,022 | 5,232 | 1,213,918 | 903,318 |
| 1917. | 1,990,582 | 66,817 | 4,301,785 | 1,179,670 | 5,148 | 1,113,872 | 913,208 |

Miscellaneous expenditure.

| Fiscal Year. | Pensions. | Police. | Public works. | $\begin{aligned} & \text { Railways } \\ & \text { and } \\ & \text { canals. } \end{aligned}$ | Scientific institutions. | Steambost inspection |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ | \$ |
| 1901 | 93,551 | 68,981 | 3,386,632 | 210,414 | 90,551 | 29,248 |
| 1902. | 83,305 | 60,241 | 4,221,294 | 272,296 | 155,285 | 27,494 |
| 1903. | 87,925 | 28,280 | 4,065,553 | 328,316 | 126,754 | 30,172 |
| 1904. | 113,495 | 31,084 | 4,807,330 | 400,862 | 125,124 | 33,609 |
| 1905. | 140,424 | 34,220 | 6,765,446 | 489,751 | 163,727 | 50,188 |
| 1906. | 179,023 | 37,265 | 7,484,716 | 452,058 | 284,272 | 37,576 |
| 1907 (9 mos.) | 125,832 | 29,269 | 5,520,571 | 390,210 | 292,824 | 32,460 |
| 1908. | 187,557 | 43,323 | 8,721,327 | 730,312 | 576,818 | 42,210 |
| 1909. | 191,533 | 44,937 | 12,300,184 | 987,692 | 553,921 | 41,227 |
| 1910. | 216,698 | 51,808 | 7,261,218 | 805,975 | 633,785 | 40,783 |
| 1911. | 240,586 | 64,484 | 8,621,431 | 635,018 | 378,130 | 42,818 |
| 1912. | 245,045 | 82,445 | 10,344,487 | 763,007 | 447,350 | 45,353 |
| 1913. | 283,188 | 97,951 | 13,468,505 | 667,356 | 417,391, | 54,148 |
| 1914. | 311,900 | 119,892 | 19,007,513 | 732,348 | 490,541 | 63,714 |
| 1915. | 358,558 | 118,995 | 19,343,532 | 727,206 | 501,431 | 65,063 |
| 1916.. | 671,133 | 116,665 | 12,039,252 | 671,590 | 463,494 |  |
| 1917....... | 2,814,546 | 128,505 | 8,633,096 | 750,525 | 434,755 | 67,560 |

## FINANCE

4.-Details of Expenditure on Consolidated Fund Account, 1901-1917-concluded.

| Fiscal Year. | Miscellaneous expenditure. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Subsidies } \\ \text { to } \\ \text { provinces. } \end{gathered}$ | Superannuation. | Various expenses. | Yukon Territory | Total miscellaneous. | Total expenditare. |
|  | 8 | \$ | \$ | \$ | \$ | \$ |
| 190 I | 4,250,607 | 324,507 | 326,236 | 274,954 | 20,872,966 | 46,866,368 |
| 1902. | 4,402,098 | 338,764 | 1,159,621 | 266,932 | 23,942,961 | 50,759,392 |
| 1903. | 4,402,503 | 346,419 | 543,178 | 807,807 | 23,667,167 | 51,691,903 |
| 1904. | 4,402,292 | 355,424 | 975,776 | 638,388 | 26,286,625 | 55,612,833 |
| 1905. | 4,516,038 | 353,261 | 796,243 | 476,228 | 32,558,441 | 63,319,683 |
| 1906.. | 6,726,373 | 356,281 | 964,184 | 405,735 | 36,616,476 | 67,240,641 |
| 1907 (9 mos.). | 6,745,134 | 269,347 | 576,004 | 294,023, | 29,610,514 | 51,542,161 |
| 1908. | 9,032,775 | 372,842 | 777,232 | 394,597 | 42,322,443 | 76,641,452 |
| 1909. | 9,117.143 | 390,319 | 1,388,504 | 353,973 | 48,547,712 | 84,064,232 |
| 1910. | 9,361,388 | 406,877, | 852,553 | 330,431 | 42,702,388 | 70,411,747 |
| 1911. | 9,092,472 | 405,342 | 1,129,453 | 303,675 | 48,706,518 | 87,774,198 |
| 1912. | 10,281,045 | 417,045 | 1,307,691 | 324,242 | 56,033,798 | 98,161,441 |
| 1913. | 13,211,800 | 436,396 | 2,252,046 | 295,394 | 64,560,182 | 112,059,537 |
| 1914. | 11,280,469 | 443,557 | 2,022,174 | 347,917 | 73,547,700 | 127,384,473 |
| 1915. : | 11,451,673 | 461,699 | 2,961,409 | 340,043 | 75,352,970 | 135,523,207 |
| 1916. | 11,451,673 | 454,342 | 1,263,134 | 344,572 | 58,521,984 | 130,350,727 |
| 1917 | 11,469,148 | 458,927 | 1,298,042 | 339,971 | 57,028,489 | 148,599,343 |

5.-Expenditure on Conselidated Fund Account, 1868-1917.

| Fiscal Year. | Charges on debt. | $\begin{aligned} & \text { Subsidies } \\ & \text { to } \\ & \text { provinces. } \end{aligned}$ | Sinking funds. | Collection of revenue. | Other expenditure. | Total expenditure. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3 | \$ | \$ | \$ | \$ | \$ |
| 1868. | 4,860,758 | 2,753,966 | 355,267 | 1,885, 804 | 3,630,298 | 13,486,093 |
| 1869. | 5,372,670 | 2,604,050 | 426,807 | 2,175,071 | 3,459,486 | 14,038,084 |
| 1870. | 5,387,054 | 2,588,605 | 126,533 | 2,351,725 | 3,891,593 | 14,345,510 |
| 1871. | 5,591,959 | 2,624,940 | 421,666 | 2,388,359 | 4,596,158 | 15,623,082 |
| 1872. | 5,603,643 | 2,930,113 | 470,607 | 2,912,107 | 5,672,999 | 17,589,469 |
| 1873. | 5,387,850 | 2,921,400 | 407,827 | 3,633,152 | 6,824,419 | 19,174,648 |
| 1874. | 5,989,121 | 3,752,757 | 513,920 | 5,019,139 | 8,041,380 | 23,316,317 |
| 1875. | 6,817,991 | 3,750,962 | 555,773 | 4,904,875 | 7,683,470 | 23,713,071 |
| 1876. | 6,609,051 | 3,690,355 | 822,953 | 5,009,081 | 8,356,932 | 24,488,372 |
| 1877 | 7,005,103 | 3,655,851 | 828,374 | 5,285,419 | 6,744,555 | 23,519,302 |
| 1878. | 7,240,970 | 3,472,808 | 945,746 | 5,388,753 | 6,454,881 | 23,503,158 |
| 1879. | 7,472,658 | 3,442,764 | 1,037,220 | 5,652,935 | 6,849,805 | 24,455,382 |
| 1880. | 8,062,954 | $3,430,846$ | 1,165,867 | 5,374,917 | 6,816,050 | 24,850,634 |

PUBLIC ACCOUNTS
5.-Expenditure on Consolidated Fund Account, 1868-1917—concluded.

| Fiscal Year. | Charges on debt. | $\begin{gathered} \text { Subsidies } \\ \text { to } \\ \text { Provinces. } \end{gathered}$ | Sinking <br> Funds. | Collection of геvепие. | Other expenditure. | Total expenditure. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ | \$ |
| 1881. | 7,819,589 | 3,455,518 | 1,250,731 | 5,750,899 | 7,225,817 | 25,502,554 |
| 1882. | 7,935,848 | 3,530,999 | 1,290,725 | 6,097,969 | 8,211,563 | 27,067,104 |
| 1883. | 7,902,722 | 3,606,673 | 1,344,137 | 6,738,502 | 9,138,123 | 28,730,157 |
| 1884. | 7,930,086 | 3,603,714 | 1,403,864 | 7,042,625 | 11,127,417 | 31,107,706 |
| 1885. | 9,806,978 | 3,959,327 | 1,482,051 | 7,372,603 | 12,416,101 | 35,037,060 |
| 1886. | 10,483,930 | 4,182,256 | 1,606,271 | 7,808,75] | 14,930,134 | 39,011,612 |
| 1887 | 9,970,671 | 4,169,341 | 1,592,953 | 8,376,027 | 11,548,688 | 35,657,680 |
| 1888. | 10,166,905 | 4,188,514 | 1,939,078 | 8,789,764 | 11,634,234 | 36,718,495 |
| 1889. | 10,422,522 | 4,051,428 | 1,736,644 | 8,873,339 | 11,833,902 | 36,917,835 |
| 1890. | 9,887,250 | 3,904,922 | 1,887,237 | 9,182,941 | 11,131,681 | 35,994,031 |
| 1891. | 9,846,205 | 3,903,757 | 1,938,079 | 9,453,320 | 11,202,207 | 36,343,568 |
| 1892. | 9,947,916 | 3,935,914 | 2,027,861 | 9,426,067 | 11,428,136 | 36,765,894 |
| 1893. | 10,020,682 | 3,935,765 | 2,095,514 | 8,993,925 | 11,768,167 | 36,814,053 |
| 1894. | 10,393,572 | 4,206,655 | 2,131,361 | 9,132,616 | 11,720,821 | 37,585,025 |
| 1895. | 10,745,245 | 4,250,674 | 2,002,31] | 9,129,416 | 12,004,359 | 38,132,005 |
| 1896. | 10,751,006 | 4,235,664 | 2,055,288 | 9,291,169 | 10,616,015 | 36,949,142 |
| 1897 | 10,960,977 | 4,238,059 | 2,101,814 | 9,336,916 | 11,711,994 | 38,349,760 |
| 1898. | 10,716,645 | 4,327,372 | 2,359,969 | 9,469,664 | 12,048,876 | 38,832,526 |
| 1899. | 11,028,369 | 4,250,636 | 2,482,485 | 9,837,453 | 14,304,557 | 41,903,500 |
| 1900. | 10,873,673 | 4,250,608 | 2,465,640 | 11,044,526 | 14,340,832 | 42,975,279 |
| 1901. | 10,970,783 | 4,250,607 | 2,480,337 | 12,503,249 | 16,661,392 | 40,866,368 |
| 1902. | 11,186,800 | 4,402,098 | 2,569,381 | 13,007,865 | 19,593,248 | 50,759,392 |
| 1903. | 11,297,812 | 4,402,503 | 2,620,588 | 14,041,041 | 19,329,959 | 51,691,903 |
| 1904. | 11,410,881 | 4,402,292 | 2,315,066. | 15,593,521 | 21,891,073 | 55,612,833 |
| 1905. | 10,906,187 | 4,516,039 | 2,261,618 | 17,593,437 | 28,042,402 | 63,319,683 |
| 1906. | 11,146,232 | 6,726,373 | 2,317,437 | 17,145,129 | 29,905,470 | 67,240,641 |
| 1907 (9 mos.). | 6,944,461 | 6,745,134 | 1,177,147 | 13,797,181 | 22,878,238 | 51,542,161 |
| 1908. | 11,324,287 | 9,032,775 | 2,234, 263 | 20,727,329 | 33,322,798 | 76,641,452 |
| 1909. | 11,931,537 | 9,117,143 | 1,922,525 | 21,632,704 | $39,460,323$ | 84,064,232 |
| 1910. | 13,456,454 | 9,361,388 | 1,441,031 | 21,811,195 | 33,341,679 | 79,411,747 |
| 1911. | 12,910,698 | 9,092,472 | 1,203,416 | 24,951,636 | 39,615,976 | 87,774,198 |
| 1912. | 12,706,853 | 10,281,045 | 1,156.456 | 28,256,780 | 45,760,307 | 98,161,441 |
| 1913. | 13,089,495 | 13,211,800 | 1,384,285 | $33,006,200$ | 51,367,757 | 112,059,537 |
| 1914. | 13,353,519 | 11,280,469 | 1,371,428 | 39,084,656 | 62,294,401 | 127,384,473 |
| 1915. | 16,188,067 | 11,451,673 | 1,645,812 | 42,232,953 | 64,004,702 | 135,523,207 |
| $1916 .$ |  | 11,451,673 | 1,773,021 | 47,902,301 | 47,366,620 | 130,350,727 |
| 1917 | 36,298,954 | 11,469,148 | 1,471,697 | 53,800,203 | 45,559,341 | 148,599,343 |

FINANCE
6.-Total Expenditure of Canada, 1868-1917.

| Fiscal Year. | Expenditure chargeable to consolidated fund. | Expenditure chargeable to capital. | Expenditure for railway subsidies. | Other charges. | Total expenditure |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ |
| 1868. | 13,486,093 | 548,438 | - | 37,158 | 14,071,689 |
| 1869. | 14,038,084 | 440,418 |  | 429,664 | 14,908,166 |
| 1870. | 14,345,510 | 3,515,116 |  | 155,988 | 18,016,614 |
| 1871.. | 15,623,082 | 3,670,397 | - | - | 19,293,479 |
| 1872. | 17,589,469 | 7,853,050 |  | 223,456 | 25,665,975 |
| 1873. | 19,174,648 | 19,859,441 |  | 5,719 | 39,039,808 |
| 1874.. | 23,316,317 | 10,177,740 |  | 4,019 | 33,498,076 |
| 1875.. | 23,713,071 | 6,922,742 | - | 2,253,098 | 32,888,911 |
| 1876. | 24,488,372 | 7,154,008 | - | 315,764 | 31,958,144 |
| 1877 | 23,519,302 | 7,599,710 |  | 1,388,984 | $32,507,996$ |
| 1878. | 23,503,158 | 6,657,200 | - | 385,413 | 30,545,771 |
| 1879. | $24,455,382$ | 5,648,332 |  | 676,225 | 30,779,939 |
| 1880.. | 24,850,634 | 8,241,174 | - | 949,948 | 34,041,756 |
| 1881. | 25,502,554 | 8,176,316 | - | 117,772 | 33,796,642 |
| 1882.. | 27,067,104 | 7,405,637 |  | 201,884 | 34,674,625 |
| 1883. | 28,730,157 | 14,147,360 |  | 21,369 | 42,898,886 |
| 1884. | 31,107,706 | 23,977,702 | 208,000 | 2,567,453 | 57,860,861 |
| 1885. | 35,037,060 | 13,220,185 | 403,245 | 502,588 | 49,163,078 |
| 1886.. | 39,011,612 | 9,589,734 | 2,701,249 | 10,534,974 | 61,837,569 |
| 1887.. | 35,657,680 | 4,439,939 | 1,406,533 |  | 41,504,152 |
| 1888. | 36,718,495 | 7,162,964 | 1,027,042 | 155,623 | 45,064,124 |
| 1889. | 36,917,8.35 | 4,420,314 | 846,722 | 1,333,327 | 43,518,198 |
| 1890.. | 35,994,031 | 4,053,159 | 1,678,196 | 44,947 | 41,770,333 |
| 1891. | 36,343,568 | 3,115,860 | 1,265,706 | 68,074 | 40,793,208 |
| 1892. | 36,765,894 | 2,164,457 | 1,248,216 | 2,093,569 | 42,272,136 |
| 1893. | 36,814,053 | 3,088,318 | 811,394 | 139,963 | 40,853,728 |
| 1894. | 37,585,025 | 3,862,970 | 1,229,885 | 330,353 | 43,008,233 |
| 1895.. | 38,132,005 | 3,030,490 | 1,310,549 | 399,294 | 42,872,338 |
| 1896. | 36,949,142 | 3,781,311 | 3,228,746 | 137,185 | 44,096,384 |
| 1897.. | 38,349,760 | 3,523,160 | 416,955 | 682,881 | 42,972,756 |
| 1898. | 38,832,526 | 4,143,503 | 1,414,935 | 943,317 | 45,334,281 |
| 1899. | 41,903,500 | 5,936,343 | 3,201,220 | 501,571 | 51,542,634 |
| 1900. | 42,975,279 | 7,468,843 | 725,720 | 1,547,624 | 52,717,466 |
| 1901. | 46,866,368 | 7,695,488 | 2,512,329 | 908,681 | 57,982,866 |
| 1902. | 50,759,392 | 10,078,638 | 2,093,939 | 1,038,831 | 63,970,800 |
| 1903. | 51,691,903 | 7,052,725 | 1,463,222 | 1,538,722 | 61,746,572 |
| 1904.. | 55,612,833 | 7,881,719 | 2,046,878 | 6,713,618 | 72,255,048 |
| 1905.. | 63,319,683 | 11,933,492 | 1,275,630 | 2,275,334 | 78,804,139 |
| 1906 | $67,240,641$ | 11,913,871 | 1,637,574 | 2,485,555 | 83,277,641 |
| 1907 (9 mos.) | 51,542,161 | 11,329,144 | 1,424,890 | 1,581,944 | 65,778,139 |
| 1908. .. | 76,641,452 | 30,429,907 | 2,037,629 | 3,469,692 | 112,578,680 |
| 1909. | 84,064,232 | 42,593,167 | 1,785,887 | 4,998,238 | 133,441,524 |
| 1910.. | 79,411,747 | 29,756,353 | 2,048,097 | 4,179,577 | 115,395,774 |
| 1911.. | 87,774,198 | 30,852,963 | 1,284,892 | 2,949,197 | 122,861,250 |
| 1912.. | 98,161,441 | 30,939,576 | 859,400 | 7,181,665 | 137,142,082 |
| 1913.. | 112,059,537 | 27,206,046 | 4,935,507 | 255,787 | 144,456,877 |
| 1914. | 127,384,473 | 37,180,176 | 19,036,237 | 2,640,162 | 186,241,048 |
| 1915. | 135,523,207 | 41,447,320 | 5,191,507 | 65,936,492 | 248,098,526 |
| 1916. | 130,350,727 | 38,566,950 | 1,400,171 | 169,384,654 | 339,702,502 |
| 1917 | 148,599,343 | 26,919,301 | 959,584 | 321,864,160 | $498,342,388$ |

## PUBLICACCOUNTS

7.-Total Receipts of Canada, 1868-1917

| Fiscal Year. | Consolidated fund receipts. | Other receipts. | Total receipts. | Sinking funds. | Difference between receipts and expenditure less sinking funds. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{8}$ | \$ | \$ | $\stackrel{ }{5}$ | \$ |
| 1868. | 13,687,928 |  | 13,687,928 | 355,267 | 28,494 |
| 1869. | 14,379,175 |  | 14,379,175 | 426,807 | 102,184 |
| 1870. | 15,512,226 | 27,431 | 15,539,657 | 126,533 | 2,350,423 |
| 1871. | 19,335,561 | 39,476 | 19,375,037 | 421,666 | +503,225 |
| 1872. | 20,714,814 |  | 20,714,814 | 470,607 | 4,480,554 |
| 1873. | 20,813,469 | 157,122 | 20,970,591 | 407,827 | 17,661,390 |
| 1874. | 24,205,093 | 302,560 | 24,507,65: | 513,920 | 8,476,503 |
| 1875. | 24,648,715 | 1,009 | 24,649,724 | 555,773 | 7,683,414 |
| 1876. | 22,587,587 | 4,468 | 22,592,055 | 822,953 | 8,543,136 |
| 1877 | 22,059,274 | 868,486 | 22,927,760 | 806,440 | 8,683,795 |
| 1878. | 22,375,011 | 31,246 | 22,406,257 | 1,012,753 | 7,126,761 |
| 1879. | 22,517,382 | 4,503,143 | 27,020,525 | 1,131,296 | 2,628,117 |
| 1880. | 23,307,407 | 57,140 | 23,364,547 | 1,215,808 | 9,461,401 |
| 1881. | 29,635,298 | - | 29,635,298 | 1,217,153 | 2,944,192 |
| 1882. | 33,383,456 | 1,799,098 | 35,182,549 | 1,226,206 | +1,734,130 |
| 1883. | 35,794,650 | 1,009,019 | 36,803,669 | 1,290,153 | 4,805,064 |
| 1884. | 31,861,962 | 953,264 | 32,815,226 | 1,350,500 | 23,695,136 |
| 1885. | 32,797,001 | 557,040 | 33,354,041 | 2,563,195 | 14,245,842 |
| 1886. | 33,177,040 | 302,843 | 33,479,883 | 1,605,271 | 26,751,415 |
| 1887 | 35,754,993 | 538 | 35,755,531 | 1,592,953 | 4,155,668 |
| 1888. | 35,908,464 | - | 35,908,464 | 1,939,078 | 7,216,583 |
| 1889. | 38,782,870 | - | 38,782,870 | 1,736,644 | 2,998,684 |
| 1890. | 39,879,925 | - | 39,879,925 | 1,887,237 | 3,170 |
| 1891. | 38,579,311 | - | 38,579,311 | 1,938,079 | 275,819 |
| 1892. | 36,921,872 | $\bigcirc$ | 36,921,872 | 2,027,861 | 3,322,404 |
| 1893. | 38,168,609 | 40,000 | 38,208,609 | 2,095,514 | 549,605 |
| 1894. | 36,374,693 | 190 | 36,374,883 | 2,131,361 | 4,501,990 |
| 1895. | 33,978,129 | - | 33,978,129 | 2,002,311 | 6,891,898 |
| 1896. | 36,618,591 | - | 36,618,591 | 2,055,288 | 5,422,506 |
| 1897. | 37,829,778 | - | 37,829,778 | 2,101,814 | 3,041,164 |
| 1898. | 40,555,238 | 1,272 | 40,556,510 | 2,359,969 | 2,417,802 |
| 1899. | 46,741,249 | 1,854 | 46,743,103 | 2,482,485 | 2,317,048 |
| 1900. | 51,029,994 | 1,473 | 51,031,467 | 2,465,640 | +779,640 |
| 1901. | 52,514,701 | 1,632 | 52,516,333 | 2,480,337 | 2,986,197 |
| 1902. | 58,050,790 | 1,543 | 58,052,333 | 2,569,381 | 3,349,086 |
| 1903. | 66,037,069 | 3,311,015 | 69,348,084 | 2,620,588 | $+10,222,101$ |
| 1904. | 70,669,817 | 9,434 | 70,679,251 | 2,315,066 | +739,270 |
| 1905. | 71,182,773 | 3,300 | 71,186,073 | 2,261,618 | 5,356,448 |
| 1906. | 80,139,360 | 2,034 | 80,141,394 | 2,317,437 | 818,811 |
| 1907 (9 mos.). | 67,969,328 | 2,781 | 67,972,109 | 1,177,147 | +3,371,118 |
| 1908.... | 96,054,506 | 911 | 96,055,417 | 2,234,263 | 14,289,000 |

Nore.-Theplus (+) sign in the last column of this table denotes the excess of receipts and sinking funds over expenditure. In other cases the expenditure exceeds receipts.

## FINANCE

7.-Total Receipts of Canada, 1868-1917-concluded.

| Fiscal Year. | Consoli- <br> dated fund <br> receipts. | Other <br> receipts. | Total <br> receipts. | Sinking <br> Funds. | Difference <br> between re- <br> eeipts and <br> expenditure <br> less sinking |
| :--- | ---: | ---: | ---: | ---: | ---: |
| funds. |  |  |  |  |  |

Nore-The plus (+) sign in the last column of this table denotes the excess of receipts and sinking funds over expenditure. In other cases the expenditure exceeds receipts.
8.-Population and Revenue and Expenditure per head, 1871-1917.

| Year. | Population | $\left\lvert\, \begin{gathered} \text { Revenue } \\ \text { per } \\ \text { head. } \end{gathered}\right.$ | Expenditure per head. | Year. | Population | Revenue per head. | Expenditure pel head. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \$ cts. | $\$ \mathrm{cts}$. |  | No. | \$ cts. | cts. |
| ${ }^{*} 1871$. | 3,485,761 | 5.55 | 4.48 | 1894. | 4,894,000 | 7.29 | 7.54 |
| 1871. | 3,518,000 | 5.50 | 4.44 | 1895. | 5,084,000 | 6.75 | 7.58 |
| 1872. | 3,611,000 | 5.74 | 4.87 | 1896. | 5,086,000 | 7.20 | 7.26 |
| 1873. | 3,668,000 | 5.64 | 5.23 | 1897 | 5,142,000 | 7.36 | 7.46 |
| 1874. | 3,825,000 | 6.33 | 6.10 | 1898. | 5,199,000 | 7.80 | 7.47 |
| 1875. | 3,887,000 | 6.34 | 6.10 | 1899. | 5,259,000 | 8.89 | 7.97 |
| 1876. | 3,949,000 | 5.70 | 6.20 | 1900. | 5,322,000 | 9.59 | 8.07 |
| 1877. | 4,013,000 | 5.50 | 5.86 | *1901. | 5,371,315 | 9.78 | 8.72 |
| 1878. | 4,079,000 | 5.49 | 5.76 | 1901. | 5,403,000 | 9.72 | 8.67 |
| 1879. | 4,146000 | 5.43 | 5.90 | 1902. | 5,532,000 | 10.49 | 9.18 |
| 1880. | 4,215,000 | 5.53 | 5.90 | 1903. | 5,673,000 | 11.64 | 9.11 |
| ${ }^{*} 1881$. | 4,324,810 | 6.85 | 5.90 | 1904. | 5,825,000 | 12.13 | 9.55 |
| 1881. | 4,337,000 | 6.83 | 5.88 | 1905. | 5,992,000 | 11.88 | 10.57 |
| 1882. | 4,384,000 | 7.62 | 6.18 | 1906. | 6,171,000 | 12.99 | 10.90 |
| 1883. | 4,433,000 | 8.08 | 6.48 | 1907 | 6,302,000 | 10.71 | 8.18 |
| 1884. | 4,485,000 | 7.11 | 6.94 | 1908. | 6,491,000 | 14.80 | 11.81 |
| 1885. | 4,539,000 | 7.23 | 7.72 | 1909. | 6,695,000 | 12.71 | 12.56 |
| 1886. | 4,589,000 | 7.23 | 8.50 | 1910. | 6,917,000 | 14.67 | 11.48 |
| 1887 | 4,638,000 | 7.71 | 7.69 | *1911. | 7,206,643 | 16.20 | 12.18 |
| 1888. | 4,688,000 | 7.66 | 7.84 | 1911. | 7,158,000 | 16.47 | 12.26 |
| 1889. | 4,740,000 | 8.19 | 7.79 | 1912. | 7,343,000 | 18.54 | 13.37 |
| 1890. | 4,793,000 | 8.33 | 7.52 | 1913. | 7,530,000 | 22.40 | 14.88 |
| *1891. | 4,833,239 | 7.98 | 7.52 | 1914. | 7,725,000 | 21.12 | 16.49 |
| 1891. | 4,844,000 | 7.96 | 7.50 | 1915. | 7,928,000 | 16.78 | 17.09 |
| 1892. | 4,889,000 | 7.55 | 7.52 | 1916. | 8,140,000 | 21.14 | 16.01 |
| 1893. | 4,936,000 | 7.73 | 7.46 | 1917 | 8,361,000 | 27.82 | 17.77 |

Note-The years marked with an asterisk(*) are those of the Census, April2, 1871, April 4, 1881, April 6, 1891, April 1, 1901, June 1, 1911. In all other cases the population is estimated at the close of each fiscal year: June 30 from 1871 to 1906 and March 31 from 1907 to 1917 . The fiscal period of 1907 is for the nine months ended March 31 .

## PUBLIC ACCOUNTS.

9.-Public Debt of Canada July 1, 1867, to March 31, 1917.

| Fiscal Year. | Total debt. | Tota assets. | Net debt. | Interest on debt. | $\begin{gathered} \text { Interest } \\ \text { from } \\ \text { investments. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1867 | 93,046,052 | 17,317,410 | $\stackrel{8}{75,728,642}$ | \$ | \$ |
| 1868. | 96,896,666 | 21,139,531 | 75,757,135 | 4,501,568 | 126,420 |
| 1869. | 112,361,998 | 36,502,679 | 75,859,319 | 4,907,014 | 313,021 |
| 1870. | 115,993,706 | 37,783,964 | 78,209,742 | 5,047,054 | 383,956 |
| 1871. | 115,402.6*3 | 37,786,165 | 77,706,518 | 5,165,304 | 554,384 |
| 1872. | 122,400, 179. | 40,213,107 | 82,187,072 | 5,257,231 | 488,042 |
| 1873. | 129,74:3,432 | 29,894,970 | 99,848,462 | 5,209,206 | 396,404 |
| 1874. | 141,163,551 | 32,838,587 | 108,324,964 | 5,724,436 | 610,863 |
| 1875. | 151,663,402 | 35,655,024 | 116,008,378 | 6,590,790 | 840,887 |
| 1876. | 161,204,688 | 36,653,174 | 124,551,514 | 6,400,902 | 798,906 |
| 1877 | 174,675,835 | 41,440,526 | 133,235,309 | 6,797,227 | 717,684 |
| 1878. | 174,957,269 | 34,595,199 | 140,362,070 | 7,048,884 | 605,774 |
| 1879. | 179,483,871 | 36,493,684 | 142,990,187 | 7,194,734 | 592,500 |
| 1880. | 194,634,441 | 42,182,852 | 152,451,589 | 7,773,869 | 834,793 |
| 1881. | 199,861,537 | 44,465,757 | 155,395,780 | 7,594,145 | 751,513 |
| 1882. | 205,365,252 | 51,703,601 | 153,661,651 | 7,740,804 | 914,009 |
| 1883. | 202,159,104 | 43,692,390 | 158,466,714 | 7,668,552 | 1,001,193 |
| 1884. | 242,482,416 | 60,320,566 | 182,161,850 | 7,700,181 | 986,698 |
| 1885. | 264,703,607 | 68,295,915 | 196,407,692 | 9,419,482 | 1,997,036 |
| 1886 | 273,164,341 | 50,005,234 | 223,159,107 | 10,137,009 | 2,299.079 |
| 1887 | 273,187,626 | 45,872,851 | 227,314,775 | 9,682,929 | 990,887 |
| 1888. | 284,513,842 | 49,982,484 | 234,531,358 | 9,823,313 | 932,025 |
| 1889. | 287,722,063 | 50,192,021 | 237,530,042 | 10,148,932 | 1,305,392 |
| 1890. | 286,112,295 | 48,579,083 | 237,533,212 | 9,656,841 | 1,082,271 |
| 1891. | 289,899,230 | 52,090,199 | 237,809,031 | 9,584,137 | 1,077,228 |
| 1892. | 295,333,274 | 54,201,840 | 241,131,434 | 9,763,978 | 1,086,420 |
| 1893. | 300,054,525 | 58,373,485 | 241,681,040 | 9,806,888 | 1,150,167 |
| 1894. | 308,348,023 | 62,164,994 | 246,183,029 | 10,212,596 | 1,217,809 |
| 1895. | 318,048,755 | 64,973,828 | 253,074,927 | 10,466,294 | 1,336,047 |
| 1896. | 325,717,537 | 67,220,104 | 258,497,433 | 10,502,430 | 1,370,001 |
| 1897 | 332,530,131 | 70,991,535 | 261,538,596 | 10,645,663 | 1,443,004 |
| 1898. | 338,375,984 | 74,419,585 | 263,956,399 | 10,516,758 | 1,513,655 |
| 1899. | 345,160,903 | 78,887,456 | 266,273,447. | 10,855,112 | 1,590,448 |
| 190 | 346,206,980 | 80,713,173 | 265,493,807 | 10,699,645 | 1,683,051 |
| 1901. | 354,732,433 | 86,252,429 | 268,480,004 | 10,807,955 | 1,784,834 |
| 1902. | 366,358,477 | 94,529,387 | 271,829,090 | 10,975,935 | 1,892,224 |
| 1903. | 361,344,098 | 99,737,109 | 261,606,989 | 11,068,139 | 2,020,953 |
| 1904. | 364,962,512 | 104,094,793 | 260,867,719 | 11,128,637 | 2,236,256 |
| 1905. | 377,678,580 | 111,454,413 | 266,224,167 | 10,630,115 | 2,105,031 |
| 1806. | 392,269,680 | 125,226,703 | 267,042,977 | 10,814,697 | 2,140,312 |
| 1907 (9 mos.). | 379,966,826 | 116,294,966 | 263,671,860 | 6,712,771 | 1,235,746 |
| 1908. | 408,207,158 | 130,246,298 | 277,960,860 | 10,973,597 | 1,925,569 |
| 1909. 1910. | 475,535,427 | 154,605,148 | 323,930,279 | 11,604,584 | 2,256,643 |
| 1910. | 470,663,046 | 134,394,500 | 336,268,546 | 13,098,161 | 2,807,465 |
| 1911. | 474,941,487 | 134,899,435 | 340,042,052 | 12,535,851 | 1,668,773 |
| 1912. | 508,338,592 | 168,419,131 | 339,919,461 | 12,259,397 | 1,281,317 |
| 1913. | 483,232,555 | 168,930,930 | 314,301,625 | 12,605,882 | 1,430,511 |
| 1914. | 544,391,369 | 208,394,519 | 335,996,850 | 12,893,505 | 1,964,541 |
| 1915. | 700,473,814 | 251,097,731 | 449,376,083 | 15,736,743 | 2,980,247 |
| 1916. | 936,987,802 | 321,831,631 | 615,156,171. | 21,421,585 | 3,358,210 |
| 1917....... | 1,382,003,268 | 502,816,970 | 879,186,298 | 35,802,567 | - 3,094,012 |

## FINANCE

10.-Assets of the Public Debt of Canada, July 1, 1867, to March 31, 1917

| Fiscal Year. | Sinking funds. | Other investments. | Province accounts. | Miscellaneous accourts. | Total assets. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ $\$ 0702$ | ${ }^{\$}$ | ${ }^{\$}$ | 80 | \$ |
| 1867.. | 1,207,222 | 4,578,060 | 10,045,534 | 1,486,094 | 17,317,410 |
| 1868. | 1,562,489 | 4,573,957 | 11,723,359 | 3,279,726 | 21,139,531 |
| 1869. | 1,989,296 | 13,348,757 | 14,776,812 | 6,387,814 | 36,502,679 |
| 1870. | 2,115,829 | 11,125,437 | 17,193,584 | 7,349,114 | 37,783,964 |
| 1871. | 2,537,495 | 9,369,952 | 19,126,531 | 6,752,187 | 37,786,165 |
| 1872. | 3,450,482 | 7,468,892 | 20,901,517 | 8,392,216 | 40,213,107 |
| 1873. | 3,598,422 | 5,717,694 | 11,537,690 | $9,041,164$ | 29,894,970 |
| 1874. | 4,112,348 | 6,313,565 | 11,524,638 | 10,888,036 | 32,838,587 |
| 1875. | 4,668,122 | 7,119,181 | 11,521,698 | 12,346,023 | 35,655,024 |
| 1876. | 5,491,075 | 9,157,464 | 11,974,808 | 10,029,827 | 36,653,174 |
| 1877. | 6,387,515 | 7,786,874 | 12,367,516 | 14,898,621 | 41,440,526 |
| 1878. | 7,400,268 | 4,551,638 | 12,274,893 | 10,368,400 | 34,595,199 |
| 1879. | $8,531,565$ | 4,152,655 | 13,030,019 | 10,779,445 | 36,493,684 |
| 1880. | 9,747,373 | 5,932,434 | 13,535,092 | 12,967,953 | 42,182,852 |
| 1881. | 10,964,526 | 6,798,964 | 13,314,115 | 13,388,152 | 44,465,757 |
| 1882.. | 12,190,732 | 11,443,104 | 13,013,286 | 15,056,479 | 51,703,601 |
| 1883. | 12,941,658 | 7,850,895 | 13,146,291 | 9,753,546 | 43,692,390 |
| 1884. | 14,292,158 | 28,337,491 | 7,499,069 | 10,191,848 | 60,320,566 |
| 1885.. | 15,855,353 | 34,497,966 | 7,502,724 | 10,439,872 | 68,295,915 |
| 1888.. | 17,461,624 | 8,249,817 | 7,508,755 | 16,785,038 | 50,005,234 |
| 1887. | 19,054,577 | 8,874,108 | 7,518,402 | 10,425,766 | 45,872,851 |
| 1888. | 20,993,654 | 10,549,696 | 7,545,150 | 10, 893,984 | 49,982,484 |
| 1889. | 22,730,299 | 9,749,155 | 7,973,556 | 9,739,011 | 50,192,021 |
| 1890. | 24,617,536 | 6,179,281 | 9,412,337 | 8,369,929 | 48,579,083 |
| 1891. | 26,555,614 | 6,199,581 | 9,910,524 | 9,424,480 | 52,090,199 |
| 1892. | 28,583,475 | 5,179,536 | 10,412,417 | 10,026,412 | 54,201, 840 |
| 1893. | 30,678,989 | 5,263,138 | 10,921,106 | 11,510,252 | 58,373,485 |
| 1894. | 32,356,777 | 5,263,138 | 10,917,856 | 13,627,223 | 62,164,994 |
| 1895. | 34,359,088 | 5,487,462 | 10,923,487 | 14,203,791 | 64,973,828 |
| 1896. | 36,414,376 | 6,077,628 | 10,586,399 | 14,141,701, | 67,220,104 |
| 1897. | 38,516,189 | 6,261,528 | 10,606,052 | $15,607,766$ | 70,991,535 |
| 1898. | 40,876,158 | 6,371,528 | 10,603,211 | 16,568,688 | 74,419,585 |
| 1899. | 43,358,643 | 6,371,528 | 10,671,783 | 18,485,502 | 78,887,456 |
| 1900. | 45,824,282 | 6,769,528 | 10,718,484 | 17,400,879 | 80,713,173 |
| 1901. | 48,304,619 | 7,062,836 | 10,718,474 | 20,166,500 | 86,252,429 |
| 1902. | 50,874,000 | 7,508,077 | 10,718,461 | 25,428,849 | 94,529,387 |
| 1903. | 53,494,588 | 8,428,962 | 4,144,218 | 33,669,341 | 99,737,109 |
| 1904. | 44,770,876 | 13,801,928 | 4,119,591 | 41,402,398 | 104,094,793 |
| 1905. | 47,032,494 | 12,691,310 | 4,048,796 | 47,681,813 | 111,454,413 |
| 1906 | 48,016,410 | 12,576,241 | 4,033,705 | 60,600,347 | 125,226,703 |
| 1907 (9 mos). | 45,981,552 | 13,223,804 | 4,033,705 | 53,055,905 | 116,294,966 |
| 1908. | 42,250,209 | 22,949,146 | 4,033,705 | 61,013,238 | 130,246,298 |
| 1909. | 38,515,547 | 22, 144,989 | 2,296,429 | 91,648,183 | 154,605,148 |
| 1910. | 14,782,613 | 26,216,852 | 2,296,429 | 91,098,606 | 134,394,500 |
| 1911.. | 11,196,826 | 27,501,851 | 2,296,429 | 93,904,329 | 134,899,435 |
| 1912. | 12,353,282 | 30,551,851 | 2,296,333 | 123,217,665 | 168,419,131 |
| 1913. | 13,737,567 | 43,885,325 | 2,296,328 | 109,011,710 | 168,930,930 |
| 1914. | 9,144,995 | 70,819,658 | 2,296,328 | 126,133,538 | 208,394,519 |
| 1915., | 10,790,807 | 111,719,684 | 2,296,328 | 126,290,912 | 251,097,731 |
| 1916... | 12,563,828 | 109,937,419 | 2,296,328 | 197,034,056 | 321,831,631 |
| 1917... | 14,035,525 | 148,586,596 | 2,296,328 | 337,898,521 | 502,816,970 |

PUBLIC ACCOUNTS
11.-Total Liabilities of Canada, July 1, 1867, to March 31, 1917.

| Fiscal Year. | Funded debt payable in London. | Funded debt payable in Canada. | Dominion notes. | Provincial notes. | Savings banks. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1867 | ${ }_{67,069,116}^{\$}$ | 3,999,175 | $3, \$$ | $\begin{aligned} & \$ \\ & 605,859 \end{aligned}$ | $\underset{1,422,047}{\$}$ |
| 1868. | 66,795,609 | 6,016,074 | 3,795,000 | $552,3 \geq 6$ | 1,686,126 |
| 1869. | 75, 347,176 | 6,950,496 | 4,830,000 | 467,743 | 2,452,119 |
| 1870. | 75,847,176 | 7,708,236 | 7,479,353 | 334,301 | 3,367,072 |
| 1871. | 75,811,163 | 7,828,451, | 7,367,341 | 115,092 | 4,515,446 |
| 1872. | 76,486,656 | 7,974,573 | 10,510,541 | 61,685 | 5,187,586 |
| 1873.. | 76,137,716 | $8,199,396$ | 11,284,132 | 51,028 | 6,119,691 |
| 1874.. | 85,798,049 | $8,914,514$ | 12,175,579, | 47,013 | 7,210,261 |
| 1875. | 99,961,023 | 8,398,909 | 10,778,873 | 44,665 | 7,171,181 |
| 1876.. | 112,133,529 | 8,123,051 | 11,533,891 | 43,229 | 7,044,118 |
| 1877.. | 122,477,629 | 8,308,524 | 10,680,493 | 42,527 | 7,470,631 |
| 1878.. | 121,244,416 | 8,933,231 | 10,460,735 | 41,846 | 8,497,013 |
| 1879. | 128,307,409 | 9,998,778 | 10,789,710 | 41,397 | 9,207,683 |
| 1880.. | 137,024.583 | 11,595,160 | 13,565,159 | 41,040 | 11,052,956 |
| 1881. | 135,601,083 | 11,580,142 | 14,538,965 | 40,810 | 15,836,672 |
| 1882.. | 132,122,876 | 10,901,005 | 15,507,911 | 40,595 | 21,768,662 |
| 1883. | 130,187,403 | 5,924,403 | 15,997,855 | 40,359 | 26,219,108 |
| 1884. | 153,157,096 | 21,988,566 | 15,360,281 | 40,237 | 29,217,537 |
| 1885.. | 154,105,122 | 19,930,644 | 15,633,256 | 40,164 | 32,979,076 |
| 1886.. | 172,247,083 | 20,382,614 | 16,297,453 | 40,084 | 37,173,814 |
| 1887.. | 171,675,736 | 18,749,402 | 15,059,836. | 39,881 | 40,832,275 |
| 1888. | 176,601,776 | 17,572,668 | 16,249,319 | 39,792 | 41,371,058 |
| 1889.. | 188,239,436 | 15,511,362 | 15,426,281 | 39,768 | 42,956,358 |
| 1890.. | 187,616,503 | 13,674,428 | 15,357,893 | 39,744 | 41,012,465 |
| 1891.. | 188,040,134 | 11,833,539 | 16,176,317 | 39,625 | $39,400,026$ |
| 1892.. | 198,804,342 | $10,362,566$ | 17,282,699 | 39,585 | 39,529,548 |
| 1893.. | 201,615,481 | 8,218,152 | 18,448, 494 | 39,570 | 41,849,656 |
| 1894. | 207,275,505 | 7,181,711 | 20,061,719 | 39,534 | 43,036,012 |
| 1885. | 218,225,504 | 7,095,625 | 19,520,233 | 39,520 | 44,450,493 |
| 1896. | 218,225,504 | 9,708,835 | 20,372,215 | 39,475 | 46,799,319 |
| 1897 | 218,225,504 | $9,188,638$ | 22,318,096 | 39,438 | 48,934,976 |
| 1898.. | 227,958,837 | 8,992,959 | 22,178,194 | 39,429 | 50,111,119 |
| 1899. | 227,958,837 | 8,812,867 | 24,286,467 | 39,429 | 50,241,715 |
| 1900. | 227,958,837 | 8,676,765 | 26,094,924 | 39,424 | 53,149,722 |
| 1901. | 227,958,837 | 8,554,365 | 27,671,452 | 39,420 | $56,048,957$ |
| 1902. | 227,958,837 | 9,007,614 | 32,780,387 | 39,407 | 58,437,989 |
| 1903. | 227,958,837 | 8,886,981 | 39,006,199 | 39,407 | 60,771,129 |
| 1904. | 209,479,619 | 7,478,081 | 41,574,783 | 39,407 | 62,158,450 |
| 1905. | 209,520,233 | 7,450,949 | 47,334,222 | 39,407 | 62,017,457 |
| 1906 | 204,738,351 | 7,838,716 | 49,941,427 | 39,361 | 61,910,622 |
| 1907 (9 mos).. | 207,627,691 | 7,301,116 | 54,794,597 | 39,361 | 62,541,812 |
| 1908. | 221,809,568 | 7,176,416 | 60,455,991 | 39,361 | $62,581,155$ |
| 1909. | 277,810,963 | 4,769,616 | 79,351,081 | 39,286 | 59,938,920 |
| 1910.. | 257,451,059 | 4,819,116 | 87,134,069 | 39,273 | 58,264,230 |
| 1911.. | 271,050,678 | 4,795,066 | 89,994,270. | 39,239 | 58,094,331 |
| 1912.. | 282,024,279 | 4,730,878 | 113,329,633 | 39,225 | 58,219,328 |
| 1913.. | 258,679,819 | 2,190,768 | 112,101,886 | 39,220 | 57,140,483 |
| 1914. | 302,842,485 | 719,003 | 117,795,639 | 39,220 | 55,567,608 |
| 1915.. | 338,369,979 | 691,503 | 157,056,119 | 39,220 | 54,001,718 |
| 1916.. | 362,703,512 | 100,298,603 | 177,943,132 | 39,220 | 53,528,420 |
| 1917.. | 362,703,312 | 340,385,810 | 183,248,987 | 39,220 | 56,216,087 |

## FINANCE.

## 11.-Total Liabilities of Canada, July 1, 1867, to March 31, 1917-concluded.

| Fiscal Year. | Compensation to Seigneurs. | Temporary loans. | Trust funds. | Province accounts. | $\left\|\begin{array}{c}\text { Mis- } \\ \text { cellaneous } \\ \text { account. }\end{array}\right\|$ | Total liabilities. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1867 | $3,869,810$ | \$ | $6,408,780$ | $\begin{gathered} \$ \\ 2,573,293 \end{gathered}$ | $\begin{gathered} \$ \\ 3,984,272 \end{gathered}$ | $\begin{aligned} & \$ \\ & 046,052 \end{aligned}$ |
| 1868. | 3,869,810 |  | 6,454,799 | $3,499,678$ | $4,227,244$ |  |
| 1869. | 3,869,810 | 6,575,410 | 6,477,818 | 4,664,511 | 227,115 | 112,361,998 |
| 1870. | 3,860,646 | 2,224,354 | 6,535,103 | 6.224,159 | 2,353,307 | 115,993,707 |
| 1871. | 3,811,065 | - | 6,595,678 | 7,951,628 | 1,496,819 | 115,492,683 |
| 1872. | 3,725,554 |  | 6.655,249 | 10,319,741 | 1,478,594 | 122,400,179 |
| 1873. | 3,500,594 |  | 6,686,347 | 14,477,825 | 4,321,370 | 130,778,099 |
| 1874. | 3,476,82 |  | $6.75 \geq 8.5$ | 16,119,309 | 669,157 | 141,163,551 |
| 1875. | 825,478 | - | $6,52^{\prime} 0^{3}-4$ | 14,984,38: | 2,676,367 | 151,663,402 |
| 1876. | 466,388 |  | 6,881,93s | 14,384,864 | 593,679 | 161,204,688 |
| 1877 | 407,061 |  | 6, 999,3 析 | 13,910,660 | 4,478,963 | 174,675,835 |
| 1878. | 400,427 |  | $6,860,331$ | 13,313,435 | 5,205,835 | 174,957,269 |
| 1879 | 391.331 |  | 6.834,474 | 12,605,299 | 5,798,670 | 183,974,754 |
| 1880. | 385.840 |  | 6,893,453 | 12,569,014 | 5,998,118 | 199,125,323 |
| 1881 | 394,596 |  | 6,941,146. | 12,424,853 | 2,503,271 | 199,861,538 |
| 1882. | 244,93t |  | 6,999,035 | 12,596,07\% | 4,884,160 | 205,365,252 |
| 1883. | 200,08; |  | 7,003,18 | 32,573,49\% | 4,013,213 | 202,159,104 |
| 1884. | 198,163 |  | 7,055,899 | 14.285,609 | 1,178,939 | 242,482,416 |
| 1885. | 10340 | 18.985908 | 7,041,841 | 14,219,480 | 1,572,737 | 264,703 f07 |
| 1886. | 188,765 | 1,262,444 | 7,060,524 | 17,310,531 | 1,201,027 | 273,164,341 |
| 1887 | 188,76.3 | 1,241,00\% | 7,080,830 | 17,282,987 | 1,036,908 | 273,1>7,626 |
| 1888. | 179,154 | 5,651,459, | 7,098,64, | 17,194,048 | 2,555,924 | 284,513.842 |
| 1889. | 181,776 |  | 7,200,386 | 16.927.884 | 1,238,81: | 287,722,063 |
| 1890. | 179,416 | 46,667 | 8,184,794 | 16,907,533 | 1,192,85* | 286,112,295 |
| 1891. | 166.960 | 7,786,665 | 8,217,995 | 16,907 | 1,330,555 | 289,899,230 |
| 1892. | 166,560 |  | 9,113,81: | 16,407,374 | 3,626,783 | 295,333,274 |
| 1893 | 166,310 | 1,460,000 | 10,111,141 | 16,407,366 | 1,738,361 | 300,054,525 |
| 1894 | 164,732 | 2,433,333 | 10,205,366 | 16,407,324 | 1,542,787 | 308,348,023 |
| 1895 | 131,387 |  | 10,263,694 | 16,407,031 | $\mathrm{I}, 915,264$ | 318,048,755 |
| 1896. | 124,328 | 1,946,667 | 10,314,883 | 16,406,987 | 1,779,324 | 325,717,537 |
| 1897 | 117,287 | 4,866,667 | 10,409,788 | 16,406,721 | 2,023,016 | 332,530,131 |
| 1898. | 78,873 |  | 10,446,967 | 16,406,435 | 2,163,171 | 338,375,984 |
| 1899. | 78,798 | 3,893,333 | 10,690,278 | 16,672,687 | 2,536,492 | $345,160,903$ |
| 1900. | 78,798 |  | 10,910,056 | 16,672,687 | 2,625,767 | 346,206,980 |
| 1901. | 78,029 | - | 11,305,611 | 16,672,677 | 6,403,085 | 354,732,433 |
| 1902. | 76,262 |  | 11,593,175 | 16,672,336 | 9,792,470 | 366,358,477 |
| 1903. | 76,262 |  | 12,181,524 | 6,523,165 | 5,900,594 | 361,344,098 |
| 1904. | 76,262 | 4,866,667 | 16,105,439 | 11,920,688 | 11,263,136 | 364,962,512 |
| 1905. | 76,262 | 2,920,000 | 18,385,824 | 11,920,668 | 18,013,558 | 377,678,586 |
|  | 76,108 | 2,920,000 | 26,857,181 | 11,920,684. | 26,027,230 | 392,269,680 |
| 1907 (9 mos.). | 72,599 | 1,216,667 | 13,744,817 | 11,920,668 | 20,707,498 | 379,966,826 |
| 1908. | 72,599 | 9,300,000 | 14,107,439 | 11,920,668 | 20,743,961 | 408,207,158 |
| 1909. | 64,030 | 13,606,333 | 13,124,674 | 11,920,582 | 17,909,942 | 478,535,427 |
| 1910. | 38,322 | 17,033,333 | 13,422,463 | 11,920,582 | 20,540,999 | 470,663,046 |
| 1911. | 38,322 | - | 13,939,187 | 11,920,582 | 25,069,812 | 474,941,487 |
| 1912. | 38,092 |  | 14,727,472 | 11,920,486 | $23,309,199$ | 508,338,592 |
| 1913. | 38,092 |  | 15,167,804 | 11,920,481 | 25,954,002 | 483,232,55E |
| 1914. | 34,238 | 8,273,333 | 15,831,903 | 11,920,481 | 31,367,464 | $544,391,36 \varepsilon$ |
| 1915. | 34,238 | 81,073,684 | 15,995,150 | 11,920,481 | 41,291,722 | $700,473,814$ |
| 1916 | 34,238 | 182,992,380 | 15,802,21s | 11,920,481 | 31,725,792 | $936,987,802$ |
| 1917 | 34,238 | 300,332,797 | If. 265,441 | 11,920,48 | 110,856,8 | $382,003,265$ |

PUBLIC ACCOUNTS.
12.-Funded Debt payable in London and Canada, March 31, 1916.

| Description. | Amount. | Interest payable thereos. | Date of Maturity. |
| :---: | :---: | :---: | :---: |
| Payable in London. <br> $4 \frac{1}{2}$ Per cent. loan of 1920-25. | $\begin{gathered} \$ \\ 24,333,333 \end{gathered}$ | $\begin{gathered} \$ \\ 1,095,000 \end{gathered}$ | May 1, 1925 (on or after May 1, 1920, on giving 3 months' notice). |
| 4 per cent. Ioan of 1940-60. | 93,926,667 | 3,757,066 | October 1, 1960 (on or after Oct. 1, 1940, on giving 3 months' notice). |
| $3{ }^{\frac{3}{4}}$ per cent. loan of 1909. | 26,701,842 | 1001.319 | July 1, 1919 (or after July 1, 1914, the whole or any portion by drawings on giving 3 months' notice). |
| $3 \frac{1}{3} \times 181884$. | 23,467,206 | 821,352 | On giving 6 months' notice or 1st Jime, 1934. |
|  |  |  |  |
| land grant | 15,056,007 | 526,960 | July 1, 1938. |
| 31 per cent. loan of 1930-50. . I | 137,058,841 | 4,797,060 | July 1, 1950 (or after July 1, 1930, on giving 6 months notice). |
| $3 \times$ " " 301888. | 8,071,230 | 242,137 | July 1, 1938. |
| $\begin{array}{llll}3 & \text { " } \\ 3 & \text { " } & \text { " } & 1892 \\ 3\end{array}$ | 18,550,000 | 547,500 | July 1, 1938. |
| $2{ }^{2}$ " " 1897 | 4,888,186 | 122,205 | October 1, 1947. |
| Total. | 362,703,312 | 13,239,099 |  |
| Payable in Canada. <br> Province of New Brunswick, 6 per cent. loan debentures. Province of Canada, 5 per cent. loan debentures. <br> Dominion stock, issue A, 6 p.c. | 600400 | - |  |
|  |  |  | Overdue. |
|  |  | - | Overdue. |
|  | 8,000 | 480 |  |
|  | 31,837 | 1,114 | Various dates. |
| * " " ${ }^{*}$ | 137,400 | 4,809 |  |
| * " 1896, 31 ${ }^{\text {a }}$ " | 48,666 10,000 | $\begin{array}{r}1,703 \\ 350 \\ \hline\end{array}$ |  |
| " " " F, 3i ${ }^{\text {a }}$ | 61,150 | 2,140 | July 1, 1925. |
| Dominion of Canada war loan 1915-25... . 5 per cent. | 103,000,000 | 5,000,000 | Dec. 1, 1925. |
| Total | 100,298,053 | 5,010,596 |  |

Provincial Subsidies.-Tables 13 and 14 show the amounts of the subsidies and other payments made by the Dominion to the Provincial Governments for each of the years 1910 to 1916 (Table 13) and the totals paid from Confederation to date (Table 14). The Provincial subsidies payable by the Dominion Government were originally settled by the British North America Act, 1867 ( 30 and 31 Vict., c. 3, s. 118), but were revised by the British North America Act, 1907 (7 Edw. VII, c. 11). Under the revised settlement each Provincial Government receives (a) a fixed grant according to population and (b) a grant at the rate of 80 cents per head of the population up to $2,500,000$, and at the rate of 60 cents per head of so much of the population as exceeds that number. The province of British Columbia receives an additional

## FINANCE

grant of $\$ 100,000$ per annum for a period of 10 years from 19071. An additional grant of $\$ 100,000$ per annum is payable to Prince Edward Island under an act of 1912 ( 2 Geo. V., c. 42 ), and the payments to Manitoba were revised by the Extension of Boundaries (Manitoba) Act (2 Geo. V., c. 32). Other payments to the Provincial Governments by the Dominion Government consist of special grants as compensation for lands and allowance for buildings, allowances in lieu of debt, etc.
13.-Subsidies and other Payments of Dominion to Provincial Governments, 1911-16.

| Provinces. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | * | \$ | \% | * | \$ |
| Prince Edward Island... | 281,932 | - 811,932 | 381,932 | 381,932 | 381,932 | 381,932 |
| Nova Scotia. | 610,460 | 636,670 | 636,666 | 636,667 | 636,667 | 636,667 |
| New Brunswick.. | 621,361 | 637,976 | 637,977 | 637,976 | 637,976 | 637,976 |
| Quebee. | 1,686,579 | 1,971,705 | 1,967,556 | 1,969,630 | 1,969,630 | 1,969,630 |
| Ontario. | 2,128,772 | 2,396,429 | 2,396,328 | 2,396,379 | 2,396,379 | 2,396,379 |
| Manitoba. | 838,247 | 833,642 | 3,643,910 | 1,478,912 | 1,406,204 | 1,406,204 |
| Saskatchewan. | 1,229,975 | 1,548,189 | 1,555,453 | 1,631,248 | 1,710,675 | 1,710,675 |
| Alberta | 1,173,069 | 1,260,722 | 1,259,489 | 1,424,590 | 1,589,075 | 1,589,075 |
| British Columbia. | 522,077 | 713,781 | 732,489 | 723,135 | 723,135 | 723,135 |
| Total. | 9,092,472 | 10,281,046 | 13,211,800 | 11,280,469 | 11,451,673 | 11,451,673 |

Note.-For the years 1868-1909, see Canada Year Book 1911, pp. 265-6.
14.-Totals of Subsidy Allowances from July 1, 1867, to March 31, 1916.

| Provinces. | Allowance for Government. | Allowance per head of Population. | Special Grants? | Interest on Debt Aliowance ${ }^{3}$. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | $\$$ | \$ | \$ | \$ |
| Prince Edward Island | 1,920,000 | 3,654,719 | 1,858,466 | 1,865,843 | 9,299,028 |
| Nova Scotia. | 4,110,000 | 15,921,131 | 826,980 | 2,232,611 | 23,090,722 |
| New Brunswick. | $3,620,000$ | 12,297,786 | 7,080,000 | 921,266 | 23,909,052 |
| Quebec ... | 4,960,000 | 48,857,434 | , | 2,902,500 | 56,719,934 |
| Ontario... | 5,360,000 | 61,730,164 |  | 2,322,643 | 69,412,807 |
| Manitoba. | 3,315,000 | 7,602,639 | 7,101,598 | 6,482,084 | 24,501,321 |
| Saskatchewan. | 1,761,666 | 3,722,022 | 5,531,250 | 4,459,125 | 15,474,063 |
| Alberta. | 1,736,667 | 3,025,726 | 5,062,500 | 4,459,125 | 14,284,018 |
| British Columbia | 2,760,000 | 4,744,560 | 5,400,000 | 1,321,582 | 14,226,142 |
| Total. | 29,543,333 | 161,546,181 | 32,860,794 | 26,966,779 | 250,917,087 |

${ }^{1}$ See Canada Year Book 1907, pp. xxxiii-iv.
${ }^{2}$ Compensation for lands and allowance for buildings.
${ }^{3}$ Allowance in lieu of debt.

## PUBLIC ACCOUNTS

15.-Coinage at the Ottawa Branch of the Royal Mint in the Calendar Years 1913-16.


## INLAND REVENUE.

Department of Inland Revenue.-Under the Inland Revenue Act (R.S. 1906, c. 51) the Department has the control and management of the collection of excise duties, of stamp duties, internal taxes, standard weights and measures and of the collection of bridge and ferry tolls and rents. It administers the statutes which deal with the adulteration of food and other articles, electricity and gas inspection, patent medicines, petroleum, naphtha and the analysis of fertilizers and feeding stuffs. The Department also establishes the food standards, which are put into force from time to time by Orders-in-Council under the authority of Section 26 of the Adulteration Act. For the year ended March 31, 1916, the total inland revenue of the Dominion amounted to $\$ 24,452,235$, as compared with $\$ 22,084,931$ in 1915.

Canadian Excise Tariff.-The following is a statement of the Canadian excise tariff, as amended by Parliament during the session of August 18-22, 1914:

| Spirits- |  |
| :---: | :---: |
| When made from raw grain, per |  |
| When made from malted barley | 42 |
| When made from imported mu- |  |
| lasses or other sweetened |  |
| ter free of Customs duty, per |  |
| proof gal. | 2.43 |
| Malt, per lb | 0.03 |
| Malt, imported, crushed or ground perlb. | d 0.05 |
| Malt liquor when made in whole |  |
| or part from any other substance |  |
| than malt, per gal. | 0.15 |
| Vinegar, per proof gal. | 0.04 |
| Acetic acid, per proof gal. | 0.04 |

Tobaceo, per !b... $\quad \$ 0.10$
Cigarettes, weighing not more than 3 lb . per m., per thousand.
Cigarettes, weighing more than 3 lb. per m., per thousand.
3.00
lb. per M., per thousand. $\quad 8.00$
Foreign raw leaf tobacco, un-
stemmed, per lb...
Foreign raw leaf tobacco, stemmed per lb.
0.42

Canada twist tobacco, per ib. $\quad 0.10$
Snuff, per lb. $\quad 0.10$
Cigars, perm. . . 3.00
Cigars when put up in packages of less than 10 each, per m... 4.00

Consumption of Alcohol and Tobacco.-The separate sources of revenue for the years 1911 to 1916 are set out in Table 16. The two largest sources of inland revenue are spirits and tobacco, which in 1916 together accounted for over eighty-four p.c. of the total. Tables 18 and 19 show that the consumption of alcoholic liquors and of tobacco bas tended annually to increase, both absolutely and relatively per head of the population, up to the year 1913. For the year 1912-13 the consumption of spirits reached its highest point, viz. $4,999,937$ gallons, or 1.112 gallon per head. For the year 1913-14 the consumption of malt liquor rose to its highest point, viz., $56,060,846$ gallons, or 7.2 gallons per head of beer. But under the influence of the war and resulting legislation a marked decrease is apparent, and for the year 1915-16 the consumption of spirits fell to $3,629,324$ gallons, or 0.745 gallon per head, as against 4,021,090 gallons, or 0.872 gallon per head in 1914-15 and $4,762,618$ gallons, or 1.061 gallon per head in 1913-14. The consumption per head of wine was 0.062 gallon in 1915-16, as against 0.095 gallon in 1914-15 and 0.124 gallon in 1913-14. In the case of malt liquor, the consumption in 1915-16 was 39,638,877 gallons, or 4.95 gallons per head of beer, as against $47,963,225$ gallons, or 6.071 gallons per head of beer in 1914-15. At the same time the excise revenue from spirits and malt has been maintained at or near the former levels as a consequence of the increased taxes imposed upon the outbreak of the war. In 1916 special provincial temperance legislation took effect in Ontario and in other provinces, the influence of which should become more apparent in the near future. Of tobacco, the quantity consumed in 1915-16 was 23,937 ,785 lb ., as compared with $24,444,380 \mathrm{lb}$. in 1914-15. The number of cigars consumed was $207,647,808$ in 1915-16, as against $236,866,542$ in 1914-15. The consumption per head of tobacco, including cigars, was 3.329 lb . in 1915-16, as against 3.427 lb . in 1914-15, 3.71 llb . in 1913-14 and 3.818 lb . in 1912-13, in which year the highest point was reached.

Electric Light and Power.-Electric light and power companies are subject to registration and inspection under the Electricity Inspection Act, 1907 (6-7 Edw. VII, c. 14), and the production of electrical energy

## INLAND REVENUE

for export is regulated by the Electricity and Fluid Exportation Act, 1907 (6-7 Edw. VII, e. 16). Both Acts are administered by the Department of Inland Revenue, and the statistics published in connection therewith are given in Tables 21 and 22.
16.-Excise and other Revenues for the Fiscal Years 1911-1916.

| Sources of Revenue. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acetic Acid. | \$ 10,242 | 11,300 | \$0,526 | 1 ${ }^{\text {1 }}$, 412 | $\$_{7,255}$ | $\$ 8,250$ |
| Cigars. | 470,197 | 517,64r | 602,269 | 588,03: | 625,905 | 685,158 |
| Electric Light.. | 59,583 | 66.5 | 74,83? | 80,476. | 82,565 | 70,562 |
| Malt... | 1,529,472 | 1,716 54, | 1,864,525 | 2,012,301 | 2,616,288 | 2,689,300 |
| Malt liquor | 52,893 | 8.,756 | 149,437 | 161,416 | 142,903 | 97,779 |
| Manufactures in bond. | 77,840 | 84,720 | 91,460 | 92,16c. | 94,904 | 105,812 |
| $\begin{aligned} & \text { Methylated } \\ & \text { spirits..... } \end{aligned}$ | 90,999 | 93,08: | 118,07: | 116,208 | 96,74i | 111,846 |
| Ferry Licenses. | 474 | 1,024 | 529 | 964 | 989 | 989 |
| Seizures... . | 5,605 | 2,2,319 | 2,062 | 1,434 | 8 4,141 | 10,349 |
| Spirits. | 7,913,376 | 8,667,666 | 9,474,142 | $9,0 \leq 8,025$ | 8,706,481 | 8,701,075 |
| Tobacco. . | 6,784,140 | 8,130,776 | 9,192,181 | 9,489,42e | 9,352,881 | 10,222,784 |
| War tax, reven ue stamps, ele |  |  |  | - | 98,057 | 1,550,488 |
| Weights and measures, gas and law stamps. | 151,229 | 163,958 | 171,506 | 185,854 | 172,740 | 169,454 |
| Other revenues. | 96,626 | 96,328. | 109,825 | 99,27\% | 83,075 | 78,389 |
| Totals. | 17,242,676 | 19,638,183 | 21,861,375 | 21,877,891 | 22,084,931 | 24,452,235 |

17.-Statistics of Distillation for the Fiscal Years 1912-1916.

| Schedule. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Licenses issued. | 15 | 14 | 14. | 析 | 16 |
| License fees.... .ils \$ | 3,750 | 3,500 | 3,500 | 3,500 | 3,750 |
| Grain,etc.,fordistillation- |  |  |  |  |  |
| Malt....... lb. | 5,676,504 | 6,637,629 | 7,434,935 | 6,761,342 | 4,863,855 |
| Indian Corn. | 52,403,560 | 63,048,555 | 72,170,255 | 60,905,148 | 33,006,0:1 |
| Rye. | 9,474,631 | 11,696,490 | 15,362,100 | 13,859,435 | 6,952,883 |
| Oats. . | 501,435 | 640,594 | 712,642 | 582,074 | 169,130 |
| Wheat. : : ${ }^{\text {a }}$ | 2,851,840 | 3,026,065 | 2,466,162 | 1,180,970 |  |
| Total grain for dis- |  |  |  |  |  |
| Molasses.. | 8,682,660 | 26,885,496 | 19,690,720 | 20,587,603 | 14,884,460 |
| Proof spirits manufactured... | 4,784,396 | 6,458,452 | 6,972,583 | 6,116,580 | 3,450,012 |
| Duty collected ex-manufactory on deficiencies and assessments- |  |  |  |  |  |
| Gallons. | 9,317 | 2,508 | 2,001 | 6,407 | 4,066 |
| Amount... ${ }^{\text {a }}$... $\$$ | 17,703 | 4,765 | 3,803 | 12,174 | 9,759 |
| Total duty collected plas license fees. . | 21,45 | 8,26 | 7,303 | 15,674 | 13,509 |
| Vinegar. ${ }^{\text {a }}$ gal. | 2,006,159 | 2,392,508 | 2,203,822 | 2,199,421 | 2,324,408 |
| Acetic Acid. ${ }_{\text {a }}$ | 278,749 | 261,890 | 2,283,440 | 2, 778,887 | 2, 203,753 |

FINANCE
18.-Quantities of Spirits, Malt Liquor, Malt and Tobacco, taken out of Bond for Consumption, 1868-1916.

| Fiscal <br> Year. | Spirits. | Malt. Liquor. | Malt. | Tobacco, snuff and Cigarettes made from- |  |  | Cigars. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Foreign Leaf | Canadian Leaf. | Combination Leaf. |  |
| 1868. | $\left\|\begin{array}{c} \text { Gal. } \\ 13,772,719 \end{array}\right\|$ | $\begin{gathered} \text { Gal. } \\ 7,685,309 \end{gathered}$ | $\underset{17,181,500}{\text { Lb. }}$ | Ib. | Lb. | Lb. | No. |
| 1869. | 12,809,501 | 7,609,148 | 23,731,351 |  |  |  |  |
| 1870. | $13,810,930$ | 7,290,540 | 22,636,249 | 6,896,624 |  |  | ${ }^{3128,096}$ |
| 1871. | 14,219,245 | 8,457,096 | 27,671,496 | 6,623,978 | 46,791 |  | ${ }^{3} 125,842$ |
| 1872. | 3,808,291 | 9,557,328 | 29,981,647 | 7,952,735 | 31,900 | - | ${ }^{3} 191,564$ |
| 1873. | 3,730,337 | 11,060,521 | 33,955,694 | 6,364,876 | 16,558 |  | ${ }^{3} 188,354$ |
| 1874. | 4,566,508 | 10,771,519 | 33,369,016 | 8,516,633 | 129,842 |  | 3329,148 |
| 1875. | 3,303,298 | 11,584,226 | 33,016,082 | 6,489,192 | 67,473 |  | 3312,470 |
| 1876. | 3,441,125 | 9,319,190 | 30,693.447 | 8,171,552 | 17,682 |  | 3334,925 |
| 1877 | 2,942,337 | 9,115,258 | 28,878,551 | 7,481,024 | 17,390 |  | 3318,051 |
| 1878. | 3,007,870 | 8,578,075 | 26,534,587 | 7,150,410 | 8,244 |  | 3362,674 |
| 1879. | 3,646,255 | 8,848,208 | 27,795,037 | 7,100,696 | 7,416 |  | ${ }^{3} 395,183$ |
| 1880. | 2,290,367 | 9,201,213 | 28,902,354 | 7,352,487 | 50,865 |  | ${ }^{3} 410,932$ |
| 1881. | 3,214,543 | 9,931,176 | 30,798,078 | 7,717,970 | 383,304 |  | ${ }^{3} 524,612$ |
| 1882. | 3,552,818 | 12,036,979 | 37,910,046 | 7,909,674 | 471,298 |  | ${ }^{3736,614}$ |
| 1883. | 3,848,787 | 12,757,444 | 39,587,385 | 8,569,784 | 395,214 | - | ${ }^{3} 931,062$ |
| 1884. | 3,608,021 | 13,098,700 | 40,533,102 | 9,745,705 | 326,975 |  | 86,062,990 |
| 1885. | 4,274,722 | 12,071,752 | 47,005,917 | 10,562,381 | 499,132 |  | 78,869,878 |
| 1886. | 2,412,818 | 13,282,261 | 37,604,708 | 7,563,602 | 346,471 |  | 92,046,289 |
| 1887 | 2,864,935 | 14,786,285 | 42,630,440 | 8,248,239 | 568,335 |  | 85,974,823 |
| 1888. | 2,326,327 | 15,944,002 | 48,640,467 | 8,539,160 | 716,873 | - | 90,783,558 |
| 1889. | 2,960,447 | 16,363,349 | 51,111,429 | 8,962,667 | 786,456 |  | 92,599,820 |
| 1890. | 3,521,194 | 17,196,115 | 45,974,013 | 9,257,799 | 632,035 |  | 98,976,117 |
| 1891. | 2,687,664 | 18,069,183 | 57,909,201 | 9,354,340 | 442,403 |  | 101,142,481 |
| 1892. | 2,545,935 | 16,946,245 | 46,425,882 | 9,523,203 | 468,962 |  | 104,528,791 |
| 1893. | 2,731,896 | 17,175,356 | 50,082,751 | 9,612,857 | 515,012 |  | 114,668,809 |
| 1894. | 2,749,109 | 18,299,636 | 51,311,206 | 9,611,393 | 390,946 |  | 115,440,480 |
| 1895. | 2,509,019 | 17,628,815 | 50,659,627 | 9,229,857 | 538,353 |  | 106,131,294 |
| 1896. | 2,332,859 | 18,014,714 | 51,690,278 | 9,118,029 | 515,557 | - | 108,290,260 |
| 1897 | 2,779,946 | 17,888,239 | 68,443,353 | 9,419,019 | 804,452 | - | 113,276,105 |
| 1898. ${ }^{\text {a }}$ | 1,874,479 | 19,871,738 | 38,954,715 | 7,109,507 | 1,946,027 |  | 113,132,223 |
| 1899. | 2,404,599 | 21,101,873 | 56,212,822 | 7,626,264 | 2,271,719 | 352,205 | 128,919,098 |
| 1900. | 2,523,576 | 23,309,172 | 60,284,064 | 7,514,663 | 2,523,936 | 1,126,439 | 138,041,707 |
| 1901. | 2,707,919 | 25,108,254 | 64,723,616 | 7,325,431 | 3,165,084 | 1,203,982 | 141,096,889 |
| 1902. | 2,933,183 | 27,623,767 | 71,440,519 | 7,679,334 | 3,007,254 | 1,285,752 | 151,780,516 |
| 1903. | 2,979,268 | 25,755,154 | 67,608,157 | 8,060,485 | 3,204,980 | 1,771,784 | 168,290,422 |
| 1904. | 3,481,287 | 27,335,985 | 75,430,347 | 8,615,760 | 3,041,622 | 1,550,325 | 180,485,202 |
| 1905. | 3,112,843 | 30,330,370 | 75,517,352 | 9,151,709 | 3,140,694 | 1,903,791 | 186,110,777 |
| 1906. | 3,545,785 | 33,250,637 | 85,699,102 | 10,190,515 | $3,208,806$ | 1,926,595 | 193,827,342 |
| $1907{ }^{2}$. | 3,033,439 | 26,505,831 | 69,176,871 | 8,340,652 | 2,277,436 | 1,499,582 | 154,253,260 |
| 1908. | 3,918,657 | 38,800,380 | 98,579,733 | 11,810,268 | 3,110,228 | 2,205,542 | 200,133,255 |
| 1909. . | 3,627,266 | 37,317,964 | 92,631,306 |  | 18,268,135 |  | 192,105,371 |
| 1910.. | 3,777,156 | 38,558,210 | 95,166,134 |  | 19,293,891 |  | 205,820,851 |
| 1911. | 4,146,452 | 41,752,448 | 101,525,430 |  | 20,641,947 |  | 227,585,692 |
| 1912. | 4,534,785 | 47,518,647 | 114,029,523 |  | 23,749,939 |  | 252,718,242 |
| 1913. | 4,999,937 | 52,314,400 | 123,920,607 |  | 25,287,332 |  | 294,772,933 |
| 1914. | 4,762,618 | 56,060,846 | 133,794,639 |  | 25,735,773 |  | 288, 219,892 |
| 1915. | 4,021,090 | 47,963,225 | 111,037,743 |  | 24,444,380 |  | 236,866,542 |
| 1916. | 3,629,324 | 39,638,877 | 89,476,590 |  | 23,937,785 |  | 207,647,808 |

[^36]
'9161-6981 'pray 」ad sapnd suroisn9 pre
19.-Consumption per head of Spirits, Wine, Beer and Tobacco and amount of Excise
20.-Number of Excise Licenses issued during the Fiscal Years 1909-1916.

| Description. | 1909. | 1910. | 1911, | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Distillers. | 14 | 14 | 15 | 15 | 14 | 14 | 14 | 13 |
| Maltsters. | 48 | 48 | 48 | 42 | 40 | 37 | 36 | 19 |
| Brewers. | 134 | 131 | 121 | 114 | 117 | 119 | 118 | 106 |
| Tobacco Manufacturers. | 78 | 62 | 66 | 64 | 72 | 82 | 89 | 84 |
| do Can. Twist. | 36 | 35 | 41 | 40 | 31 | 24 | 25 | 19 |
| Cigar Manufacturers. | 224 | 231 | 225 | 235 | 253 | 255 | 262 | 221 |
| Petroleum Refineries. | 3 | 4 | 4 | 4 | 5 | 5 | 6 | , |
| Manufacturers in Bond- Vinegar.... | 19 | 19 | 19 | 19 | 19 | 20 | 20 | 18 |
| Perfumes, Pharmaceutical Preparations, etc. | 27 | 26 | 29 | 29 | 29 | 37 | 47 | 54 |
| Fulminate of Mercury | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 |
| Cereal Foods.. | - | - | 1 | 1 | 1 | 1 | 1 | 3 |
| Chemical Stills.. | 34 | 43 | 43 | 48 | 70 | 70 | 69 | 119 |
| Wood, lohol Manutatturers. | - | - | 11 | 16 | 11 | 11 | 11 | 12 |
| Mait Vinegar Brewers. | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 2 |
| Compounders | 2 | 3 | 3 | 4 | 6 | 6 | 5 | 2 |
| Still Manufacturers.. | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |
| Arerir Meid Manuacturers | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 |
| Bonded Warebouses. | 258 | 266 | 252 | 253 | 262 | 252 | 265 | 230 |

21.-Number of Electric Light and Power Companies registered under the Electricity Inspection Act in the Fiscal Years 1910-16.

| Provinces. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No. | No. | No. |
| Prince Edward <br> Island | ${ }_{31}^{2}$ | 3 | 4 | 56 | 5 37 | 6 35 | 6 35 |
| Noval Scotia... | 31 | 18 | 23 | 25 | 24 | 24 | 24 |
| Quebec. | 63 | 63 | 60 | 65 | 70 | 53 | 61 |
| Ont: rio . | 217 | 228 | 219 | 230 | 262 | 282 | 287 |
| Minitoba. .. ... | 17 | 17 | 14 | 18 | 16 | 16 | 16 |
| Saskittchewan. | 10 | 12 | 9 | 15 | 52 | 54 | 54 |
| Alberta. . ., . | 10 | 10 | 21 | 28 | 39 | 36 | 36 |
| British Columbia. . | 29 | 33 | 35 | 36 | 57 2 | 55 | 55 |
| Yukon | 2 | 2 | 2 | 2 | 2 |  |  |
| Totals. | 398 | 418 | 419 | 460 | 564 | 561 | 574 |

## INLAND REVENUE.

22.-Electrical Energy generated or produced for Export and for Consumption in Canada under authority of the Electricity and Fiuid Exportation Act during the Fiscal Years 1913, 1914, 1915 and 1916.

| Companies. | Generated or produced for export. | Generated or produced for consump tion in Canada. | Total output of generating station or other source. |
| :---: | :---: | :---: | :---: |
|  | Units. | Units. | Units. |
| Intario Power Company of Niagara Falls Niagara Falls, Ontario $1+13$ | 254,286,580 | 284,9 | 39, |
| 1914 | 282,123,004 | 412,597,896 | 694,720,900 |
| 1915 | 203,633,936 | 579,915,364 | 783,549,300 |
| 1916 | 199,135, 160 | 616,834,440 | 815,969,600 |
| Canadian Niagara Power Company, Niag- |  |  |  |
| sra Falls, Ontario.. .. .. . 1913 | 325,775,842 | 10,986,988 | 336,762,830 |
| 1914 | 400,214,980 | 11,420,020 | 411,635,000 |
| 1915 | 382,672,196 | 9,755.804 | 392,428,000 |
| 1916 | 400,521, 090 | 11,178,910 | 411,700,000 |
| Electrical Development Company of Ontario Ltd., Niagara Falls, Ontario. 1913 |  |  |  |
|  | 55,034,000 | 155,773,208 | 210,807,408 |
| 1914 | 42,154,000 | $191,885,670$ $262,407,443$ | $\begin{aligned} & 234,089,670 \\ & 960407443 \end{aligned}$ |
| 1916 | $34,652,000$ | 395,346,500 | 429,908,500 |
| Ontario and Minnesota Power Company, |  |  |  |
| Fort Frances, Ontario... . 1913 | 21,233,520 | 1,094,513 | 22,328,033 |
| 1914 | 21,649,327 | 868,856 | 22,518,183 |
| 1915 | 19,190,360 | 8,069,997 | 27.260,357 |
| Maine and New Brunswick Electrical Power Company, Ltd., Aroostook Falls, N.B. | 13,144,070 | 11,789,534 | 24,933,604 |
|  |  |  |  |
|  | 2,371,446 | 63,070 | 2,434,516 |
| 1914 | 2,846,016 | 57,967 | 2,903,983 |
| 1915 | 3,054,393 | 172,849, | 3,227,242 |
| British Columbia Electric Ry. Co., Vancouver, B.C... | 3,075,893 | 242,437 | 3,318,330 |
|  |  | 120.78 | 121,071,571 |
|  | 395,831 | 114,697,400 | 115,003,231 |
|  | 397,709 | 81,629,981 | 82,027,690 |
|  | 330,626 | 68,470,689 | 68,801,315 |
| Western Canada Power Co., Vancouver, B.C. | 3,259,693 | 18,191,562 | 21,451,255 |
| 1914 | 23,213,891 | 39,339,239 | 62,553,130 |
| 1915 | 18,219,238 | 52,334,262 | 70,553,500 |
| Sherbrooke Railway and Power Co, Sherbrooke, Que.. $\qquad$ | 11,937,700 | 60,468,020 | 72,405,720 |
|  | 230,820 | 8,605,200 | 8,836,020 |
| Cedars Rapids Mfg. and Power Co. Cedars Rapids, Que. $\quad .1915$ |  |  |  |
|  | 28,913,000 | 7,599,800 | 36,512,800 ${ }^{\text {4 }}$ |
|  | 358,753,000 | 56,031,000 | 414,784,000 |
| Totals. | 662,243,664 | 591,849,507 | 1,254,093,171 |
|  | 772,597,049 | 770,867,048 | 1,543,464,097 |
|  | 656,080,832 | 1,001,885,500 | 1,657.966,332 |
|  | 1,021,780,359 | 1,228,966,730 | 2,250,747,089 |

${ }^{1}$ For first three months of fiscal year.

## PROVINCIAL PUBLIC ACCOUNTS.

Tables $\mathbf{2 3 - 2 5}$ show for the latest financial year for which $\mathrm{r} \epsilon$ ports have been published the receipts and expenditure of each of the nine Provincial Governments of Canada. Table 23 giving totals and per capita figures for each of the five years ended 1915-16, Table 24 similar figures for the year 1915-16 and Table 25 shows the detailed items for the latest year available. In Tables 23 and 24 the figures for Alberta are for the year ended December 31, 1916, but in Table 25 the Alberta detailed figures are for the year ended December 31, 1915. The total revenue of the nine provinces for the period covered by Table 24 amounts to $\$ 49,644,541$, and the total expenditure to $\$ 53,241,866$. The largest revenue is that of Ontario, $\$ 13,841,340$, Quebec being next with $\$ 9,647,983$ and British Columbia third with $\$ 6,291,694$. In the total expenditure for the year that of Ontario was highest, $\$ 12,706,333$, British Columbia second with $\$ 9,880,662$, and Quebec third with $\$ 9,436,688$. Per capita the largest revenues are in British Columbia \$11.04, and Manitoba $\$ 10.72$, the same provinces having also the greatest expenditures per capita, viz., British Columbia $\$ 17.34$ and Manitoba $\$ 11.17$

## 23.-Annual Revenue and Expenditure of the Provincial Governments, 1911-12 to 1915-16.

| Province. | 1911-12. | 1912-13. | 1913-14. | 1914-15. | 1915-16. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| nce | \$ | ${ }^{\circ}$ | \$ | \$ | \$ |
| - | 485,565 ${ }^{1}$ | 506,553 | 525,555 | 470,730 | ,024 |
| Total Expenditure | $527,220^{1}$ | 450,112 | 445,396 | 510,169 | 463,217 |
| Revenue per head | 5.18 | 5.40 | 5.61 | 5.02 | 5.15 |
| Expenditure per hea | 5.62 | 4.80 | 4.75 | 5.44 | . 94 |
| Nova Scotia- |  |  |  |  |  |
| Total Revenue. | 1,870,056 | 1,920,565 | 1,885,4.58 | 1,953,302 | 2,165,338 |
| Total Expenditure | 1,832,075 | 1,949,784 | 2,098,893 | 2,073,672 | 2,132,135 |
| Revenue per bead | 3.80 | 3.85 | 3.75 | 3.89 | 4.26 |
| Expenditure per head | 3.72 | 3.91 | 4.18 | 4.13 | 4.19 |
| New Brunswick- |  |  |  |  |  |
| Total Revenue.. | 1,417,722 | $1,459,000$ $1,446,963$ | 1,505,229 | $1,634,079$ $1,626,634$ | 1,580,419 |
| Reval Exp | 4.01 | 1.12 4.12 | 4.25 | 4.62 | 4.36 |
| Expenditure pe | 3.98 | 4.0 | 4.22 | 4.5 | 4.33 |
| Quebec- |  |  |  |  |  |
| Total Revenue. | 8,070,109 | ,382,737 | 9.000 .377 | 9,597,926 | ,647,983 |
| Total Expenditure | 8,310,123 | 8,532,520 | 8,624,368 | 9,959,171 |  |
| Revenue per head. | 4.03 | 4.04 | 4.25 | 4.54 | 4.39 |
| Expenditure per h | 4.15 | 4.1 | 4.07 | 4.71 | 4.29 |
| Cntario- |  |  |  |  |  |
| Total Expenditure. | 10,287,992 | 10,868,026 | 11,819,311 | 12,704,362 | 12,706,333 |
| Revenue per head. | 3.93 | 4.32 | 4.23 | 4.94 | 5.12 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Total Revenue. | 7,046,675 | 5,788,07 | $\begin{aligned} & 5,512,163 \\ & 5,63865 \end{aligned}$ | 5,472,955 $6,026,598$ |  |
| Total Expenditure. | 4,339,540 | $5,314,849$ 11.83 | $\begin{array}{r}5,638,658 \\ 10.84 \\ \hline\end{array}$ | $\begin{array}{r}6,026,596 \\ 10.35 \\ \hline\end{array}$ | 17,780 10.72 |
| Revenue per head. | 14.98 | 11.83 10.87 | 10.84 11.08 | 11.39 | 110.17 |
| Expenditure per he | 9,23 | 10.87 | 11.08 | 11.39 | 11.17 |
| Total Revenue. | 3,359,866 | 4,427,047 | 5,866,220 | , |  |
| Total Expenditure | 3,294,337 | 4,511,348 | 5,396,380 | 5,060,234 | ,815 |
| Revenue per head | 6.60 | 8.23 | 10.30 | 7.78 | 6.99 |
| Expenditure per head | 6.47 | 8.38 | 9.48 | 8.40 | 7.67 |

1Fifteen months.

PROVINCIAL PUBLIC ACCOUNTS.
23.-Annual Revenue and Expenditure of the Provincial Governments, 1911-12 to 1915-16.-concluded.

| Province. | 1911-12. | 1912-13. | 1913-14. | 1914-15. | 1915-16. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Alberta- | \$ | \$ | \$ | \$ | \$ |
| Total Revenue. | 4,040.351 | 5,399,905 | 5,255,276 | 5,143,590 | 5,281,695 |
| Total Expenditure. | 3,896,800 | 5,225,584 | 5,401,595 | 5,714,032 | 6,018,894 |
| Revenue per head. | 10.42 | 13.12 | 12.04 | 11.16 | 10.74 |
| Expenditure per head.. | 10.05 | 12.70 | 12.37 | 12.33 | 12.24 |
| British ColumbiaTotal Revenue. | 10,745,70¢ | 12,510,215 | 10,479,259 | 7,974,496 | 6,291,694 |
| Total Expenditure. | 11,189,024 | 15,444,822 | 15,766,912 | 11,942,667 | 9,880,662 |
| Revenue per head. | 25,69 | 27.62 | 21.46 | 16.33 | 11.04 |
| Expenditure per head... | 26.75 | 34.18 | 32.30 | 24.46 | 17.34 |
| Summary Total Revenue. | 47,178,054 | 51,582,394 | 51,150,910 | 49,910,743 | 49,644,541 |
| Total Expenditure. | 45,086,160 | 53,744,008 | 56,415,287 | 55,617,537 | 53,241,866 |
| Revenue per head. | 6.45 | 6.87 | 6.64 | 6.32 | 6.12 |
| Expenditure per head.... | 6.16 | 7.16 | 7.33 | 7.04 | 6.56 |

24.-Revenue and Expenditure of the Provincial Governments, 1915-1916.

| Provinces. | Year Ended. | Total Revenue. | Revenue per head | $\left\lvert\, \begin{gathered} \text { Total } \\ \text { Expendi- } \\ \text { ture. } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { Expen- } \\ \text { diture } \\ \text { per head } \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Prince Edward Island | December 31, 1916... | $\$ 8$ 482,535 | Scts. <br> 5.15 | $\begin{gathered} \$ \\ 463,217 \end{gathered}$ | $\$$ cts. 4.94 |
| Nova Scotia. . . | September 30, 1916.. | 2,165,338 | 4.26 | 2,132,135 | 4.19 |
| New Brunswick | October 31, 1916... | 1,580,419 | 4.36 | 1,568,342 | 4.33 |
| Quebec... | June 30, 1916. | 9,647,983 | 4.39 | 9,436,688 | 4.29 |
| Ontario... | October 31, 1916. | 13,841,340 | 5.12 | 12,706,333 | 4.70 |
| Manitoba. | November 30, 1916. | 5,897,807 | 10.72 | 6,147,780 | 11.17 |
| Saskatchewan. | February 28, 1916. | 4,455,730 | 6.99 | 4,887,815 | 7.67 |
| Alberta. | December 31, 1916... | 5,281,695 | 10.74 | 6,018,894 | 12.24 |
| British Columbia. | March 31, 1916. | 6,291,694 | 11.04 | 9,880,662 | 17.34 |
|  | 49,644,541 |  | 6.12 | 53,241,866 | 6.56 |

25.-Receipts and Expenditure of the Provincial Governments, 1915-1916.

Prince Edward Island (Year ended December 31, 1916).

| Receipts from | Amount. | Expenditure for | Amount. |
| :---: | :---: | :---: | :---: |
| Dominion subsidy.. | \$ 372,182 | Administration of justice. | \$ 27,947 |
| Fees, Provincial Secretary... | 1,785 | Education. | 173,963 |
| Prothonotary's fees. | 1,815 | Hospital and infirmary | 59,252 |
| Fire Insurance Cos.. | 5,400 | Interest. .. .. | 45,899 |
| Life Insurance Cos. | 1,612 | Legislation. | 10,027 |
| Registrar of deeds. | 5,590 | Paupers.. | 3,845 |
| Banks. | 5,754 | Agriculture, Dept. of.. | 19,314 |
| Hospital fees... | 6,303 | Provincial Sec'y Treasurer... | 7,607 |
| Succession duties.... | 10,213 | Registry offices. . : . | 5,330 |
| Land tax. | 38,040 | Public Works Dept., salaries |  |
| Income tax. | 14,414 | roads, bridges, etc. | 68,522 |
| Fines and penalties. | 1,787 | Sinking fund. $\quad$. | 11,745 |
| Fox tax.. | 9,744 | Executive Council | 2,873 |
| Miscellaneous. . | 7,896 | Provincial Buildings.. | 3,725 |
|  |  | Library . ${ }^{\text {a }}$. | 1,394 |
|  |  | Telephone Extension. | 1.151 |
|  | 482,535 | Total expenditure. .. . | 463,217 |

FINANCE
25.-Receipts and Expenditure of the Provincial Governments, 1915-1916-con.

Nova Scotia (Year ended September 30, 1916).

| Receipts from | Amount. | Expenditure for | Amount. |
| :---: | :---: | :---: | :---: |
| Subsidy, Dominion of-Canada | $\stackrel{\$}{636,667}$ | Interest. | $862$ |
| Mines. . .. .... | 814,258 | Debenture interest. | 54,868 450,774 |
| Interest mortgage H, \& S.W. |  | Sinking funds. | 40,669 |
| Ry | 155,645 | Legislative expenses.. | 68,177 |
| Succession duties. | 161,450 | Salaries... | 17,250 |
| Nova Scotia Hospital | 112,768 | Education | 370,146 |
| Victoria General Hospital. | 20,561 | Technical education. | 55,440 |
| Provincial Sanatorium. | 12,183 | School Book Burean, | 34,949 |
| Joint stock companies. | 19,127 | Agriculture. | 84,553 |
| Fees, and game licenses. | 5,528 | Mines and Crown Lands.. . | 36,528 |
| Marriage licenses. | 11,442 | Miners' relief societies.. | 24,387 |
| Crown Lands. | 20,624 | Public Charities Dept.:- |  |
| Agriculture. | 9.519 | Nova Scotia Hospital. . | 150,753 |
| Education. | 1,763 | Victoria General Hospital. | 109,869 |
| Technical education. | 10,448 | County Hospitals. | 26,662 |
| School Book Bureau. | 28,916 | Provincial Sanatorium. | 26,998 |
| Private bills. | 1,640 | Transient poor.. | 10,847 |
| Royal Gazetie. | 2,281 | Public Works. | 28,088 |
| Supplementary revenue. | 68,292 | Public priating. | 21,427 |
| Motor Vehicles. | 41,056 | Highways. | 216,723 |
| Interest. | 7,211 | Road Commissioners' office. . | 17,018 |
| Theatres and Cinematographs....... | 12,343 | Steamboats, packets and ferries. | 73,404 |
| Temporary Tax. | 7,334 | Industries and immigration.. | 15,465 |
| Miscellaneous.. | 2,961 | Succession duties | 1,208 |
|  |  | Roads, Motor Vebicle Act. | 17,769 |
|  |  | Criminal Prosecutions. | 13,579 |
|  |  | Miscellaneous. | 164,584 |
| Total receipts... | 2,165,338 | Total expenditure...... | 2,132,135 |

New Bronswick (Year ended October 31, 1916).
Dominion subsidies.
Territorial revenue:-
Stumpage
Mileage Timber licenses. Royalties Fishing leases. Game licenses, etc.
Probate fee fund.
Provincial hospital..
Jordan Memorial Sanatorium
Motor vehicles. .
School books...
Fees, Provincial Secretary's office.
Taxes, incorporated companies.
Railway taxes.
Succession duties..
Liquor licenses.
Miscellaneous items.

| Administration of justice. | 23,513 |
| :---: | :---: |
| Agriculture. | 46,617 |
| Contingencies. | 20,935 |
| Education. | 290,941 |
| Executive govermment. . | 45,853 |
| Fish forest and game. | 33,800 |
| Immigration. | 10,000 |
| Interest. | 351,005 |
| Legislative Assembly | 27,803 |
| Public Hospital. | 10,000 |
| Provincial Hospital. | 94,386 |
| Liquor licenses. | 26,244 |
| School books... | 21,050 |
| Sinking funds. | 31,406 |
| Public works. | 346,458 |
| Stumpage collection... | 29,398 |
| Printing. . | 16,913 |
| Probate fee fund | 13,518 |
| Jordan Memorial Sanatorium | 37,839 |
| Canadian Patriotic Fund, Contribution.. | 12,500 |
| Miscellaneous... | 78,163 |
| Total expenditure... | 1,568,342 |

## PROVINCIAL PUBLIC ACCOUNTS.

25.-Receipts and Expenditure of the Provincial Governments, 1915-1916-con.

Quebec (Year ended June 30, 1916).

| Receipts from | Amount. | Expenditure for | Amount, |
| :---: | :---: | :---: | :---: |
|  | \$ |  | \$ |
| Dominion subsidies. | 1,842,170 | Interest on debt | 1,435,812 |
| Special subsidy. | 127,461 | Redemption of debt. | 142,788 |
| Interest on trust fund. | 58,274 | Premium, disc't, exch'ge, etc. | 8,067 |
| Lands and Forests- |  | Sinking fund. . | 121,712 |
| General receints. | 83,597 | Legislation- |  |
| Woods and forests. . | 1,683,682 | Legislative Council. | 58,531 |
| Crown domain. | 28,354 | Legislative Assembly.. | 227,043. |
| Fisheries and game. | 138,489 | Printing and binding... | 116,632 |
| Mines. | 22,369 | Library... . | 11,950 |
| Law stamps. : . . | 456,600 | Civil government, salaries, |  |
| Law fees, exclusive of stamps. | 60,843 | etc. $\because$. | $649,156$ |
| Building and jury fund. . | 78,632 | Admidistration of justice. . | 1,157,907 |
| Registration stamps..... . | 190,504 | Reformatory and industrial |  |
| Licenses-hotel, shop, ete. . | 1,047,768 | schools. | 145,000 |
| Taxes on commercial cor- |  | Public instruction. | 1,545,079 |
| porations. $\because$ | 1,034,564 | Agriculture. . . . . | 470.802 |
| Succession duties. . . . | 1,375,804 | Improvement of rural roads. . | 349.000 |
| Lanatic Asylums-Municipal |  | Colonization roads, etc. . | 209,010 |
| contributions and paying patients. |  | Pullic works and buitdings. | 935,851 |
| Reformatory and industrial | 229,946 | Charities-Lunatic asylums. ete. | 633,625 |
| schools. : | 60,990 | Grants to various charitable |  |
| Official Gazette. | 51,311 | institutions. . .- | 69,885 |
| Interest on investments. | 107,844 | Lands and forests. | 370,500 |
| Interest on siaking fund. | 28,015 | Mines and fisheries. | 99,033 |
| Interest from Municipalities under the Good Roads Act |  | Pensions-Civil Service. . . | 71,472 |
| under the Good Roads Act. <br> Premium, discount and ex- | 137,402 | Collection of revenue, for licenses, etc |  |
| change.... $\because \sim \cdots$ | $40,594$ | Registrars' salaries and con- |  |
| Tex under 3 Geo. V., Cap. 38. | 53,341 | tingencies | 84,819 |
| Tax on transfer of shares, bonds, ete. |  | Expenses of Elections. Motor Vehicle Law. | 64,530 28.829 |
| Motor vehicle law . | 247.082 | Offial Gazette. | 30,000 |
| Casual revenue. . ... .. | 103,607 | Streams Commission. | 42,565 |
| Reimbursement Railway subsidy tax. | 40,321 | Miscellaneous. | 201,040 |
| Municipalities, for maintenance of prisoners... | 19,867 |  |  |
| Civil service, contributions for pensions. | 23,861 |  |  |
| Insurance Act Revenue. . | 23,847 |  |  |
| Miscellaneous items. . | 174,656 |  |  |
| Total receipts. | 9,647,983 | Total expenditure. | 9,436,688 |

FINANCE
25.-Receipts and Expenditure of the Provincial Governments, 1915-1916-con.

Ontario (Year ended October 31, 1916).

| Receipts from | Amount. | Expenditure for | Amount. |
| :---: | :---: | :---: | :---: |
|  | \$ |  | * |
| Dominion of Canada- <br> Subsidy on population and |  |  |  |
| special grant. | 2,253,964 | Legislation. . | 292,158 |
| Subsidy, 47 Vic., c. 4. | 142,415 | Administration of justice. | 644,219 |
| Interest paid by the Dom- |  | Education. | 2,262,801 |
| inion (common sch. fund) Interest on investments | 73,506 178,57 | Public institutions, mainten- |  |
| Lands, Forests and Mines. | 1,860,557 | Colonization and immigra- | 1,464,504 |
| Timiskaming and N.O. Ry. | 1,000,000 | tion... | 43,671 |
| Agriculture. | 143,806 | Agriculture. | 746,627 |
| Law stamps.. | 123,630 | Hospitals and charities. | 522,452 |
| Education Department. | 70,279 | Repairs and maintenance. | 241,579 |
| Fisheries and game. | 174,602 | Colonization roads.... | 253,539 |
| Provincial Secy's Dept.- |  | Charges, Crown lands. | 616,279 |
| Charitable Institutions. | 277,043 | Refunds. | 90,932 |
| Licenses. | 346,169 | Hydro-Electric Power Com- |  |
| Registrar General's Branch | 44,583 | mission. | 127,044 |
| Letters Patent, Licenses, etc. | 109,276 | Game and fisheries. . Public Buildings, ete. | 130,952 |
| Other Items . .... ... | 34,706 | For Parliament Buildings. | 21,569 |
| Department of Public High- ways- |  | " Public Institutions.... | 137,254 23,667 |
| Motor Vehicles Branch . . | 639,987 | " Osgoode Hall. | 20,383 |
| Fire Marshal's Tax. | 74,148 | " Public works.... | 179,373 |
| Corporation Tax Act, 4 Geo. |  | " UnderSpecialWarrants | 217,156 |
| V., c. 11,. . . . ${ }^{\text {a }}$ | 1,831,391 | " Statutory expenditure. | 2,710,834 |
| Succession duties. | 2,333,700 | Other Public Buildings | 33,803 |
| Deposits in lieu of bond of payment of succession duty.. | 118,094 | War expenditureOntario Military Hospital in England- |  |
| Casual revenue... | 671,124 | Construetion. | 225,000 |
| Insurance Department. | 71,341 | Equipment | 77,099 |
| Hydro-Electric Commission, |  | Maintenance. | 71,636 |
| Interest paid by muni- |  | Gifts to British Navy, etc. | 86,336 |
| cipalities under R. S. O., 1914 | 515,083 | Grants in Aid of Recruting. | 74,400 |
| War Tax Act, 5 Geo. $\dot{\mathrm{V}} .$, c. 3 , proceeds of sale of Treas- |  | with C. E. Force. Other War Expenditure. | $\begin{array}{r} 94,625 \\ 120,122 \end{array}$ |
| Other items... | 4,141 | Miscellaneous items. | 349,666 |
| Total receipts. | 13,841,340 | Total expenditure.. | 12,706,333 |

PROVINCIAL PUBLIC ACCOUNTS
25.-Receipts and Expenditure of the Provincial Governments, 1915-1916-con. Mantioba (Year ended November 30, 1916).

| Receipts from | Amount. | Expenditure for | Amount. |
| :---: | :---: | :---: | :---: |
| Dominion of Canada- Subsidy | $\underset{1,406,204}{\$}$ | LegislationMembers... | $\mathbf{7 1 , 4 9 3}$ |
| Subsidy land fund. | $\begin{array}{r} 1,406,204 \\ 176,005 \end{array}$ | Members.... Salaries. | $\begin{aligned} & 71,493 \\ & 13,349 \end{aligned}$ |
| Total. | 1,582,209 | Printing and binding contracts. <br> Comptroiler-General's | 34,160 |
| Dept. of Attorney-General- |  | Office. .. | 36,333 |
| Fines. | 50,711 | Other items. | 22,753 |
| County Court fees. . | 18,705 | Total... | 178,094 |
| Law fees. | 40,025 | Executive Council. | 39,883 |
| Land titles-general fees. | 239,974 | Treasury Department- |  |
| Liquor licenses.. | 864 | Provincial debenturesInterest. | 1,255,707 |
| Department of Agriculture and ImmigrationFees. |  | Wolf bounties. <br> Retiring allowances and | 22,238 |
|  | 45,087 | annuities. | 18,967 |
| Marriage licenses. | 6,501 | Employees onActive Service | 35,712 |
| Agricultural College. | 63,146 | Other items. | 134,404 |
| Dept. of Education- |  | Total. | 1,467,028 |
| Fees. | 47,593 | Provincial Secretary's Dept. | 28,720 |
| Legislation. | 2,645 | Dept, of Education- |  |
| Dept. of Provincial lands.... | 157,010 | Grants. | 665,890 |
|  |  | Training Schools. | 65,290 |
|  |  | Inspection of Schools. | 64945 |
| Dept. of Public Works- |  | Other items. | 114,380 |
| Support of insane. . | 90,136 | Total. | 910,505 |
| " deai and dumb... incurables. | $\begin{array}{r}8,363 \\ 28,741 \\ \hline 18\end{array}$ | Dept. of Agriculture and Immigration- |  |
| Industrial training school. | 18,928 | Agriculture and statistics. | 82,113 |
| Bureau of Labour. | 5,837 | Agricultural College. | 176,616 |
| Well Boring Machines receipts | 10,718 | Grants, hospital and charity. | 153,957 |
| Government grain elevators | 56,158 | Immigration. | 37,799 |
| Dept. of Provincial Treasurer |  | Other items. | 37,768 |
|  | 604,029 | Total. | 488,253 |
| Succession duties. | 304,496 | Attorney-General's Dept- |  |
| Insurance Act fees... | 45,563 | Land titles offices. | 134,537 |
| Fire prevention fees. | 8,287 | Law Courts. | 53,920 |
| Corporation tax. | 220,729 | Police and Police Courts. | 62,233 |
| Railway tax.... | 200,222 | Licenses. ${ }^{\text {a }}$ | 39,309 |
| Sundry revenue. <br> Theatre and Automatic <br> Vending Machine Tax.. | 25,018 | Administration of justice.. | 189,827 |
|  |  | Public Utilities Commis- |  |
|  | 18,865 | sion. | 22,529 |
| Automobile licenses. | 137,699 | Other items. | 41,125 |
| Telegraph and telephones.... | 1,820,190 | Total. | 543,480 |
| Dept. of Provincial Secretary fees, ete. <br> Miscellaneous. |  | Telegraphs and telephones... | 1,380,000 |
|  | 39,289 | Public Works Department- |  |
|  | 69 | Hospitals for insane. | 276,051 |
| Miscellaneous. . |  | School for deaf and dumb. | 42,070 |
|  |  | Home for incurables. | 75,736 |
|  |  | Industrial training sehool. | 50,436 |
|  |  | Agricultural College. | 69,804 |
|  |  | Aid to municipalities and public works... | 171,153 |
|  |  | Other items. | 369,397 |
|  |  | Total | 1,054,647 |
|  |  | Miscellaneous.. | 57,170 |
| Total receipts. | 5,897,807 | Total expenditure. | 6,147,780 |

FINANCE.
25.-Receipts and Expenditure of the Provincial Governments, 1915-1916-con. Sashatchewan (Year ended April 30, 1916).

| Receipts from | Amount. | Expenditure for | Amount. |
| :---: | :---: | :---: | :---: |
| Dominion of Canada- | \$ | Public | ${ }^{5} 10$ |
| Subsidy- |  | Interest. | 893,102 |
| tion. | 190,000 | Sharges on issue of securi- | 75,499 |
| Population per capita. | 552,800 | ties and temporary loans. | 119,449 |
| Debt allowance. | 45,375 | Premium, discount and ex- |  |
| In lieu of lands | 562,500 | change, etc. | 5,657 |
| School lands fund. | 239,985 | Total. | 1,093,707 |
| Tota | 1,950,66t | Civil Government. | 343,719 |
|  |  | Legislation. | 211,604 |
| Treasury Dep | 655,558 | Administration of justice- |  |
| Succession dutie | 80 | supreme, District and Surrogate Courts. |  |
| Land Titles Act-fees, ete. | 398,973 | Criminal investigations. | 94,089 |
| Liquor licenses, | 13,209 | Police, prisoners and insane | 78,604 |
| Fines and forfeiture | 43,258 | Registration of land titles.. | 237,225 |
| Sale of law stamps. | 195,036 | Liguor License Act. | 15,810 |
| Sheriffs' fees. | 289,026 | Other items. | 16,811 |
| Other items. | 13,272 | Total. | 859,403 |
| Total... | 997,154 | Public Wor |  |
| Provincial Secretary's Dept.- |  | Public building | 489,319 |
| Incorporation and Registration fees (Companies |  | Construction and maintenance of small bridges. | 7,974 |
| Act) | 20, | Roads and road improve- |  |
| Fees on annual returns (Companies Act) | 32,700 | ments. | $\begin{gathered} 51,978 \\ 89 \end{gathered}$ |
| License fees-Motor vehicles | 111,153 | Inspection of steam boilers | 38,414 |
| License fees-Moving pic- |  | Water suppl | 3,218 |
| tures. | 12,4 | Surveys.. | 50,272 |
| License fees-Auctione |  | Other items. | 17,779 |
| pedlers and marrisg | 20,227 | To | 828,884 |
| Corporation Taxation A | 167,205 | Education. | 987,795 |
| Railway Taxation Act. | 87,418 | Agriculture and Statist |  |
| Insurance companies fee | 39,703 | Assistance to agricultural |  |
| Other items. Total. | 3,103 | interests gen | 549 |
| Total... <br> ublic Works D | 494,703 | Assistance to live stock industry..... | 30,571 |
| Under Steam Boilers | 31,386 | Assistance to dairy and |  |
| Revenue from jails. | 8,977 | poultry industries... | 87,986 |
| Hospital for insane. | 16,948 | Publicity and statistical |  |
| Stock refunds. | 36,472 |  | 26,636 |
| Other items. Total. | ¢,831 | Weed control and game | 8,273 |
| Education | 47,6 | Bureau of | 7,595 |
| Agricultural Departzoent- |  | Destruction of wolves. | 15,000 |
| Assessment on butter fat. | 9,742 | Other items. | 14,776 |
| Brand fees. | 5,274 | Total. | 268,886 |
| Game licenses. | 21,126 | Bureau of Public Health- |  |
| Refund Creamery Loans. | 60,090 | Bureau of public health. | 31,219 |
| Other items. | 8,146 | Expenditure under the Hos- |  |
| Municipal Dept. | 104,283 | pitals Act.... | 120,000 14,294 |
| Municipal Dept. | 3,092 | Vital statistics. | 14,934 |
| Assembly.. | 40,128 | T | 180,447 |
| Highways Department | 51,900 | Neglected children. | 30,619 |
| Miscellaneous items.. | 6,945 | Miscellaneous items. | 82,751 |
| Tot | 55,730 | Total expenditure.. | 4,887,815 |

## PROVINCIAL PUBLICACCOUNTS.

25.-Receipts and Expenditure of the Provincial Governments, 1915-1916-ion.

Alberta (Year ended December 31, 1915).

| Receipts from | Amount. | Expenditure for | Amount. |
| :---: | :---: | :---: | :---: |
| Dominion of Canada-- |  | Public debt. | 94 |
| Annual subsidy. | \$1,589,07t | Civil government. | 485,528 |
| Public school lands. | 258,914 | Legislation | 119,484 |
| Interest, General.. | 33,365 | Administration of justice. | 733,650 |
| Insurance Act fees. | 67,591 | Public Works- |  |
| Under Corporation Taxation |  | Maintenance and repairs. Inspection of | 251,084 5,504 |
| Insurance companies.. | 53,012 | Inspection of coal min | 28,655 |
| Land companies. | 7,937 | Inspection of steam boilers | 28,083 |
| Loan \& Trust companies... | 18,640 | Ferry service. | 47,314 |
| Banks. | 47,450 | Maintenance of bridges. | 11,077 |
| Miscellaneous companies... | 6,810 | Construction of roads.. | 173,435 |
| License fees- |  | Surveys. | 5,425 |
| Marriage | 8,260 | Contingencies. | 3,386 |
| Automobile. | 77,626 | Total public works | 553,983 |
| Under Theatres' Act.. | 14,330 | Education- |  |
| Companies Ord |  | Grants paid under |  |
| Incorporation fees | 23,633 | School Grants Ordinance. |  |
| Foreign Companies Ordin- $\therefore \text { ance- }$ |  | teachers' institutes.. Inspection of schools.. | 44,283 39,161 |
| License fees, etc. | 10,718 | Examinations... | 27,050 |
| Railway tax. | 74,166 | School reade | 22,660 |
| Attorney General's |  | Grants to University of |  |
| Succession duties.. | 107,881 | Alberta... | 145,000 |
| Land Titles Office, general fees. |  | Other items | 55,904 |
| Registrars' Assurance Fund | 54,028 | Total education. | 907,408 |
| Court fees.... | 153,592 | Agriculture- |  |
| Sheriffs' fees. | 66,149 | Grants to agricuitural |  |
| Gaols. | 12,837 |  | 105,778 |
| Hospital for Insane.. | 28,432 | Administration of Demon | 14,510 |
| Liquor License OrdinanceHotel licenses. | 149,963 | Operation of Schools of |  |
| Wholesale licens | 147,798 | Agriculture. . . $\quad$.. | 20,000 |
| Club licenses. | 10,317 | Promoting and encouraging |  |
| Brewers' and Distillers' |  | Dairy Work. | 11,540 |
| licenses. | 15,000 | Poultry Iodustry | 8,000 |
| Other items. | 22,623 | Vital Statisties. | 10,261 |
| Fines under Dominion and Provincial statutes |  | Live stock and agricultura institutes and association | 17,235 |
| Department of Public Works. | 62,331 | Destruction of noxious |  |
| Dept. of Municipal Affairs- |  | weeds. | 24,274 |
| Educational Tax Trust Ac- |  | Protection of game. | 29,689 |
| wild Lands 'Tax | 129,604 | Expenses re Demonstration farm. | 55,722 |
| Wild Lands Tax. | 156,832 18,415 | Advance payments--Cream |  |
| Other items. | 26,364 |  | 236,812 |
| Agriculture Department | 236,172 | Immigration and coloniza- |  |
| Education Department. | 15,960 | tion.. | 17,967 |
| Telephones. | $962.14{ }^{-}$ | Other items. | 62,136 |
| Other items.. | 224,125 | Total agriculture.. | 613,924 |
|  |  | Hospitals, charities and pub lic health. | 111,860 |
|  |  | Public Institutions | 227,623 |
|  |  | Telephones | 971,657 |
|  |  | Miscellaneous. | 220.841 |
| Total receipts. . . . . . . . 5,143,590 |  | Total expenditure. | 5,714,032 |

FINANCE.
25.--Receipts and Expenditure of the Provincial Governments, 1915-1916-concluded. British Colombia (Year ended March 31, 1916).

| Received from | Amount. | Expenditure for | Amount. |
| :---: | :---: | :---: | :---: |
| Dominion of Cana | \$ |  | \$ |
| Annual payment of interest | 29,151 | Interest on public debt. | 779,263 |
| ${ }_{*}^{*}{ }^{*}$ | 180,000 | Sinking funds, etc. | 202,842 |
| grant per capita... | 313,984 | Premium, discount, exchange |  |
| " for lands conveyed. | 100,000 | and commission | 438,960 |
| B.N.A.Act, $1907{ }^{\text {payment }}$. ${ }^{\text {a }}$ gr'nt |  | Civil government (salaries).. | 1,555,562 |
| C.N.A. Act, 1907 | 100,000 | Administration of justice |  |
| Land revenue. | 181,118 | Legislation. | 62,601 |
| Timber leases. | 126,479 | Public Institutions- |  |
| Timber royalty and licenses. | 1,477,378 | Printing office. | 51,351 |
| Free Miners' Certificates.. | 47,921 | Bureau of mines. | 4,950 |
| Mining receipts, general. | 59,278 | Hospital for insane. | 280,207 |
| Licenses, Trade and Liquor.. | 75,925 | Museum... | 3,987 |
| " Game. | 71,582 | Provincial home. | 16,587 |
| " Motor. | 94,892 | Fisheries (hatcheries and administration).. | 23,726 |
| surabce Act. | 81,680 | Agriculture. ... ${ }^{\text {a }}$ | 162,430 |
| Fines and fees of court. | 20,117 | Board of Health | 31,793 |
| Probate fees | 64,505 | Grant to University of B. C. |  |
| Succession duties. | 139,907 | (Conditional) | 175,000 |
| Law stamps.. | 81,178 | Forest Protection Fund. | 115,270 |
| Registration of companies. | 37,950 | Surveys. | 121,104 |
| Registry fees. | 241,548 | Songhees Indian Reserve Im- |  |
| Real property tax. | 492,814 | provement | 79,310 |
| Personal property tax. | 278,536 | Kettie Valley Ry (Under |  |
| Wild land tax ${ }^{\text {E }}$... | 534,460 | Cap. 35, 1912, and Cap. 64, |  |
| Income tax. | 329,288 | 1914.). | 550,700 |
| Interest. | 159,681 | Hospitals and charities... | 355,441 |
| Mineral tax | 163,336 | Administration of justice |  |
| Printing office.. | 25,091 | (other than salaries).. | 249,392 |
| Log-scaling Fees. | 29,439 | Education. | 1,325,308 |
| Fees Uuder "Moving Picture |  | Transport.. | 38,851 |
| Act" $\quad$ : $\quad$. | 17,715 | Revenue services.. | 18,555 |
| Interest on investments of sinking funds. . | 98,133 | Public Works- <br> Works and buildings... | 383,571 |
| Royalty and tax on coal. | 173,262 | Roads, streets, bridges and |  |
| Tax on unworked Crown granted Mineral Claims.... | 35,703 | wharves. <br> Subsidies | 2,063,235 |
| Hospital for the insane. | 32,740 | ferries and bridges..: | 82,299 |
| Water revenue. | 59,908 | Miscellaneous, including |  |
| Marriage licenses. | 16,070 | surveys.... | 814,324 |
| Boiler inspection fees.. | 24,327 |  |  |
| Fishing eannery licenses. | $33,335$ |  | 10,083,504 |
| Timber sales.. | 71,876 26,000 | Less amount of sinking funds and redemption of deben- |  |
| Dykes Assessment Act. | 19,080 | es | 202,842 |
| Miscellaneous.. | 126,535 |  |  |
| Net revenue. | 6,291,694 | Net Expenditure... | 9,880,662 |

[^37]
## MUNICIPAL STATISTICS.

Tables 26-27 consist of municipal statistics, collected by means of a schedule addressed to the clerks of cities and towns throughout Canada having a population of 5,000 and over according to the Census of 1911. Certain municipalities failed to return the schedule and could not, therefore, be included in the tables, which relate to cities and towns. Table 26 gives the general statistics relating to population, area, incorporation and mileage. The population figures are those of the local assessment, except where italicised, in which cases the population is as returned by the Census of 1911. The street mileage is distinguished as between macadamized roads and permanent roads, the latter including asphalt, tar-macadam and other forms of permanent roadway. In a few municipalities the macadam roads include or consist of gravel, rocmac, graded or rocked roads; also in some municipalities the sewer mileage includes storm sewers as well as sanitary sewers. In Table 27, showing the assessment and valuation of property, the headings are abbreviated in order to save space: they show the amount of the local improvement assessment; under the column headed "Exemptions" the value of property exempt from taxes or liable for local improvements only; the assessed valuation of all taxable property; the general assessment rate in mills on the dullar and the total amount of taxes levied. Table 28 shows receipts, expenditure, debentures, sinking funds, assets and liabilities. The figures throughout relate to the calendar year, and the amounts of the debentures, sinking funds, assets and liabilities are as standing at the close of the year.
26.-General Statistics of Cities and Towns, 1916.


## FINANCE

## 26.-General Statistics of Cities and Towns, 1916-concluded.

| Cities and Towns. | Poptlation. | Area of Munidipality. |  | Year of Incorporation. |  | Milagge of Streets atd Sewera. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Latd Acres. | Water Acres. | Original. | Latest. | Total Street. | Macadamized Roads. | Permanent Roads. |  | Sewers. |
| Quebec-con. |  |  |  |  |  |  |  |  |  |  |
|  | 850,000 | 26,402 | - | 1833 | 1899 | 767.5 | 333 | 220 | 450 | $360 \%$ |
| Sherbec. | 100,000 | 5,860 | 228 | 1832 |  | 91. | 315 | 80 |  |  |
| Sberbl... | 20,470 8,500 | 2, 3.000 | 228 | $1860{ }^{\circ}$ | 1907 1889 | 36.5 14.0 | ${ }_{6} 7.5$ | Nil | 4.12 | 23.5 |
| St. Hyacintie. . | 12,228 | 1,800 | ${ }^{2}$ fent | 1857 | 1915 |  |  | 1.60 |  | 16 |
| Thetford Mines | 7,200 | 1,532 | None | 1905 | 1910 | 11.33 | 5.78 | 1.39 | 17.15 | 15 |
| Three Rivers... | 20,000 | 2,560 |  | 1857 | 1915 | 26 | 9.70 | - | 42 |  |
| Yalleyfreld:.... | 9.575 |  |  | 1874 | 1893 |  |  | - | - |  |
| Westmount | 18,260 | 976 |  | 1874 | 1908 | 27.21 | 26.41 | 8 | 49.82 | 29.36 |
| Ontario- |  |  |  |  |  |  |  |  |  |  |
| Barrie. . | 6,488 | 2.550 | - | 1853 | 1871 | - |  | 1 | 24 | 12 |
| Brantiord. | 26.601 | 2,851 | 125 | 1847 | 1877 | 70 | 65.5 | 5.75 | 82.5 | 68 |
| Brockville: | 9,428 | 1.242 2 | - | 1832 |  | 26 | 20 | 2.6 | 30.5 | 16 |
| Cobalt, | 4,974 <br> 4.875 | 417 2.560 |  | 190\% |  | 7 | 1 | 3 | $4^{3}$ | 4.5 |
| Collingwoo | 7,010 | 4,440 | - | 1858 |  |  | No rec |  |  | 5.5 |
| Cornwall.. | 8.800 | 750 |  | 1847 |  |  | 13 | None | 20 | 9 |
| Galt. | 11,920 | 1.525 | 75 | 1850 | 1915 | 41.5 | 6.5 |  |  | 50 |
| Guelph | 16,022 | 3,104 |  |  | 1879 |  |  | 4.20 | (0) 50 | 19 |
| Hamilton | 104,491 | 7,143 |  | 1847 |  | 168 | 75 | 48 | 248 | 138.38 |
| Kenors.. | 5.278 | 4,150 | 1,380 | 1846- | 1892 |  | 3.5 |  |  |  |
| Kingston | 22,000 19 | 2,135 |  | 1846 1854 |  | 68 | 39 | 35 | 60.74 | 30.75 |
| Kitchener | 19,380 57.301 | 3,252 6,302 | - | 1854 1855 | 1012 | 68 136 | ${ }_{1}^{26}$ | 11 | 69 <br> 169 | 88 |
| Niagara Fails... | 11,715 | 1.500 | - | 1862 | 1904 | 47.5 | 12.5 | 2.46 | 50 | 29.4 |
| North Bay | 8,855 | 2,10n |  | 1890 |  | 30 | 5.23 | 23.85 | 17.8 |  |
| Oshava. | 8.812 | 2,400 | - | 1850 | 1878 | 40 |  | 7 | 25 | 17 |
| Ottawa. | 100,561 | 5,295 | 856 | 1827 | 1854 | ${ }^{3} 36$ | 102 | 54 | 210 |  |
| Peterboro' | 19,816 | 2,583 | 289 | 1850 | 1905 | 35 | 19 | 4.63 | 69.2 | 34.26 |
| Port Arthur | 15.224 | 9,127 | 1,148 | 1388 | 1908 | - | 25.6 | 4.4 | 28.93 | 9.1 |
| Port Hope. | 4,675 | 1,080 |  | 1834 |  | 30 |  |  | 35 | 9. |
| Sault Ste, Marie | 12.714 | 3.100 | - | 1887 | 1912 | 58 | 8.4 | ${ }_{191}{ }^{7}$ |  | 15.5 |
| St. Catharin | 17,880 | 2,400 2,835 | - | 1854 | 1885 | 62 | 8 | 12.2 | 56.23 | 41.75 |
| Toronto. | 463,705 | 20.480 | 4,544 | 1834 | - | 530.24 | 29.53 | 328.78 | 710.43 | 540.70 |
| Welland | 7.905 | 1,200 |  | 1878 | 180 | 25 |  | 3.2 | 28.33 | 15 |
| Windsor. | 24,1822 | 2,400 | + | 1854 | 1892 | $75{ }^{1}$ | 2.70 | 36.95 | 110 | 43 |
| Woodstocl | 10,004 | 1,525 | - | 1853 | 1901 | 45 | 19 | 7 | 30.5 | 21 |
|  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{\text {'Brandon... }}$ | 18.048 | 5,46e | 300 | 1883 |  | 60 | 2.75 | 4 | 54.36 | 34.70 |
| St. Bonitace | 11,581 | 11.290 |  | 1883 | 1508 | 60 | $\pm$ | 19 | 13 |  |
| Windipeg | 201,981 | 14,865 | 422 | 1873 |  | 500 | 33 | 145.3 | 132 | 253 |
| Saskatchewan- |  |  |  |  |  |  |  |  |  |  |
| Monsejaw....... | 16,934 | 9,760 0,713 | 845.5 | 1903 1885 | $1804{ }^{*}$ | 348 85 | $1{ }^{-}$ | ${ }_{45}^{4.75}$ | 40.2 | 44.2 29 |
| Prince Albert... Regina | -6,436 | 0,713 8,427 |  | 1903 |  | 105 | 1- | 80 | 42.76 | 69.6 |
| Saskatoon. | 21,048 | 8,480 | 480 | 1963 | 1906 | 65.76 | 5.76 | 60 | 53.8 | 51.18 |
|  |  |  |  |  |  |  |  |  |  |  |
| Calarary ${ }^{\text {a }}$.... | 56,514 | 24,720 | 1,200 |  |  | $\because$ | - |  | 160.85 38.16 | 200.26 31.13 |
| Lethbridge $\ldots .$. Medicine Hat... | 9,436 9,272 | \% $\begin{array}{r}6,944 \\ 11,280\end{array}$ | 597 | 1890 | 1906 | 75 | - | ${ }_{181}{ }^{167}$ | 28. | 33.18 |
|  |  |  |  |  |  |  |  |  |  |  |
| New Westminster. | 15,009 | 3,481 |  | 1872 | 1888 | 102 | 23 | 10.2 | 23 | 52 |
| Vancouver..... | 97,006 | 10,547 | 3.833 | 1886 | - | 3602 | 180 | ${ }^{61}$ | 210 | 203 |
| Victoria......... | 50,000? | 4,640 | 3.8. | 1862 | - | 200 | 78 | 122 | 132.4 | 120 |

MUNICIPALSTATISTICS
27.-Assessment and Valuation of Property of Cities and Towns, 1916.


Nown-P=Protestant School rate. $\mathrm{C}=$ Catholic School rate.
Including a special exemption. ${ }^{2}$ Including Mines.

## FINANCE

27.-Assessment and Valuation of Property of Cities and Towns, 1916.-con.

| Cities and Towns. | Looal Improvement Assessment. | Exemptions. | Value of Taxable Property. | General Assessment Raie. | Taxes Levied. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | $\underset{\text { per }}{\text { Mills }}$ | \$ |
| Ontario- |  |  |  |  |  |
| Barrie. | 3,307 | 499,510 | 3,491,900 | 32.00 | 113,457 |
| Brantford. |  | 3,748,450 | 18,193,080 | 27.50 | 446,000 |
| Brockville. |  | 774,145 | 4,250,754 | 29.50 | 162,718 |
| Cobalt. | None | 164,325 | 3,890,274 | 36.00 | 100,819 |
| Cobourg. | 5,237 | Not given | 2,187,698 | 32.00 | 76,583. |
| Collingwood. | 8,833. | 139,975 | 3,605,519 | 32.00 ${ }^{35}$ | 112,870 |
| Cornwall.... | - | 374,075 | 2,248,193 | P5.S. | 75,436 |
|  |  |  |  | S.S. |  |
| Galt. | 7,802,935 | 1,432,285 | 7.424,815 | 29.00 | 231,587 |
| Guelph. |  | 2,440,795 | 9,179,135 | 29.60 | 328,410 |
| Hamilton. | 260,716 | 17,173,113 | 80,993,370 | 22.00 | 1,732,300 |
| Kenora. | 6,469 | 1,054,175 | 2,920,915 | Not given | 99,529 |
| Kingston.. | 4,764,345 | 4,764,345 | 11,080,694 | 26.00 | 392,337 |
| Kitchener. |  | 1,487,459 | 10,273,319 | 26.00 | 392,608 |
| London... | 314,150 | 7,423,422 | 40,033,558 | 29.65 | 1,418,312 |
| Niagara Falls. | 25,404 | 600,000 | 8,843,775 | 25.00 | 219,053 |
| North Bay | 7,097 | 782,550 | 6,563,635 | 25.50 | 168,969 |
| Oshawa. | 14,385 | 479,825 | 4,002,031 | $19.30{ }^{28.00}$ | 130,727 |
| Ottawa. | 276,030 | 37,199,320 | 111,015,510 | P.S. | 2,221,421 |
|  |  |  |  | 23.10 |  |
| Peterboro. |  | 2,698,020 | 12,970,440 | 26.30 | 365,394 |
| Port Arthur. | 138,475 | 4,557,530 | 25,607,630 | 21.00 | 632,893 |
| Port Hope. | 971 | 218,640 | 2,584,660 | 23.50 | 70,901 |
| Sault Ste. Marie. | 37,620 | 967,500 | 9,803,885 | P.S. | 300,254 |
|  |  |  |  | 25.10 S.S. |  |
| St. Catharines. |  | 1,639,875 | 13,236,285 | 25.50 | 446,055 |
| Stratford. | 73,446 | 2,277,475 | 8,564,670 | 29.30 | 351,018 |
| Toronto ${ }^{2}$ | 1,807,068 | 81,527,839 | 582,619,762 ${ }^{1}$ | 22.50 | 13,090,073 |
| Welland. | -23,414 | 800,340 | 5,497,925 | 30.00 | 160,390 |
| Windsor | 88,723 | 3,084,225 | 22,531,214 | 23.00 | 602,780 |
| Woodstock... | 17,640 | 1,213,050 | 5,138,002 | 29.00 | 173,095 |

Note-P.S. $=$ Public School rate.
S.S.=Separate School rate.
${ }^{1}$ Includes Business and Income. ${ }^{2}$ The Municipalities of East Toronto North Toronto and West Toronto have been annexed.

MUNICIPAL STATISTICS
27.-Assessment and Valuation of Property of Cities and Towns, 1916-concluded.

| Cities and Towns. | Local Improvement Assessment. | Exemptions. | Value of Taxable Property. | General Assessment Rate | Taxes Levied. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | Mills | \$ |
| Manitoba- |  |  |  |  |  |
| Brandon. | 109,245 | 3,992,308 | 15,609,320 | 26.00 | 515,112 |
| St. Boniface. | 140,776 | 3,405,290 | 18,287,060 | 26.00 | 634,380 |
| Winnipeg. | 1,375,489 | 44,757,910 | 278,732,370 | $15.70^{1}$ | 6,087,290 |
| Saskatchewan- |  |  |  |  |  |
| Moosejaw | 72,634 | 5,989,900 | 37,824,309 | $\left\{\begin{array}{c}18.85 \\ \text { Gen'l. } \\ 5.60 \text { P. } \\ \text { S. }\end{array}\right.$ | 877,052 |
| Prince Albert. | Nil. | 2,057,540 | 18,080,168 | $\left(\begin{array}{c}9.70 \text { S.S. } \\ 18.00 \\ 23.30\end{array}\right.$ | 434,594 |
| Regina.... | 188,385 | \| 17,102,565 | 68,073,210 | $\left\{\begin{array}{c}\text { P.S. } \\ \text { 28.60 } \\ \text { S.S }\end{array}\right.$ | 1,331,857 |
| Saskatoon . | 129,358 | 2,842,610 | 40,489,437 | - 19.55 | 869,373 |
| Alberta- |  |  |  |  |  |
| Calgary.... | 427,500 | $\begin{aligned} & \text { about } \\ & 7,000,000 \end{aligned}$ | 80,608,781 ${ }^{2}$ | 21.50 | 2,317,348 |
| Lethbridge | 3,301,490 | 6,322,260 | $12,287,930$ | 33.00 | $460,024$ |
| Medicine Hat. | 42,287 | 1,524,120 | 14,848,260 | 25.00 | 422,190 |
| British Columbia- |  |  |  |  |  |
| Nanaimo... | - | 180,850 | 2,721,120 | $\left(26.40\right.$ ( ${ }^{19}$ ) | - |
| New Westminster | 70,253 | 4,526,125 | 15,038,725 | $\left(\begin{array}{c}\text { gross } \\ 22.00 \\ \text { net }\end{array}\right.$ | 397,022 |
| Vancouver | 616,123 | 74,895,475 ${ }^{\text {a }}$ | 214,358,910 | $\left\{\begin{array}{l}24.44 \\ \text { gross } \\ 22.00\end{array}\right.$ | 3,409,089 |
| Victoria. | 681,595 | 10,122,520 | 62,641,2204. | ( net 19.58 | 1,294,930 |

Nore-P.S. $=$ Public School rate.
S.S. =Separate School rate.
${ }^{1}$ In addition there is a business tax of 63 p.c. ${ }^{2}$ For 1917 ${ }^{3}$ Assessed valuation of buildings or improvements exermpt by by-law. ${ }^{4}$ Land only. The valuation of buildings assessed but not taxed $=\$ 25,302,431$.

FINANCE
28.-Receipts, Expenditure, Assets and Liabilities of Cities and Towns, 1916.

| Cities and Towns. | Receipts. | Expendi- ture. | General Debentures. | T.oesal Improvement Deberntures. | Sinking Funds. | Total Assets. | Total Liabilities. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P E. Island- | \% | \$ | \$ | \$ | 5 | \$ | 8 |
| Charlottetown | 78,000 | 92,366 | 670,500 | 1 | 72,829 | 1,088,108 | 936,035 |
| Nova Scotia |  |  |  |  |  |  |  |
| Amherst. | 171,212 | 180.892 | 943,500 | 1 | 139,043 | 1,104,84 | 969,820 |
| New Glasg | 235.285 | 235,265 | 772,930 | 70.500 | 82;614 | 821,892 | 807,664 |
| Sydney Min | 104.532 | 102,703 | 279,500 |  | 63,458 | 382,302 | 291,415 |
| Truro... | 114,826 103,810 | 14,623 | $728+110$ | None | 161.316 | 921,941 | 732,810 |
| Yarmouth | 103,810 | 105,580 | 442, 000 |  | 11,381 | 546.881 | 443,905 |
| New Brunswick- |  |  |  |  |  |  |  |
| Fredericton. | 233,193 | 229,183 |  | Not given |  |  |  |
| Moncton. | 191,827 | 188,037 | 1,814, 193 | None | 123,802 | 1,936.458 | 1.871,248 |
| St. John | 1,459,894 | 1,459,894 | 4,884,197 |  | 1,152,806 | 7,496,051 | 4,937.922 |
| Quebec |  |  |  |  |  |  |  |
| Chicoutim | 93,429 | 38,800 | 866,751 |  | - | 919,366 | 914.308 |
| Fraservill | 87,535 | 89,126 | 965.762 | 295,762 | 49,635 | 1,016,960 | 1,032,52 |
| Huls | 157,097 | 159,084 | 1,586,1362 | 308,900 | 104,301 | Being revi | sed. |
| Joliette | 185,508 | 179,500 | 469,500 |  | 30,203 | 787,881 | 552,41: |
| Lachine | 343.037 | 319,786 | 2,469,000 |  | 37,187 | 2,758,419 | 2,469,006 |
| Levis. | 363,246 | 346.476 | 733.284 | 45,000 | 345 | 864,314 | 831,284 |
| Maisonne | 2,761,326 | 2,446,986 | 16,809.723 |  | 27.812 | 24,837,061 | 27,098, 707 |
| Montreal | 12,564,7868 | 13, 303,869 | 97,306,898 |  | 1,576.605 | Notcomp. | 101,535,39t |
| Queber. | 1,548,550 | 1,482,303 | 14,343,5880 |  | 192,104 | 15,661,517 | 14,523,088 |
| Sherb | 1,130,516 | 1,41.866 | 886,500 |  | 21,008 | 1,236,041 | 1,198,614 |
| Sorel. | 71,438 | 82,000 | 545,000 | 225,000 | Ni! | 665,800 | 721,706 |
| St. Hyacinthe.. | 79.406 | 84,875 | 348.177 |  | 4.972 | 6850.096 | 71, 588 |
| Thetford Mines., | 54,344 | 48,442 | 314,000 | $11050{ }^{1}$ | 5.000 | 459,480 | 382,675 |
| Three Rivers | 1,054+580 | 1,033,045 | 1,715,500 | 1,325,00c | 264,332 | 3,748,957 | 3,715,96\% |
| Valley field | 81.627 | 121,067 | 677,000 |  | 15,000 | 747,072 | 681,78: |
| Westmount | 565.720 | 562,88) | 4,291,667 | $2,360,5684$ | 648.167 | 6,038,008 | 4,543,17\% |
| Ontario- |  |  |  |  |  |  |  |
| Barrie. | 180,215 | 185.0900 | 328,982 | 94,506 | Nil | 772.598 | 458,299 |
| Brantiord. | 1.104,456 | 1,104,456 | 1,780,005 | 795,848 | 877,389 | 4,256,680 | 3,802,571 |
| Brockville | 175,592 | 176.270 | 678,217 | 249,869 | 287,577 | 1.628 .075 | 992.951 |
| Cobalt | 122,934 | 119.538 | 49,544 | None | 92,826. | 277,829 | 68,45 |
| Cobourg | 153,139 | 143.16.5 | 227,280 | 25,295 | $20,604]$ | Not given |  |
| Collingwoo | 225,247 | $225.24{ }^{\text {a }}$ | 400,158 | 105,340 | 18,243 | 505,359. | 529.315 |
| Cornwalf | 134.82: ${ }^{18}$ | 112,501, | 205.303 | 43,902 | None | 421,837 | 276,084 |
| Galt. | 331,017 | 339,790 | 1,588,802 | 172,987 | 442.752 | 2,129,497 | 1,557,18: |
| Guelph | 901, 880 | 898,808 | 1,598.492 | 697.626 | 605,018 . | 2,380,965 | 1,813,981 |
| Hamilton | 2,632,653 | 2,802,828 | $9.672,032$ | 2,377,444 | 1,859,607 | 19,542,661 | 13,502,41: |
| Kenora | 317,85t | 233,810, | \% 857.041 | 57.794 | 138.171 | 1,459,987 | 090,47\% |
| Kingston. | 388.160 | 375.391 | 1,432,179 | 245.052 | 192,269 | $1.593,261$ | 1,752,068 |
| Kitchen | 426,928 | 422,464 | 1,4t2,820 | 760,815 | None | 3,058,300 | 2,345,05: |
| London. | 1,801,281 | 1,784,673 | 4,487,167 | 812,948 | 143.062 | 7,095,705 | 3,262,55! |
| Niagara Fal | 440,812 | 382.701 | 78,086 | 531.893 | None. | 1,625,660 | 1,037,90: |
| North B | 314,667 | 299,763 | 49\%,628, | 298.807 |  | 1,051,469 | 1,003, 336 |
| Oshawa | 145,794 | 167.7695 4631096 | - 3178,392 | 5 206,448 | None | 605,433 | 603,848 |
| Peterbor | 4, 393,434 | 472,288 | 1,928,351 | 413,035 | 520,940 | 2.782 .904 | 2,341,381 |
| Port Art | 1,274,491 | 1,223,82* | 4,153,873 | 1,760,889 | 926,772 | 5,767,474 | 5,710.21 |
| Port Hope | 207,296 | 178,218 | 292,91] | 7.199 | 2,685 | 420,458 | 335.494 |
| Sault Ste. Marie | 337, 173 | 332,234 | 1,078,858 | 4100367 | 242,162 | 2,534,430 | 2,137,96\% |
| St. Catha | Not | givep | 2,057,054 | 1,147,285 | ${ }_{528}^{681,310}$ | Not | given |
| Toranto | 40.053,131 | 13,649,6051 | 75,249,462 | 21,801.458 | 23,054,650 | 125,039,411 | +06,623,829 |
| Welland | 304,235 | 325,469 | 574,437 | 386,042 | 1,244,050 | 1,187+184 | 1,020,264 |
| Windsor | 840,808 | 823,956. | 1,378.296 | 947,214 | 20, 555 | 3,600,763 | 2,828,404 |
| Woodstock.... . | $310+342$ | 310.103 | 789,951 | 151,398, | 321,020 | 1,173,383 | 840.263 |
| Manitoba- |  |  |  |  |  |  |  |
| Brandon <br> St. Bonif | 654,944 702,272 | $\begin{aligned} & 899,175 \\ & 728,461 \end{aligned}$ | $\begin{aligned} & 1,299,880 \\ & 1,318,894 \end{aligned}$ | $\begin{aligned} & 1,(098,142 \\ & 2,589,743 \end{aligned}$ | $\begin{aligned} & 738,159 \\ & 876,402 \end{aligned}$ | $\begin{aligned} & 3,797,759 \\ & \mathbf{5 , 4 3}, 2206 \end{aligned}$ | $\begin{aligned} & 3,230,35( \\ & \mathbf{4}, 900,92( \end{aligned}$ |
| Winnipeg. | 11,084,613 | 11,587,878 | 10,115,558 | $32.011,2487$ | 6,955,904 | 56,548,006 | 53,8C9,72 |

Fur Notes see page 547.

## MUNICIPAL STATISTICS

28.-Receipts, Expenditure, Assets and Liabilities of Cities and Towns, 1916concluded.


[^38]Ontario Hydro-Electric Power Commission.-The Canada Year Book of 1910 (p. xlii) described the installation on October 11, 1910, at Berlin, now Kitchener, Ontario, of electrical energy generated by the Niagara Falls and the initial work carried out by the Ontario HydroElectric Power Commission for the supply of electrically generated power to 15 municipalities. During the last seven years the operations of the Commission have rapidly extended until in 1917 about 100 Ontario municipalities derive electrical power from the Niagara Falls and other Ontario water systems of the Commission. Table 29, on pages 548 to 551 , gives for 1915 the financial statistics of the electrical installations of 99 municipalities. It shows that the total cost of the plant erected was $\$ 14,873,348$, that the cost of operations for the year 1915 was $\$ 3,367,276$ and that the revenue was $\$ 4,069,817$, leaving a surplus of $\$ 702,541$. The total number of consumers in the 99 municipalities for 1915 was 120,828 , as compared with 96,744 in 1914 . Of the total in 191595,591 were domestic, 21,419 were commercial and 3,818 were power consumers. The total horse power taken in December 1915 was 100,242 , as compared with 70,698 in December 1914. Table 30 is a detailed statement of the assets and liabilities of the municipalities served by the Commission for the three years 1913, 1914 and 1915. The total assets, it will be noticed, have grown from $\$ 11,907,827$ in 1913 to $\$ 17,683,264$ in 1915.

## 29.-Financial Statistics of Electrical Installations of Municipalities served by the Ontario Hydro-Electric Power Commission, 1915.

(From the Annual Report for 1915 of the Ontario Hydro-Electric Power Commission.)

| Municipsiity. | Montis. | Cost al Plant. |  | $\begin{gathered} \text { Operation } \\ \text { and } \\ \text { Maintenance. } \end{gathered}$ | Fized Chargea. | Total Operation. | Revenue. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$ | \$ | * | \$ | \$ | 8 |
| Toronto. | 12 | 6,884,799 | 6,677,520, | 956,481 | 362,340 | 1,318,822 | 1,589,117 |
| Ottaws. | 12 | 887,204 | 550.941 | 129.523 | 40,366 | 109,889 | 203,244 |
| Hamilton | 12 | 1,920,067 | 981,758 | 182,762 | 64,946 | 243,708 | 300,432 |
| Brantord | 12 | 257,994 | 228,723 | 36,030 | 14,688 | 51,616. | 66,296 |
| Windsor. | 12 | 389,025, | 399,0012 | 53,451 | 13,039 | 66,480 | 71.815 |
| Peterborv. | 12 | 173,821 | 159,102 | 73.451 | 13,373 | 86.82i | 98,042 |
| Kitchener. | 12 | 346,168 | 197,326 | 67,382 | 19,437 | 85.819 | 110,380 |
| Port Arthur | 12 | 670.303 | 510,314 | 82,067 | 48,493 | 128,560 | 162,498 |
| St. Catharines | 12 | 198,731 | 187,30? | 31,908 | 9,734 | 41,527 | 50, 840 |
| Strafiont. | 12 | 216, 600 | 175, 731 | 46,327 | 14,399 | 60,728 | 64,066 |
| Guelph. | 12 | 218.065 | 115,482 | 54,275 | 10.273 | 64,548 | 77,858 |
| St. Thomas. |  | 182.122 | ${ }_{137}^{118.035}$ | 63,406 | $8,8,360$ | 71,766 | 89.904 |
| Chathsm | 12 | 129.781 | 137,533 | 11,712 | - ${ }^{\mathbf{3}, 4,46}$ | 17,176 | 16,454 |
| Wooditaet | 12 | 150,428 | 71,088 | 30,905 | 7,291 | 38,106 | 51,417 |
| Weltand. | 12 | 95,886 | 102,756 | 34,372 | 8,660 | 43,032 | 50,887 |
| Barrie. | 12 | 106,834 | 49,871 | 20,417 | 6,052 | 26,469 | 30,449 |
| Midianct. | 12 | 78,673 | 39,363 | 12,987 | 3,827 | 16,814 | 24,405 |
| Collivgwood | 12 | 60,600 | 35,985 | 17.639 | 3,557 | 21,196 | 27,025 |
| Ingersoll.. | 12 | 95,706 | 75,386 | 21,396 | 5,046 | 26,441 | 31.624 |
| Preston. | ¢ | 105,610 | 78,794 | 25.475 | 7,213 | 32,688 | 35,848 |
| Waterlos. | 12 | 95,335 | 62,628 | 22,179 | 4,285 | 26,484 | 31,861 |
| Dundas. | 12 | 73,103 | 62.681 | 16,892 | 5,707 | 16,599 | 19,842 |
| Goderich. | 12 | 76,565 | 50,178 | 10,979 | 4,447 | 15,426 | 22,309 |
| Walkervilie | 12 | 137,221 | 136.786 | 51,383 | 7,957 | 59,340 | 64,981 |
| Paris... | 12 | 90,738 | 62,593 | 11,440 | 7,966 | 19,406 | 20,639 |
| Simcoe... | ${ }^{9}$ | 31,985 | 35,716 | 3,1,138 $\mathbf{1 7 , 5 2 3}$ |  | 22,322 | 5,228 27,087 |
| Bramptor | 12 | 79,209 43,905 | 63,071 29,909 | 17,523 <br> 12 <br> 1756 | 4,799 1,981 | 22,322 <br> 14 <br> 1737 | 27,087 17,019 |
| Penetang... | 12 | 49,908 45,278 | 29,968 $\mathbf{4 6 , 6 3 8}$ | $12+56$ <br> $7+17$ <br>  <br> 1 | 3,581 | 10,998 | 11,087 |
| St. Mary's. | 12 | 78,870 | 47,021 | 11,733 | 4,775 | 16,508 | 21,704 |
| Tilsonburg. | 12 | 38.407 | 33,425 | 11,102 | 2,675 | 13,777 | 16,295 |
| Strathroy | 12 | 42,675 | 42,428 | 7,133 | 2,720 | 9,853 | 13,023 |
| Hespeler. | 12 | 31,622 | 26.862 | 9,295 | 3,144 | 12,439 | 15,675 |
| Elmira. | 12 | 18,828 | 19,494 | 4,536 | 1,357 | 5,893 | 8,219 |
| Weston. | 12 | 33,558 | 20,035 | 8,402 | 2,352 | 10,754. | 14,228 |
| Clinton. | 12 | 39,920 | 39,163 | 6,783 | 2,643 | 8,406 | 9,866 |
| Georgetown. | 12 | 26,807 | 19,786 | 10,177 | ${ }_{1}^{1,791}$ | 12.107 | 15.915 |
| Mintico. | 12 | 28,679 | 21,275 | 8.01 .5 | 2,270 | 10,285 | 10.822 |
| Seaiorth | 12 | 29,944 | 23,107 | 11,060 | 1,662 | 12,722 | 15,018 |
| Acton.. | 12 | 15,928 | 10,139 | 3,38B | 1,124 | 4,510 | 6,420 |
| Tilbury | 8 | 13,203 | 15,224 | ${ }_{6}^{2+256}$ | ${ }^{668}$ | 2.924 8,320 | ${ }_{9}^{3,392}$ |
| Mitchell | 12 | ${ }^{27.373}$ | 9,810 | 6,196 | 2,124 1,304 | 6,160 | 8 8,166 |
| New Hamburg | 12 | 24.597 | 17,727 17,262 | 4,846 | 1.304 | 4,896 | 6,409 |
| Fergus.. | 13 8 | 17,686 | 18,455 | 2,684 | 755 | 3,439 | 3,579 |
| Pt, Dalhousie | 12 | 14,865 | 5 $1.4,49.5$ | 3,681 | 629 | 4.310 | 4,829 |
| Norwich....... | 12 | 15.877 | 13, 665 | 4,444 | 1,885 | 6,429 | 9,485 |

MUNICIPAL ELECTRICAL INSTALLATIONS

## 24.-Financial Statistics of Electrical Installations of Municipalities served by the Ontaria Hydro-Electrie Power Commission, 1915.

(From the Annual Report for 1915 of the Ontario Hydro-Electric Power Corsmission.)

| Surplus. | Depreciation Charge. | Surplus less Depreciation Charge. | Assets. | Liabilities | Reserves ${ }^{1}$ | Ratio of Net Debt to total Assets. | Mumicipality. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | \$ | \$ | $\$$ | \$ | 8 | p. c. |  |
| 270,295 | - | 270,295 | 8,309,211 | 7,148,851 | 1,160,360 | 86.0 | . Toronto |
| 33, 3505 | 33,000 | 355 | 1,077,512 | 712,665 | 364,847 | 66.1 | ..... Ottawa |
| 56,724 | 25,809 | 30,915 | 1,203,062 | 1,037,651 | 165,411 | 86.3 | ...... Hamilton |
| 66,563 | 32,735 10,000 | 27,828 4,680 | 1,073,583 | 881,082 238,952 | 242,501 32,492 | 77.4 88.1 | .....). Brantiord |
| 14,680 5.325 | 10,000 | 4,680 <br> 5,325 | 471,444 | 394,516 | 32.492 9.899 | 88.15 | . |
| 11,218 | 7,500 | 8,718 | 183,496 | 163,468 | 20,028 | 90.0 | ....... Peterboro |
| 24,561 | 13,500 | 11,061 | 381.770 | 253,800 | 127,970 | 66.5 | Kitchener |
| 33,938 |  | 33,938 | 778.726 | 578,790 | 199,936 | - | .. Port Arthur |
| 9,119 | 7,250 | 1,869 | 206,783 | 191,529 | 15,254 | 92.6 | . . . St. Catharinea |
| 3,340 | 5,250 | 1,910 | 249,303 | 189,285 | 60,018 | 75.9 | . Stratiord |
| 13,310 | 10.500 | 2,810 | 271,580 | 131,224 | 140,356 | 48.3 | $\because$ Gnelph |
| 18,138 | 8,735 | 9,403 | 217,646 | 118,035 | 99,611 | 54.2 | St. Thomas |
| ${ }^{722}$ |  | 722 | 139,810 | 138,672 | 1,138 | 70.4 | Chatbama |
| 13,786 | 10,000 | 3,766 | 278,720 | 205,483 | 73.237 | 70.4 | . . . . . ${ }^{\text {a }}$....Galt |
| 13,221 | 6,725 | 6,496 | 202,3411 | 107,386 | 94,955 | 53.1 | . Woodstook |
| 7,805 3,980 | 4,425 3,500 | 3,430 480 | 118, 1908 | 106,322 49.871 | 11,869 70,216 | 90.0 41.5 | . ... Welland |
| 7,501 | 3,400 | 4,191 | 93,813 | 39,362 | 54,451 | 42.0 | ......... Midland |
| 5,820 | $2+600$ | 3,229 | 70.831 | 35,985 | 34,846 | 50.5 | . . . Collingwood |
| 5,183 | 3,200 | 1,988 | 112,256 | 83,755 | 28,501 | 76.8 | .... ... Ingersoll |
| 3.960 | 3.800 | 840 | 110,961 | 78,794 | 32,167 | 71.0 | ....... Prestion |
| 5.397 | 4,000 | 1,397 | 103,866 | 64,356 | 39,510 | 63.5 | . . . . . . Waterloo |
| 3,243 6,883 | 2, 3,700 | $\begin{array}{r}343 \\ 3,133 \\ \hline\end{array}$ | 74,913 87,102 | 62.061 52.926 | 12,852 | 82.3 60.7 | . |
| 5.641 | 3,750 | 5,641 | 145,530 | 136,786 | - 8 8,744 | 94.0 | ....).Walkerville |
| 633 |  | 633 | 101,133 | 66,947 | 34,186 | 06.3 | ..... . . Paris |
| 2,020 | - ${ }^{-1}$ | 2,090 | 37,806 | 35,718 | 2,090 | 94.4 | . . . . . . . . Simcoe |
| 4,765 | 3,100 | 1,765 | 85,002 | 63,071 | 21,931 | 74.2 | . . . . Brampton |
| ,- 282 89 | 2,000 | 288 | 48,078 47 47 | 29,909 | 18,169 | 92.2 | it Penetang |
| 5,196 | 3,600 | 89 1,596 | 47,337 86,789 | 46,638 | 38,173 | 98.5 560 | Wallacebure |
| 2,458 | 1,875 | 583 | 47,696 | 34,305 | 13,391 | 71.9 | ....T.Tilisonburg |
| 3,152 | 1,500 | 1,652 | 46,325 | 42,428 | 3,897 | 91.6 | . . . . . Strathroy |
| 1,118 | 2,000 | 882 | - 54,439 | 23,014 | 31,425 | 42.3 | Prescott |
| 3,238 | 1,750 | 1,486 | 35,437 | 26,862 | 8,575 | 75.7 | . . Hespeler |
| 2326 | 750 | 1,576 | 24, 065 | 19,494 | 4.571 | 81.0 | . Elmira |
| 3,474 | $1+520$ | 1,954 | 37,176 | 20,035 | 17,14] | 53.9 | . Weston |
| 3,860 | $\begin{array}{r}330 \\ 1,280 \\ \hline\end{array}$ | 2,588. | 42,712 28,868 | 40,747 | 1.965 | 95.4 | . ...... Clinton |
| 2,811 | $1+200$ | 1,611 | 27,104 | 20,317 | 6,787 | 68.5 74.9 | Georsetown |
| 537 | 1,090 | 553 | 34,470 | 21.274 | 13,196 | 61.7 | . . Milton |
| 2,290 | 1,450 | 846 | 35.282 | 25,000 | 10,282 | 70.8 | .Soaforth |
| 1,910 | 500 | 1.410 | 22,561 | 14,295 | 8,266 | 63.4 | Acten |
| 1.072 | 1,099 | 266 | 15,617 | 15,224 | 393 | 97.6 | . . . . . . Tilbary |
| 2,016 | 1.000 | 1,116 | 29,866 30,394 | ${ }_{17} 9.727$ | ${ }_{12,667}^{20,05}$ | 32.8 | Now Mitchell |
| 1,513 | 650 | 863 | 18,996 | 17,262 | 1,734 | 90.8 | Now Hamburg |
| 131 |  | 131 | 18,874 | 18,455 | 419 | 98.0 | $\cdots$..... Dresden |
| -519 | 415 | 104 | 15,963 | 14.495 | 1,468 | 90.8 | . Pt. Dalhousie |
| 2,976 | I, 195 | 1,781 | 21.305 | 13,865 | 7,440 | 65.1 | . Norwich |

${ }^{1}$ Includes Debentures Paid, Sinking Fund and Depreciation, Reserves and Surplus.

## FINANCE

29.-Financial Statistics of Electrical Installations of Municipalities served by the Ontario Hydro-Electric Power Commission, 1915-concluded.
(From the Annual Report for 1915 of the Ontario Hydro-Electric Power Commission.)


## MUNICIPAL ELECTRICALINSTALLATIONS

## 29.-Financial Statistics of Electrical Installations of Municipalities served by the Ontario Hydro-Electric Power Commission, 1915-concluded.

(From the Annual Report for 1915 of the Ontario Hydre-Electric Power Commission.)


[^39]30.-Statement of Assets and Liabilities of Municipalities served by the Ontario Hydro-Electric Commission for the Calendar Years, 1913-15.

|  | 1913. | 1914. | 1915. |
| :---: | :---: | :---: | :---: |
| Number of Municipalities. | 45 | 69 | 99 |
| Assets- | \$ | \$ | \$ |
| Lands and Buildings. | 626,707 | 791,732 | 873,838 |
| Sub-Station Equipment... | 1,090,876 | 1,476,088 | 1,582,063 |
| Distribution System, Overhead. | $2,690,835$ 644,514 | 3,422,764 | $\begin{array}{r}1,234,626 \\ \hline 928,421\end{array}$ |
| Line Transformers. | 615,546 | 787,613 | 981,755 |
| Meters. | 840,607 | 1,172,475 | 1,418,165 |
| Street Lighting Equipment, Reg. ... | 900,615 | 1,071,255 | 1,309,628 |
| " ${ }^{\text {a }}$ " Ornamental. | 62,765 | 270,387 | 197,645 |
| Miscel. Equipment and Const. Exp. | 866,552 | 2,062,036 | 1,701,183 |
| Steam and Hydraulic Plant. . | 1,401,175 | 420,108 | 461,651 |
| Old Plant. . | 341,277 | 478,882 | 415,518 |
| Other Miscellaneous Assets. | - | 140,632 | 768,855 |
| Total Plant. | 10,081,469 | 12,901,125 | 14,873,348 |
| Bank and Cash Balance. | 450,888 | 422,350 | 284,654 |
| Inventories. . $\quad$. | 344,488 | 561,873 | 602,920 |
| Accounts Receivable. | 540,275 | 615,227 | 726,557 |
| Sinking Fund... | 431,747 | 625,217 | 868,984 |
| Other Assets. | 58,960 | 123,411 | 326,801 |
| Total Liquid Assets. | 1,826,358 | 2,348,078 | 2,809,916 |
| Total Assets . | 11,907,827 | 15,249,203 | 17,683,264 |
| Liabilities- |  |  |  |
| Debenture Balance. | 8,711,308 | 10,678,078 | 11,831,811 |
| Accounts Payable. | 1,553,712 | 1,682,150 | 2,040,038 |
| Bank Overdraft. | 160,919 | 228,623 | 292,107 |
| Other Liabilities. | 42,413 | 113,838 | 37,388 |
| Total Liabilities. | 10,468,352 | 12,762,690 | 14,201,344 |
| Reserves- |  |  |  |
| Debentures Paid. | 202,751 | 320,129 | 394,466 |
| Sinking Fund Reserve. | 431,747 | 625,217 | S6,984 |
| Depreciation Reserve. | 478,146 | 850,618 | 817,183 |
| Surplus. | 326,831 | 750,549 | 1,401,287 |
| Total Reserves. | 1,439,475 | 2,546,513 | 3,481,920 |
| Total Liabilities and Reserves. | 11,907,827 | 15,249,203 | 17,683,264 |
| Percentage of Net Debt to Total Assets | 88.0 | 83.0 | 80.0 |

## BUILDING PERMITS.

Building Permits.-Table 31, from the Labour Gazette of February, 1917, shows the value of the building permits issued by 35 cities for each of the years 1915 and 1916. For the year 1916 the total value of the building permits in the table was $\$ 39,740,592$, as compared with $\$ 33,566,749$ in 1915, a net increase of $\$ 6,173,843$.
31.-Va]ues of Building Permits taken out is 35 Cities, in 1915 and 1916. [From the Labour Gazette of February, 1917.]

31.-Values of Building Permits taken out in 35 Cities, in 1915 and 1916. (From the Labour Gazette of February, 1917.J-concluded.

| City. | 1915. | 1916. | Increase of Decrease. |
| :---: | :---: | :---: | :---: |
| Alberta- | \$ | \$ | \$ |
| Calgary | 150,550 | 663,500 | + 512,950 |
| Edmonton. | 309,825 | 231,540 | - 78,285 |
| British Columbia- |  |  |  |
| New Westminster | 85,130 | 85,307 | $+\quad 177$ |
| Vancouver | 1,593,249 | 2,989,893 | + 1,396,644 |
| Victoria. | 242,450 | 170,265 | - 72,185 |
| Total 35 Cities. | 33,566,749 | 39,740,592 | +6,173,843 |

## BANKING.

The total assets of the chartered banks at December 31, 1916, were $\$ 1,948,044,256$, as compared with $\$ 1,737,992,244$ in 1915 . The total liabilities were $\$ 1,706,948,568$, as compared with $\$ 1,499,283,690$. Deposits by the public in Canada were $\$ 1,303,215,134$ at December 31, 1916 (Table 35), as compared with $\$ 1,144,680,651$ in 1915 . On March 31, 1916, the total at the credit of depositors in the Post Office and Dominion Government Saving Banks was $\$ 53,528,427$, as compared with $\$ 54,001,718$ in 1915 . Table 32 affords some measure of banking progress in Canada by a comparison of the number of branches at different periods. The number has grown from 123 at Confederation to 3,202 as at December 31, 1916, besides 107 in other countries. Table 33 is a statement of the number of branches of each of the 22 chartered Banks of Canada by provinces, as at December 31, 1916. The total number of branches is 3,309 , of which 3,202 are in Canada and 107 are in other countries.
32.-Number of Branches of Banks in Canada, by Provinces, 1868, 1902, 1905, 1915 and 1916.


## 33.-Number of Branches of Chartered Banks, by Provinces, as at December 31st, 1916.

| Chartered Banks. | P. <br> Island. | Nova Scotia. | New <br> Brunswiek. | Quebec. | Ontario. | Manitoba, | Saskatchewn. | Alberta. | British Columbia | Yukon. | Other Countries | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bank of Montreal. | I | 13 | 10 | 35 | 60 | 7 | 10 | 9 | 28 | - | 9 | 182 |
| Quebec Bank. | - | - | 1 | 25 | 9 | 1 | 12 | 3 | 2 | - | - | 53 |
| Bank of Nova Scotia. . | 7 | 30 | 33 | 10 | 64 | 2 | 5 | 4 | 3 | - | 32 | 190 |
| Banic of British North America. | - | 1 | 5 | 9 | 21 | 9 | 24 | 4 | 17 | 1 | 4 | 95 |
| Bank of Toronto.............. | - | - | - | 9 | 88 | 8 | 20 | 7 | 4 | - | - | 116 |
| Molsons Bank. | - | - | - | 38 | 50 | 2 | - | 4 | 3 | - | - | 97 |
| Banque Nationale. | $\cdots$ | $\rightarrow$ | - | 218 | 3 | - | - | - | - | - | 1 | 222 |
| Merchants' Bank of Canada.... | - | t | 1 | 30 | 85 | 15 | 22 | 40 | 7 | - | 1 | 202 |
| Banque Provinciale da Canada. . | - | - | 9 | 115 | 19 | - | - | - | - | - | - | 143 |
| Union Bank of Canada......... | - | 1 | 1 | 9 | 90 | 46 | 93 | 52 | 10 | - | 2 | 304 |
| Cauadian Bank of Commerce. | 5 | 14 | 4 | 81 | 89 | 23 | 61 | 49 | 42 | 2 | 6 | 376 |
| Royal Bank of Canada. | 5 | 30 | 18 | 31 | 119 | 4 | 24 | 28 | 30 | - | 52 | 371 |
| Dominion Bank... | - | - | - | 4 | 62 | 10 | 4 | 4 | 2 | - | - | $86-$ |
| Bank of Hamilton... | - | - | - | $\cdots$ | 58 | 25 | 22 | 10 | 8 | - | - | 123 |
| Standard Bank of Canada. . . . | - | - | - | 1 | 100 | 2 | 9 | 12 | 1 | - | - | 125 |
| La Banque d'Hochelata. . . . . . | $\rightarrow$ | - | - | 150 | 16 | 6 | 3 | 4 | - | - | - | [79 |
| Bank of Ottawa. | - | - | - | 13 | 61 | 7 | 9 | 1 | 1 | - | - | 92 |
| Imperial Bank ol Canada. . . . | - | - | $\rightarrow$ | 2 | 76 | 4 | 15 | 12 | 14 | - | - | 123 |
| Home Bank of Camada. | - | - | - | 3 | 28 | 6 | 7 | 1 | 1 | - | - | 46 |
| Nortbern Crown Bank. | $\rightarrow$ | - | - | - | 25 | 23 | 53 | 4 | 9 | - | - | 114 |
| Sterling Bank of Canada. | - | - | - | 1 | 42 | 4 | 2 | - | - | - | - | 49 |
| Weyburn Security Bank. | - | - | - | - | - | - | 21 | - | - | - | - | 21 |
| Tolal | 18 | 110 | 83 | 784 | 1,145 | 204 | 416 | 248 | 191 | 3 | 107 | 3,309 |

34.-Assets of Chartered Banks of Canada, December 31, 1916.

| Chariered Banks. | Deposit in the Central Gold Reserves. | Specie. | Dominion Notes. | Call and short loans in Canada. | Current loans in Can- ada ${ }^{2}$. | Other Assets. | Total Assets. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bank of Mortreal. | 8 | $16,863,009$ | $\stackrel{8}{8}$ | \$ | 99,485,114 |  | $\begin{gathered} \$ 58.868 .861 \end{gathered}$ |
| Quebec Bank.... | 8,000,000 | $16,863,009$ 66,368 | 25,059,126 | 4,998,609 | 6, $6,452,049$ | 209,401, 81718 | 21,162,177 |
| Batik of Nova Scotia | 2,000,000 | 7,187,031 | 10,339,227 | 4,519,455 | 42,888,083 | 49,687,981 | 116,621,727 |
| Bank of British North America. | 1,000,000 | 1,573,960 | 3,303,112 | 3,161,405 | 23,424,499 | 36,392,750 | 68,855,726 |
| Bank of Toronte. | 1,300,000 | 938,143 | 6,669,006 | 3,185,698 | 42,196,688 | 17,678,748 | 71,968,283 |
| Molsons Bank. | 1,000,000 | 544,543 | 3,698,277 | 4,832,843 | 33,181,237 | 16,876,653 | 60,128,553 |
| Banque Nationale | 1,200,000 | 209,847 | 1,716,133 | 2,531,521 | 18,862,814 | 8,262,487 | 32,782,802 |
| Merchants Bank of Canada. | 3,500,000 | 3,674,067 | 6,369,420 | 6,476,772 | 54,517,972 | 33,472,379 | 108,010,610 |
| Banque Provinciale du Canada. |  | 68,658 | 1,244,305 | 2,678,874 | 6,581,450 | 7,841,177 | 18,414,464 |
| Union Barrk of Canada.. | 3,700,000 | 1,227,366 | 5,689,397 | 2,829,947 | 54,067,900 | 40,261,163 | 107,775,773 |
| Catadian Batik of Commerce. | $5,000,000$ | 18,165,832 | 14,879,634 | 15,092,215 | 136,890,509 | 92,491,512 | 282,519,702 |
| Royal Brath of Canada. | 7,500,000 | 12,996,813 | 13,953,366 | 11,051,245 | 89,275,260 | 116,771,690 | 251;548,374 |
| Domition Bank. | 1,500,000 | 1,915,648 | 9,220,183 | 4,325,653 | 48,976,389 | 26,928,819 | 92,866,692 |
| Bank of Hamilton. | 1,400,000 | 849,297 | 3,567,884 | 3,407,443 | 31,956,669 | 14,265,033 | 55,446,326 |
| Standard Bank of Canada. | 2,200,000 | 1,263,213 | 2,942,759 | 3,518,711 | 36,392,803 | 12,890,013 | 59,207,499 |
| Banque d'Hochelaga. | 700,000 | 371,636 | 2,196,902 | 2,191,876 | 24,206,675 | 12,721, ${ }^{260}$ | 42,389,049 |
| Bank of Ottawa. | 900,000 | 1,270,485 | 2,332,422 | 2,242,716 | 25,122,811 | 24,380,789 | $56,249,223$ |
| Ithperial Bank of Canada. |  | 1,603,085 | 7,428,877 | 4,063,454 | 41,856,242 | 30,222,383 | 85,174,041 |
| Home Bank of Canada. | 500,000 | 118,946 | 2,190,628 | 727,213 | 12,739,962 | 4,753,604 | 21,030,353 |
| Northern Crounn Bank. | 1,900,000 | 197,925 | 593,484 | 504,890 | 8,205,274 | 10,425,466 | 21,827,039 |
| Sterling Bank of Canada. | - | 51,252 | 665,979 | 229,443 | 6,024,208 | 5,264,939 | 12,235,821 |
| Weyburn Security Bank. | - | 15,045 | 168,737 |  | 1,130,796 | 1,646,583 | 2,961,161 |
| Total. | 43,700,000 ${ }^{1}$ | 71,172,169 | 124,750,241 | 82,569,983 | 844,435,354 | 781,416,509 | ,948,044,256 |

[^40]35.-Liabilities of Chartered Banks of Canada, Deceniber 31, 1916.

| Chartered Banks. | $\left\lvert\, \begin{gathered} \text { Capital paid } \\ \text { up. } \end{gathered}\right.$ | Rest or reserve fund. | Notes in circulation. | Deposits by the public in Canada. | Other liabilities. | Total liabilities ${ }^{1}$ | Rate p.c. of last dividend. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | 0 | \$ | \$ ${ }^{\text {\% }}$ | \$ |  |  |
| Bank of Mointreal. | 16,000,000 | 16,000,000 | 22,279,238 | 232,356,367 | 69,214,921 | 323,850,526 | 10 |
| Quebec Bank..... | $2,735,000$ 6,50000 | 1,000,000 | 2,615,478 | 13,553,302 | 1,153,145 | 17,321,925 | 7 |
|  | $6,500,000$ $4,866,666$ | $12,000,000$ $3,017,333$ | 7,945,081 | 68,663,458 | 20,928,534 | 97,537,073 | 14 |
| Bank of Britisht North America. | 5,000,000 | $3,017,333$ $6,000,000$ | $5,695,588$ $5,399,979$ | $41,503,895$ $53,426,193$ | 12,182,546 | 59,382,029 | 6 |
| Molsorts Pank. . | $4,000,000$ | $4,800,000$ | $5,199,908$ | 63,426,193, $43,989,411$ | 1, $1,2674,418$ | $60,095,778$ $50,868,737$ | 11 |
| Banque Nationale. | 2,000,000 | 1,900,000 | 3,376,816 | 22,851,629 | 2,300,081 | 28,528,526 | 8 |
| Merchants Bank of Canada. | 7,000,000 | 7,000,000 | 9,216,086 | 77,254,518 | 6,638,862 | 93,109,466 | 10 |
| Banque Provinciale du Canada. | $1,000,000$ | 700,000 | 1,162,318 | 13,602,967 | 1,906,658 | 16,671,943 | 7 |
| Union Bank of Canada. | 5,000,000 | 3,400,000 | 7,917,397 | 79,785,560 | 11,240,060 | 98,943,017 | 8 |
| Canadian Bank of Commerce. | 15,000,000 | 13,500,000 | 19,527,257 | 187,647,301 | 45, 869,504 | 253,044,062 | 10 |
| Royal Bank of Canada. Dominion Bank. | $12,000,000$ $6,000,000$ | 12,560,000 | 18,981,157 | 145,699,151 | 61,107,377 | 225,787,685 | 12 |
| Bank of Hamilton. | $3,000,000$ | 3,300,000 | 3,863,531 | $69,624,656$ $43,154,598$ | 2,579,422 | $79,322,310$ $48,877,030$ | 12 |
| Standard Bank of Canada. | 3,310,410 | 4,310,410 | 5,388,488 | 44,576,606 | 1,843,212 | 50,808,306 | 13 |
| Banque d'Hochelaga. | 4,000,000 | $3,700,000$ | 4,619,802 | 28,824,083 | 995,004 | 34,438,889 | , |
| Bank of Ottawa. | 4,000,000 | 4,750,000 | 4,732,145 | 41,256,513 | 1,421,407 | 47,410,065 | 12 |
| Imperial Bank of Canada.. | 7,000,000 | 7,000,000 | 7,052,784 | 59,047,960 | 3,519,146 | 69,619,890 | 12 |
| Home Bank of Canada. . | 1,946,639 | 300,000 | 2,325,845 | 10,028,224 | 6,368,894 | 18,722,963 |  |
| Northern Crown Bank... | 1,429,172 | 715;600 | 2,931,725 | 15,559,251 | 1,010,332 | 19,501,308 | 6 |
| Sterling Bank of Canada. | 1,210,744 | 300,000 | 1,155,210 | 8,717,410 | 755,969 | 10,628,589 | 6 |
| Weyburn Security Bank. | 347,710 | 130,000 | 281,222 | 2,092,081 | 110,148 | 2,483,451 | 5 |
| Total. | 113,346,341 | 113,383,343 | 148,785; 28 \% | 1,000,315;134 | 254,948,147 | 1;706,948,568 | - |

${ }^{1}$ Exclusive of capital paid up and rest or reserve fund.

FINANCE.
36.-General Statement of Chartered Banks, 1868-1916.

| Calen- <br> dar <br> Year. | Capital paid up. | Notes in circulation. | Total on deposit ${ }^{1}$. | Discounts to the people. | Lirabilities ${ }^{2}$. | Assets. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 30,50 | 350,646 | 94 |  | 45,144,854 |  |
|  | 30,790,137 | 9,539,511 | $40,028,090$ |  |  |  |
| 1870. | 33,031,249 | 15,149,031 | 48,763,205 | 66,276,961 | 65,685,870 | 103,197,103 |
| 1871 | 37,095 | 20,91 | 56,287,391 | 84,799,841 | 80,250,974 | 12 |
| 1872 | 45,190,085 | 25,296,454 | 61,481,452 | 106,744,665 | 90,864,688 | 148 |
| 187 | 54,690,561 | 27,165,878 | 65,426,042 | 119,274,317 | 98,982,668 | 166,0 |
| 187 | 60,388,340 | 27,904,963 | 77,113,754 | 131,680,111 | 116,412,392 | 187,921,031 |
| 1875 | 64,619,513 | 23,035,639 | 74,642,446 | 136,029,307 | 104,609,356 | 186,255,330 |
| 1876 | 66,8 | 21,245, 935 | 72, | 127,621,577 | 99,614,014 | 183,499,801 |
| 1877 | 65,206,009 | 20,704,338 | 74,166,287 | 125,681,658 | 99,810,731 | 181,019,194 |
| 1878 | 63,682,863 | 20,475,586 | 70,856,253 | 119,682,659 | 95,538,831 | 175,450,274 |
| 18 | 62,737,276 | 19,486,10 | 73,151,425 | 113,485,10 | 96,760,113 | 173,548,490 |
|  | 60,052,117 | 22,529,623 | 85,303,814 | 102,166,115 | 111,838,941 | 184,276,190 |
| 18 | 59,534 | 28,516, | 94,346, | 116,953,497 | 127,176,249 | 200,613,879 |
| 18 | 59,799,644 | 33,582,08 | 110,133,12 | 140,077,194 | 149,777,214 | 227,426,835 |
| 1883. | 61,390,118 | 33,283,30 | 107,648,38 | 143,944,957 | 145,938,095 | 228,084,650 |
| 884 | 61,597,021 | 30,449,410 | 102.398,22 | 130,490,053 | 137,493,917 | 219,998,642 |
| 1885 | 61,711,566 | 30,720,762 | 104,014,660 | 126,827,792 | 138,762,695 | 219,147,080 |
| 18 | 61,662 | 31,030 | 111 | 132,833,313 | 146,954,260 | 228,061,872 |
| 18 | 60,860,561 | 32,478,118 | 112,656,985 | 139,753,755 | 149,704,402 | 230,393,072 |
| 1888. | 60,345,035 | 32,205,259 | 125,136,47 | 141,002,37 | 163,990,797 | 243,504,164 |
| 1889 | 60,229,752 | 32,207,144 | 134,650,732 | 149,958,98 | 173,029,602 | 253,789,803 |
| 18 | 59,974,902 | 32,834,511 | 135,548 | 153,301,33 | 173,207,587 | 254,546,329 |
| 18 | 60,700,697 | $33,061,042$ | 148,396,968 | 171,082 | 187,332,325 | 269,307,032 |
| 1892. | 61,626,311 | 33,788,679 | 166,668,471 | 193,455,883 | 208,062,169 | 291,635,251 |
| 1893. | 62,009,346 | $33,811,925$ | 174,776,722 | 206,623,042 | 217,195,975 | 302,696,715 |
| 189 | 62,063,371 | 31,166,003 | 181,743,890 | 204,124,939 | 221,006,724 | 307,520,020 |
| 18 | 61,800,700 | 30,807,041 | 190,916,939 | 203,730,80 | 229,794,3 | 6,536,527 |
| 1896 | 62,043,173 | 31,456,297 | 193 | 213 | 232 |  |
| 1897 | 62,027,703 | 34,350,118 | 211,788,096 | 212,014,635 | 252,660,708 | 341,163,505 |
| 1898. | 62,571,920 | 37,873,934 | 236,161,062 | 223,806,320 | 281,076,656 | 370,583,991 |
| 1899. | 63,726,399 | 41,513,139 | 266,504,528 | 251,467,076 | 318,624,033 | 412,504,768 |
| 190 | 65,154,594 | 46,574,780 | 305,140,242 | 279,279,761 | 356,394,095 | 459 |
| 1901 | 67,035,615 | 50,601,205 | 349 , | 388,299,888 | 420,003,743 | 531,829,324 |
| 1902 | 69,869,670 | 55,412,598 | 390,370,493 ${ }^{3}$ | 430,662,670 | 466,963,829 | 585,761,109 |
| 1903 | 76,453,125 | 60,244,072 | 424,167,140 ${ }^{3}$ | 472,019,689 | 507,527,550 | 641,543,226 |
| 1904 | 79,234,191 | 61,769,888 | 470,265,744 ${ }^{3}$ | 509,011,993 | 554,014,076 | 695,417,756 |
|  | 82,655,828 | 64,025,643 | $531,243,476{ }^{3}$ | 559,814,918 | 618, | 767,490,183 |
| 190 | 91,035,604 |  |  | 655,869,879 | 713,790 | 878,512,076 |
| 190 | 95,953,732 | 75,784,482 | 654, $839,711^{3}$ | 709,975,274 | 769,026,924 | 945,685,708 |
| 1908 | 96,147,526 | 71,401,697 | 658,367,015 ${ }^{3}$ | 670,170,83 | 762,077,184 | 941,290,619 |
| 1909. | 97,329,333 | 73,943,119 | $783,298,880^{3}$ | 762,195,546 | 882,598,547 | 1,067,007,534 |
| 1910. | 98,787,929 | 82,120,303 | 909,964, $839^{3}$ | 870,100, | 1,019,177,601 | 1,211,452,351 |
| 1911. | 103,009,256 | 89,982,223 | 980,433,788 ${ }^{3}$ | 926,909,616 | 1,097,661,393 | 1,303,131,206 |
| 912 | 112,720,943 | 100,146,541 | 1,102,910,383 ${ }^{3}$ | 1,061,843,991 | $1,240,124,354$ | 1,470,065,478 |
| 913. | 116,297,729 | 105,265,336 | 1,126,871,523 ${ }^{3}$ | 1,111,993,263 | 1,287,372,534 1 | 1,530,093,671 |
| 14 | 114,759,807 | 104,600,185 | $1,144,210,363^{3} 1$ | 1,101,880,924 | 1,309,944,006 | 1,555,676,395 |
|  | 113,982,741 | 105,137,092 | 1,198,340,315 ${ }^{3}$ | 1,066,252,854 | 1,353,629,12 | 1,596,424,643 |
|  | 113,175,35 |  | 1,418,0 | 135,866, | ,596,905,33 | ,839,286,709 |

Note.-The statistics in this table are averages computed from the monthly returns in each vear. ${ }^{1}$ Including deposits of federal and provincial governments. ${ }^{2}$ Excluding capital and rest or reserve fund. ${ }^{3}$ Including amounts deposited elsewhere than in Canada, not previously included in deposits.

BANKING.
37.-Deposits in Chartered Banks in Canada and elsewhere, 1901-1916. ${ }^{1}$

| Calendar Year. | Deposits by the public in Canada. |  | Deposits elsewhere than in Canada. | Balances due to <br> Dominion and <br> Provincial Governments. | Total deposits. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | payable <br> on demand. | payable after notice or on a fixed day |  |  |  |
|  | 95,169,631 | 221,624,664 | $\begin{gathered} \$ \\ 26,560,444 \end{gathered}$ | $\stackrel{\$}{6,218,588}$ | $\stackrel{8}{349,573,327}$ |
| 1902. | 104,424,203 | 244,062,545 | 34,529,739 | 7,354,006 | 390,370,493 |
| 1903. | 112,461,757 | 269,911,501 | 34,931,701 | 6,862,181 | 424,167,140 |
| 1904. | 117,962,023 | 307,007,192 | 36,388,330 | 8,908,199 | 470,265,744 |
| 1905. | 138,116,550 | 338,411,275 | 44,325,531 | 10,390,120 | 531,243,476 |
| 1906. | 165,144,569 | 381,778,705 | 46,030,241 | 13,014,998 | 605,968,513 |
| 1907 | 166,342,144 | 413,014,657 | 58,828,181 | 16,654,729 | 654,839,711 |
| 1908. | 169,721,755 | 406,103,063 | 65,793,319 | 16,748,878 | 658,367,015 |
| 1909. | 225,414,828 | 464,635,263 | 70,788,822 | 22,459,967 | 783,298,880 |
| 1910. | 260,232,399 | 532,087,627 | 78,445,210 | 39,199,603 | 909,964,839 |
| 1911. | 304,801,755 | 568,976,209 | 72,823,733 | 33,832,091 | 980,433,788 |
| 1912. | 359,431,895 | 625,705,765 | 81,137,710 | 36,635,013 | 1,102,910,383 |
| 1913. | 367,214,143 | 626,199,470 | 97,528,021 | 35,929,889 | 1,126,871,523 |
| 1914. | 346,069,908 | 656,760,687 | 101,244,738 | 40,135,030 | 1,144,210,363 |
| 1915. | 358,444,252 | 690,904,274 | 110,671,820 | 38,319,969 | 1,198,340,315 |
| 1916. ..... | 428,717,781 | 780,842,383 | 155,603,314 | 52,871,951 | 1,418,035,429 |

38.-Discounts of Chartered Banks in Canada and elsewhere, 1901-1916.

| $\begin{gathered} \text { Cal- } \\ \text { en- } \\ \text { dar } \\ \mathbf{Y r} \end{gathered}$ | Call and short loans on stocks and bonds in Canada. | Call and short loans elscwhere than in Canada. | Current loans in Canada ${ }^{2}$ | Current loans elsewhere than in Canada. | ```Loans to govern- ments.``` | Overdue debts. | Total discounts of banks. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 8 | \$ | \$ | \$ | 8 | \$ | \$ |
| 1901 | 35, 304,84t | 40,020,238 | 283,387,17 | 24,678,377 | 2,931,398 | 1,977,854 | 388,299,888 |
| 1902 | 4i5,206,588 | 46,162,659 | 303,128,54 | 30,288,65? | 3,796,592 | 2,079,694 | 430,662,670 |
| 1902 | 43,583,78\& | 38,025,662 | 360,573,639 | 25,586,802 | 2,211,379 | 2,038,419 | 472,019,689 |
| 19 | 36,999,790 | 41,212,007 | 407,475,439 | 18,665,002 | 2,465,495 | 2,194,260 | 509,011,993 |
| 1905 | 42,659,144 | 51,452,955 | 436,659,38 | 25,097,824 | 1,960,46E | 1,985,146 | 559,814,918 |
| 1906 | 56,597,649 | 59,363,638 | 500,770,572 | 35,777,625 | 1,353,258 | 2,007,136 | 655, 669,879 |
| 1907 | 49,192,291 | 52,907,513 | 574,784,939 | 27,340,135 | 2,183,799 | 3,566,597 | 709,975,274 |
| 1908 | 42,060,715 | 60,764,075 | 529,320,13 | 424,383,503 | 5,542,149 | $8,100,257$ | 670,170,833 |
| 1909 | 53,266,984 | 119,728,263 | 544,380,947 | \|34,454,995 | 2,913,083 | 7,451,274 | 762,195,546 |
| 1910 | 61,623,002 | 112,777,530 | 646,910,799 | 939,912,108 | 2,027,344 | 6,850,107 | 870,100,890 |
| 1911 | 63,889,906 | 91,097,714 | 728,462,99 | 35,742,140 | 1,844,837 | 5,872,028 | 926,909,616 |
| 1912 | 71,221,133 | 105,718,070 | 842,051,08 | 8,36,803,506 | 2,167,778 | 3,792,416 | 1,061,843,991 |
| 1913 | 70,096,169 | 98,602,615 | 801,489,259 | 44,578,835 | 2,851,877 | 4,374,508 | 1,111,933,263 |
| 1914 | 69,646,196 | 112,438,696 | 858,565,15 | 48,570,152 | 7,063,242 | 5,597,48 | 101,880,924 |
| 1915 | 72,695,421 | 118,896,692 | 809,727,20 | 644,998,570 | 13,187,508 | 6,747,457 | 1,066,252,854 |
| 1916 | 85,386,829 | 164,786,760 | 806,332,07 | 4,64,857,403 | 8,014,092 | 16,489,373 | 1,135,866,531 |

[^41]
## FINANCE

39.-Assets of Chartered Banks for the Calendar Years 1913-1916 ${ }^{1}$

| Schedule. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: |
|  | \$ | $\$$ | \$ | \$ |
| Balances due from agencies of the banks or from other banks or agencies in the United Kingdom. <br> Balances due from agencies of chartered banks or agencies elsewhere than in Canada and the United Kingdom... Bank premises. | 13,329,642 | 12,230,533 | 20,824,559 | 24,025,192 |
|  |  |  |  |  |
|  | 28,154,996 | 36,932;958 | 43,781,939 | 72,923,228 |
|  | 40,235,778 | 45,007;862 | 47,704,275 | 49,358,665 |
| Call and short loans on stocks and bonds in Canada. <br> Call and short loans elsewhere than in Canada. | 70,096,168 | 69,646,196 | 72,695,421 | 85,386,829 |
|  | 98,602,615 | 112,438,696 | 118,896,692 | 164,786,760 |
| Current loans in Canada ${ }^{2}$. | 891,489,259 | 858,565,153. | 809,727,206 | 806,332,074 |
| Current loans elsewhere than in Canada.. | 44,578,835 | 48,570,152 | 44,998,570 | 4,857,403 |
| Deposit in central gold reserve Deposits made with and balances due from other banks in Canada. | 6,605,261 | 6,070,833 | 8,325,833 | 22,316,667 |
|  | 5,648,586 | 5,686,916 | 8,156,471 | 8,059,707 |
| Deposits with Dominion Govermment for security of note circulation. | 6,536,341 | 6,693,684 | 6,756,648 | 6,811,213 |
|  | 94,146,377 | 105,842,634 | 135,440,326 | 139,416,618 |
| Dominion and provincial government securities. | 9,995,237 | 11 | 12,814,898. | 29,717,007 |
| Loans to governments. <br> Loans to other banks in Canada. | 2,851,877 | 7,063 | 13,187,5 | 8,014,092 |
|  | 135,017 | 136,725 | 36,290 |  |
| Mortgages on real estate sold by banks. <br> Municipalsecurities in Canada and publie securities elsewhere than in Canada. | 2,094,245 | 1,722,978 | 1,691,657 | 1,674,331 |
|  | 23,183,162 | 22,707,738 | 31,553,09] | 117,902,686 |
| Notes of and cheques on other banks. | 64,485,2 | 58,43 | 55,573,844 | 76,466,651 |
| Overdue debts. | 4,374,508 | 5,597 | 6,747,457 | 6,489,373 |
| Railway and other bonds, debentures and stocks. | 70,713,075 | 68,636,267 | 74,020,538 | 68,386,482 |
| Real estate other than bank premises. | 1,465,181 | 2,810,4 | 3,952 | 4,988,544 |
| Speeie. | 41, | 53 | 64,67 | 68,380,346 |
| Other assets. | 10,251,038 | 15,251,132 | 14.835,775 | 12,992,643 |
| Total assets. | 1,530,093,671 | 55, 676,395 | 96,424.6 | 839,285,749 |

[^42]
## BANKING <br> 40.-Liabilities of Chartered Banks for the Caiendar Years 1913-1916 ${ }^{1}$.

| Schedule. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ |
| Liabilities to shareholdersCapital paid up. | 116,297,729 | 114,759,807 | 113,982,741 | 113,175,353 |
| Rest or reserve fund. | 109,129,393 | 113,130,626 | 113,020,310 | 112,988,541 |
| Total | 225,427,122 | 227,890,433 | 227,003,051 | 226,164,894 |
| Other liabilities- |  |  |  |  |
| Balances due to agencies of Canadian banks, or to other banks or agencies in the Lnited Kingdom. | 12,030,969 | 14,117,852 | 8,651,977 | 3,693,293 |
| Balances due to agencies of Canadian banks, or to other banks or agencies elsewhere than in Canada and the United Kingdom. | 8,791,532 | 0,494,979 | 11,693,234 | 16,074,466 |
| Balance due to Dominion Government after deducting advances for credits, pay lists, etc. | 7,873,277 | 11,158,018 | 14,022,387 | 30,333,980 |
| Balance due to provincial governments. | 28,056,612 | 28,977,012 | 24,297,582 | 22,537,970 |
| Deposits by the publicpayable on demand in Canada. | 367,214,143 | 346,069,908 | 358,444,252 | 428,717,781 |
| Deposits by the public payable after notice or on a fixed day in Canada. | 626,199,470 | 656,760,687 | 690,904,274 | 780,842,383 |
| Deposits made by and balances due to other banks in Canada. | 6,478,200 | 7,726,783 | 10,434,999 | 10,418,946 |
| Deposits elsewhere than in Canada.. | 07,528,021 | 101,244,708 | 110,671,820 | 155,603,314 |
| Notes in circulation | 105,265,336 | 104,600,185 | 105,137,092 | 126,691,913 |
| Liabilities not included under foregoing heads.. | 27,034,974 | 29,793,844 | 19,371,506 | 21,991,291 |
| Total. | 1,287,372,534 | 1,309,944,006 | 1,353,629,123 | 1,596,905,337 |
| Total liabilities to shareholders and other liabilities. | 1,512,799,656 | 1,537,834,439 | 1,580,632,174 | 1,823,070,231 |
| Excess of assets over-all lia-bilities-undivided profits not included. | 17,294,015 | 17,841,956 | 15,792,469 | 16,216,478 |

[^43]
## FINANCE

41.-Average Monthly Circulation of Dominion Notes by Denominations, 1891-1916 ${ }^{1}$.

| $\begin{gathered} \text { Cal- } \\ \text { en } \\ \text { dar } \\ \text { Year } \end{gathered}$ | Denominations. |  |  |  |  |  |  | Total average. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$5,000. | $\begin{gathered} \$ 500 \text { and } \\ \$ 1,000 . \end{gathered}$ | $\left\lvert\, \begin{gathered} \$ 50 \mathrm{and} \\ \$ 100 . \end{gathered}\right.$ | $\begin{aligned} & \$ 4, \$ 5, \\ & \$ 10 \text { and } \\ & \$ 20 \end{aligned}$$\$ 20 \text {. }$ | \$5. | \$1 and \$2. | Fractionals. |  |
|  |  |  |  |  |  |  |  |  |
|  | \$ | \$ | \$ |  | \$ |  |  |  |
| 18 |  | 9,050, | 280,860 | 449,644 |  | 6,412, | 181,130 | 16,374,459 |
| 1892 | - | 9,895,0 | 299,988 | 473,290 |  | $6.551,2$ | 187,880 | 17,407,441 |
| 1892 |  | 11,280,12 | 250,820 | 451,061 |  | 6,788,000 | 196,000 | 18,966,006 |
| 1894 |  | 13,297,16 | 227,070 | 403,334 | - | 6,615,0 | 206,550 | 20,749,168 |
| 1895. |  | 13,834,666 | 232,300 | 369,439 |  | 6,743,555 | 217,802 | 21,397,762 |
| 189 | 2,285,000 ${ }^{2}$ | 12,135,875 | 219,600 | 348,827 |  | 6,980,012 | 227,390 | 22,196,704 |
| 1897 | 4,891,250 | 10,309,208 | 241,821 | 322,751 |  | 7,237,520 | 236,156 | 23,238,706 |
| 1898 | 6,410,417 | 8,137,833 | 216,883 | 364,992 |  | 7,851,532 | 248,122 | 23,229,779 |
| 1899 | 7,474,583 | 8,130,083 | 211,196 | 434,286 | - | 8,524,327 | 267,175 | 25,041,650 |
| 1900 | 8,480,000 | 7,854,500 | 218,921 | 395,573 |  | 9,315,354 | 286,117 | 26,550,465 |
| 1901 | 8,862,083 | 9,363,375 | 232,142 | 524,480 | - | 9,757,778 | 312,911 | 29,052,769 |
| 1902 | 11,358,750 | 9,010,667 | 229,858. | 639,937 | - | 10,463,359 | 338,842 | 32,041,413 |
| 1903 | 18,004,167 | 7,649,000 | 189,121 | 558,987 | - | 11,409,251 | 352,934 | 38,163,460 |
| 1904 | -33,460,000 | 6,941,167 | 150,758 | 456,313 | - | 11,995,396 | 362,203 | 43,365,837 |
| 1905 | 28,300,417 | 6,785,792 | 128,554 | 493,264 | - | 12,630,271 | 376,359 | 48,714,657 |
| $190 \%$ | 30,019,583 | 6,919,583 | 122,882 | 392,779 | - | 13,997,323 | 407,381 | 51,859,532 |
| 1907 | 36,163,667 | 6,763,625 | 116,021 | 334,589 |  | 15,188,627 | 450,011 | 59,017,440 |
| 1908 | 45,739,583 | 7,143,125 | 105,154 | 214,831 |  | 14,910,365 | 489,886 | 68,602,94 |
| 1909 | 56,764,583 | 7,693,208 | 98,846 | 153,019 | - | 15,542,364 | 540,391 | 80,792,411 |
| 1910. | 63,366,250 | 8,069,500 | 94,708 | 2.54,635 | - | 17,235,627 | 607,849 | 89,628,569 |
| 1911 | 69,349,167 | 8,984,958 | 89,800 | 1,666,906 |  | 19,166,092 | (664,431 | 99,921,354 |
| 1912 | 77,859,167 | 9,436,542 | 48,396 | 1,065,798 | 9,369,522 | 20,798,557 | 728,225 | 114,621,445 |
| 1913. | 78,227,083 | 9,782,083 | 22,133 | 141,143 | 6,152,655 | 22,009,108 | 764,372 | 117,098,577 |
| 1914 | 89,766,250 | 9,674,792 | 17,504 | 73,17 | 4,078,939 | 22,020,852 | 791,102 | 126,422,609 |
| 1915 | 123,407,083 | 8,402,917 | 14,304 | 60,497 | 3,523,189 | 21,482,2 | 824,867 | 157,715,153 |
| 1916 | 140,392,500 | 8,053,125 | 12,837 | 53,86 | 3,233,989 | 23,601, | 37 | ,816, |

${ }^{1}$ The statistics in this table are averages computed from the montbly returns of each year. ${ }^{2}$ Three months only. ${ }^{3}$ Six months only. First issue of Dominion $\$ 5$ notes, July 1, 1912.
42.-Amount of Exchanges of the Clearing Houses of Chartered Banks, 1912-1916.

| Cities. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }_{2-5}^{*} 8$ | 248.715048 | ${ }^{5} 016858$ |  |  |
| Calgar | 2-5,492,303. | 2 | E | 88, 565 |  |
| Halifax. | 100,466,678 | 105,347,636 | 100,280, 108 | 104,414, 595 | 125, 697,881 |
| Hamilton. | 158,127,435 | 177,946,610 | 148,886.812 | 151,420,271 | 200,811,087 |
| London. | 84,526,961. | 90,720,752 | 86,024,238 | 89,774,78i | 100,090,560 |
| Montreal | 2,845,470,000 | 2,879,118,000 | 2,631,350,000 | 2,628,122,42 ${ }^{\text {c }}$ | 3,715,125,744 |
| Ottawa. | 244,123,453 | 207,667,006 | 209,662,599 | 211,636.519 | 261, 49.599 |
| Quebec. | 158,760,185 | 165,674,745 | 165,873,241 | 158,325.906 | 192,163,703 |
| St. John, N.B. | 88,969,218 | 82,447,747 | 78,259,921 | 77,533,868 | ¢0,46,705 |
| Toronto. | 2,170,230,376 | 2,181,281,507 | 2,012,953,966 | 1,885,956,257 | $2,571,535,613$ |
| Vancouver, B.C. | 645,118,887 | 606,899,710 | 420,951,718 | 281,575,949 | 321,555,736 |
| Victoria, B.C. | 183,544,238 | 176,977,074 | 121,663,271 | 76,677,926 | 81,271,154 |
| Winnipeg. | 1,537,817,524 | 1,634,977,237 | 1,370,960,806 | 1,530,683,124 | 2,061,795,257 |
| Regina. | 115,727,648 | 132,087,457 | 98,205,541 | 87,122,611 | 124,349,589 |
| Saskation | 115,898,467 | 96,034,723 | 59,314,947 | 52,146,841 | 68,316,154 |
| Moosejaw | 65,136,326 | 61,370,949 | 45,846,371 | 42,634,319 | 52,971,442 |
| Total. | 9,010,137,316 | 9,060,320,521 | 7,909,212,098 | 7,653,618,554 | 10,315,853,900 |

'From Bradstreet's.

## BANKING.

43.-Rest or Reserve Fund held by Chartered Banks by months, 1907-1916.

| Months. | 1907 | 1908. | 1909. | 1910. | 1911. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | * | \$ |
| January | 69,396,431 | 71,071,984 | 74,585,185 | 78,449,573 | 84,356,108 |
| February. | 69,130,046 | 71,215,644 | 74,489,942 | 78,521,946 | 84,766,633 |
| March.... | 69,716,655 | 71,302,408 | 75,328,293 | 78,569,586 | 84,891,710 |
| April. | 69,988,077 | 71,530,096 | 75,607,676 | 78,846,070 | 85,213,740 |
| May | 69,412,774 | 71,558,683 | 75,755,488 | 79,2ヶ1,915 | 86,690,829 |
| June... | 69,556,585 | 71,653,898 | 75,824,738 | 79,370,321 | 86,943,135 |
| July.. | 69,637,439 | 71,657,694 | 75,847,368 | 79,429,978 | 88,352,064 |
| August. | 69,748,293 | 71,681,938 | 75,888,103 | 79,823,679 | 89,324,728 |
| September | 69,798,322 | 71,700,983 | 75,937,663 | 80,089,471 | 90,181,949 |
| October | 69,862,098 | 72,707,614 | 76,172,223 | 80,157,791 | 93,418,824 |
| November. | 70,534,757 | 74,006,611 | 77,368,333 | $83,164,948$ | 95,699,232 |
| December | 70,901,232 | 74,427,630 | 77,847,333 | 83,965,869 | 96,868,124 |
| Monthly averages. | 69,806,892 | 72,041,265 | 75,887,695 | 79,970,346 | 88,892,256 |
|  | 1912. | 1913. | 1914. | 1915. | 1916. |
| January | 98,101,595 | 107,200,548 | 112,401,141 | 113,227,654 | 112,457,333 |
| February | 98,721,502 | 107,514,405 | 112,679,074 | 113,227,654 | 112,457,333 |
| March. . | 99,234,481 | 107,903,491 | 112,706,350 | 113,227,654 | 113,022,933 |
| April. | 100,638,290 | 108,414,337 | 113,287,200 | 113,327,654 | 113,122,933 |
| May. | 100,878,848 | 108,681,230 | 113,346,113 | 113,060,988 | 113,022,933 |
| June. | 101,031,186 | 108,732,561 | 113,368,898 | 113,060,988 | 113,022,933 |
| July. | 101,735,482 | 108,959,833 | 113,381,526 | 113,060,988 | 113,022,933 |
| August. | 102,751,441 | 109,194,211 | 113,382,911 | 113,060,988 | 113,022,933 |
| September. | 104,301,411 | 109,358,445 | 113,385,761 | 113,061,008. | 113,022,933 |
| October | 104,639,396 | 109,624,776 | 113,392,374 | 112,752,333 | 113,022,933 |
| November. | 106,212,072 | 111,850,862 | 113,165,307 | 112,718,473 | 113,293,018 |
| December | 106,840,007 | 112,118,016 | 113,070,859 | 112,457,333 | 113,383,343 |
| Monthly averages... | 102,090,476 | 109,129,393 | 113,130,626 | 113,020,310 | 112,989,541 |

44.-Average Circulation of Bank Notes and Government Notes by five-year and annual periods, 1874-1916.

| Five-year <br> periods. | Yearly <br> average of <br> bank <br> notes. | Yearly <br> average of <br> government <br> notes, $\$ 20$ <br> and under. | Years. | Yearly <br> average of <br> bank <br> notes. | Yearly <br> average of |
| :--- | :---: | :---: | :---: | :---: | :---: |
| govenment |  |  |  |  |  |
| notes, $\$ 20$ |  |  |  |  |  |
| and under. |  |  |  |  |  |

FINANCE.
45.-Total amount of Issue and Redemption of Dominion Notes from July 1, 1878, to March 31, 1916.


565
BANKING.
46.-Business of the Post Office Savings Banks, 1868-1916.

|  | Savings banks at end of fiscal year. | Deposits received in year. | Trans- ferred from gov't s. b. to post office. s. b. | Interest <br> on <br> deposits <br> in year | $\begin{gathered} \text { Total cash } \\ \text { and } \\ \text { interest. } \end{gathered}$ | Amount withdrawn in year. | Amount at credit of open accounts at end of year. | Open accounts at end of year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 81 | \$ | \$ | 039 |  |  | \$ ${ }^{\text {2 }}$ |  |
| 18 | 81 213 | 212,507 | - | 939 21,094 | 213,446 | r 8 8,857 | 204,589 | 2,102 |
| 1869 | 213 | 927,885 |  | 21,094 | 1,396,590 | 664,555 | $\begin{array}{r} 856,814 \\ 1,588,849 \end{array}$ | 7,212 |
| 1871 | 230 | 1,917,576 |  | 84,274 | 2,001,850 | 1,093,439 | 2,497,260 | 17,153 |
| 1872 | 235 | 2,261,631 |  | 116,174 | 2,377,805 | 1,778,565 | 3,096,500 | 21,059 |
| 1873 | 239 | 2,306,918 |  | 126,933 | 2,433,851 | 2,323,299 | 3,207,052 | 23,526 |
| 1874 | 266 | 2,340,284 |  | 126,273 | 2,466,557 | 2,468,644 | 3,204,965 | 24,968 |
|  |  | 1,942,346 |  | 120,758 | 2,063,194 | 2,341,979 | 2,926,090 | 24,294 |
| 1876 | 279 | 1,726,204 |  | 110,116 | 1,836,320 | 2,021,458 | 2,740,952 | 24,415 |
| 1877 | 287 | 1,521,000 |  | 104,068 | 1,625,068 | 1,726,083 | 2,639,937 | 24,074 |
| 1878 | 295 | 1,724,371 |  | 103,834 | 1,828,205 | 1,713,658 | 2,754,484 | 25,535 |
| 1879 | 297 | 1,973,243 |  | 110,913 | 2,084,156 | 1,733,449 | 3,105,191 | 27,445 |
| 80 | 297 | 2,720,216 |  | 136,075 | 2,856,291 | 2,015,813 | 3,945,669 |  |
| 1881 | 304 | 4,175,042 |  | 184,905 | 4,359,947 | 2,097,389 | 6,208,227 |  |
| 1882 | 308 | 6,435,989 |  | 291,065 | 6,727,054 | 3,461,619 | 9,473,662 | 51,463 |
| 1883 | 330 | 6,826,266 |  | 407,305 | 7,233,571 | 4,730,996 | 11,976,237 | 61,059 |
| 1884 | 343 | 6,441,439 |  | 477,487 | 6,918,926 | 5,649,611 | 13,245,552 | 66,682 |
| 1885 | 35 | 7,098,459 |  | 539,561 | 7,638,020 | 5,793,032 | 15,090,540 | 73,322 |
| 1886 | 392 | 7,645,227 |  | 607,075 | 8,252,302 | 6,183,479 | 17,159,372 |  |
| 1887 | 415 | 8,272,041 |  | 692,404 | 8,964,445 | 6,626,067 | 19,497,750 | 90,159 |
| 1888 | 433 | 7,722,330 | 217,385 | 765,639 | 8,705,354 | 7,514,071 | 20,689,033 | 101,693 |
| 1889 | 463 | 7,926,634 | 1,085,980 | 841,922 | 9,854,536 | 7,532,146 | 23,011,423 | 113,123 |
| 1890 | 494 | 6,599,896 | 167,502 | 786,875 | 7,554,273 | 8,575,042 | 21,990,65 | 112,321 |
| 1891 | 634 | 6,500,372 | 389,169 | 734,431 | 7,623,972 | 7,875,978 | 21,738,648 | 111,230 |
| 1892 | 642 | 7,056 |  | 734,591 | 7,796,593 | 7,230,839 | 22,298,40 | 110,805 |
| 1893 | 673 | 7,708,888 |  | 777,483 | 8,486,371 | 6,631,579 | 24,153,19 | 114,275 |
| 1894 | 699 | 7,524,286 | 218,174 | 835,800 | 8,578,260 | 7,473,586 | 25,257,868 | 117,020 |
| 1895 | 731 | 7,488,028 | 493,889 | 876,049 | 8,857,966 | 7,310,292 | 26,805,542 | 120,628 |
| 18 | 75 | 8,138,947 | 449,982 | 944,525 | 9,533,454 | 7,406,066 | 28,932,930 | 126,442 |
| 189 | 779 | 8,223,000 | 1,856,474 | 1,024,512 | 11,103,986 | 7,656,087 | 32,380,829 | 135,737 |
| 1898 | 814 | 9,183,693 | 786,868 | 982,726 | 10,953,287 | 8,853,178 | 34,480,93 |  |
| 1899 | 838 | 8,310,630 |  | 1,001,900 | 9,312,530 | 9,021,863 | 34,771,60 | 142, |
| 1900 | 847 | 10,448,485 | 141,172 | 1,049,699 | 11,639,356 | 8,903,505 | 37,507,45 | 150,987 |
| 190 | 895 | 11,091,099 |  | 1,126,952 | 12,218,051 | 9,774,694 | 39,950,813 | 157,368 |
| 190 | 915 | 11,382,035 | 415,508 | 1,188,925 | 12,986,46 | 10,617,071 | 42,320,210 | 162,761 |
| 19 | 934 | 12,060,825 |  | 1,254,049 | 13,314,874 | 11,379,757 | 44,255,327 | 167,023 |
| 1904 | 961 | 11,737,930 | - | 1,309,567 | 13,047,507 | 11,883,128 | 45,419,70 |  |
| 1905 | 989 | 10,504,430 | 252,774 | 1,320,512 | 12,077,716 | 12,129,101 | 45,368,321 | 165, |
| 190 | 1,011 | 10,805,458 | 559,593 | 1,327,645 | 12,692,696 | 12,324,529 | 45,736,488 | 164,542 |
| 190 | 1,0 | 8,803,503 | 1,216,169 | 1,027,834 | 11,047,50 | 9,330,76 | 47,453,22 | 167,285 |
| 1908 | 1,084 | 12,293,274 | 59,244 | 1,369,404 | 13,721,9 | 13,610,8 | 47,564,28 | 165,691 |
| 1909 | 1,102 | 9,415,569 |  | 1,342,870 | 10,758,439 | $13,132,239$ | 45,190,484 | 155,895 |
| 1910 | 1,133 | 8,816,512 | - | 1,279,011 | 10,095,523 | 11,699,650 | 43,586,357 | 148,893 |
| 19 | 1,151 | 9,957,016 |  | 1,257,566 | 11,214,582 | 11,470,360 | 43,330,579 | 147,478 |
| 1912 | 1,172 | 11,054,877 | 223,831 | 1,258,165 | 12,536,873 | 12,303,688 | 43,563,764 | 147,919 |
| 1913 | 1,212 | 11,299,964 |  | 1,255,180 | 12,555,144 | $13,289,966$ | 42,728,942 | 146,034 |
| 1914 | 1,250 | 11,346,459 | 140,319 | 1,218,492 | 12,705,270 | 13,842,925 | 41,591,387 | 143,320 |
| 19 | 1,269 | 10,154,189 |  | 1,175,537 | 11,329,726 | 12,925,606 | 39,995,406 | 135,477 |
| 1916 | 1,289 | 8,539,742 | 295,100 | 1,160,083 | 9,994,925 | 9,981,913 | 40,008,418 | 134,345 |

## FINANCE.

47.-Business of the Dominion Government Savings Banks, 1868-1916.

| Fiscal Year. | Cash deposits in year. | $\begin{aligned} & \text { Interest } \\ & \text { on deposits } \\ & \text { in year. } \end{aligned}$ | Total cash and interest. | Withdrawals in year. | At credit of depositors June 30. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | . 292094 | * 078 | 50 | \$ | \$ |
| 1868. | '292,994 | 66,078 | 359,072 | 297,000 | 1,483,219 ${ }^{1}$ |
| 1869. | 323,138 | 69,528 | 392,666 | 281,360 | 1,594,525 |
| 1870. | 462,481 | 77,128 | 529,609 | 311,564 | 1,822;570 |
| 1871. | 556,669 | 88,256 | 644,925 | 305,459 | 2,072,036 |
| 1872. | 1,085,289 | 100,836 | 1,186,125 | 1,142,346 | 2,154,234 ${ }^{2}$ |
| 1873. | 2,442,917 | 93,892 | 2,530, 809 | 1,732,873 | 2,958,170 |
| 1874. | 3,207,689 | 154,491 | 3,362,180 | 2,564,996 | 4,005,295 ${ }^{3}$ |
| 1875. | 3,570,289 | 177,896 | 3,748,185 | 3,508,389 | 4,245,091 |
| 1876. | 3,222,672 | 178,572 | 3,401,244 | 3,343,170 | 4,303,165 |
| 1877. | 3,911,576 | 190,156 | 4,101,732 | 3,574,204 | 4,830,693 |
| 1878. | 5,366,358 | 232,816 | 5,599,174 | 4,687,338 | 5,742,529 |
| 1879. | 4,549,290 | 242,665 | 4,791,955 | 4,431,992 | 6,102,492 |
| 1880. | 5,240,195 | 268,729 | 5,508,924 | 4,504,129 | 7,107,287 |
| 1881. | 6,494,640 | 323,874 | 6,818,514 | 4,297,356 | 9,628,445 |
| 1882. | 7,090,434 | 411,949 | 7,502,383 | 4,835,828 | 12,295,009 |
| 1883. | 7,067,390 | 505,388 | 7,572,778 | 5,624,908 | 14,242,87C |
| 1884. | 6,807,632 | 576,653 | 7,384,285 | 5,655,171 | 15,971,984. |
| 1885. | 7,170,480 | 645,707 | 7,816,187 | 5,899,635 | 17,888,536 |
| 1886. | 7,513,069 | 728,546 | 8,241,615 | 6,115,709 | 20,014,442 |
| 1887 | 6,134,911 | 795,164 | 6,930,075 | 5,609,992 | 21,334,525 |
| 1888. | 3,541,144 | 813,349 | 4,354,493 | 5,006,993 | 20,682,025 |
| 1889. | 3,645,188 | 777,300 | 4,422,488 | 5,159,578 | 19,944,935 |
| 1890. | 3,086,936 | 688,417 | 3,775,353 | 4,698,476 | 19,021,812 |
| 1891. | 2,858,535 | 614,094 | 3,472,629 | 4,833,063 | 17,661,378 |
| 1892. | 3,155,344 | 585,989 | 3,741,333 | 4,171,565 | 17,231,148 |
| 1893. | 3,410,093 | 588,319 | 3,998,412 | 3,533,094 | 17,696,464 |
| 1894. | 3,400,456 | 601,420 | 4,001,876 | 3,920,196 | 17,778,144 |
| 1895. | 3,242,278 | 594,283 | 3,836,561 | 3,969,749 | 17,644,956 |
| 1896. | 3,293,379 | 598,445 | 3,891,824 | 3,670,391 | 17,866,389 |
| 1897 | 3,186,581 | 597,580 | 3,784,161 | 5,096,403 | 16,554,147 |
| 1898. | 2,705,030 | 463,313 | 3,168,343 | 4,092,309 | 15,630,181 |
| 1899. | 2,514,398 | 449,166 | 2,963,564 | 3,123,635 | 15,470,110 |
| 1900. | 2,784,581 | 452,400 | 3,236,981 | 3,064,825 | 15,642,266 |
| 1901. | 2,881,477 | 462,809 | 3,344,286 | 2,888,408 | 16,098,144 |
| 1902. | 2,971,583 | 473,334 | 3,444,917 | 3,425,284 | 16,117,777 |
| 1903. | 3,051,868 | 475,245 | 3,527,113 | 3,129,088 | 16,515,802 |
| 1904. | 2,879,793 | 483,233 | 3,363,026 | 3,140,084 | 16,738,744 |
| 1905. | 2,817,267 | 489,322 | 3,306,589 | 3,396,197 | 16,649,136 |
| 1906. | 2,744,818 | 473,281 | 3,218,099 | 3,693,101 | 16,174,134 |
| 1907 (9 mos) | 1,981,286 | 333,866 | 2,315,152 | 3,400,702 | 15,088,5844 |
| 1908. | 2,457,330 | 436,539 | 2,893,869 | 2,965,582 | $15,016,871^{4}$ |
| 1909. | 2,074,479 | 431,120 | 2,505,599 | 2,774,084 | $14,748,4364$ |
| 1910. | 2,120,201 | 427,037 | 2,547,238 | 2,617,802 | 14,677,872 ${ }^{4}$ |
| 1911. | 2,337,188 | 428,509 | 2,765,697 | 2,679,817 | 14,763,7524 |
| 1912. | 2,616,248 | 422,862 | 3,039,110 | 3,147,298 | 14,655,564 ${ }^{\text {a }}$ |
| 1913. | 2,573,775 | 409,453 | 2,983,228 | 3,227,251 | 14,411,5414 |
| 1914. | 2,363,643 | 408,650 | 2,772,293 | 3,207,672 | 13,976,1624 |
| 1915. | 2,277,153 | 404,525 | 2,681,678 | 2,651,082 | 14,006,312 |
| 1916. | 1,904,392 | 407,148 | 2,311,540 | 2,797,843 | 13,520,009 ${ }^{4}$ |

${ }^{1}$ This amount includes $\$ 1,422,047$ at credit of depositors June 30,1867 . ${ }^{2}$ Includes $\$ 38,418$ at credit of New Brunswick account in 1871 . ${ }^{3}$ Incitudes $\mathbf{\$ 2 4 9}, \mathbf{9 4 1}$ at credit of Prince Edward Island account in J873. "March 3I.

## BANKING.

48.-Total Business of Post Officeand Dominion Government Savings Banks, 1868-1916.

| Fiscal Year. | Cash deposits in year. | Interest on total deposits. | Total cash and interest. | Withdrawals in year. | At credit of depositors June 30. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1868. | $\stackrel{\$}{\$ 05,501}$ | ${ }_{67,017}^{\$}$ | $\stackrel{\$}{572,518}$ | $\stackrel{8}{306,757}$ | $\begin{gathered} \$ \\ 1,687,808^{1} \end{gathered}$ |
| 1869. | 1,251,023 | 90,622 | 1,341,645 | 578,114 | 2,451,339 |
| 1870. | 1,810,382 | 125,817 | 1,936,199 | 976,119 | 3,411,419 |
| 1871. | 2,474,245 | 172,520 | 2,646,775 | 1,488,897 | 4,569,297 |
| 1872. | 3,346,920 | 217,010 | 3,563,930 | 2,920,911 | 5,250,734 ${ }^{2}$ |
| 1873. | 4,749,885 | 220,825 | 4,970,660 | 4,056,172 | 6,165,222 |
| 1874. | 5,547,973 | 280,764 | 5,828,737 | 5,083,639 | 7,210,261* |
| 1875. | 5,512,634 | 298,654 | 5,811,288 | 5,850,368 | 7,171,181 |
| 1876. | 4,948,876 | 288,688 | 5,237,564 | 5,364,627 | 7,044,118 |
| 1877. | 5,432,576 | 294,224 | 5,726,800 | 5,300,287 | 7,470,631 |
| 1878. | 7,000,729 | 336,650 | 7,427,379 | 6,400, 997 | 8,497,013 |
| 1879. | 6,522,533 | 353,578 | 6,876,111 | 6,165,441 | 9,207,683 |
| 1880. | 7,960,411 | 404,804 | 8,365,215 | 6,519,942 | 11,052,956 |
| 1881. | 10,669,682 | 508,779 | 11,178,461 | 6,394,745 | 15,836,672 |
| 1882. | 13,526,423 | 703,014 | 14,229,437 | 8,297,447 | 21,768,662 |
| 1883. | 13,893,656 | 912,693 | 14,806,349 | 10,355,903 | 26,219,108 |
| 1884. | 13,249,071 | 1,054,140 | 14,308,211 | 11,304,782 | 29,217,537 |
| 1885. | 14,268,939 | 1,185,267 | 15,454,206 | 11,692,667 | 32,979,076 |
| 1886. | 15,158,296 | 1,335,621 | 16,493,917 | 12,299,179 | 37,173,814 |
| 1887. | 14,406,952 | 1,487,569 | 15,894,521 | 12,236,060 | 40,832,275 |
| 1888. | 11,480,859 | 1,578,988 | 13,059,847 | 12,521,064 | 41,371,058 |
| 1889. | 12,657,802 | 1,619,222 | 14,277,024 | 12,691,724 | 42,956,358 |
| 1890. | 9,854,333 | 1,475,292 | 11,329,625 | 13,273,518 | 41,012,465 |
| 1891. | 9,748,076 | 1,348,525 | 11,096,601 | 12,709,040 | 39,400,026 |
| 1892. | 10,211,346 | 1,320,580 | 11,531,926 | 11,402,404 | 39,529,548 |
| 1893. | 11,118,981 | 1,365,802 | 12,484,783 | 10,184,673 | 41,849,658 |
| 1894. | 11,142,916 | 1,437,220 | 12,580,136 | 11,393,782 | 43,036,012 |
| 1895. | 11,224,195 | 1,470,332 | 12,694,527 | 11,280,041 | 44,450,498 |
| 1896. | 11,882,307 | 1,542,970 | 13,425,277 | 11,076,456 | 46,799,319 |
| 1897. | 13,266,055 | 1,622,092 | 14,888,147 | 12,752,490 | 48,934,976 |
| 1898. | 12,675,591 | 1,446,039 | 14,121,630 | 12,945,487 | 50,111,119 |
| 1899. | 10,825,028 | 1,451,066 | 12,276,094 | 12,145,498 | 50,241,715 |
| 1900. | 13,374,238 | I,502,099 | 14,876,337 | 11,968,330 | 53,149,722 |
| 1901. | 13,972,574 | 1,589,761 | 15,562,335 | 12,663,100 | 56,048,957 |
| 1902. | 14,769,126 | 1,662,259 | 16,431,385 | 14,042,355 | 58,437,987 |
| 1903. | 15,112,695 | 1,729,292 | 16,841,987 | 14,508,845 | 60,771,129 |
| 1904. | 14,617,733 | 1,792,799 | 16,410,532 | 15,023,211 | 62,158,450 |
| 1905. | 13,574,471 | 1,809,834 | 15,384,305 | 15,525,298 | 62,017,457 |
| 1906. | 14,109,869 | 1,800,926 | 15,910,795 | 16,017,630 | 61,910.622 |
| 1907 (9 mos). | 12,000,958 | 1,361,700 | 13,362,658 | 12,731,468 | 62,541,8124 |
| 1908. | 14,809,848 | 1,805,943 | 16,615,791 | 16,576,448 | 62,581,1554 |
| 1909. | 11,490,048 | 1,773,990 | 13,264,038 | 15,906,273 | 59,938,920 |
| 1910. | 10,936,713 | 1,706,048 | 12,642,761 | 14,317,452 | 58,264,2294 |
| 1911. | 12,294,204 | 1,686,075 | 13,980,279 | 14,150,177 | 58,094,3314 |
| 1912. | 13,894,956 | 1,681,027 | 15,575,983 | 15,450,986 | 58,219,3284 |
| 1913. | 13,873,739 | 1,664,633 | 15,538,372 | 16,617,217 | 57,140,4834 |
| 1914. | 13,850,421 | 1,627,142 | 15,477,563 | 17,050,597 | 55,567,4494 |
| 1915. | 12,431,342 | 1,580,062 | 14,011,404 | 15,577,288 | 54,001,7184 |
| 1916. | 10,739,234 | 1,567,231 | 12,306,465 | 12,779,756 | 53,528,427 ${ }^{4}$ |

[^44]F1NANCE
49.-Value of Dominion Noles and of Bank Notes in circulation, and amount of goli held by the Receiver-General, 1882-1916.

| March 31. | One and Two Dollar Notes in Circulation. | Total <br> DoninionNotes <br> in Circulation. | Bank Notes in Circulation. | Gold held by the Receiver General. |
| :---: | :---: | :---: | :---: | :---: |
|  | \$ | S | \$ | \$ |
| 1882. | 5,675,413.00 | 14,315,437 77 | 22,947,269,04 | 2,149,461.92 |
| 1883. | 5,809,548.00 | 15,801,769.98 | 34,517,813.52 | 2,381,288.51 |
| 1884. | 5,427, 58.00 | 16,901,296.46 | 30,197,882.51 | 2,548,794.52 |
| 1885. | 5,290,655.00 | 15,600,166.86 | 29,791,262.85 | 2,345,525.44 |
| 1886. | 5,195,681.00 | 16,858,838.28 | 29,959,916.55 | 4,060,046.84 |
| 1887 | 5,761,588.00 | 14,781,270.78 | 31,521,420.43 | 2,516,972.36 |
| 1888. | 5,933,659.00 | 15,931,679.11 | 31,985,285.27 | 3,452,022.09 |
| 1889. | 5,852,308,00 | 15,110,965.33 | 32,471,522.09 | 3,925,994.19 |
| 1890. | $5,974,395.00$ | 15,228,780.65 | 31,704,281.61 | 3,017,109.53 |
| 1891. | 6,202,728.00 | 16,156,465.48 | 33,020,661 . 30 | 3,789,704.21 |
| 1892. | 6,211,976.00 | 16,213,525.76 | 32,483,965.00 | 3,728,463.36 |
| 1893. | 6,526,193.00 | 17,587,711.66 | 33,430,883.00 | 5,550,381.36 |
| 1894. | 6,362,517.00 | 19,548,102.45 | 30,702,607.00 | 7,624,381.36 |
| 1895. | 6,339,098.00 | 20,946,237 . 12 | 29,414,796.00 | 9,175,245.43 |
| 1896. | 6,606,214.00 | 18,791, 747.62 | 30,789,457.00 | $7,049,897.33$ |
| 1897 | $6,711,754.00$ | 21,987,613.26 | 31,082,521.00 | 10,380,205.37 |
| 1898. | 7,306,574.00 | 21,142,624.76 | 35,930,085 .00 | 9,779,170.97 |
| 1899. | 7,902,076.00 | 23, $983,078.39$ | 38,409,227.00 | 11,768,191.25 |
| 1900. | 8,590,618.00 | 24,452,442.52 | 43,814,918,00 | 10,829,263.02 |
| 1901. | 9,136,829.00 | 28,498,519.52 | 47,611,967.00 | 15,159,309.02 |
| 1902. | 9,546,552.00 | 29,868,112.05 | 52,442,282.00 | 15,939,396.55 |
| 1903. | 10,671, 569 . 00 | 33,777,733.58 | 58,283,494.00 | 20,702,144.08 |
| 1904. | 11,241,646.00 | 39,777,831.33 | $59,760,119.00$ | $27,377,814.83$ |
| 1905. | 11,616,702.00 | 47,839,250 . 33 | 58,721,173.00 | $35,813,970.43$ |
| 1906. | 12,697,203.00 | 47,201,200.22 | 65,991,818.00 | 32,617,209.02 |
| 1907 | 14,477,814.00 | 54,794,596.86 | 76,346,013.00 | $37,619,596.81$ |
| 1908. | 14,119,524.00 | $60,455,991.36$ | 69,047,892.00 | $41,689,751.31$ |
| 1909. .. | 14,215,587.00 | $79,351,080.50$ | 68,708,458.00 | $61,581,665.45$ |
| 1910. | $15,728,269.00$ | 87,134,008.50. | 78,265,822.00 | 69,736,110.85 |
| 1911. | 17,155,996.00 | 89,994,270.25 | 81, 938,753.00 | 74,159,771.40 |
| 1912. | 19,356,015.00 | 113,443,633.40 | 95,918,404.00 | 98,802,395. 14 |
| 1913. | 20,783,997,00 | 112,101,885.65 | 102,202,047.00 | $98,507,112.81$ |
| 1914. | 20,605,876.00 | 117,795,638.53 | 96,848,384, 00 | I01,161,366. 18 |
| 1915. | 20,236,608.50 | 157,056,118.91 | 96,666,544.00 | $94,644,423.44$ |
| 1916. | 21,927,267,50 | $177,943,131.54$ | 114,804,604.00 | 120,931,622.98 |

LOAN AND TRUST COMPANIES

## LOAN AND TRUST COMPANIES.

Loan and Trust Companies.--Up to and including the year 1913 tables were given in the Year Book of the assets and liabilities, with comparative figures for a series of years, of loan companies and building societies. These tables were taken from the "Annual Report of the Affairs of Building Societies, Loan and Trust Companies in the Dominion of Canada," as issued by the Department of Finance. The statistics in this Report were compiled by the Department of Finance partly from the statements required to be furnished under legislation of the Dominion Parliament and partly from returns voluntarily made by corporations operating under provincial charters. The laws relating to loan and trust companies incorporated by Acts of the Parliament of Canada were revised by the Loan and Trust Companies Acts of 1914 (4-5 Geo. V, cc. 40 and 55), and since the passing of these Acts the Annual Report issued by the Department of Finance up to and including the year 1913, has been replaced for the years 1914 and 1915 by "Annual Statements of the Loan and Trust Companies incorporated by Acts of the Parliament of Canada." Tables 50 and 51 show therefore the liabilities and assets of the loan and trust companies as compiled from these statements. They relate to 14 loan and 13 trust companies, and do not include companies or societies operating under provincial charters.

## 50.~LLabilities and Assets of Loan Compenies, 1914-1915.

LIABILITLES.

| Year. | Capital paid ap in cash. | Resetve Fund. | Debentares. |  |  | Deposits. |  | Other liabilitijes. | Total lisbilities. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | payable cin Canada | pryable | Stock issued. | payable <br> on demand. | payable afker notice. |  |  |
|  | \$ | \$ | 8 | 8 | $\$$ | \$ | 8 | \$ | 5 |
| 1914..... | 19,238,512 | 9,374,363 | 6,688,124 | 22,745,770 | 1,296,480 | 3,611,174 | 2,492,898 | 3,140,770 | 70,588.031 |
| 1918, | 19,401,856 | 9,878,268 | 8,784,836 | 22,279,881 | 1,390,889 | 5,471,355 | 3,721,839 | 3,083,784 | 71,982,666 |

ANSETS.

| Year. | Loaned on mortgagesand bypotheques. | Loaned upon and invested in |  |  |  | $\begin{gathered} \text { Cash } \\ \text { on } \\ \text { hand } \\ \text { and in } \\ \text { banks. } \end{gathered}$ | Interest due. | Other <br> Assets. | Total Assets. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Government, municipaland school securities | Bonds of inerrporated companies | Stocks of incorporated companies | Bank stocks. |  |  |  |  |
| 1814.... <br> 4015... | $\$$ $53,710,084$ $52,807,357$ | 3 <br> 775,783 <br> $1,483,635$ | $\$$ $1,162,442$ $2,062,710$ | $\$$ $7,659,052$ $7,314,803$ | $\$$ $1,019,317$ $1,019,702$ | ¢ $3,230,803$ $3,993,004$ | $\$$ 891,443 679,966 | 8 $2,399,167$ $2,631,489$ | $\$$ $70,588,091$ $71,992,666$ |

## FINANCE <br> 51.-Liabilities and Assets of Trust Companies, 1914-1915. LIABILITIES.

| Year. | Liabilities to Sharebolders. |  |  | $\left\lvert\, \begin{gathered} \text { Other } \\ \text { liabilities } \end{gathered}\right.$ | Total liabilities of the companies | Liabilities to the Public. |  |  | Total habilities to the public. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Capital paid up in cash. | Reserve Fund. | Other liabilities to Shareholders. |  |  | Money in trust for investment. | Trast funds for invest- mentguar- antoed. | Estate trusts and agencies under adminis- dration. |  |
| $\begin{aligned} & 1914 . . \\ & 1915 . . \\ & \hline \end{aligned}$ | $\begin{gathered} 8 \\ 6,051,146 \\ 5,807,128 \\ \hline \end{gathered}$ | $\begin{array}{r} \$ \\ 2,541,413 \\ 1,159,479 \end{array}$ | $\begin{gathered} 8 \\ 202,427 \\ 233,738 \end{gathered}$ | $\begin{array}{r} \$ \\ 1,948,414 \\ 606,005 \end{array}$ | $\begin{array}{r} 8 \\ 10,743,400 \\ 7,306,350 \\ \hline \end{array}$ | $\begin{gathered} \$ \\ 2,552,455 \\ 3,113.170 \mid \end{gathered}$ | $\begin{gathered} 5,998,013 \\ 6,613,929 \end{gathered}$ | $\begin{gathered} 29,832,343 \\ 31,002,934 \\ \hline \end{gathered}$ | $\begin{gathered} 8 \\ 38.392 .811 \\ 40.730 .03 \end{gathered}$ |
| ASSETS. |  |  |  |  |  |  |  |  |  |
|  | Loans |  |  |  | Government municipaland school securities owned. | Cash on hand and in banke. | Marketvalue ofrealestate.govern-mentsecurities,etc., overbookvaiue. |  |  |
| Year. | On real estate secured by mortgage and hypotheques. |  | on stocks of incorporated corapanies | on securities of incorporated companies |  |  |  | All other assets. | Total <br> Assets of the сомраліен |
| $1914 .$. $1915 .$. | $\begin{gathered} \$ \\ 5,189,797 \\ 3,972,520 \end{gathered}$ | $\begin{gathered} 8 \\ 113,095 \\ 102,395 \end{gathered}$ | $\begin{gathered} \$ \\ 303,939 \\ 110.692 \end{gathered}$ | $\begin{gathered} 8 \\ 253,686 \\ 536,832 \end{gathered}$ | $\begin{gathered} 8 \\ 787,400 \\ 876,760 \end{gathered}$ | $\begin{gathered} 8 \\ 179,928 \\ 172,448 \end{gathered}$ | $\begin{gathered} \$ 9 \\ 879,089 \\ 5,181 \end{gathered}$ | $\begin{array}{c\|} \hline \$ \\ 3,08,756 \\ 1,529,522 \end{array}$ | $\begin{gathered} 8 \\ 20,740,640 \\ 7,306,350 \end{gathered}$ |

## COMMERCIAL FAILURES.

Commercial Failures in Canada, 1916.-According to Bradstreet's of January 6, 1917, the total number of Canadian failures reported during the calendar year 1916 was 1,772 , with liabilities of $\$ 15,952,684$. In number there was a decrease in 1916 of 32.39 p. c., as compared with 1915 , while the liabilities decreased by 50.36 p. c. Dun's Review of the same date gives the total number of Canadian insolvencies in 1916 as 1,677 , as compared with 2,652 in 1915 , whilst liabilities reached in 1916 the total of $\$ 24,985,908$, as compared with $\$ 40,676,621$ in 1915. Tables 52 to 54 give the statistics from both authorities, those from Bradstreet's (Table 52) being classified by provinces for the calendar years 1915 and 1916 and those for Dun's Review, including Newfoundland, being classified by branches of business for the calendar years 1914 to 1916 (Table 53) and by classes and provinces for the calendar year 1916, with totals for the years 1907 to 1915 , including Newfoundland (Table 54).
52.-Commercial Failures in Canada, by Provinces, for the Calendar Years 1915 and 1916. (From Bradstreet's.)

| Provinces. | Fo. of |  | Assets. |  | Liabilities. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1915. | 1916. | 1915. | 1916. | 1915. | 1916. |
| Prince Edward Istand.. | 3 | 5 | 44,982 | 8,860 | \$ 52,381 | $\stackrel{\$}{19,015}$ |
| Nova Scotia. | 70 | 40 | 513,836 | 81,521 | 881,991 | 231,968 |
| New Brunswick. | 54 | 43 | 150,824 | 125,037 | 271,657 | 274,110 |
| Quebec. | 785 | 539 | 5,336,333 | 2,978,012 | 12,604,439 | 6,894,322 |
| Ontario. | 702 | 566 | 2,741,114 | 1,442,748 | 5,876,947 | 3,425,090 |
| Manitoba. | 284 | 173 | 1,126,453 | 461,335 | 3,333,618 | 2,081,857 |
| Saskatchewan. | 264 | 136 | 1,012,636 | 504,598 | 2,749,422 | 1,209,523 |
| Alberta. | 216 | 150 | 976,886 | 372,671 | 1,904,638 | 753,679 |
| British Columbia. | 243 | 120 | 2,324,128 | 374,296 | 4,459,219 | 1,063,120 |
| Canada. | 2.621 | 1,772 | 14,227,192 | 6,349,078 | 32,134,312 | 15,952,684 |

## 53.-Commercial Failures in Canada by Branches of Business, 1914-1916. (From Dun's Review.)

| Classes. | 1914. |  | 1915. |  | 1916. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\substack{\text { Num- } \\ \text { ber. }}}{ }$ | Liabilities. | Number. | Liabilities. | Number. | Liabilities. |
| Manufacturers- |  | \$ |  | \$ |  | \$ |
| Iron and Foundries. | 10 | 213,302 | 8 | 90,005 | 9 | 330,605 |
| Machinery and Tools... | 37 | 612,190 | 51 | 730,998 | 14 | 151,590 |
| Woollens, Carpets, etc. | 1 | 70,000. | 5 | 45,300 | 2 | 9,400 |
| Cotton, Hosiery, etc. | 1 | 235,000 | 2 | 6,100 | 2 | 501,900 |
| Lumber, Carpenters... | 98 | 3,984,340 | 175 | 4,115,701 | 47 | 3,290,284 |
| Clothing, Millinery | 102 | 923,359 | 2 | 1,180,201 | 51 | 259,558 |
| Hats, Gloves and Furs. | 18 | 150,490 | 12 | 541,202 | 5 | 72,800 |
| Chemicals and Drugs. | 8 | 201,921 | 21 | 354,498 | 1 | 5,000 |
| Paints and Oils. | 1 | 70,000 |  |  | 2 | 11,200 |
| Printing, Engraving. | 33 | 265,441 | 32 | 282,302 | 24 | 146,440 |
| Milling and Bakers. | 38 | 100,268 | 46 | 381,392 | 40 | 266,019 |
| Leather, Shoes, etc. | 23 | 380,222 | 14 | 410,503 | 13 | 299,804 |
| Liquors and Tobacco. | 9 | 71,614 | 12 | 521,802 | 10 | 592,701 |
| Glass, Earthenware. | 24 | 635,244 | 25 | 1,611,701 | 15 | 1,371,062 |
| All other | 211 | $3,199,800$ | 250 | 3,605,709 | 128 | 1,488,283 |
| Total manafacturing. | 614 | 11,063,191 | 655 | 13,877,414 | 363 | 8,796,646 |
| Traders- |  |  |  |  |  |  |
| General Stores. | 372 | 4,271,004 | 295 | 4,333,693 | 217 | 1,835,694 |
| Groceries and Meats. | 476 | $3,266,396$ | 414 | 1,676,007 | 315 | 1,298,125 |
| Hotels, Restaurants... | 149 | 1,716,798 | 162 | 3,368,502 | 127 | 1,901,753 |
| Liquors and Tobacco. | 84 | 310,989 | 88 | 632,903 | 49 | 433,134 |
| Clothing, Furnishing.. | 317 | 2,455,390 | 223 | 2,534,096 | 120 | 1,172,064 |
| Dry Goods and Carpets. | 161 | 1,607,725 | 130 | 1,902,208 | 72 | 1,341,716 |
| Shoes, Rubbers and Trunks | 91 | 872,219 | 75 | 678,804 | 58 | 262,325 |
| Furniture, Crockery.. | 53 | 417,344 | 53 | 521,904 | 25 | 541,417 |
| Hardware, Stoves \& Tools. | 77 | 401,441 | 86 | 1,150,795 | 52 | 581,917 |
| Chemicals and Druga. | 33 | 351,311 | 31 | 280,805 | 22 | 116,549 |
| Paints and Oils. | 2 | 12,000 | - |  | 3 | 25,000 |
| Jewellery and Clocks.. | 57 | 406,201 | 41 | 295,005 | 29 | 183,066 |
| Books and Papers.. | 19 | 120,221 | 26 | 124,308 | 16 | 63,945 |
| Hats, Furs and Gloves. | 16 | 466,833 | 18 | 392,597 | 10 | 78,274 |
| All other | 257 | 2,002,063 | 246 | 3,805,263 | 122 | 2,455,389 |
| Total trading. | 2,164 | 18,677,935 | 1,888 | 21,696,890 | 1,237 | 12,290,368 |
| Agents and Brokers . | 120 | 5,303,968 | 118 | 5,588,017 | 85 | 3,982,520 |
| Total.. | 2,898 | 35,045,094 | 2,661 | 41,162,32] | 1,685 | 25,069,534 |

FINANCE.

## 54.-Commercial Failures in Candela by Provinces and Classes for 1016, with totals for 1907-1915. (From Dun's Review.)



Note.-Newfoundland included in totals 1907-1915.

## GOVERNMENT ANNUITIES.

Under the Government Annuities Act, 1908 (7-8 Edw. VII, c. 5), His Majesty the King, represented by the Minister (at present the Postmaster General), may sell to persons domiciled in Canada immediate or deferred annuities of not less than $\$ 50$ nor more than $\$ 1,000$ (1) for the life of the annuitant; (2) for a term of years certain, not exceeding twenty years, provided the annuitant shall so long live; (3) for a term of years certain, not exceeding twenty years, or for the life of the annuitant, whichever period shall be the longer; and (4) an immediate or deferred annuity to any two persons domiciled in Canada during their joint lives, and with or without continuation to survivor. The property and interest of any annuitant in any contract for an annuity is neither transferable nor attachable. Except upon the occurrence of invalidity or disablement of an annuitant, no annuity on a separate life is payable unless the annuitant has reached the age of 55. The purchaser may contract that in the event of the death of the annuitant before the date fixed for the annuity to begin all money paid shall be refunded to his heirs with interest at the rate of three per cent., compounded yearly. Statistics of the annuities in force on March 31, 1917, are given in Tables 55-57. From September 1, 1908, to March $31,1917,4,305$ annuities have been issued, of which 145 have been cancelled on account of death, leaving on March 31, 1917, 796 immediate annuities and 3,364 deferred annuities, a total of 4,160 contracts in force. The total value of these annuities is $\$ 916,875.95$, and the amount received for annuities purchased is $\$ 3,316,680.20$.
55.-Number of Immediate Annuities of each amount paid in full from September 1, 1908, to March 31, 1917.

Males.

| Ages. | \$100 | \$200 | \$300 | \$400 | \$500 | \$600 | \$700 | \$800 | \$900 | \$1000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No. | No. | No. | No. | No. | No. |
| 55-59. | 31 | 20 | 8 | 8 | 12 | 6 | 0 | 0 | 2 | 3 |
| 60-64. | 28 | 19 | 18 | 6 | 3 | 11 | 0 | 0 | 0 | 2 |
| 65-69.. | 39 | 18 | 10 | 8 | 2 | 14 | 1 | 0 | 0 | 4 |
| 70-74. | 23 | 17 | 14 | 11 | 2 | 12 | 1 | 1 | 2 | 1 |
| 75-79. | 13 | 8 | 5 | 5 | 1 | 4 | 0 | 0 | 0 | 2 |
| 80-85. .. | 10 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |

Females.

| $55-59$. |  | 49 | 24 | 16 | 8 | 6 | 4 | 0 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| $60-64$. |  | 38 | 13 | 12 | 4 | 3 | 9 | 0 | 0 | 0 | 4 |
| $65-69$. | . | 44 | 14 | 12 | 6 | 2 | 4 | 1 | 0 | 1 | 1 |
| $70-74$. |  | 36 | 17 | 8 | 2 | 2 | 6 | 0 | 0 | 0 | 1 |
| $75-79$. |  | 8 | 10 | 3 | 1 | 4 | 1 | 0 | 0 | 0 | 0 |
| $80-85$. |  | 6 | 2 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 |

## FINANCE

56.-Number of Deferred Annuities of each amount purchased by lump sums, lump sums and annual payments, and periodical payments from September 1 , 1908, to March 31, 1917.

## Males.

| Ages. | \$100 | \$200 | \$300 | \$400 | \$500 | \$800 | \$700 | \$800 | \$900 | \$1000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5-9. | 123 | 23 | 6 | 3 | $\underline{2}$ | 5 | - | - | - | 1 |
| 10-19. | 310 | 31 | 24 | 6 | 11 | 10 | - | - | - | 4 |
| 20-29 | 274 | 103 | 82 | 29 | 30 | 55 | 1 | 1 | - | 3 |
| 30-39. | 200 | 74 | 89 | 32 | 15 | 52 | $\sim$ |  | - | 8 |
| 40-49 | 117 | 44 | 42 | 24 | 13 | 18 | 1 | - | - | 10 |
| 50-59. | 39 | 20 | 6 | 1 | 2 | 7 | - | - | - | 1 |
| 60-69. | 4 | 0 | 0 | 0 | 0 | 1 | - | - | - | 0 |

Females.

| $5-9$. |  | 32 | 9 | 15 | 1 | 4 | 3 | - | - | - | 2 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- | :--- | :--- | :--- |
| $10-19$. | . | 117 | 16 | 12 | 3 | 1 | 14 | - | - | - | 1 |
| $20-29$. | . | 179 | 66 | 57 | 8 | 6 | 24 | - | - | - | 1 |
| $30-39$. |  | 171 | 98 | 66 | 21 | 13 | 22 | 1 | - | - | 3 |
| $40-49$. | $\cdot$ | 157 | 67 | 38 | 24 | 8 | 18 | - | 1 | - | 4 |
| $50-59$. | $\cdot$ | 3 | 13 | 8 | 1 | 1 | 3 | - | - | - | 0 |
| $60-69$. |  | 0 | 0 | 0 | 0 | 0 | - | - | - | 0 |  |

Note.-Annuitants numbering 49, who have not yet furnished their ages, are not included in the above table.
57.-Valuation on March 31, 1917, of Annuity Contracts issued pursuant to the Government Annuities Act, 1908.

| Description of Contract. | No. | Amount of Annuities. | Value of Annuities Purchased. |
| :---: | :---: | :---: | :---: |
| Immediate Annuities. | 540 | 139,797.90 | $\begin{gathered} \$ \\ 1,096,464.00 \end{gathered}$ |
| Immediate Annuities guaranteed.... | 182 | 43,117.99 | 420.866 .00 |
| Immediate Last Survivor (on 2 lives). | 74 | 21,979.57 | 226,829.00 |
| Deferred, Plan "A" | 1,125 | 227,208.19 | 463,683.83 |
| Deferred, Plan "A", guaranteed. | 1,785 | 356,648.67 | 443,819.09 |
| Deferred, Last Survivor (on 2 lives). | 35 | 9,792.64 | 51,962.81 |
| Deferred, Plan " B ".... | 419 | 118,330.99 | 363,034.88 |
| Total number of contracts in force. | 4,160 | 916,875.95 | 3,066,659.61 |

## INSURANCE.

Insurance Statistics.-Insurance companies doing business throughout the Dominion of Canada are licensed by the Dominion Government under acts administered by an Insurance Department under the Minister of Finance. The insurance statistics in Tables 58-81, which are restricted to companies doing business under license from the Dominion Government and do not therefore include the business of companies operating under license from the Provincial Governments, are compiled from the Reports of the Superintendent of Insurance, and are divided into three classes relating (1) to insurance against fire; (2) to life insurance and (3) to insurances of a miscellaneous character covering risks of accident, guarantee, employer's liability, sickness, burglary, hail, steam boilers, tornado, weather, inland transportation, automobiles, sprinkler leakage, live stock and title. They refer in all cases to the calendar year.

Complete and final statistics of the Insurance Department are available for the year 1915 and 1916 in respect of fire insurance and insurance other than fire and life, as given in Tables 58 and 59 and 76-81. For life insurance the figures are complete and final up to and including the year 1915; but for 1916 they are taken from the "Abstract of Statements of Insurance Companies in Canada," issued subject to correction on March 5, 1917 Table 67 is new, and has been added to show the provincial distribution of the net premiums written and net losses paid by Canadian, British and United States companies, respectively

Fire Insurance.-Fire insurance was carried on in 1916 by 87 companies, as compared with 88 companies in 1915. Of the 87 companies in 1916, 25 were Canadian, 27 British, 31 United States and four French, these numbers being the same as for 1915 , except that there were 32 companies in the United States instead of 31. The gross amount of fire policies, new and renewed, taken during the year 1916 , was $\$ 3,418,238,680$, which is greater by $\$ 306,685,777$ than the amount taken in 1915. Premiums charged in 1916 amounted to $\$ 37,231,691$, as compared with $\$ 36,048,345$ in 1915. The net amount at risk in 1916 was $\$ 3,720,058,236$.

Life Insurance.--The business of life insurance in Canada was transacted in 1915 by 44 active companies, including 26 Canadian, seven British, one Colonial and ten United States. During 1915 and the latter part of 1914 the life companies were faced with difficulties such as have never before been experienced in Canada. On the outbreak of war, they were confronted with an immediate depreciation in all classes of securities, a complete demoralization of security markets and a propective large increase in claims arising out of the war. While these difficulties were recognized during the latter part of 1914, the seriousness of the conflict was perhaps not fully realized until 1915, and with the indications which the events of that year gave of a prolonged struggle and of the necessity of further Canadian contingents, the companies were forced to modify their practices in respect of the insurance of enlisted men. The provision made by the companies generally to meet the changed conditions is described in Vol. II (Life Insurance Companies) of the Report for 1915 of the Superintendent of Insurance,

## FINANOE.

pp. ci-cv. Notwithstanding the difficulties arising out of the war the total amount of policies in Canada taken during the year 1915 was $\$ 221,119,558$, which is greater than the amount taken in 1914 by $\$ 4,113,042$. The Canadian companies show a decrease in 1915 of $\$ 4,472,014$, whilst in 1914 they had a decrease of $\$ 5,988,258$; the British companies have a decrease of $\$ 3,567,277$, whilst in 1914 they had an increase of $\$ 2,343,895$; and the American companies have an increase of $\$ 12,152,333$, whilst in 1914 they had a decrease of $\$ 10,957,667$ The respective amounts effected were: Canadian companies $\$ 121,033,310$, British and Colonial companies $\$ 5,727,313$ and United States companies $\$ 94,358,935$. Thus the amount taken by Canadian companies exceeds that taken by the British and Colonial and United States companies together by $\$ 20,947,062$. The total amount of life insurance in force in Canada for the year 1915 at the date of the statements rendered was $\$ 1,311,616,677$, an increase over 1914 of $\$ 69,456,199$, these figures being distributed among the three different classes of companies as follows: Canadian $\$ 829,972,809$ (increase $\$ 35,452,386$ ); British and Colonial $\$ 58,087,018$ (decrease $\$ 2,683,640$ ); United States $\$ 423,556,850$ (increase $\$ 36,687,453$ ).

Life Insurance on the Assessment Plan.-Table 75 gives the statistics of life insurance on the assessment plan, that is, insurance effected through fratermal or friendly societies by assessments on the members thereof and with annual dues to meet expenses. The statistics in these tables relate, however, only to the four societies reporting to the Insurance Department of the Dominion Government, viz., the Catholic Mutual Benefit Association, the Commercial Travellers' Mutual Benefit Society, the Independent Order of Foresters (whose statistics include sick and funeral departments) and the Woodmen of the World.

Insurance other than Fire or Life.-Insurance business other than fire or life was carried on in Canada in 1916 by 80 companies: 27 Canadian, 15 British and 38 United States. In 1915 the corresponding figures were: 28 Canadian, 14 British and 35 United States, a total of 77 Forty-one of these companies in 1916 ( 37 in 1915) likewise transacted fire insurance, and one company in both years transacted life insurance. In addition there were in both years five fraternal orders or societies which carried on sickness insurance and also life insurance. Of the 27 Canadian companies in 1916 ( 28 in 1915), 19 ( 21 in 1915) transacted miscellaneous classes of business only. The combined assets of the 19 companies amounted in 1916 to $\$ 6,845,744$, as compared with $\$ 7,425,487$ in 1915 . The total liabilities in 1916 were $\$ 1,883,844$, as compared with $\$ 2,033,488$. The excess of assets over liabilities in 1916 was thus $\$ 4,961,899$, as compared with $\$ 5,391,999$, the excess of assets over liabilities in 1915.

Insurance under Dominion and Provincial Licenses combined.-In Vol. I of his Report for 1915 (Insurance Companies other than Life), the Superintendent of Insurance stated that he had endeavoured to collect from the available sources the figures for the business transacted by companies holding licenses from the Provincial Governments of Can-
ada, or permitted by the laws of the provinces to transact business without a license. The business of the provincial licensees is divisible into three classes: (1) business transacted by provincially incorporated companies within the province by which they are incorporated; (2) business transacted by provincially incorporated companies in provinces other than those by which they are incorporated and (3) business transacted by British and foreign companies licensed by the Provincial Govermments. On page lxvi of the Report for 1915 of the Superintendent of Insurance appears a table showing for life and fire insurance and for miscellaneous classes of insurance (excluding marine), and for Dominion and provincial licensees respectively, the smount of premiums received and claims paid for the year 1914. According to this table the total amount of the premiums received in 1914 for life insurance was $\$ 43,820,816$ of which $\$ 43,376,950$ represents the business of Dominion licensees; and the claims paid amounted to $\$ 16,656,479$, of which $\$ 16,591,354$ were paid by Dominion licensees. For fire insurance the total premiums received were $\$ 31,351,001$, including $\$ 27,499,158$ by Dominion licensees, and the claims paid totalled $\$ 17,620,846$, including $\$ 15,347,284$ by Dominion licensees. The premiums received for miscellaneous classes of insurance, exciuding marine, amounted to $\$ 10,-$ 769,707 , of which $\$ 9,255,143$ were received by Dominion licensees, and the claims paid were $\$ 5,056,094$, including $\$ 4,605,411$ paid by Dominion licensees. In Vol. I of the Report for 1916 of the Superintendent of Insurance it is further stated that information was collected from provincial licensees in respect of the year 1916 as to (1) the net amount of insurance written; (2) the net amount of insurance in force at the end of the year; (3) net premiums received and (4) net losses paid. The information thus collected for fire, life and other classes of insurance is given in Tables 82-85, following Tables 58-81 which are restricted to the business of companies operating under Dominion license. In Table 86 are added particulars respecting the amount of insurance effected under Section 139 of the Insurance Act 1910, i.e., insurance effected, under specified conditions, of property in Canada, with associations outside of Canada which are not licensed to transact insurance business in Canada. According to Tables 82-86 the total fire insurance effected in 1916 on property situated in Canada was $\$ 4,049,-$ 314,201, including $\$ 3,418,238,680$ with Dominion licensees, $\$ 368,271,639$ with provincial licensees and $\$ 262,803,882$ with unlicensed companies (Table 86). The total net amount of life insurance in force at December 31,1916 (Table 85 ) was $\$ 1,861,958,085$, of which $\$ 1,513,860,856$ was with Dominion licensees. The bulk of the life business of the provincial licensees is transacted by fraternal companies.

FINANCE
58.-Fire Insurance Business transacted in Canada, 1915.

| Companies. | Gross Amount of Policies new and renewed. | Premiums charged thereon. | $\begin{gathered} \text { Rate } \\ \text { of } \\ \text { pre- } \\ \text { niums } \\ \text { per } \\ \text { cent } \\ \text { of } \\ \text { risks. } \end{gathered}$ | Net cash received for Premiums | $\begin{array}{\|c} \text { Net cash } \\ \text { paid } \\ \text { for } \\ \text { Losses. } \end{array}$ | Per-centage of losses paid to premiums ved. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Canadian Companies. | \$ | \$ | p.c. | \$ | \$ | p.c. |
| Acadia. | 16,405,713 | 219,729 | 1.34 | 112,009 | 93,607 | 83.57 |
| Anglo-American. | 18,590,599 | 256,873 | 1.38 | 152,045 | 117,242 | 7711 |
| Beaver. | 5,304,836 | 86,936 | 1.64 | 30,943 | 1,548 | 5.00 |
| British America. | 77,840,123 | 843,500 | 1.08 | 506,735 | 284,695 | 50.18 |
| British Colonial. | 9,227,747 | 144,266 | 1.56 | 64,722 | 77,723 | 102.09 |
| British Northwestern. | 4,530,073 | 83,070 | 1.84 | 49,953 | 32,622 | 65.31 |
| Canada National. | 23,223,662 | 354,150 | 1.52 | 202,511 | 86,858 | 42.89 |
| Canadian | 27,494,130 | 419,880 | 1.53 | 269,301 | 112,465 | 41.76 |
| Dominion. | 22,855,580 | 311,061 | 1.36 | 207,537 | 143,303 | 69.05 |
| Dominion of Canada. | -999,406 | 11,392 | 1.14 | 4,691 | 188 | 4.01 |
| Factories | 20,937,423 | 329,099 | 1.57 | 142,623 | 133,933 | 93.91 |
| Hudson Bay | 10,211,949 | 159,322 | 1.56 | 90,052 | 65,151 | 72.35 |
| Imperial Underwritere | 9,073,454 | 118,905 | 1.31 | 97,070 | 64,379 | 66.32 |
| Liverpool-Manitoba. | 35,935,805 | 463,840 | 1.29 | 266,296 | 131,870 | 49.52 |
| London Mutual. | 74,392,919 | 777,400 | 1.04 | 466,924 | 281,380 | 60.26 |
| Lumbermen's $F$ I. Contract. | 1,647,361 | 37,740 | 2.29 | 3,782 | None. |  |
| Mercantile | 25,973,436 | 275,877 | 1.06 | 224,319 | 135,375 | 60.35 |
| Montreal-Canada | 10,004,400 | 139,177 | 1.39 | 88,871 | 89,385 | 100.58 |
| Mount Royal | 52,547,074 | 652,925 | 1.24 | 411,074 | 161,653 | 39.32 |
| North Empire | 10,967,271 | 189,031 | 1.72 | 111,107 | 57,905 | 52.12 |
| Northwest. | 15,240,882, | 194,647 | 1.28 | 139,874 | 84,093 | 60.12 |
| Occidental. | 9,915,169 | 192,163 | 1.94 | 112,498 | 68,673 | 61.04 |
| Pacific Coast. | 11,801,090 | 153,501 | 1.30 | 79,639 | 32,477 | 40.78 |
| Quebec. | 27,282,543, | 295,838 | 1.08 | 236,366 | 84,120 | 35.59 |
| Western. | 150,851,486 | 1,717,642 | 1.14 | 488,130 | 285,221 | 58.43 |
| Totals. | 673,244,131 | 8,427,965 | 1.25 | 4,559,074 | 2,625,867 | 57.60 |
| Bratish Companies. |  |  |  |  |  |  |
| Alliance. | 25.152,607 | 240,929 | 0.96 | 215,168 | 90,382 | 42.00 |
| Atlas. | 46,970,299 | 598,555 | 1.27 | 515,974 | 310,587 | 60.19 |
| British Dominions General | 11,880,708 | 131,885 | 1.11 | 96,456 | 57,898 | 60. 02 |
| Caledonian. | 43,763,253 | 499,819 | 1.14 | 433,157 | 237,083 | 54.73 |
| Commercial Union. | 119,540,603 | 1,326,042 | 1.11 | 937,766 | 471,565 | 50.29 |
| Employers' Liability | 39,842,657 | 427,755 | 1.07 | 346,005 | 189,959. | 54.90 |
| General Accident Fire and Life. | 32,272,798 | 383,04S | 1.19 | 289,316 | 126,881 | 43.86 |
| Guardian Ass'c. Co. | 87,571,292 | 1,131,108 | 1.29 | 970,601 | 482,686 | 49.73 70.86 |
| Law Thion and Rock | 27,280,780 | 308,859 | 1.13 | 257,994 | 182,822 | 70.86 |

## INSURANCE

58.-Fire lnsurance Business transacted in Canada, 1915.-con.

| Companies, | Gross amount of policies new and renewed. | Premiums charged thereon. | Rate of premiums per cent. of risks | Net cash received for Premiums | Net cash paid for Losses. | Per- cent- age of losses paid to pre- miums recei- ved. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | p.e. | \$ | \$ | p.c. |
| British Companies- |  |  |  |  |  |  |
| Liverpool and London and Globe.... | 137,545,930 | 1,661,460 | 1.21 | 1,342,437 | 710,524 | 52.93 |
| London Guarantee and Accident | 386,254 | 3,675 | 0.95 | 1,198 | None. |  |
| London and Lancashire Fire. | 80,100,138 | 888,727. | 1.11 | 703,503 | 333,860 | 47.46 |
| London Assurance. | 32,671,206 | 371,390 | 1.14 | 300,984 | 139,186 | 46.24 |
| North British and Mercantile. |  |  | 1.12 | 927,240 | 495,777 | 53.47 |
| Northern Ass'ce. Co.. | 68,448,611 | 875,839 | 1.28 | 770,010 | 385,857 | 50.11 |
| Norwich Union Fire. | 72,435,907 | 871,804 | 1.20 | 735,400 | 391,006 | 53.17 |
| Ocean Accident and Guarantee. . | 3,918,715 | 54,000 | 1.38 | 43,171 | 9,383 | 21.74 |
| Palatine Insurance Co | 29,278,665 | 362,279 | 1.24 | 247,026 | 112,917 | 45.71 |
| Phoenix of London.. | 97,527,941 | 1,244,386 | 1.28 | 935,794 | 390,595 | 41.74 |
| Provincial. | 5,937,340 | 43,815 | 0.74 | 40,473 | 19,781 | 48.88 |
| Royal Exchange. | 43,501,250 | 457,346 | 1.05 | 379,111 | 172,056 | 54.38 |
| Royal Insurance Co... | 150,733,604 | 1,725,350 | 1.14 | 1,429,655 | 695,908 | 48.68 |
| Seottish Union and National. | 42,337,867 | 439,155 | 1.04 | 372,392 | 160,164 | 43.01 |
| Sun Insurance Office. | 46,815,191 | 567,488 | 1.21 | 483,707 | 287,578 | 55.32 |
| Union Assurance Society... | 56,691,850 | 640,096 | 1.13 | 474,056 | 244,608 | 51.60 |
| Yorkshire. . | 38,036,807 | 459,297 | 1.21 | 360,769 | 210,298 | 58.29 |
| Totals.. | 1,438,037,721 | 16,807,401 | 1.17 | 13,609,363 | 6,889,360 | 50.62 |
| American and Other Companies. |  |  |  |  |  |  |
| Etna Insurance Co... | 31,727,746 | 388,890 | 1.23 | 314,501 | 218,329 | 69.42 |
| American Central. | 23,430,734 | 226,736 | 0.97 | 123,338 | 53,203 | 43.14 |
| American Insurance Co | 4,745,288 | 78,877 | 1.66 | 62,633 | 22,104 | 35.29 |
| American Lloyds. | 5,288,200 | 19,652 | 0.37 | 18,299 | 1,577 | 8.62 |
| California Insurance Co. | 3,263,688 | 57,790 | 1.77 | 37,130 | 16,940 | 45.62 |
| Connecticut Fire. | 13,084,257 | 159,671 | 1.22 | 116,960 | 61,620 | 52.68 |
| Continental Insurance Co. |  |  | 1.03 | 259 | 134,112 | 51.62 |
| Equitable Fire and Marine | 13,742,357 | 159,802 | 1.16 | 29,863 | 13,775 | 46.13 |
| Fidelity-Phenix. | 38,346,677 | 439,197 | 1.15 | 330,390 | 196,961 | 59.61 |
| Fireman's Fund. | 11,624,306 | 119,265 | 1.03 | 111,074 | 53,843 | 48.47 |

58.-Fire Insurance Business trangacted in Canada, 1915-cemeluded.

| Companies. | Gross Armount of Policies new and renewed. | Premiums charged thereon. | Rate of pre miums per cent of risks. | Net cash recerved for Premiums | Net cash paid for Losses. | Per-centage of losses paid to pre miums ved. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| American and Other Companies-con. | \$ | \$ | p.c. | \$ | \$ | p. |
| Firemen's Insurance Co... | 6,634,613 | 90,233 | 1.36 | 70,360 | 27,968 | 39.75 |
| Compagnie d'Assurances Cénérales. | 8,410,818, | 101,053 | 1.20 |  | 43,508 | 68.78 |
| German American. ... | 62,232,448. | 526,385 | 0.85 | 370,849 | 214,572, | 57.86 |
| Germania Fire. | 4,361,573, | 72,330 | 1.66 | 27,419 | 37,468 | 136.65 |
| Glens Falls | 13,744,428 | 189,202 | 1.38 | 142,722 | 64,409 | 45.13 |
| Globe and Ruatgers. | $45,820,828$ | 305,891 | 0.80 | 278,165 | 102,908 | 37.00 |
| Hartiord Fire. | 111,057,076 | 1,056,314 | 0.95 | 899,129 | 461,245 | 51.30 |
| Home Insurance Co. | 97,029,178 | 1,066,269 | 1. 10 | 920,416 | 459,169 | 49.40 |
| Insurance Co. of North America. . | 47,248,438 | 516,764 | 1.09 | 430,767 | 248,106 | 57.60 |
| Insurance Co. of State of Pa . | 17,603,934 | 219,922 | 1.25 | 164,561 | 73,492 | 44.66 |
| Lur ber fnsurance Co. | None. | None. |  | 6,555 | 1,640 | 25.02 |
| Millers Nitional. | 2,436,455 | 29,314 | 1.20 | 24,927 | 5,992 | 24.04 |
| National-Ben Franklin | 9,168,243 | 106,274 | 1.16 | 84,225 | 63,784 | 75.73 |
| National Fire of Hartford. | 66,982,757 | 703,563 | 1.05 | 494,643 | 462,862 | 93.58 |
| National Union Fire of Pittsburgh, Pa. | 20,947,024 | 268,043 | 1.28 | 209,848 | 109,073 | 51.98 |
| La Nationale Compagnie d'Assurances | 15,051,406 | 191,635 | 1.27 | 148,557 | 68,357 | 46.01 |
| Niagara Fire. ..... | 15,851,908 | 200,550 | 1.27 | 172,749 | 83,073 | 48.09 |
| Northwestern National. | 13,129,420 | 157,362 | 1.20 | 134,648 | 78,625 | 58.39 |
| Phenix Compagnie |  |  | 1.08 | 24,238 | 4,343 | 17.92 |
| Phoenix, of Hartford. . | 44,633,485 | 524,072 | 1.17 | 368,014 | 190,790 | 51.84 |
| Providence Washing ton. | 20,769,767 | 245,637 | 1.18 | 197,743 | 130,804 | 66.15 |
| Queen, of America. | 57,948,174 | 726,410 | 1.25 | 604,103 | 321,095 | 53.15 |
| Springfield Fire and Marine. | 75,635,139 | 631,774 | 0.84 | 479,481 | 287,942 | 60.05 |
| St. Paul Fire and | 24,914,001 | 326,15 | 1.31 | 243,040 | 122,113 | 48.26 |
| L'Union, Paris, France | 20,797,900 | 250,950 | 1.21 | 186,233 | 118,084 | 63.41 |
| Westchester Fire. | 14,431,836 | 203,537 | 1.41 | 136,742 | 92,836 | 67.89 |
| Totals | 1,000,271,051. | 16,812,979 | 1.08 | 8,306,394 | 4,646,722 | 55.94 |
| Grand Totals. | 3,111,552,903 | 36,048,345 | 1.16 | 26,474,832 | 14,161,949 | 53.49 |

## INSURANCE

59.-Fire Insurance Basiness transacted in Canada, 1916.

| Companies. | Gross Amount of Policies new and renewed. | Premaiuns charged thereon. | Rate of premiums per cent of risks. | Net cash received for Premiums. | Net cash paid for Losses. | Per-centage of losses paid to pre-re-ceived. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | p.c. | \$ | \$ | p.c. |
| Acadian Fire | 17,437,231 | 226,911 | 1.30 | 110,968 | 88,954 | 75.66 |
| Beaver Fire. | 5,180,548 | 81,560 | 1.57 | 27,838 | 8,651 | 31.07 |
| British America. | 107,750,412 | 1,228,311 | 1.14 | 679,119 | 307,959 | 45.35 |
| British Colonial. | 12,309,583 | 179,947 | 1.46 | 87,887 | 77,235 | 87.88 |
| British Northwestern. | 5,440,482 | 95,104 | 1.75 | 56,212 | 25,899 | 46.07 |
| Canada Accident. | 3,701,149 | 40,651 | 1.10 | 5,546 | 5,133 | 92.55 |
| Canada National. | 21,892,153 | 318,728 | 1:46 | 170,189 | 118,220 | 69.46 |
| Canadian Fire... | 29,073,087 | 498,681 | 1.47 | 273,449 | 98,389 | 35.98 |
| Canadian Lumbermen's Ins. Exc. | 985,655 | 20,419 | 2.07 | 180 | None |  |
| Dominion Fire. | 25,840,101 | 337,551 | 1.31 | 212,538 | 108,593 | 51.09 |
| Dominion of Can. Gtee. and Acet. | 3,139,471 | 39,410 | 1.26 | 26,257 | 6,304 | 24.01 |
| Factories. | 14,847,441 | 242,031 | 1.63 | 111,797 | 76,386 | 68.33 |
| Hamilton Fire. | 10,544,394 | 81,218 | 0.77 | 41,186 | 22,588 | 54.84 |
| Hudson Bay. | 18,543,976 | 234,052 | 1.26 | 130,169 | 85,470 | 65.66 |
| Imperial Underwriters | 16,114,339 | 130,671 | 0.81 | 96,958. | 46,762 | 48.23 |
| Liverpool Manitoba. . | 37,204,142 | 449,520 | 1.21 | 233,550 | 140,282 | 60.07 |
| London Mutual. | 70,707,648 | 670,194 | 0.95 | 397,458 | 279,365 | 70.29 |
| Mercantile Fir | 30,865,259 | 301, 168 | 0.98 | 245,758. | 148,499 | 60.42 |
| Mount Royal | 59, 986,872 | 715,441 | 1.19 | 381,590 | 182,855 | 47.92 |
| North Enapire Fire | 12,187,370 | 200,930 | 1.65 | 80,436 | 103,303 | 128.43 |
| North West Fire. | 14,204,920 | 172,636 | 1.22 | 125,923 | 94,041 | 74.68 |
| Occidental Fire. | 16,489,899 | 265,032 | 1.61 | 127,632 | 54,518 | 42.71 |
| Pacific Coast. | 11,781,878 | 151,706 | 1.29 | 90,661 | 29,814 | 32.89 |
| Quebec Fire. | 30,136,463 | 310,887 | 1.03 | 257,956 | 152,069 | 58.95 |
| Western. | 166,381,652 | 1,884,858 | 1.13 | 846,619 | 339,287 | 40.08 |
| Totals.. | 742,805,919 | 8,807,615 | 1.19 | 4,817,876 | 2,595,576 | 53.87 |
| British Companies. Alliance. | 28,042,379 | 274,546 | 0.98 | 246,250 | 114,759 | 46.60 |
| Atlas | 49,077,491 | 577,681 | 1.18 | 495,108 | 337,971 | 68.26 |
| British Dominions General. | 11,313,641 | 121,372 | 0.99 | 90,277 | 62,429 | 69.15 |
| Caledonian | 45,4,58,083 | 498,455 | 1.10 | 426,418 | 290,004 | 68.01 |
| Commercial Union. | 141,666,541 | 1,317,308 | 0.93 | 1,013,179 | 639,752 | 63.14 |
| Employers' Liability General Accident | 49,467,297 | 516,403 | 1.04 | 420,791 | 189,871 | 45.12 |
| Fire and Life. | 29,149,191 | 365,833 | 1.26 | 329,491 | 154,823 | 46.99 |
| Guardian Assce. Co. | 95,967,518 | 1,185,971 | 1.24 | 989,086 | 588,909 | 59.54 |
| Law Union and Rock | 27,193,781 | 293,558 | 1.08 | 24,6,634 | 131,146 | 53.17 |
| Liverpool and London and Globe... | 155,014,748 | 1,617,749 | 1.04 | 1,320,340 | 718,867 | 54.45 |

FINANCE
59.-Fire Insurance Business transacted in Canada, 1916-con.

| Companies. | Gross Amount of Policies new and renewed. | Premiums. charged thereon. | Rate of premiums per cent of | Net cash received for Premiums. | Net cash paid for Losses | Per-centage of losses paid to premiums re-ceived. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| British Companiescon. <br> London Guarantee and | \$ | $\$$ | p.c. | \$ | \$ | p.c. |
| Accident. | 14,230,618 | 116,392 | 0.82 | 54,534 | 11,956 | 21.92 |
| London and Lanc:ashire Fire. |  |  | 0.98 |  | 356,983 | 49.79 |
| London Assurance. | 33,317,443 | 359,877 | 1.08 | 310,808 | 131,239 | 42.23 |
| North British and Mercantile. | 117,038,418 | 1,095,834 | 0.94 | 920,026 | 497,670 | 54.09 |
| NorthernAssurance Co | 72,651,285 | 875,461 | 1.21 | 761,895 | 571,654 | 75.03 |
| Norwich Union Fire. . | 72,796,741 | 844,115 | 1.16 | 787,655 | 431,288 | 54.76 |
| Ocean Accident and Guarantee. | 18,637,201 | 203,059 | 1.09 | 138,259 | 65,087 | 47.08 |
| Patatine Insurance Co. | 32,327,506 | 372,369 | 1.15 | 276,444 | 199,057 | 72.01 |
| Phoenix. of London. | 101,711,370 | 1,246,536 | 1.23 | 964,766 | 430,961 | 44.67 |
| Provincial. | 6,439,376 | 47,394 | 0.74 | 36,953 | 18,029 | 48.79 |
| Royal Exchange. | 48,659,559 | 510,372 | 1.05 | 442,054 | 202,859 | 45.89 |
| Royal Insurance Co... | 162,489,584 | 1,747,015 | 1.08 | 1,471,655 | 739,389 | 50.24 |
| Scottish Union and National. | 45,342,889 | 467,584 | 1.03 | 408,579 | 203,345 | 50.39 |
| Sun Insurance Office. . | 56,933,231 | 625,014 | 1.10 | 533,836 | 305,232 | 57.18 |
| Union Assurance Soc- jety.... | 59,055,853 | 636,224 | 1.08 | 494,239 | 324,375 | 65.63 |
| Yorkshire. | 43,327,155 | 496,585 | 1.15 | 403,678 | 208,856 | 51.74 |
| Totals. | 1,606,346,835 | 17,278,034 | 1.08 | 14,294,801 | 7,926,461 | 55.45 |
| American and Other Companies. |  |  |  |  |  |  |
| Atna insurance Co. | 35,158,308 | 399,094 | 1.14 | 336,180 |  |  |
| Americal Central. American Insurance | 22,726,001 | 189,390 | 0.83 | 76,258 | 51,021 | 66.91 |
| Co.. | 3,372,197 | 50,257 | 1.49 | 46,993 | 9,745 | 20.74 |
| American Lloyds. | 8,437,918 | 30,636 | 0.36 | 22,540 | 5,162 | 22.90 |
| California Insurance Co. | 3,385,852 | 52,188 | 1.54 | 40,090 | 22,724 | 56.68 |
| Connecticut Fire. | 17,632,269 | 206,640 | 1.17 | 140,594 | 75,504 | 53.70 |
| Continental Insurance Co... | 43,819,412 | 435,550 | 0.99 | 317,380 | 138,224 | 43.55 |
| Equitable Fire and Marine. | 16,073,373 | 174,319 | 1.08 | 43,490 | 21,224 | 48.80 |
| Fidelity-Phenix. | 41,800,540 | 455,449 | 1.08 | 345,202 | 170,811 | 49.48 |
| Fireman's Fund. | 16,478,630 | 160,474 | 0.97 | 127,870 | 50,481 | 39.48 |
| Firemen's Insurance Co. | 7,055,482 | 91,454 | 1.30 | 74,766 | 29,729 | 39.67 |

## INSURANCE

59.-Fire Insurance Business transacted in Canada, 1916-concluded.

| Companies. | Gross amount of policies new and renewed. | Premiums charged thereon. | Rate of preper cent. of risks. risks. | Net cash received for premiums. | Net cash paid for losses |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| American and Other Companies-con. | \$ | \$ |  | \$ | \$ | p.c. |
| Companie Insuran |  |  |  |  |  |  |
| Co. of Paris | 8,353,555 | 97,373 | 1.17 | 69,575 | 70,785 | 101.74 |
| German American. | 57,656,659 | 451,831 | 0.78 | 347,801 | 218,112 | 62.71 |
| Glens Falls. | 15,386,334 | 181,329 | 1.18 | 149,497 | 93,811 | 62.75 |
| Globe and Rutgers. | 53,090,487 | 522,226 | 0.98 | 404,607 | 231,851 | 57.30 |
| Hartford Fire. | 112,177,889 | 1,088,069 | 0.97 | 1,012,400 | 444,513 | 43.91 |
| Home losurance Co.. | 99,494,937 | 1,036,695 | 1.04 | 898,665 | 428,152 | 47.64 |
| Jnsurance Co. of North America. | 52,502,707 | 521,765 | 0.99 | 431,406 | 197,638 | 45.81 |
| Insurance Co. of State of Pa . | 15,037,457 | 171,371 | 1.14 | 96,061 | 61,158 | 63.67 |
| Millers National | 6,016,248 | 63,237 | 1.05 | 37,663 | 13,682 | 36,33 |
| National-Ben Franklin. | 9,534,439 | 110,156 | 1.16 | 86,977 | 38,58¢ | 44.36 |
| National Fire of Hartford. | 54,229,351 | 618,019 | 1.14 | 500,103 | 251,86] | 50.36 |
| National Union Fire of Pittsburgh. | 23,027,348 |  | 1.17 |  |  | . 12 |
| La Nationale Compagnie d'Ass. | 17,431,064 | 210,653 | 1.21 | 152,093 | 86,606 | 56.94 |
| Niagara Fire. | 17,558,707 | 202,018 | 1.15 | 137,959 | 100,77t | 73.05 |
| $\begin{aligned} & \text { Northewstern } \\ & \text { National. } \end{aligned}$ | 14,541,757 | 172,072 | 1.18 | 129,435 | 59,404 | 45.89 |
| Phenix Compagnie Francaise. |  |  |  |  | 31,061 |  |
| Phonix of Hartford... | 50,663,224 | 544,909 | 1.08 | 365,244 | 193,557 | 46.64 52.99 |
| Providence Washington. | 19,457,829 | 218,903 | 1.13 | 179.955 | 119,694 | 66.51 |
| Queen of America. | 62,709,008 | 757,757 | 1.21 | 614,935 | 334,706 | 54.43 |
| St. Paul Fire and Marine. | 38,391,355 | 422,287 | 1.10 | 380,644 | 200,360 | 60.60 |
| Springfield Fire and |  |  |  |  |  |  |
| Marine. | 70,569,47\% | 568,358 | 0.81 | 465,582 | 306,782 | 65.89 |
| Stuy vesant. ${ }^{\text {a }}$ | $9,215,645$ | 106.998 | 1.16 | 40,497 | 39,388 | 97.26 |
| L'Union, Paris, France | 20,241,110 | 240,815 | 1.18 | 193,428 | 121,039 | 62.58 |
| Westchester Fire. | 18,80,202 | 246,13" | 1.31 | 181,816 | 85,402 | 46.97 |
| Totals. | 1,069,085,926 | 11,146,04? | 1.04 | 8,671,173 | 4,589,096 | 52.92 |
| Canadian Companies.. | 742,805,919 | 8,807,615 | 1.19 | 4,817,876 | 2,595,576 | 53.87 |
| British Companies. | 1,606,346,83E | 17,278,034 | 1.08 | 14,294,801 | 7,926,461 | 55.45 |
| Companies. | 1,069,085,926 | 11,146,042 | 1.04 | 8,671,173 | 4,589,096 | 52.92 |
| Grand Total | 3.418,238,6880\| | 37.231.69] | 1.0. | 27.783,850 | 15,111,133 | 54.39 |

FINANCE
60.-Amounts received for Fire Insarance Preminms and yaid for Losses, with percentage of Losses to Premiums, 1869-1916.

| Year. | Premiums received. | Losses paid. | Percentage of losses to premiums. | Year. | Premiums received. | Losses paid. | Percentage of losses to premiums. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 |  | 5 |  | ${ }_{6}{ }^{\text {\% }}$, 595 | O |  |
|  | 1,781 | 1,027,720 | 57.56 | 1884 | 6,793,595 | 5,052,690 |  |
| 1871. | 2,321,716 | 1,549,199 | $66.7{ }^{\text {c }}$ | 1895 | 6,943,382 | 4,993,750 | 71.92 |
| 1872. | 2,628,710 | 1,909,975 | 72.66 | 1806. | 7,075,850 | 4,173,501 | 58.98 |
| 1873. | 2,968,416 | 1,682,184 | 55.67 | 1897 | 7,157,661 | 4,701,833 | 65.69 |
| 1874. | 3,522,303 | 1,926,159 | 54.68 | 1898. | 7,350,131 | 4,784,487 | 65.09 |
| 1875. | 3,594,764 | 2,563,531 | 71.31 | 1899 | 7,910,492 | 5,182,038 | 65.51 |
| 1876. | 3,708,006 | 2,867,295 | 77.33 | 1900. | 8,331,948 | 7,774,293 | 93.31 |
| 1877 | 3,764,005 | 8,490,919 | 225.58 | 1901. | 9,650,348 | 6,774,956 | 70.20 |
| 1878. | 3,368,430 | 1,822,764 | 54.11 | 1902. | 10,577,084 | 4,152,289 | 39.26 |
| 1879. | 3,227,488 | 2,145,198 | 66.47 | 1903. | 11,384,762 | 5,870,716 | 51.57 |
| 1880. | 3,479,577 | 1,666,578 | 47.90 | 1904 | 13,169,882 | 14,099,534 | 107.06 |
| 1881. | 3,827,116 | 3,169,824 | 82.83 | 1905. | 14,285,671 | 6,000,519 | 42.00 |
| 1882. | 4,229,706 | 2,664,986 | 63.01 | 196. | 14,687,963. | 6,584,291 | 44.83 |
| 1883. | 4,624,741 | 2,920,228 | 63.14 | 1907 | 16,114,475 | 8,445,041 | 52.41 |
| 1884. | 4,980,128 | 3,245,323 | 65.16 | 1908. | 17,027,275 | 10,279,455 | 60.37 |
| 1885. | 4,852,460 | 2,679,287 | 55.22 | 1909 | 17,049,464 | 8,646,826 | 50.72 |
| 1886. | 4,932,335 | 3,301,388 | 66.93 | 1910. | 18,725,531 | 10,292,393 | 54.96 |
| 1887 | 5,244,502 | 3,403,514 | 64.90 | 1911. | 20,575,255 | 10,936,947 | 53.16 |
| 1888. | 5,437,263 | 3,073,822 | 56.53 | 1912. | 23,194,518 | 12,119,581 | 52.25 |
| 1889. | 5,588,016 | 2,876,211 | 51.47 | 1913. | 25,745,947 | 14,003,759 | 54.39 |
| 1890. | 5,836,071 | 3,266,567 | 55.97 | 1914. | 27,499,158 | 15,347,284 | 55.75 |
| 1891. | 6,168,716 | 3,905,697 | 63.31 | 1915. | 26,47-1,833 | 14,161,949 | 53.49 |
| 1892. | 6,512,327 | 4,377,270 | 67.22 | 1916. | 27,783, | 15,111,133 | 54.39 |
|  |  |  |  | Total | 450,739,560 | 272,241,945 | 60.40 |

61.-Totals of Fire Insurance Premiums received and Losses paid, with percentage of Losses to Premiums by Nationality of Companies, 1869-1916.

| Companies. | Premiums received. | Losses paid. | Percentage of losses to Premiums. |
| :---: | :---: | :---: | :---: |
|  | \$ | * | p.c. |
| Canadian companies... | 96,048,484 | 59,795,734 | 62.26 |
| British companies. | 267,308,107 | 163,371,003 | 61.12 |
| American and other companies... | 87,382,969 | 49,075,208 | 56.16 |
| Total. | 450,739,560 | 272,241,945 | 60.40 |

## INSURANCE.

62.-Fire Insurance Premiums received and Losses paid by Canadian Companies doing business in Canada and other Countries, with percentage of Losses paid to Premiums received, 1878-1916.

| Year. | Business in Canada. |  |  | Business in other Countries. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Premiurns received. | Losses paic. | Percentage of losses paid to premiums received. | Premiums received. | Losses paid. | Percentage of tosses paid to premiums received. |
|  | * | \$ | p.e. | $t$ | $\$$ | p.c. |
| 1878. | 591,495 | 241,545 | 40.84 | 1,251,923 | 737,430 | 58.90 |
| 1880. | 459,653 | 219,954 | 47.85 | 1,377,310. | 885,293 | 64.28 |
| 1885. | 983,555 | 518,633 | 52.73 | 1,485,078 | 1,051,100 | 70.78 |
| 1890. | 1,018,226 | 604,846, | 59,40 | 1,584,879 | 910,511 | 57.45 |
| 1895. | 785,416 | 499,47? | 63.59 | 2,566,980 | 1,462,849 | 56.99 |
| 1900. | 689,956 | 658,405 | 95.43 | 2,804,896 | 1,969,862 | 70.23 |
| 1905. | 2,611,899 | 1,277,772 | 48.92 | 3,911,739 | 2,307,655 | 58.99 |
| 1910. | 3,037,675 | 1,754,359 | 57.5 | 3,141,709 | 1,714,812 | 54.58 |
| 1911 | 3,204,241 | 1,755,348 | 54.78 | 3,343,157 | 2,149,515 | 64.30 |
| 1912. | 3,133,661 | 1,662,120 | 53.04 | 3,467,975 | 2,039,201 | 58.80 |
| 1913. | 3,285,887 | 1,978,284 | 60.26 | 2,856,233 | 1,829,175 | 56.56 |
| 1914. | 2,989,211 | 1,797,561 | - 60.13 | 3,129,204 | 2,112,379 | 67.51 |
| 1915. | 2,938,210 | 1,668,798 | 56.80 | 3,011,851 | 1,750,132 | 58.11 |
| 1916. | 3,038,964 | 1,475,316 | 48.55 | 2,799,871 | 1,632,886 | 58.32 |

63.-Amount of Fire-Insurance at risk in Canada, 1869-1916.

| Year. | Amonnt at risk. | Year. | Amount at risk. | Year. | Amount at risk. | Year. | Amount at risk. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ |  | \$ |  | \$ |  | \$ |
| 1869. | 188,359,809 | 1881. | 462,210,968 | 1893. | 814,687,057 | 1905. | 1,318,146,495 |
| 1870. | 191,549,586 | 1882.. | 526,856,478 | 1894. | 836,067,202 | 1906. | 1,443,902,244 |
| 1871. | 228,453,784 | 1883. | 572,264,041 | 1895. | 837,872,864 | 1907 | 1,614,703,536 |
| 1872. | 251,722,940 | 1884.. | 605,507,780, | 1896. | 845,574,352 | 1908. | 1,700,708,263 |
| 1873. | 278,754,835 | 1885. | 611,794,479 | 1897 | 868,522,217 | 1909. | 1,863,276,504 |
| 1874. | 306,844,219 | 1888. | 586,773,022 | 1898. | 895,394,107 | 1910.. | 2,034,276,740 |
| 1875. | 364,421,029 | 1887 | 634,767,327 | 1899 | 936,869,668 | 1911. | 2,279.868,346 |
| 1876. | 404,608,180 | 1888. | 650,735,059 | 1900.. | 992,332,360 | 1912. | 2,684,355,895 |
| 1877. |  |  |  | 1901. | 1,038,687,619 | 1913. | 3,151,930,389 |
| 1878. | $409,899,701$ | 1890.. | 720,679,621 | 1902. | 1,075,263,168 | 1914. | 3,456,019,009 |
| 1879. | 407,357,985 | 1891.. | 759,602,191 | 1903. | 1,140,453,716 | 1915. | 3,531,620,802 |
| 1880.. | 411,563,271 | 1892.. | 821,410,072 | 1904. | 1,215,013,931 | 1916.. | 3,720,058,236 |

## FINANCE.

64.-Assets of Canadian Companies doing Fire Insurance, or Fire Insurance and other classes of Insurance, and Assets in Canada of Companies other than Canadian transacting such business in Canada, 1912-1916.

| Schedule. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ |
| Canadian Companies- |  |  |  |  |  |
| Loans on real esta | 2,159,311 | 3,041,389 | 3,169,250 | 19,848 |  |
| Stocks, bonds and debentures. . | 9,614,883 | 9,376,392 | 9,024,937 | 9,793,226 | 10,785,277 |
| Agents' balances and premiums outstanding.... | 1,670,990 | 1,893,507 | 2,043,406 | 2,567,121 | 2,718,065 |
| Cash on hand and in banks | 1,735,522 | 1,737,687 | 1,656,436 | 2,162,128 | 2,271,752 |
| Interest and rents. | 139,267 | 159,258 | 205,657 | 290,747 | 292,548 |
| Other assets. | 892,146 | 681,761 | 445,324 | 354,109 | 471,452 |
| Total assets | 16,951,740 | 17,780,799 | 17,501,179 | 19,434,408 | 21,178,244 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Loans on real estate..... | 17,406,247 | 12,673,949 | 14,695,586 | 5,471,761 | $5,321,817$ |
| Stocks, bonds and debentures. | 13,809,237 | 11,683,102 | 13,720,258 | 14,778,620 | 15,487,919 |
| Agents' balances and premiums outstanding.... | 1,362,148 | 1,583,009 | 1,722,732 | 2,122,057 | 2,275,667 |
| Cash on hand and in banks | 1,568,817 | 1,509,870 | 2,162,506 | 2,265,547 | 2,848,486 |
| Interest and rents. | 505,182 | 421,358 | 548,115 | 186,550 | 205,650 |
| Other assets in Canada.. | 350,199 | 156,585 | 165,781 | 164,763 | 219,340 |
| Total assets in Canada | 37,422,430 | 30,617,223 | 35,852,078 | 27,360,754 | 28,720,800 |
| American Companies- |  |  |  |  |  |
| Real estate. | - | - |  |  |  |
| Loans on real estate. |  |  | 8,500 |  | one. |
| Stocks, bonds and debentures. | 5,650,445 | ,840,822 | 8,487,566 | 8,304,971 | 9,285,183 |
| Agents' balances and premiums outstanding.... | 719 | 1,264,185 | 1,400,871 | 1,406,320 | 1,485,304 |
| Cash on hand and in banks | 292,554 | 221,340 | 449,000 | -870,233 | 1,196,765 |
| Interest and rents. | 52,755 | 67,767 | 95,457 | 111,582 | 124,360 |
| Other assets. | 23,099 | 27,646 | 26,028 | 55,951 | 42,167 |
| Total assets in Canada. | 6,738,18? | 8,421,760 | 10,467,422 | 10,749,057 | 12,133,779 |
| All Companies- |  |  |  |  |  |
| Real estate. | 3,160,221 | 3,480,155 | 3,793,269 | 3,318,685 | $3,657,321$ |
| Loans on real estate. Stocks, bonds and debentures. | 19,565,558 | 15,715,338 | 17,873,336 | 8,791,609 | 8,665,567 |
|  | 29,074,565 | 27,900,316 | 31,232,761 | 32,876,817 | 35,558,379 |
| Agents' balances and premiums outstanding.. | 3,752,474 | 4,740,701 | 5,167,009 | 6,095,498 | 6,479.036 |
| Cashon hand and in banks | 3,596,893 | 3,468,897 | 4,267,942 | 5,297,908 | 6,317,003 |
|  | 697,204 | 648,383 | 849,229 | $\begin{aligned} & 588,879 \\ & 574,823 \end{aligned}$ |  |
| Other assets. | 1,265,444 | 865,992 | 637,133 | 574,823 | 732,959 |
| Total assets in Cana | 61,112,359 | 56,819,782 | 63,820,679 | 57,544,219 | 62,032,823 |

## 1NSURANGE.

65.-Liabilities of Canadian Companies doing Fire Insurance, or Fire Insurance and other classes of Insurance, and Liabilities in Canada of Companies other than Canadian transacting such business in Canada, 1912-16.

| Schedule. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Canadian Companies- <br> Unsettled losses. <br> Reserve of unearned premiums. <br> Sundry items.. | \$ | \$ | 8 | \$ |  |
|  | 830,395 | 858,066 | 951,039 | 1,004,123 | 1,832,805 |
|  |  |  |  |  | 5,960,745 |
|  | 984,575 | 1,274,755 | 1,147,752 | 1,509,362 | 1,783,253 |
| Total liabilities, not including capital. . | 7,581,549 | 8,113,698 | 8,005,807 | 8,409,225 | 9,576,803 |
| Excess of assets over liabilities, excluding capital. <br> Capital stock paid up. | 9,370,191 | 9,667,101 | 9,495,372 | 11,025,183 | 11,601,441 |
|  | 9,145,607 | 9,825,459 | 9,327,546 | 9,705,234 | 9,706,336 |
| British CompaniesUnsettled losses. . |  | 703,556 | 878,988 | 733,158 | 75 |
| Reserve of unearned miums. | 7,340,187 | 8,017,926 | 8,488,770 | 8,681,721 | $9,699,494$ |
| Sundry itemst. . | 2,108,703 | 1,155,394 | 962,328 | 1,520,477 | 417,151 |
| Total liabilities in Canada | 9,893,971 | 9,876,876 | 10,330,086 | 10,935,356 | 12,093,120 |
| Excess of assets over liabilities, excluding capital. <br> Capital stock paid up. | 27,528,459 | 20,740,347 | 25,521,991 | 16,425,398 | 16,627,680 |
| American Companies Unsettled losses. | 362,9 | 595,8 | 858,806 | 699,776 |  |
| Reserve of unearned premiums. |  | 4,388,977 | 4,888,828 | 4,767,985 | 5,129,402 |
| Sundry items ${ }^{1}$. | 224,533 | 291,582 | 310,379 | 336,998 | 262,587 |
| Total liabilities in Canada | 3,871,339 | 5,276,423 | 6,058,013 | 5,804,709 | 6,558,966 |
| Excess of assets over liabilities excluding capital. <br> Capital stock paid up. | 2,866 850 | 3,145,338 | 4,409,409 | 4,944,348 | 5,574,813 |
| All CompaniesUnsettled losses. | 1,638,4 | 2,157,486 | 2,688,8 |  | , |
| Reserve of unearned premixms. | 16,390,593 | 18,387,780 | 19,284,614 |  | 20,789,641 |
| Sundry items ${ }^{1}$. | 3,317,811 | 2,721,731 | 2,420,459 | 3,366,837 | 2,462,991 |
| Total liabilities in Canada not including capital. | 21,346,859 | 23,266,997 | 24,393,906 | 25,149,290 | 28,228,889 |
| Excess of assets over liabilities excluding capital. | 39,765,500 | 33,552,786 | 39,426,772 | 32,394,929 | 33,803,984 |
| Capital stock paid up ${ }^{2}$. | 9,145,607 | 9,825,459 | 9,327,546 | 9,705,234 | 9,706,33 |

[^45]FINANCE.
66.-Cask Income and Expenditure of Canadian Companies doing Fire Insurance, or Fire Insurance and other chasses of Insurance and Cash Income and Expenditure in Canada of Companies other than Camadian transucting such basiness in Canada, 1912-16.

| Schedule. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| InCOME. | \$ | \$ | * | \$ | \$ |
| Canadian CompaniesNet cash for premiums. . |  |  |  |  |  |
|  | 9,644,235 | 9,167,900 | 9,122,882 | 10,008,557 | 11,146,958 |
| Interest and dividends on stocks, etc. | $568,329$ | 653,599 | 640,459 | 672,406 | $11,14,358$ 739,599 |
| Sundry items.. | 185,991 | 176,642 | 15,257 | 59,795 | 78,632 |
| Total cash income. | 10,398,555 | 9,998,141 | 9,778,598 | 10,740,758 | 11,965,189 |
| British Companies ${ }^{1}$ Net cash for premiums... |  |  |  |  |  |
|  | 12,092,125 | 13,138,597 | 13,710,908 | 13,609,363 | 14,294,801 |
| Interest and dividends on stocks, ete. | 1,483,672 | 1,298,719 | 1,370,943 | 911,348 | 952,600 |
| From branches other than Fire or Life... |  |  |  |  |  |
| Sundry iteme.. | 1,072,415 | 1,367,109 | 1,381,397 | $\begin{array}{r} 2,217,868 \\ 4,659 \end{array}$ | $\begin{array}{r} 2,239,324 \\ 1,557 \end{array}$ |
| Total cash inconte. | 14,770,385 | 15,807,076 | 16,463,704 | 16,748,238 | 17,488,372 |
| American Companies ${ }^{1}$ Net cash for premiums... |  |  |  |  |  |
|  | 6,038,987 | 7,508,050 | 8,771,599 | 8,306,395 | 8,671,173 |
| Interest and dividends on stocks, etc. | 191,585 | 254,252 | 339,690 | 398,696 | 445,970 |
| From branches other than |  |  |  |  |  |
| Fire or Life... | 312,008 | 414,616 | 595,104 | 978,343 | 1,551,295 |
| Sundry items.. | 4,381 | 754 | 28,067 | None | None |
| Total cash income. | 6,546,961 | 8,177,672 | 9,734,460 | 9,683,484 | 10,668,438 |
| Expenditure. |  |  |  |  |  |
| Canadian Companies- |  |  |  |  |  |
| Paid for losses. | 5,552,013 | 5,786,981 | 5,729,042 | 5,947,654 | 6,560,438 |
| General expenses. .. | 3,907,665 | 3,676,507 | 3,639,927 | 3,701,268 | 4,040,280 |
| Dividends or bonus to shareholders... | 447,537 | 481,900 | 329,588 | 510,429. | 438,319 |
| Total cash expenditure. . | 9,907,215 | 9,945,38 | 9,698,558 | 10,159,351 | 11,038,037 |
| Excess of inoome over expenditure. | 491,340 | 52,75 | 80,040 | 581,407 | 926,152 |
| British Companies ${ }^{1-}$ |  |  |  |  |  |
| Paid for losses. | 6,319,064 | 6,839,453 | 7,796,482 | $6,889,360$ | 7,926,461 |
| General expenses. . | 3,764,912 | 4,146,973 | 4,356,332 | 4,503,221 | 4,812,638 |
| On account of branches other than Fire or Life. | 232,822 | 1,174,587 | 1,218,800 | 2,179,610 | 1,968,887 |
| Total cash expenditur | 11,016,798 | 12,261,013 | 13,371,614 | 13,572,191 | 14,707,986 |

[^46]
## INSURANCE.

66.-Cash Income and Expenditure of Canadian Compantes doing Fire Insurance, or Fire Insurance and other classes of Insurance and Cash Income and Expenditure in Canada of Companies other than Canadian transacting such basiness in Canada, 1912-16-moncluded.

| Schedule. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Expenditura-con. | \$ | \$ | \$ | 8 | \$ |
| Excess of income over ex penditure. | 3,753,587 | 3,546,063 | 3,092,090 | 3,171,047 | 2,780,386 |
| American Companies ${ }^{-}$ Paid for losses. | 3,068,757 | 4,043,757 | 4,578,500 | 4,646,722 | 4,589,096 |
| General expenses. | 1,691,584 | 2,235,516 | 2,551,307 | 2,578,842 | 3,004,448 |
| On accoust of branches other than Fire or Life | 198,160 | 272,771 | 434,380 | 761,589 | 1,821,147 |
| Total cash expeuditure. | 4,958,501 | 6,552,044 | 7,564,187 | 7,987,153 | 9,414,691 |
| Excess of income over expenditure.. | 1,588,460 | 1,625,628 | 2,170,273 | 1,696,281 | 1,253,747 |

IIncome and expenditure in Cadaria.
67.-Amount of Net Premiums written and Net Losses incurred by Provinces in Canada, by Canadian, British and American and other Companies transacting Fire Insurance, 1916.
(Licensed re-insurance deducted).

| Provinces. | Canadian. |  | British. |  | United States and other. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Premiums. | Lorses. | $\begin{gathered} \text { Pre- } \\ \text { miums. } \end{gathered}$ | Losses. | Premiums. | Losses. |
| P.E. Island. | \$19,783 | \$1,700 | 85,655 | \$ 141,363 | $\frac{\$}{32,627}$ | ${ }_{65,023}^{5}$ |
| Nova Sootia. | 220,855 | 136,712 | 463,960 | 232,052 | 561,916 | 256,628 |
| New Brunswick. | 230,501 | 120,149 | 611,261 | 387,831 | 441,913 | 259,680 |
| Quebec. | 1,339,572 | 612,423 | 3,898,655 | 1,983,907 | 1,752,922 | 842,009 |
| Ontario. | 2,144,939 | 1,701,545 | 5,029,042 | 3,847,124 | 2,561,161 | 2,002,049 |
| Manitoba. ... | 645,907 | 290,941 | 1,060,488 | 615,404 | -928,999 | 466,404 |
| Saskatchewan. | 563,388 | 256,598 | -953,323 | 346,267 | 732,326 | 290,491 |
| Alberta. | 457,879 | 228,660 | 903,483 | 407,072 | 726,456 | 364,334 |
| British Columbia. | 519,507 | 236,967 | 1,430,480 | 651,653 | 965,676 | 426,245 |
| Yukon.......... | 97 | None. | 850 | None- | 1,637 | None. |
| Total. | 6,142,428 | 3,634,695 | 14,417,197 | 8,612,673 | 8,705,633 | 4,972,863 |

## FINANCE

68.--Life Insurance in Canada, 1912-1916.

| Schedule. | 1912. | 1913. | 1914. | 1915. | 1916.1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CanadianCompanies- |  |  |  |  |  |
| Policies new and taken up. . .. No. | 205,316 | 100,967 | 108,844 | 109,118 | 120,759 |
| Policies in force at end of year | 663,870 | 553,372 | 587,887 | 620,559 | 676,998 |
| Policies become claims... . | 9,409 | 7,870 | 8,248 | 9,213 | 9,909 |
| Amount of policies new and |  |  |  |  |  |
| taken up. | 141,267,596 | 131,493,582 | 125,505,324 | 121,033,310 | 138,201,281 |
| Net amount of policies in force" | 706,656,117 | 750,637,902 | 794,520,423 | 829,972,809 | 898,151,418 |
| Net amount of |  |  |  |  |  |
| ${ }_{\text {claima }}{ }^{\text {policies become }}$ | 7,760,842 | 7,613,365 | 9,009,944 | 10,383,062 | 11,763,148 |
| Amount of premi- ums in year... | 23,540,081 | 24,784,163 | 26,047,253 | 28,546,303 | 30,445,735 |
| Claims paid ${ }^{2}$ " | 7,550,633 | 7,640,225 | 8,455,729 | 9,914,932 | 10,514,258 |
| Unsettled claimsNot resisted. | 1,012,805 | 877,327 | 1,135,185 | 1,329,424 | 2,333,180 |
| Resisted. | 48,133 | 8,000 | 110,362 | 109,090 | 114,972 |
| British Companies- |  |  |  |  |  |
| Policies new and taken up. . ...no. | 2,522 | 4,448 | 11,603 | 7,690 | 6,920 |
| Policies in force at end of year | 24,922 | 27,522 | 30,925 | 31,383 | 23,147 ${ }^{8}$ |
| Policies become claims. | 622 | 666 | 652 | 802 | $405^{3}$ |
| Amount of policies new and taken up. | 319,952 | 6,950,60 | 9,294,590 | 5,727,313 | 5,295,133 |
| Net amount of policies in force a | 54,537,725 | 58,176,795 | $6,291,08$ $60,770,658$ | 58,087,018 | 36,815,604 ${ }^{\text {a }}$ |
| Net amount of |  |  |  |  |  |
| policies become claims. | 1,395,028 | 1,472,815 | 1,516,885 | 1,773,592 | 860,152 ${ }^{\text {a }}$ |
| Amount of premiums in year... | 1,768,046 | 1,905,486 | 1,006,998 | 2,071,592 | 1,898,659 |
| Claims paid ${ }^{\text {a }}$ " | 1,333,955 | 1,526,803 | 1,385,909 | 1,712,889 | 1,693,628 |
| Unsettled claims- |  |  |  |  |  |
| Not resisted. " | 217,139 | 175,118 | 310,217 | 324,261 | 393,530 |
| Resisted. ..." | noue. | none. | none. | 50,500 | 50,594 |

[^47]
## INSURANCE

68.-Life Insurance in Cantada 1912-1916-concluded.

| Schedule. | 1912. | $1913 .$ | 1914. | 1915. | $1916^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| American Companies |  |  |  |  |  |
| Policies new and taken up. .. .No. | 243,583 | 408,676 | 323,606 | 365,788 | 330,008 |
| Policies in force at end of year | 808,605 | 1,055,088 | 1,157,943 | 1,297,010 | 1,474,455 |
| Policies become claims. | 7,982 | 9,853 | 10,843 | 13,168 | 16,708 |
| Amount of poli- : $\quad 10,81$ |  |  |  |  |  |
| cies new and taken up. . $\$$ | 70,617,555 | 98,164,269 | 82,206,602 | 94,358,935 | 87,649,711 |
| Net amount of policies in force" | 302,114,827 | 359,775,330 | 386,869,397 | 423,556,850 | 467,499,266 |
| Net amount of policies become claims... | 3,877,009 | 4,216,778 | 4,677,481 | 5,403,510 | 6,695,184 |
| Amount of premiums in year... |  | 11,951,557. | 13,139,844 | 14,488 783 | 15,893,099 |
| Claimes paid ${ }^{\text {² }}$ " | 3,866,840 | 4,349,751 | 4,409,764 | 5,542,199 | 6,488,908 |
| Unsettied claims- |  |  |  |  |  |
| Not resisted.. " Resisted... | $\begin{gathered} 339,273 \\ 22,200 \end{gathered}$ | $\begin{array}{r} 281,655 \\ 21,480 \end{array}$ | $\begin{array}{r} 613,031 \\ 24,707 \end{array}$ | $\begin{aligned} & 475,751 \\ & 125,790 \end{aligned}$ | $\begin{aligned} & 656,138 \\ & 122,597 \end{aligned}$ |
| All Companies- |  |  |  |  |  |
| Policies new and taken up. ... .no. | 451,421 | 514,091 | 444,053 | 482,596 | 457,687 |
| Policies in force |  |  |  |  |  |
| at end of year <br> Policies become | 1,487,397 | 1,635,982 | 1,776,755 | 1,948,952 | 2,174,600 ${ }^{3}$ |
|  | 18,07 | 18,389 | 19,743 | 23,183 | 27,022 ${ }^{3}$ |
| Amount of poli- |  |  |  |  |  |
| taken up. \$ | 219,205,103 | 231,608,546 | 217,006,516 | 221,119,558 | 231,146,125 |
| Net amount of |  |  |  |  |  |
| Net amount of |  |  |  |  | 402,466,288 ${ }^{3}$ |
| policies become claims.. | 13,032,879 | 13,302,958 | 15,204,310 | 17,560,1 | 19,318,484 ${ }^{3}$ |
| Amount of premi- |  |  |  | 17,50, 164 |  |
| ums in year... | 35,709,516 | 33,641,206 | $41,094,095$ | 45,106,678 | 48,237,493 |
| Unsettled claims. | 12,751:328 | 13,516,779 | 14,251,402 | 17,170,020 | 18,696,794 |
| Not resisted... " | 1,629,217 | 1,334,100 | 2,058,4\%3 | 2,129,438 | 3,382,848 |
| Resisted. | 70,333 | 29,480 | 135,089 | 285,290 | 288,163 |

${ }^{1}$ Figures subject to revision. ${ }^{2}$ Including matured endowments. ${ }^{3}$ Incomplete.

## FINANCE

## 69.-Insurance Death-rate in Canada, 1912-1915.

| Companies. | 1912. |  |  | 1913. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of lives exposed to risk. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { deaths. } \end{aligned}$ | Deathrate per 1,000. | Number of lives exposed to risk. | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { deaths. } \end{gathered}$ | Deathrate per 1,000. |
| Active Companies, fordinary... <br> Active companies, industrial. <br> Assessment and fraternal soeieties. <br> Non-active and retired companies. |  |  |  |  |  |  |
|  | 547,015 | 4,365 | 7.980 | 595,842 | 4,374 | 7.341 |
|  | 867,603 | 8,677 | 10001 | 974,350 | 9,048 | 9.286 |
|  | 138,781 | 1,380 | 9.873 | 138,842 | 1,339 | 9.644 |
|  | 3,46.5 | 123 | 35.498 | 3,384 | 123 | 36.342 |
| Total. | 1,557.864 | 14,445 | 9.337 | 1,712,418 | 14,884 | 8.692 |
|  |  | 1914. |  |  | 1915. |  |
| Active Companies, ordinary. | 637,686 | 4,800 | 7.527 | 682,070 | 5,708 | 8.368 |
| Active companies, industrial. | $1,070,637$ | 9,497 | 8.870 | 1,185,923 | 10,368 | 8.743 |
| Assessment and fraternal societies Non-active and retired companies. | 126,06? | 1,377 | 10.923 | 109,050 | 1,308 | 11.994 |
|  | 3,217 | 90 | 30.774 | 2,950 | 122 | 41.356 |
| Total. | 1,837,602 | 15,773 | 8.583 | 1,979,993 | 17,507 | 8.842 |

Note-Average death-rate for all companies in the fifteen years 1901-1915, 9.637 par 1,000.
70.-Assets of Canadian Life Companies and Assets in Canada of Life Companies other than Canadian Companies, 1912-1916.

| Schedule. | 1912. | 1913. | 1914. | 1915. | 1916.1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Canadian Companies- | ${ }^{\$} 1.457$ | \$1510.386 | 12, ${ }^{\text {\% }}$, 6.617 | $\stackrel{8}{14,096,206}$ | $\stackrel{\$}{14,308,118}$ |
| Real estate.. | 9,031,457 | 11,510,386 | 12,773,617 | 14,096,206 | $14,308,118$ |
| Loans on real estate. | 75,248,268 | 87,215,996 | 94,765,472 | 96,058,936 | 95,916,630 |
| Loans on collaterals. | 2,889,833 | 1,477,725 | 2,132,153 | 1,696,754 | 2,501,710 |
| Cash loans and premium obligations on policies in force | 25,879,863 | 30,875,309 | 36,204,417 | 39,303,673 | 41;311,569 |
| Stocks, bonds and debentures. | 86,036,806 | 87,754,400 | 94,881,911 | 104,357,271 | 126,398,386 |
| Interest and rent due and accrued. | 4,037,421 | 4,798,603 | 5,839,838 | 6,724,400 | 7,190,936 |
| Cash on hand and in banks. | 2,895,719 | 3,365,373 | 4,163,749 | 5,159,4292 | 3,680,355 |
| Outstanding and deferred premiums. | 5,322,814. | 6,025,257 | 6,776,990 | 6,562,725 | 6,635,347 |
| Other assets. | 290,694 | 221,446 | 288,791 | 283,980 | 304,325 |
| Total assets. | 211,632,875 | 233,244,495 | 257,826,838 | 274,243,434 | 298,247,338 |

${ }^{1}$ Figures subject to revision. Hucludes cash deposits with Government.

INSURANCE.
70.-Assets of Camadtan Life Companies and Assets in Canada of Life Companies other than Canadian Companies, 1912-1916-concluded.

| Schedule. | 1912 | 1913. | 1914. | 1915. | $1916 .{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| British Companies- | $\$$ | \$ | \$ | 1 | \$ |
| Real estate. | 911,034 | 917,860 | 919,588 | 961,214 | 968,794 |
| Loans on real estate. | 12,410,674 | 17,937,890 | 18,420,270 | 17,834,771 | 16,902,175 |
| Loans on collaterals. | 141,500 | 139,568 | 139,069 | 155,193 | 169,296 |
| Cash loans and premium obligations on policies in force | 1,965,671 | 2,373,212 | 2,556,680 | 2,713,809 | 2,655,569 |
| Stocks, bonds and debentures. | 16,361,169 | 15,103,739 | 15,272,005 | 14,675,860 | 15,999,544 |
| Interest and rent due and acorued. . | 238,153 | 300,336 | 370,350 | 407,409 | 432,307 |
| Cash on hard and in banks | 352,135 | 435,258 | 854,670 | 702,430 | 787,354 |
| Outstanding and deferred premiums. |  |  |  | 347,661 | 344,215 |
| Other assets. | 30,740 | 13,797 | 10,598 | 10,224 | 18,367 |
| Total assets in Canada. | 32,691,198 | 37,585,785 | 38,924,378 | 37,808,566 | 38,277,621 |
| American Companies- |  |  |  |  |  |
| Real estate. | 58,683 | 177,228 | 70,765 | 72,559 | 79,840 |
| Loans on real estate. | 5,778,313 | 11,417,124 | 9,173,058 | 11,973,851 | 11,087,153 |
| Loans on collaterals. | sone. | mone. | none. | none. | none. |
| mium obligations on policies in force. | 6,973,367 | 8,742,100 | 10,012,133 | 10,850,791 | 10,777,910 |
| Stocks, bonds and debentures. | 45,955,544 | 46,685,135 | 50,777,774 | 49,721,360 | 55,146,516 |
| Interest and rent due and accrued. | 769,570 | 931,390 | 1,050,904 | 1,152,562 | 1,151,210 |
| Cash on hand and in banks ${ }^{2}$. | 442,496 | 6.53,675 | 763,901 | 2,408,289 | 2,537,267 |
| Outstanding and deferred premiums. | 964,842 | 1,130,772 | 1,238,849 | 1,287,225 | 1,352,317 |
| Other assets. ... | 124 | 20 | 1,222 | 1,874 | 9,846 |
| Total assets in Canada. | 60,942,869 | 69,746,444 | 73,068,606 | 77,468,511 | 82,142,059 |

${ }^{2}$ Includes cash deposits with Government.
Note.-Certain British companies transacting fire imsurance in Canada transactialso life insurance in Canada, and insomuch as a separation of assets has not been made between these two classes, their assets in Canada are not here included, but are included in the assets of British companies shown in Table 64 on page 586 .

## FINANCE

71.-Labilities of Canadian Life Compantes and Liabilities in Canada of Life Companies other than Canadian Companies, 1912-1916.

| Schedule. | 1912. | 1913. | 1914. | 1915. | 1916.1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Canadian CompaniesUnsettled claims. Net re-insurance reserve.. <br> Sundry liabilities | $\begin{array}{r} \$ \\ 1,608,795 \\ 179,244,051 \\ 3,529,836 \end{array}$ | $\begin{array}{r} \$ \\ 1,501,526 \\ 196,698,301 \\ 3,7 \cdot 5,340 \end{array}$ | $\begin{array}{r} \$ \\ 2,132,846 \\ 213,606,163 \\ 7,244,806 \end{array}$ | $\begin{array}{\|r\|} \boldsymbol{\$} \\ 2,382,635 \\ 227,562,062 \\ 7,571,712 \end{array}$ | $\begin{array}{r} 8 \\ 3,676,158 \\ 246,493,986 \\ 8,462,277 \end{array}$ |
| Total liabilities not including capital. | 184,382,682 | 201,944,867 | 222,983,815 | 237,516,409 | 258,632,421 |
| Surplus of assets excluding capital.. Capital stock paid up. | $\begin{array}{r} 27,250,193 \\ 5,919,306 \end{array}$ | $\begin{array}{r} 31,299,628 \\ 5,409,233 \end{array}$ | $\begin{array}{r} 34,843,123 \\ 5,462,314 \end{array}$ | $\begin{array}{r} 36,727,025 \\ 5,582,019 \end{array}$ | $\begin{array}{r} 39,614,962 \\ 5,679,618 \end{array}$ |
| British companies? Unsettled claims. Net re-insurance reserve. <br> Sundry liabilities. | $\begin{array}{r} 217,139 \\ 17,899,146 \\ 274,365 \end{array}$ | $\begin{array}{r} 175,118 \\ 18,080,566 \\ 118,047 \end{array}$ | $\begin{array}{r} 3!0,217 \\ 18,498,011 \\ 133,782 \end{array}$ | $\begin{array}{r} 374,761 \\ 18,760,831 \\ 209,972 \end{array}$ | $\begin{array}{r} 444,123 \\ 19,014,344 \\ 69,362 \end{array}$ |
| Total tiabilities not including capital. | 18,390,650 | 18,373,731 | 18,942,010 | 19,345,564 | 19,527,829 |
| Surplus of assets | 14,300,548 | 19,212,054 | 19,982,368 ${ }^{3}$ | 18,463,002 | 18,749,792 |
| American companies ${ }^{2}$ Unsettled claims. Net re-insurance reserve. <br> Sundry liabilities. | $\begin{array}{r} 421,473 \\ 54,869,557 \\ 1,009,838 \end{array}$ | $\begin{array}{r} 303,134 \\ 60,596,643 \\ 1,240,377 \end{array}$ | $\begin{array}{r} 637,737 \\ 65,020,583 \\ 1,368,261 \end{array}$ | $\begin{array}{r} 601,540 \\ 69,124,299 \\ 1,687,867 \end{array}$ | $\begin{array}{r} 778,735 \\ 74,997,533 \\ 1,988,928 \end{array}$ |
| Total liabilities not including capital. | 56,300,868 | 62,140,154 | 67,026,581 | 71,413,706 | 77,765,196 |
| Surplus of assets... | 4,642,001 | 7,606,290 | 6,042,02 | 6,054,805 | 4,376,863 |
| All companiesUnsettled claims. Net re-insurance reserve. Sundry liabilities. . | $\begin{array}{r} 2,247,407 \\ 252,012,754 \\ 4,314,039 \end{array}$ | $\begin{array}{r} 1979,778 \\ 275,375,510 \\ 5,103,464 \\ \hline \end{array}$ | $\left.\begin{array}{r} 3,080,800 \\ 297,124,757 \\ 8,746,849 \end{array} \right\rvert\,$ | $\begin{array}{r} 3,358,936 \\ 315,447,192 \\ \mathbf{9 , 4 6 9 , 5 5 2} \end{array}$ | $\begin{array}{r} 4,899,016 \\ 340,505,863 \\ 10,520,567 \end{array}$ |
| Total liabilities not including capital. | 259,074,200 | 282,458,752 | 308,952,406 | 328,275,680 | 355,925,446 |
| Surplus of assets excluding capital.. Capital stock paid up ${ }^{4}$. | $\begin{array}{r} 46,102,742 \\ 5,919,306 \end{array}$ | $\begin{array}{r} 58,117,972 \\ 5,409,233 \end{array}$ | $\begin{array}{r} 60,867,516 \\ 5,462,314 \end{array}$ | $\begin{array}{r} 61,244,831 \\ 5,582,019 \end{array}$ | $\begin{array}{r} 62,741,617 \\ 5,679,618 \\ \hline \end{array}$ |

${ }^{1}$ Figures subject to revision. 'Liabilities in Canada. Incomplete. ${ }^{4}$ Canadian companies only

## INSURANCE.

72.-Cash Income and Expenditure of Canadian Life Companies and Cash Income and Expenditure in Canada of Life Companies other than Canadian Companies, 1912-1916.

| Schedule. | 1912. | 1913. | 1914. | 1915. | $1916{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Income. <br> Canadian companies- | \$ | $\$$ | \$ | \$ | 8 |
| Net premium income | 31,488,787 | 33,728,176 | 35,273,895 | 38,492,314 | 41,781,806 |
| Consideration for annuities. |  | $3, \$ 10,677$ |  |  | 2,332,401 |
| Interest and dividends on stocks, etc. | 10,393,491 | 12,219,117 | 13,561,140 | 14,512,703 | 16,006,695 |
| Sundry items.. | 918,918 | 237,932 | 408,118 | 133,224 | 301,405 |
| Total cash income... | 45,724,622 | 49,995,902 | 52,766,630 | 54,837,839 | 60,416,307 |
| British companiesNet premium income Consideration for annuities. <br> Interest and dividends on stocks, etc.. <br> Sundry items.. <br> Total cash income ${ }^{2}$ |  |  |  |  |  |
|  | 1,766,593 | 1,904,486 | 1,906,690 | 2,071,284 | 1,898,602 |
|  | $1,451$ | $1,000$ | 307 | 307 | 158 |
|  | 1,441,172 | 1,757,322 | 1,903,351 | 1,933,401 | 889,698 |
|  | 1, 32,496 | 1,6,028 | 1, 6,514 | 1,8,197 | 712 |
|  | 3,241,712 | 3,668,836 | 3,816,862 | 4,007,189 | 3,789,170 |
| American companiesNet premium income Consideration for annuities. <br> Interest and dividends on stocks, etc. <br> Sundry items.. <br> Total cash income ${ }^{2}$. |  |  |  |  |  |
|  | 10,338,012 | 11,815,933 | 13,118,951 | 14,476,565 | 15,830,132 |
|  | $63,378$ | 135,627 | 20,892 | 12,217 | 62,968 |
|  | 2,278,745 | 2,746,319 | 3,301,999 | 3,633,145 |  |
|  | 76,835 | 429,036 | 33,640 | 15,237 | 46,331 |
|  | 12,756,970 | 15,126,915 | 16,475,482 | 18,137,164 | 19,842,724 |
| Expenditure. |  |  |  |  |  |
| Canadian companiesPayments to policyholders. <br> General expenses. |  |  |  |  |  |
|  | 15,265,414 | 16,601,436 | 19,405,276. | 25,909,382 | 24,132,222 |
|  | 9,969,772 | 10,539,236 | 10,998,450 | 11,322,408 | 12,253,155 |
| Dividends to stockholders. | 436,257 | $583,683$ | $453,682$ | $690,436$ | 510,796 |
| Total expenditure.. Excess of income over expenditure | 25,671,443 | 27,724,355 | 30,857,408 | 37,922,226 | 36,896,173 |
|  | 20,053,179 | 22,271,547 | 21,909,222 | 16,915,613 | 23,520,134 |

${ }^{1}$ Figures subject to revision. ${ }^{2}$ Income and expenditure in Canada.

## FINANCE.

72.-Cash Income and Erpeaditure of Conodian Life Companies and Cash Income and Expenditare in Canada of Life Compmaies other than Camadian Companies, 1912-1916-concluded.

| Schedule. | 1912. | 1913. | 1914. | 1915. | $1916{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Expenditure-con. <br> British companies-- <br> Payments to policyholders. <br> General expenses. Dividends to stockholders.. | $\$$ | \$ | $\$$ | \$ | \$ |
|  | 1,624,614 | 1,810,311 | 1,606,784 | 2,182,843 | 5 |
|  | + 454,416 | -511,352 | -609,386 | 2,182,848 | 385,907 |
|  |  |  |  |  |  |
| Total expenditure ${ }^{2}$. Excess of income over expenditure | 2,079,0 | 2,321,6 | 2,216,170 | 2,691,362 | 2,475,122 |
|  | 1,162,682 | 1,347,173 | 1,600,692 | 1,315,827 | 1,314,048 |
| American companies-- |  |  |  |  |  |
| Payments to policyholders. | 6,063,448 |  |  |  |  |
| General expenses. . . | 2,610,301 | 2,999,600 | 3,230,648 | 3,403,578 | 9,549,992 |
| Dividends to stock- holders.. .. |  |  |  |  |  |
| Total expenditure ${ }^{2}$. | 8,673,749 | 9,875,056 | 10,428,023 | 11,738,961 | 13,278,530 |
| Excess of income over expenditure | 4,083,221 | 5,251,859 | 6,047,459 | 6,398,203 | 6,564,194 |

${ }^{1}$ Figures subject to revision. ${ }^{2}$ Income and expenditure in Canada.
73.-Net Amount of Life Insurance in force in Canada, 1901-1916.

${ }^{1}$ Figures subject to revision. ${ }^{2}$ Incomplete.
Note.-For the yeare 1875 to 1900, see Canada Year Book 1911, p. 313.

## INSURANCE

74.-Premium Income of Life Companies, 1901-1916.

|  | Year. | Canadian Companies. | British Companies. | American Companies. | All Companies. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$ | \$ | \$ | \$ |
| 1901. |  | 9,133,890 | 1,346,666 | 4,709,298 | 15,189,854 |
| 1902. |  | 10,048,204 | 1,415,273 | 5,614,083 | 17,077,560 |
| 1903. |  | 10,882,650 | 1,435,318 | 5,922,297 | 18,240,265 |
| 1904. |  | 11,969,100 | 1,473,514 | 6,536,710 | 19,969,324 |
| 1905. |  | 13,947,827 | 1,500,232 | 6,632,658 | 22,080,717 |
| 1906. |  | 14,093,056 | 1,583,861 | 6,687,539 | 22,364,456 |
| 1907 | .. | 14,963,714 | 1,567,951 | 6,612,207 | 23,143,872 |
| 1908. |  | 16,081,504 | 1,546,941 | 7,069,494 | 24,697,939 |
| 1909. | . | 17,438,780 | 1,590,656 | 7,476,859 | 26,506,295 |
| 1910. |  | 19,952,162 | 1,580,255 | 8,239,486 | 29,771,903 |
| 1911. |  | 20,736,480 | 1,680,731 | 9,202,415 | 31,619,626 |
| 1912. |  | 23,540,081 | 1,768,046 | 10,401,389 | 35,709,516 |
| 1913. |  | $24,784,163$ | 1,905,486 | 11,951,557 | 38,641,206 |
| 1914...... |  | 26,047,253 | 1,906,998 | 13,139,844 | 41,094,095 |
| 1915. |  | 28,546,303 | 2,071,592 | 14,488,783 | 45,106,678 |
| $1916^{1}$ |  | 30,445,735 | 1,898,659 | 15,893,099 | 48,237,493 |

'Figures subject to revision.
Note.-For the years 1875 to 1900, see Canada Year Book 1911, p. 312.
75.-Life Insurance on Assessment Plan, 1912-1916.

| General. | 1912. | 1913. | 1914. | 1915. | 1911.1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. certificates taker- | 20,098 | 15,391 | 6,102 | 4,503 | 3,897 |
| No. certificates become clairns. | 1,735 | 1,905 | 2,203 | 2,072 | 2,108 |
| Amount paid by members. | 2,420,571 | 2,404,200 | 2,443,861 | 2,332,594 | 1,931,896 |
| Amount of certifiestes new and taken up. $\qquad$ | 19,167,381 | 11,852,050 | 4,568,250 | 3,152,000 | 3,299,250 |
| Netamountinforce" | 144,913,387 | 136,244,519 | 119,008,814 | 100,421,755 | 91,722,498 |
| Amount of certificates become |  |  |  |  |  |
| claims..... | 2,072,178 | 2,213,885 | 2,372,672 | 2,275,594 | 2,101,300 |
| Claims paid... | 2,051,248 | 2,171,048 | 2,339,953 | 2,254,448 | 2,234,240 |
| $\begin{aligned} & \text { Unsettled claims- } \\ & \text { Not resisted. } \\ & \text { Resisted. } \end{aligned}$ | 233,350 2,921 | 344,248 | 218,865 | 215,426 | 196,878 |
| Amount terminated by | 2,921, | 2,200 | 8,000 | 8,00 | 5,500 |
| Death.. | 1,625,293 | 1,599,317 | 1,582,979 | 1,556,038 | 1,441,667 |
| Surrender, expiry or lapse. | 11,285,447 | 22,768,463 | 24,581,265 | 22,015,141 | 11,934,616 |
| Total terminated.......... | 12,910,740 | 24,367,780 | 28,164,244 | 23,571,179 | 13,376,283 |

[^48]FINANCE.
75.-Life Insurance on Assessment Plan, 1912-1916-concluded.

| General. | 1912. | 1913. | 1914. | 1915. | 1916.1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ |
| Assets- |  | 983,379 | 1 | 1022 |  |
| Loans on real estate | 6,984,249 | 6,768,482 | 6,909,908 |  |  |
| Policy Loans (Liens arising out of readjustment). | 6,081,20 |  | 6,00,008 | 19,101,1532 | $7,430,142$ $18,500,291 *$ |
| Stocks, bonds and debentures. | 11,353,96F | 12,981,610 | 13,625,254 | 13,758,528 | 13,766,537 |
| Cash on hand and in banks. | 850,786 | 539,391 | 1,012,246 | 1,026,428 | 749,659 |
| Interest and rent due and accrued... | 234,612 | 253,982 | 268,875 | 397,529 | 462,904 |
| Dues from members.. | 83,833 | 79,012 | 120,679 | 178,022 | 93,287 |
| Other assets. | 1,584,809 | 1,365,614 | 1,159,167 | 1,955,345 | 2,680,277 |
| Total assets . | 22,071,802 | 22,971,470 | 24,166,330 | 44,545,654 | 44,744,236 |
| Liabilities- |  |  |  |  |  |
| Claims, unsettled.. | 512,197 | 527,368 | 441,123 | 458,945 | 362,411 |
| Reserve.. |  |  |  | $41,395,398{ }^{3}$ | 42,479,090 ${ }^{3}$ |
| Due on account of general expenses. | 7,826 | 5,804 | 5,568 | 8,971 | 4,962 |
| Other liabilities. . | 788,438 | 664,659 | 410,742 | 1,047,637 | 316,495 |
| Total liabilities not inciuding reserve.. | 1,308,461 | 1,197,831 | 857,433 | 42,910,951 | 43,162,958 |
| Income- |  |  |  |  |  |
| Assessments... | 4,940,399 | 4,961,774 | 5,094,179 | 4,762,454 | 3,981,676 |
| Fees and dues. | 336,975 | 330,286 | 302,528 | 268,644 | 242,926 |
| Interest and rents. | 964,152 | 1,208,485 | 1,460,737 | 1,498,638 | 2,051,013 |
| Other receipts.. | 52,531 | 5,646 | 75,329 | 2,404 | 65,095 |
| Total income. | 6,294,057 | 6,506,191 | 6,932,773 | 6,532,140 | 6,340,710 |
| ExpenditurePaid to members. | 3,942,59 | 4,306,131 | 4,522,395 | 4,518,2:88 |  |
| General expenses. | 619,045 | 705,078 | 822,937 | 459,990 | 446,829 |
| Total expenditure. | 4,561,638 | 5,011,209 | 5,345,332 | 4,978,288 | 4,922,208 |
| Excess of income over expenditure. | 1,732,419 | 1,494,982 | 1,587,441 | 1,553,852 | 1,418,502 |

${ }^{1}$ Figures subject to revision. ${ }^{2}$ Independent Order of Foresters.
${ }^{3}$ Independent Order of Foresters $\$ 40,783,811$ in 1915 and $\$ 41,662,074$ in 1916, including a special war reserve of $\$ 500,000$. Woodmen of the World, $\$ 611,587$ in 1915 and $\$ 704,200$ in 1916.

## INSURANCE

76.-Insurance other than Fire and Life, 1915.

| Companies. | Policies in force at end of year. | Premiums. | Amount of Policies new and renewed. |  | Losses incurred. | Claims. paid. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \$ | \$ | \$ | \$ | \$ |
| Guarantee... | 18,586 | 730,138 | 217,891,879 | 168,091,331 | 172,221 | 165,526 |
| Personal Accident. | 81,900 | 1,684,010 | 340,003,958 | 259,926,262 | 867,277 | 883,028 |
| Personal Accident and Sickness.. | 38,305 | 402,753 | 8,842,935 | 7,394,493 | 206,054 | 193,017 |
| Employers' Liability | 5,735 | 1,952,250 | 92,276,983 | 79,902,335 | 1,014,485 | 1,175,989 |
| Sickness. | 90,885 | 1,084,798 | 8,089,224 | 10,691,980 | 680,358 | 702, 164 |
| Burglary.. | 5,440 | 91,885 | 14,894,205 | 12,001,146 | 24,007 | 24,425 |
| Steam Boiler. | 4,985 | 150,377 | 24,983,875 | 58,170,709 | 11,688 | 12,473 |
| Hail. | - | 744,332 | 8,007,110 | - | 402,216 | 402,738 |
| Weather | 160 | 70,612 | 2,240,125 | 289,870 | 46,267 | 46,452 |
| Inland Trausportation. | 1,866 | 165,450 | 282,673,179 | 8,144,387 | 109:545 | 81,918 |
| Plate Glass . | 9,823 | 269,263 | 1 | 1 | 100,740 | 105,164 |
| Automobile ${ }^{\text {z }}$., | - | 312,427 | 16,456,807 | 12,702,203 | 158,650 | 172,766 |
| Automobile ${ }^{3}$.. | 5,496 | 323,658 | 64,950,500 | 41,225,950 | 131.336 | 90,626 |
| Sprinkler Leakage. | 627 | 38,780 | 7,123,847 | 11,757,619 | 18,014 | 18,786 |
| Live Stock. | 1,684 | 79,971 | 1,565,322 | 770,885 | 44,553 | 50,939 |
| Title.. | - | 79 | 15,000 | - | none. | none. |
| Tornado. | - | 26,750 | 9,306,415 | 16,088,787 | 3,623 | 3.760 |
| Explosion. | - | 5,949 | 3,664,731 | 1,389,735 | none. | none. |

${ }^{1}$ Plate glass companies having adopted the system of insurance by replacement, instead of paying for the value of glass broken, their returns do not show the amount of insurance effected during the year, nor the amount in force at the end of the year.

[^49]FINANCE.
77.-Insurance other than Fire and Life, 1916.

| Companies. | Policies in force at end of year. | Premiums. | Amount of Policies new and renewed. | Net Amotint in force. | Losses incurred. | Claims paid. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \$ | 5 | \$ | * | \$ |
| Guarantee.. | 18,995 | 799,010 | 221,230,048 | 181,968,018 | 310,983 | 156,377 |
| Personal Accident. | 87,422 | 1,535,428 | 369,705,904 | 286,489,532 | 652,253 | 624,449 |
| Personal Accident and Sickness.. | 50,985 | 685,775 | 19,924,786 | 17,405,207 | 309,905 | 293,441 |
| Employers' Liability | 5,582 | 1,930,198 | 85,575,170 | 74,502,695 | 1,144,937 | 1,133,653 |
| Sickness. | 92,038 | 1,109,801 | 4,624,2704 | 5,463,570 | 719,195 | 720,830 |
| Burglary. | 8,232 | 118,673 | 25,548,648 | 22,515,669 | 22,107 | 15,347 |
| Steam Boiler.. | 5,281 | 199,017 | 28,580,647 | 63,757,470 | 5,716 | 5,384 |
| Hail. | 49 | 1,430,866 | 23,007,636 | 46,665 | 1,570,035 | 1,602,081 |
| Inland Transportation. | 6 | 165,605 | 396,861,323 | 2,436,191 | 48,274 | 74,695 |
| Plate Glass. | 11,495 | 271,30 | 1 | 1 | 131,502 | 125,296 |
| Automobile ${ }^{2}$. | 3,285 | 341,944 | 24,457,831 | 15,372,341 | 141,438 | 137,774 |
| Automobile ${ }^{3}$ | 8,558 | 567,559 | 73,279,540 | 58,069,502 | 174,675 | 167,319 |
| Sprinkler Leakage. | 708 | 51,823 | 8,633,941 | 13,084,962 | 29,548 | 25,753 |
| Live Stock. .. | 2,084 | 76,084 | 1,752,910 | 782,681 | 52,196 | 51,825 |
| Title.. |  | 50 | - | - | non | none. |
| Tornado. | 3,066 | 48,564 | 12,761,316 | 21,157,448 | 24,023 | 22,233 |
| Explosion.... | - | 63,435 | 17,069,653 | 10,580,653 | none. | node. |

${ }^{\text {r Plate glass companies having adopted the system of insurance by replacement, }}$ instead of paying for the value of glass broken, their returns do not show the amount of insurance effected during the year, nor the amount in force at the end of the year.
${ }^{2}$ Including fire risk. ${ }^{2}$ Excluding fire risk. ${ }^{4}$ Returns of two companies only.

## INSURANCE

78.-Income and Erpenditare and Assets and Liabilities of Canadian Companies doing Insurance Business other than Fire and Life, 1915.

| Companies. | Cash Income. | Cash Expenditure. | Excess of Income over Expendi- ture. | Assets. | Lisbilistien. 1 | Excess of Assets over Liabilities. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ | \$ |
| Boiler Inspection. | 76,460 | 64,581 | 11,879 | 285,656 | 84,315 | 201,341 |
| Canada Accident. | 267,505 | 242,799 | 24,706 | 538,539 | 163,689 | 374,850 |
| Canada Hail. | 56,215 | 46,379 | 9,836 | 78,473 | 1,238 | 77,235 |
| Cansda Weather | 72,362 | 69,541 | 2,821 | 36,255 | 5,117 | 31,138 |
| Canadian Casuslty and Boiler. . | 107,463 | 112,243 | -4,780 | 154,051 | 73,554 | 80,497 |
| Canadian Surety | 58,824 | 45,595 | 13,229 | 253,713 | 25,094 | 228,619 |
| Casualty Co.of Canada | 9,079 | 8,471 | 608 | 19,970 | 4,000 | 15,970 |
| Chartered Trust and Executor Co. | 12,360 | 11,456 | $\mathrm{CO4}$ | 241,056 | 5,965 | 235,091 |
| Dominion-Gresham... | 122,556 | 113,255 | 9,301 | 333,066 | 90,093 | 242,973 |
| Genersl Accident. | 217,704 | 273,115 | $-55,411$ | 277,109 | 146,386 | 130,723 |
| General Animals... | 52,813 | 59,513 | -6,700 | 43,363 | 16,582 | 26,781 |
| Globe Indemnity Co. of Canada. | 502,171 | 483,260 | 18,911 | 518,857 | 251,515 | 267,342 |
| Guarantee Co. of N.A. | 316,963 | 249,731 | 67,232 | 2,056,292 | 296,927 | 1,759,365 |
| Guardian Accident and Gugrantee. | 87,985 | 93,895 | -5,910 | 258,037 | 49,321 | 208,716 |
| Imperial Gusrantee and Accident. | 257,479 | 251,312 | 6,167 | 421,721 | 144,457 | 277,264 |
| Londonand Lancashite Guarantee and Accicident. . | 863,398 | 1,050,504 | -187,106 | 1,276,154 | 454,981 | 821,173 |
| Merchants Casualty Co. | 299,795 | 251,857 | 47,988 | 141,180 | 40,265 | 100,915 |
| Merchants' and Employers' Guarantee and Accident. | 90,083 |  |  |  |  |  |
| Moose, Grand Lodge of the Loyal Order of. | 5,03 | 82,021 6,367 | $\begin{gathered} 7,412 \\ -\infty 03 \end{gathered}$ | $13,662$ |  | 122,489 -116 |
| North American Accident. | 164,792 | 148,482 | 16,310 | 251,528 | 88,747 | 162,781 |
| Protective Association of Canada. | 147,903 | 144,214 | 3,689 | 70,144 | 43,292 | 26,852 |
| Total. | 3,789,324 | 3,809,191 | -19,867 | 7,425,487 | 2,053,488 | 5,391,999 |

1Not including eapital stock.

FINANCE.
79.-Income and Expenditure and Assets and Liabilities of Canadian Companies doing Insurance Business other than Fire and Life, 1916.

| Companies. | Cash <br> Income. | $\begin{gathered} \text { Cash } \\ \text { Expendr- } \\ \text { ture. } \end{gathered}$ | Excess of Income over Expenditure. | Assets. | Liabilities. 1 | Excess of Assets over Liabilities. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 8 | \$ | * | * | * | 1 |
| Boiler Inspection. | 104,643 | 73,370 | 31,273 | 326,074 | 103,654 | 222,420 |
| Canada Hail. | 114,382 | 145,218 | $-30,836$ | 56,613 | 7,834 | 48,779 |
| Canada Weather | 84,643 | 86,973 | -2,330 | 27,983 | 9,309 | 18,674 |
| Canadian Surety | 75,619 | 54,522 | 21,097 | 280,045. | 33,008 | 247,037 |
| $\begin{array}{ccc}\text { Casualty Co. of Can- } \\ \text { ada } & \ldots & \cdots\end{array}$ | 3,371 | 4,418 | $-1,047$ | 21,002 | 3,897 | 17,105 |
| Chartered Trust and Executor Co. | 13,12! | 12,187 | 934 | 244,463 | 6,163 | 238,300 |
| Dominion-Gresham... | 132,410 | 101,489 | 30,921 | 345,904 | 88,969 | 256,935 |
| General Accident. | 369,605 | 342,216 | 27,389 | 450,084 | 216,769 | 233,315 |
| General Animals... | 53,522 | 57,500 | $-3,978$ | 45,333 | 20,300 | 25,033 |
| Globe Indemnity Co. of Canada. | 525.946 | 496,303 | 29,643 | 570,390 | 304,240 | 266,150 |
| Guarantee Co. of N.A. | 348,552 | 272,723 | 75,829 | 2,096,556 | 268,831 | 1,827,725 |
| Guardian Accident and Guarantee... | 101,798 | 90,555 | 11,243 | 284,091 | 64,368 | 219,723 |
| Imperial Guarantee and Accident. | 266,731 | 242,579 | 24,152 | 449,935 | 162,390 | 287,545 |
| London and Lancasbire Guarantee and Accicident. . | 273,936 | 600,225 | -326,289 | 883,630 | 285,463 | 598,167 |
| Merchants Casualty Co. | 470,046 | 411,565 | 58,481 | 208,978 | 79,437 | 129,541 |
| Merchants' and Employers' Guarantee and Accident. | 124,566 | 123,040 | 1,526 | 167.947 | 43,633 | 124,314 |
| Moose, Grand Lodge of the Loyal Order of. | 3,184 | 3,044 | 140 | 13,978 | 14,405 | -427 |
| North American Accident. . | 192,045 | 164,025 | 28,020 | 299,385 | 125,851 | 173,534 |
| Protective Association of Canada. | 148,220 | 142,326 | 3,894 | 73,352 | 45,323 | 28,029 |
| Total . . | 3,404,340 | 3,424,278 | -19,938 | 6,845,743 | 1,883,844 | 4,961,899 |

Not including capital atock.

INSURANCE.
80.-Income and Expenditure in Canada of Companjes, other than Canadian, doing Business other than Fire and Life, 1915.

| Companies. | Income (cash). |  |  | Expenditure (cash). |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Premiums. | $\left\lvert\, \begin{gathered} \text { Int. } \\ \text { \& Divi- } \\ \text { dends } \\ \text { on } \\ \text { Stock. } \end{gathered}\right.$ | Total Cash Income. | $\begin{gathered} \text { Paid } \\ \text { for } \\ \text { Losses. } \end{gathered}$ | General Expenditure | Total Cash Expenditure | Excess of Income over Expenditure. |
|  | \$ | \$ | 8 | \$ | * | \$ | \$ |
| American \& Foreign Marine. |  | none. | 17,711 | 9,405 | 3,989 | 13,394 | 4,317 |
| American Surety. | 15,915 | 2,680 | 18,595 | 1,476 | 4,467 | 5,943 | 12,652 |
| British \& Foreign Marine... | 2,087 | 4,680 |  | 270 | 428 | 698 | 6,069 |
| Fidelity Casualty |  |  |  |  |  |  |  |
| Co.. ${ }^{\text {Hartford }}$ Steam | 207,879 | 7,903 | 215,782 | 84,204 | 100,417 | 184,621 | 31,161 |
| Boiler. | 1,820 | 1,350 | 3,170 | none. | none. | none. | 3,170 |
| International Fi delity.. |  |  |  |  |  | 1,878 | 5,053 |
| LloydsPlateGlass | 63,538 | 4,563 | 68,101 | 25,520 | 28,513 | 54,033 | 14,068 |
| Loyal Protective | 88,318 | 1,727 | 100,705 | 48,254 | 33,311 | 81,566 | 19,139 |
| Maryland Casualty | 205,668 | 17,220 | 222,888 | 96,832 | 84,999 | 181,831 | 41,057 |
| National Provincial Plate Glass |  |  | 12,882 | 6,123 | 6,235 | 12,358 | 524 |
| National Surety.. | 58,090 | 5,119 | 63,209 | 11,100 | 23,173 | 34,273 | 28,936 |
| New York Plate Glass. . | 19,748 | 1,309 | 21,057 | 7,322 | 7,055 | 14,377 | 6,680 |
| Ocean Marine. . . | 16,238 | none. | 16,238 | 489 | 2,532 | 3,021 | 13,217 |
| Railway Passengers. | 157,113 | none. | 157,113 | 53,776 | 81,734 | 135,510 | 21,603 |
| Ridgely Protective. | 10,460 | 1,190 | 17,524 ${ }^{2}$ | 6,681 | 11,804 | 18,485 | - 961 |
| Travelers' Indemnity Co., Hartford. | 94,277 | 6,060 | 100,337 | 37,837 | 37,553 | 7,48 75,390 | 24,947 |
| United Commercial Travelers of America. | 16,226 | 1,350 | 19,003 ${ }^{3}$ | 22,583 | 552 | 23,135 | -4,132 |
| United States $\because \mathrm{Fi}-$ delity and Guaranty | 280,851 | 13,475 | 294,326 | 93,484 | 129,113 | 222,597 | 71,729 |
| Total. | 1,275,752 | 68,626 | 1,362,339 | 506,786 | 556,323 | 1,063,110 | 299,229 |

${ }^{1}$ Includes sundries \$10,660. $\quad{ }^{2}$ Includes sundries \$5,874.
${ }^{8}$ Includes sundries $\$ 1,427$.

## FINANCE.

81.-Income and Expenditure in Canada of Companies, other than Camadian, doing Business other than Fire and Life, 1916.

| Companies. | Income (cash). |  |  | Expendipure (cash). |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Premiums. | Int. S. Divi- dends on Stock. | Totsl Cash Income. | $\begin{gathered} \text { Paid } \\ \text { for } \\ \text { Losses. } \end{gathered}$ | General <br> Expenditure. | Totel Cash Expenditure | $\begin{aligned} & \text { Excess } \\ & \text { of } \\ & \text { Income } \\ & \text { over } \\ & \text { Expen- } \\ & \text { diture. } \end{aligned}$ |
|  | \$ | 8 | \$ | \$ |  | \$ | \$ |
| American \& Foreign Marine. | $23,727$ |  |  | 218 | 5,558 | 5,776 | 17,951 |
| American Surety. | 15,515 | 2,680 | 18,195 | -222 | 5,201 | 4,979 | 12,216 |
| British \& Foreign Maride... |  | 4,680 | 6,040 | 3,082 | 360 | 3,442 | 2,598 |
| Fidelity Casualty Co.. | 208,537 | 6,888 | 215,425 | 75,241 | 110,331 | 185,572 | 29,853 |
| Hartford Steam Boiler. | 2,345 | 1,350 | 3,695 | none. | none. | none. | 3,695 |
| International Fi delity. |  |  | $\mathbf{6}, 760$ |  | $430$ | 1,977 | 4,783 |
| LloydsPlateGlass | 53,205 | 3,905 | 57,110 | 27,467 | 31,199 | 58,666 | -1,556 |
| Loyal Protective | 92,772 | 2,207 | 105,722 | 53,930 | 48,364 | 108,294 | -2,572 |
| Maryland Casualty | 237,873 | 12,801 | 250,6822 | 94,736 | 116,746 | 211,482 | 39,200 |
| National Provincial Plate Glass | 12,386 |  | 12,386 | 7,459 | 5,883 | 13,342 | -956 |
| National Surety.. | 68,148 | 5,692 | 73,840 | 13,719 | 27,413 | 41,132 | 32,708 |
| New York Plate Glass. . | 15,808 | 1,313 | 17,121 | 7,788 | 7,542, | 15,330 | 1,791 |
| Ocean Marine. . | 19,553 | none. | 19,553 | 1,058 | 3,660 | 4,718 | 14,835 |
| Railway Passengers. | 208,220 | none. | 208,220 | 87,123 | 106,696 | 193,819 | 14,401 |
| Ridgely Protective. | 24,787 | 1,279 | 33,742 ${ }^{3}$ | 15,927 | 16,037 | 31,964 | 1,778 |
| Travelers' Indemnity Co., Hartford. | 128,393 | 5,808 | 134,201 | 33,161 | 58,026 | 91,187 | 43,014 |
| United Commer- <br> cial Travelers of America. | 17,514 | none | 17,514 | 13,126 | 3,363 | 16,489 | 1,025 |
| United States Fi delity and Guaranty | 305,338 | 13,083 | 318,371 | 76,969 | 158,605 | 235,574 | 82,797 |
| Total. . | 1,442,241 | 61,636 | 1,522,304 | 518,329 | 705,414 | 1,223,743 | 298,561 |

${ }^{1}$ Includes sundries $\$ 10.743$.
${ }^{3}$ Ineludes sundries $\$ 7,676$.
${ }^{2}$ Includes sundries $\$ 8$.

## INSURANCE

82.-Dóminion and Provincial Fire Insurance in Canada, 1916.

| Business transacted by | Net insurance written. | Net in force Dec. 31, 1916. | Net premiums received. | Net losses paid. |
| :---: | :---: | :---: | :---: | :---: |
| 1. Dominion licensees. | \$ ${ }_{\text {3,418,238,680 }}$ | \| $\begin{gathered}\$ \\ 3,720,058,236\end{gathered}$ | $\begin{gathered} \$ \\ 27,783,851 \end{gathered}$ | $\begin{gathered} \$ \\ 15,111,133 \end{gathered}$ |
| 2. Provincial licensees: <br> (a) Provincial companies within provinees by which they are incorporated. | 322,270,079 | 755,401,438 | 3,190,014 | 1,834,679 |
| (b) Provincial companies within provinces other than those by which they are incorporated. <br> (c) British and Foreign companies | $23,364,377$ $22,637,183$ | $48,079,232$ $46,435,008$ | 192,952 519,538 | 98,807 254,952 |
| Total for Provincial Companies.. | 368,271,639 | 849,915,678 | 3,902,504 | 2,188,438 |
| Grand Totals. . .. | 3,786,510,319 | $\|4,564,973,914\|$ | 31,686,355 | 17,299,571 |

83.-Dominion and Provincial Insurance in Canada, other than Fire and Life, 1916.

| Business transacted by | $\begin{array}{\|c\|} \substack{\text { Net } \\ \text { premiums } \\ \text { received. }} \end{array}$ | Net losses paid. |
| :---: | :---: | :---: |
| 1. Dominion licensees. | $\begin{gathered} \$ \\ 9,295,134 \end{gathered}$ | $\begin{gathered} \$ \\ 5,156,457 \end{gathered}$ |
| 2. Provincial licensees- <br> (a) Provincial companies within provinces by which they are incorporated. | 767,417 | 656,502 |
| (b) Provincial companies within provinces other than those by which they are incorporated. <br> (c) British and Foreign Companies. | 223,921 7055,806 | 243,670 709,719 |
| Total for Provincial Companies | 1,757,144 | 1,609,891 |
| Grand Totals. | 11,052,278 | 6,766,348 |

FINANCE.
84.-Dominion and Provincial Insurance in Canada, other than Fire and Life, 1916.

NET PREMIUMS RECEIVED.

| Class of business. | Dominion Licensees | Provincial Licensees. |  |  |  | Grand Totals. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (a) Prov. Cos. within provinces by which they are incorp. | (b) <br> Prov. <br> Cos. <br> within <br> provinces <br> other <br> than <br> those by <br> which <br> they are <br> incorp. |  | Total provincial Licensees |  |
| Accident. Accident and Sickness combined. | $\begin{array}{r} \$ 1,535,428 \\ 585,775 \end{array}$ | \$27,204 | \$ - | \$ 53,060 | \$80,264 | \$1,615,692 |
|  |  | 30,900 | 1,621 | 3,526 | 36,047 | 621,822 |
| Automobile (including Fite risk). | $341,944$ | - | - | 5,169 | 5,169 | 347,113 |
| Automobile (excluding Fire risk). | 567.559 | - |  | 24,781 | 24,781 |  |
| Burglary | 118,673 | $1,541$ | - 50. |  |  | $\begin{aligned} & 592,340 \\ & 118,673 \end{aligned}$ |
| Employers' Liability. | 1,930,198 |  |  | $29,165$ | 30,706 | 1,960,904 |
| Explosion. .. | 63,435 |  |  |  |  | 63,435 |
| Guarantee. | 799,010 | $\begin{array}{r} 58,495 \\ 552,138 \end{array}$ |  | 1,321640,681 | 59,925$1,407,973$ | $8,88,935$$2,838,839$ |
| Hail. ${ }^{\text {m }}$ | 1,430,866 |  | 215,154 |  |  |  |
| Inland Transportation | 165,605 |  |  | 1,816 | 1,816 | 167,421 |
| Live Stock. . | 76,084 | 7,863 | 5,428 |  | 13,291 | 89,375 |
| Plate Glass. | 271,302 | 45,982 | 1,209 | 5,590 | 52,781 | 324,083 |
| Sickness. | 1,109,801, | 4,692 | - | 513 | 5,205 | 1,115,006 |
| Sprinkler Leakage. | 51,823 | - | - | - |  | 51,823 |
| Steam Boiler. | 199,017 | - | - |  | - | 199,017 |
| Title. |  |  | - |  | - ${ }^{-}$ |  |
| Tornado. | 48,564 | 39,002 | - | 184 | 39,186 | 87,750 |
| Totals..... | 9,295,134 | 767,417 | 223,921 | 765,806 | 1,757 | 52,278 |
| NET LOSSES PAId. |  |  |  |  |  |  |
| Accident. <br> Accident and sickness combined. | 624,449 | 18,347 | - | 22,208 | 40,555 | 665,004 |
|  | 293,441 | 3,515 | I,048 | 2,641 | 7,204 | 300,645 |
| Automobile (including Fire risk). | 137,774 | - | 1,04 | 1,36\% | 1,363 | 139,137 |
| Automobile (excluding Fire risk) | 167,319 |  |  | 12,786 | 12,786 | 180,105 |
| Burglary. | 15,347 | ( $\begin{array}{r}- \\ - \\ \hline 8,600 \\ \hline 8917\end{array}$ |  | 21,493 | 21,493 |  |
| Employers' Liability | 1,133,653 |  | - |  |  | 1,155,146 |
| Explosion. | None. |  | 1,683 |  | None.$10,371$ | $\begin{aligned} & \text { None. } \\ & 166,748 \\ & 3.080,328 \end{aligned}$ |
| Guarantee. | 156,377 |  |  |  |  |  |
| Hail. ${ }^{\text {a }}$. . | 1,602,081 | 591,727 | 238,850 | 647,670 79 | 1,478,247 | $\begin{array}{\|r} 3,080,328 \\ 74,774 \end{array}$ |
| Inland Transportation | $\begin{aligned} & 74,695 \\ & 51,825 \end{aligned}$ |  |  |  | 3,323 | 54,148 |
| Live Stock. | $\begin{aligned} & 125,296 \\ & 720,830 \end{aligned}$ | 20,329 | 814 | 749 | 21,892 | 147,188 |
| Sickness. |  | 3,004 | - | 642 | 3,646 | $\begin{array}{r} 724,476 \\ 25,753 \end{array}$ |
| Sprinkler Leakage. | $\begin{array}{r} 720,830 \\ 25,753 \end{array}$ |  | - |  |  |  |
| Steam boiler | 5,384 None. | None. 8,932 | - |  | None. 8,932 | None. 31,165 |
| Tornado. | N-22,233 |  |  |  |  |  |
| Tolals | 5,156,457 | 656,502 | 243.670 | 709,719 | 1,609,891 | $6,766,348$ |

## INSURANCE

85.-Dominion and Provincial Life Insurance in Canada, 1916.

| Business transacted by | Net Insurance written. | Net in force Dec. 31, 1916. | Net Premiums Received. | Net losses Paid. |
| :---: | :---: | :---: | :---: | :---: |
| 1. Dominion licensees- <br> (a) Life companies... <br> (b) Fraternals. | $\begin{gathered} \$ \\ 231,101,625 \\ 3,299,250 \end{gathered}$ | $\left\|\begin{array}{c} 5 \\ 1,422,179,632 \\ 38,681,224 \end{array}\right\|$ | $\begin{gathered} \$ \\ 48,093,105 \\ 1,931,898 \end{gathered}$ | $\begin{gathered} \$ \\ 18,719,677 \\ 2,147,515 \end{gathered}$ |
| Totals. | 234,400,875 | 1,513,860,856 | 50,025,003 | 20,867,192 |
| 2. Provincial licensees- <br> (a) Provincial companies within province by which they are incorporated. |  |  |  |  |
| (i) Life companies. <br> (ii) Fraternals.... | $2,725,703$ $10,228,023$ | $11,327,435$ $207,699,570$ | $\begin{array}{r} 326,532 \\ 3,243,372 \end{array}$ | 54,287 $3,095,684$ |
| (b) Provincial companies in provinces other than those by which they are incorporated. |  |  |  |  |
| (i) Life companies. | 502,968 | 1,706,268 | 42,779 | 7,625 |
| (ii) Fraternals. | 3,999,450 | 71,207,427 | 726,660 | 648,515 |
| (c) British and foreign companies. |  |  |  |  |
| (i) Fraternals. | 4,141,300 | 56,156,529 | 971,660 | 786,309 |
| Totals for Provincial companies.... | 21,597,444 | 348,097,229 | 5,311,003 | 4,592,420 |
| Grand Totals. | 255,998,319 | 1,861,958,085 | 55,336,006 | 25,459,612 |

86.-Fire Insurance effected on property in Canada, under Section 139 of the Insurance Act, 1910, by Companies, Associations or Underwriters not Iicensed to transact business in Canada.

| Companies. | Amount of Insurance. |
| :---: | :---: |
| Lloyds' Associations. | $5$ |
| Reciprocal Underwriters. | 28,574,461 |
| Mutual Companies. | 135,548,458 |
| Stock Companies. | 42,816,369 |
| Total. | 262,803,882 |

86.-Fire Insurance effected on property in Canada, under Section 139 of the Insurance Act, 1910, by Conepanies, Assecietions, or Underwriters not licensed to transact business in Canada-concluded.

| Description of Property. | Amount of Insurance. |
| :---: | :---: |
| Lumber and Lumber Mills. | $\underset{15,893,008}{5}$ |
| Other industrial Plants and Mercantile establishments. | 185,548,910 |
| Stock and Merchandise. : .. | 36,499,877 |
| Railway property and equipment. | 24,055,737 |
| Miscellaneous... .. .. | 806,290 |
| Total. | 262,803,882 |

Amount by Provinces.

| P.E. Island. | ${ }_{24,302}^{8}$ |
| :---: | :---: |
| Nova Scotia. | 6,415,987 |
| New Brunswick. | 8,671,915 |
| Quebec. | 95,970,370 |
| Ontario. | 112,252,434 |
| Manitoba | 11,516,133 |
| Saskatchewan. | 8,679,496 |
| Alberta. | 6,145,890 |
| British Columbia. | 12,710,055 |
| Yukon. | 417,300 |
| Total. | 262,803,882 |

## XI.-ADMINISTRATION.

## PARLIAMENTARY REPRESENTATION.

Representation of Provinces.-The four original provinces of the Dominion were Ontario, Quebec, Nova Scotia and New Brunswick, which were given parliamentary representation according to Section 37 of the British North America Act, 1867 By Imperial Orders in Council the provinces of British Columbia and Prince Edward Island were admitted into the Dominion, the former on July 20, 1871, by Order dated May 16, 1871, and the latter on July 1, 1873, by Order dated June 26, 1873. An Act of the Dominion Parliament of May 12,1870 ( 33 Vict., c. 3), provided for the formation of the province of Manitoba out of Rupert's Land and the Northwest Territories, so soon as these should be admitted into the Dominion of Canada, which admission was effected by Imperial Order in Council dated June 23, 1870, and taking effect on July 15, 1870. In consequence of doubts as to the legal validity of the Dominion Act of 1870 ( 33 Vict., c. 3), the Imperial Parliament passed an Act in 1871 ( $34-35$ Vict., c. 28) making the Canadian Act valid and effectual.

## PARLIAMENTARY REPRESENTATION

Parliament of Canada.--The Parliament of the Dominion of Canada consists of the Senate with 87 members and of the House of Commons with 221 members, senators being appointed for life by the GovernorGeneral and members of the House of Commons being elected by the people. The ordinary legal limit of duration for each parliament is five years; but by Act of the Imperial Parliament (6-7 Geo. V., c. 19), passed June 1, 1916, and intituled an Act to amend the British North America Act, 1867, the duration of the 12th Parliament of Canada was extended until October 7, 1917 The 12th Parliament of Canada was dissolved by proclamation of the Governor General on October 6th, 1917; and preparations are now being made for the election of a new Parliament on December 17, 1917 A Redistribution Act passed after each census readjusts the number of representatives in the House of Commons in accordance with rules laid down in Section 51 of the British North America Act, 1867, of the Imperial Parliament (30-31 Vict., c. 3). These rules provide that the province of Quebec shall always have the fixed number of 65 members, and that there shall be assigned to each of the other provinces such a number of members as will bear the same proportion to the number of its population (ascertained by the census) as the number 65 bears to the population of Quebec.

The Senate.-The numerical representation of the Senate by provinces is as Iollows: Prinee Edward Island 4, Nova Scotia 10, New Brunswick 10, Quebec 24, Ontario 24, Manitoba 4, Saskatchewan 4, Alberta 4, British Columbia 3. Total 87

House of Commons.-The representation of the people in the House of Commons has been governed by Acts of the Dominion Parliament passed in 1903, 1904 and 1907 (3 Edw. VII, c. 60; 4 Edw. VII, c. 35; 6-7 Edw. VII, c. 41). The provinces of Saskatchewan and Alberta were created by Acts of the Dominion Parliament passed in 1905 (4-5 Edw. VII, cc. 3 and 42), and after the Northwest Census of 1906 the Representation Act was amended by an Act of April 27, 1907 (6-7 Edw VII, c. 41), which gave Saskatchewan ten members and Alberta seven members after the next ensuing election of October 26, 1908. The seven additional members thus given to Saskatchewan and Alberta brought the representation of Canada in the House of Commons up to 221 as stated above.

Representation Act, 1914.-By the Representation Act, 1914 (4-5 Geo. V, c. 51), which was assented to on June 12, 1914, and which will come into operation for the forthcoming election of the thirteenth Parliament of Canada, it is provided that the House of Commons shall consist of 234 members, distributed by provinces as follows: Prince Edward Island 3, Nova Scotia 16, New Brunswick 11, Quebec 65, Ontario 82, Manitoba 15, Saskatchewan 16, Alberta 12, British Columbia 13 and Yukon Territory 1. Table 1 shows the representation in the House of Commons according to the districts of the Representation Act, 1914.

## ADMINISTRATION

## 1.-Representation in the House of Commons according to the Districts of the Representation Act, 1914.

| Provinces and Districts. | Popu- <br> lation <br> 1911. | Representar tion. | Provinces and Districts. | Population 1911. | Repre sentation. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Canada. | 7,206,643 ${ }^{1}$ | 234 | Quebec. | 2,005,779 | 65 |
| Prince Edward |  |  | Argenteuil. | 16,766 | 1 |
|  | 93,728 | 3 | Bagot. | 18,200 | 1 |
| Kings. | 22,636 | 1 | Beauce. | 51,399 | I |
| Queers. | 38,313 | 1 | Beatharnois. | 20,802 | 1 |
|  |  |  | Berthier.. | 21,141 | 1 |
| Nova Scoti | 492,338 | 16 | Bonaventure. . | 28,110 | 1 |
| Antigonish and Guys- |  |  | Brome... | 13,216 | 1 |
| borough. | 29,010 | 1 | Chambly and |  |  |
| Cape Breton North and |  |  | Vercherés. | 28,715 | 1 |
| Victoria. ${ }^{\text {a }}$, ${ }^{\text {a }}$ | 29,888 | 1 | Champlain. | 39,824 | 1 |
| Cape Breton South and Richmond. | 66,625 | 2 | Charlevoix- Mont- morency | 27,972 | 1 |
| Colchester... ${ }^{\text {a }}$ - | 23,664 | 1 | Chateauguay-Hunting- |  |  |
| Cumberland | 40,543 | 1 | don..... | 26,562 | 1 |
| Digby and Annapolis.. | 29,871 | 1 | Chicoutimi-Saguenay ${ }^{2}$. | 65,888 | 1 |
| Halifax City and County | 80,257 | 2 | Compton. | 29,630 | 1 |
| Hants. | 19,703 | 1 | Dorchester | 25,096 | 1 |
| Inverness. | 25,571 | 1 | Drummond and Artha- |  |  |
| Kinga. | 21,780 | 1 | baska. | 41,590 | 1 |
| Lunerburg. | 33,260 | 1 | Gaspé. | 35,001 | 1 |
| Pictou... | 35,858 | 1 | Hull. . | 34,192 | 1 |
| Shelburne and Queens.. | 24,211 | 1 | Joliette. | 23,911 | 1 |
| Yarmouth and Clare. | 32,097 | 1 | Kamouraska. | 20,888 | 1 |
|  |  |  | Labelle. | 31,149 | 1 |
| New Brunswick. | 351,889 | 11 | Laprairie-Napierville... | 19,335 | 1 |
| Charlotte. | 21,147 | 1 | L'Assomption-Mont- |  |  |
| Gloucester. | 32,662 | 1 | calm. | 28,506 | 1 |
| Kent. | 24,376 | 1 | Laval-Deux-Mon- |  |  |
| Northumberland. . . . | 31,194 | 1 | tagnes. | 25,275 | 1 |
| Restigouche and Madawaska. | 32,321 | 1 | Levis. | 28,913 | 1 |
| Royal. | 31,491 | 1 | Lotbinière. | 22,158 | 1 |
| St. John City and Coun- | 31,91 |  | Maskinongé. | 16,509 | 1 |
| ty and Albert County | 63,263 | 2 | Matane. | 27,539 | 1 |
| Victoria and Carleton. | 33,034 | 1 | Mégantic. | 31,314 | 1 |
| Westmorland. | 44,621 | 1 | Missiquoi. . | 17,466 | 1 |
| York-Sunbury | 37,780 | 1 | Montmagny | 17,356 | 1 |

${ }^{1}$ Including 5,900, the population of the Northwest Territories.
2 Includes portion of Northwest Territories added to Quebec by the Exten* sion of Boundaries Act, 1912, with a population of 2,547

Note.-Included in the total population of Quebec are the following unorganized parts and their respective populations, which are not attached to any county, viz.-Abitibi 910, East Main 160, Mistassini 191, Nemiskau 5b, Rupert's House 445, Stratton Island 3, Waswanipi 301.

## PARLIAMENTARY REPRESENTATION

## 1.-Representation in the House of Commons according to the Districts of the Representation Act, 1914-con.

| Provinces and Districts. | Population 1911. | Repre sentation. | Provinces and distriets. | PopuIation 1911. | Repre sentation. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Quebec-concluded. |  |  | Ontario-con. |  |  |
| Montreal Island- |  |  | Dufferin. | 17,740 | 1 |
| Hochelaga | 44,884 | 1 | Dundas.. | 25,973 | 1 |
| Jacques Cartier. | 55,943 | 1 | Durham. | 26,411 | 1 |
| Laurier-Outremont... | 45,176 | 1 | Elgin E.... | 17,597 | 1 |
| Maisonneuve. | 33,796 | 1 | Elgin W | 26,715 | I |
| Ste. Anne... | 41,541 | 1 | Essex N | 38,006 | 1 |
| St. Antoine. | 34,794 | 1 | Essex S. | 29,541 | 1 |
| St. Denis. ${ }^{\text {d }}$ S | 45,141 | 1 | Fort William and Rainy |  |  |
| Westmount-St. Henri. | 56,088 | 1 | River. .. | 33,626 | 1 |
| St. James.... | 44,057 | 1 | Frontenac. | 21,944 | 1 |
| St. Laurent-St. |  |  | Glengarry and Stormont | 38,226 | 1 |
| George. | 38,883 | 1 | Grenville. | 17,545 | 1 |
| George-Etienne |  |  | Grey N . | 33,957 | 1 |
| Cartier. | 51,937 | 1 | Grey S. | 31,934 | 1 |
| St. Mary | 62,521 | 1 | Haldimand. | 21,562 | 1 |
| Nicolet. | 30,055 | 1 | Halton. | 22,208 | 1 |
| Pontiac. | 29,416 | 1 | Hamilton E. | 39,793 | 1 |
| Portneuf. | 30,260 | 1 | Hamilton W | 37,279 | 1 |
| Quebec County | 28,046 | 1 | Hastings E. | 24,978 | 1 |
| Quebec E. | 30,922 | 1 | Hastings W | 30,825 | 1 |
| Quebec 5 . | 24,163 | 1 | Huron N | 26,886 | 1 |
| Quebec W | 30,506 | 1 | Huron S. | 26,097 | 1 |
| Richelieu. | 19,810 | 1 | Kent. | 52,439 | 1 |
| Richmond and Wolfe. | 39,491 | 1 | Kingston. | 20,660 | 1 |
| Rimouski... ${ }_{\text {a }}$ | 23,951 | 1 | Lambton E. | 25,779 | 1 |
| St. Hyacinthe-Rouville. | 35,473 | 1 | Lambton W | 29,109 | 1 |
| St. Jean-Iberville. . | 21,882 | 1 | Lanark. | 34,375 | 1 |
| Shefford. | 23,976 |  | Leeds. | 36,753 | 1 |
| Sherbrooke.. | 23,211 | 1 | Lennox and Addington.. | 20,386 | 1 |
| Stanstead. | 20,765 | , | Lincoln.. . | 35,429 | 1 |
| Temiscouata. | 36,430 | 1 | London. | 46,300 | 1 |
| Terrebonne. | 29,018 | 1 | Middlesex E. | 23,465 | 1 |
| Three Rivers and St. |  |  | Middlesex W | 27,300 | 1 |
| Maurice. | 36,153 | 1 | Muskoka. | 21,233 | 1 |
| Vaudreuil-Soulanges.... | 20,439 | 1 | Nipissing. . | 43,714 | , |
| Wright. $\quad$. | 23,862 | 1 | Norfolk. | 27,110 | 1 |
| Yamaska. | 20,387 | 1 | Northumberland. . | 32,892 | 1 |
|  |  |  | Ontario N | 17,141 | 1 |
|  |  |  | Ontario S... | 23,865 |  |
| Ontario. | 2,527,292 | 82 | Ottawa. | 77,182 | 2 |
|  |  |  | Oxiord N | 25,077 |  |
| Algoma $\mathbf{E}$. | 37,968 | 1 | Oxiord S. | 22,294 | 1 |
| Algoma W | 28,752 | 1 | Parry Sound. | 26,547 | 1 |
| Brant. | 19,259 | 1 | Peel.... | 22,102 | 1 |
| Brantiord City | 26,617 | 1 | Perth N | 30,235 | 1 |
| Bruce N . | 23,783 | 1 | Perth S.... | 18,947 | 1 |
| Bruce S. | 26,249 | 1 | Peterborough E. | 15,499 | 1 |
| Carleton. | 24,417 | 1 | Peterborough W | 26,151 | 1 |

## 1.--Representation in the House of Commons according to the Districts of the Representation Act, 1914-concluded.

| Provinces and districts. | Population 1911. | Repre-sentation. | Provinces and districts. | Population 1911. | Repre sentation. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ontario-concluded. |  |  | Saskatchewan. | 492,432 | 16 |
| Port Arthur and Ke. |  |  | Assiniboia. .. | 31,975 | 1 |
| nora ${ }^{1}$ | 37,641 | 1 | Battleford. | 21,753 | 1 |
| Prescott.. | 26,968 | 1 | Battleford North. | 24,017 | 1 |
| Prince Edward. | 17,150 | 1 | Humboldt. | 37,126 | 1 |
| Renfrew N. | 23,617 | 1 | Kindersiey. | 21,937 | 1 |
| Renfrew S. | 27,852 | 1 | Last Mountain. | 32,464 | 1 |
| Russell. | 39,434 | 1 | Maple Creek. . . | 19,869 | 1 |
| Simcoe E. | 35,294 | 1 | McKenzie. | 36,921 | 1 |
| Simcoe N. | 24,699 | 1 | Moosejaw. | 31,552 | 1 |
| Simcoe S.. | 25,060 | 1 | Prince Albert. | 36,162 | 1 |
| Timiskaming. | 37,076 | 1 | Qu'Appelle. | 30,470 | 1 |
| Toronto South. | 43,956 | 1 | Regina. . | 44,441. | 1 |
| Toronto East. . . | 53,712 | 1 | Saskatoon. | 31,539 | 1 |
| Toronto Centre. | 54,792 | 1 | Saltcoats. | 32,332 | 1 |
| Toronto West. | 57,804 | 1 | Swift Current. . | 28,793 | 1 |
| Toronto (Parkdale) | 59,609 | 1 | Weyburn. | 31,081 | 1 |
| Toronto North.... | 51,318 | 1 |  |  |  |
| Victoria. | 36,499 | 1 | Aberta. | 374,663 | 12 |
| Waterloo N. | 33,619 | 1 | Battle River. . | 26,140 | 1 |
| Waterloos. | 28,988 | 1 | Bow River. . . . | 27,044 | 1 |
| Welland. | 42,163 | 1 | Calgary E. | 35, 172 | 1 |
| Wellington N | 22,292 | 1 | Calgary W. | 30,211 | 1 |
| Wellington S. | 32,200 | 1 | Edmonton E.. .. | 32,188 | 1 |
| Wentworth. | 34,634 | 1 | Edmonton W | 34,956 | 1 |
| York E. | 32,864 | 1 | Lethbridge....... | 29,552 | 1 |
| York W | 33,306 | 1 | Macleod.... .. | 30,685 | 1 |
| YorkS. | 34,458 | 1 | Medicine Hat. . . . . . | 24,481 | 1 |
| York N | 22,415 | 1 | Red Deer... | 37,815 | 1 |
|  |  |  | Strathcons. | 28,501 | 1 |
|  |  |  | Victoris. | 37,918 | 1 |
| Manitoba. | 461,630 | 15 | British Columbia |  |  |
|  |  |  | British Columbia. Burrard. | 392,480 48,493 | 13 |
| Brandon. Dauphin. | 39,734 23,371 | 1 | Currard. | 48,493 26,908 | 1 |
| Lisgar.. | 25,978 | 1 | Comox-Alberni. . | 16,777 | 1 |
| Macdonald. | 20,802 | 1 | Kootenay E. .... | 22,399 | 1 |
| Marquette... | 32,384 | 1 | Kootenay W | 28,373 | 1 |
| Nelson ${ }^{2}$. | 11,973 | 1 | Nanaimo . . | 31,822 | 1 |
| Neepawa. .... | 23,913 | 1 | Skeena. . ....... . | 25,486 | 1 |
| Portage la Prairie. | 22,059 | 1 | Vancouver Centre.... | 60,104 | 1 |
| Provencher. | 23,998 | 1 | Vancouver South.. | 20,446 | 1 |
| Selkirk. | 32,650 | 1 | Victoria City. | 31,660 | 1 |
| Souris. | 27,133 | 1 | Westminater Dist. | 22,848 | 1 |
| Springtield . . . . . | 37,527 | 1 | Westminster, New .. | 29,098 | 1 |
| Winnipeg Centre. | 58,903 | 1 | Yale..... | 28,066 | 1 |
| Winnipeg North. | 45,682 | 1 |  |  |  |
| Winnipeg South. | 35,525 | 1 | Yukon Territory, | 8,512 | 1 |

: Includes portion of Northwest Territories added to Ontario by the Extension of Boundaries Act, 1912, with a population of 4,018 .
${ }^{2}$ Includes portion of Northwest Territories added to Manitoba by the Extension of Boundaries Act, 1912, with a population of 6,016 .

## DOMINION PARLIAMENTS

2.-Governors-General of Canada, 1867-1917.

| Name. | Date of appointment. | Date of assumption of office. |
| :---: | :---: | :---: |
| Viscount Monck, G.C.M.G.. | June 1, 1867 | July 1, 1867 |
| Lord Lisgar, G.C.M.G. (Sir John Young). | Dec. 29, 1868 | Feb. 2, 1869 |
| The Earl of Dufferin, K.P., K.C.B., G.C.M.G. | May 22, 1872 | June 25, 1872 |
| The Marquis of Lorne, K.T., G.C.M.G | Oct. 5, 1878 | Nov. 25, 1878 |
| The Marquis of Lansdowne, G.C.M.G. | Aug. 18, 1883 | Oct. 23, 1883 |
| Lord Stanley of Preston, G.C.B. | May 1, 1888 | June 11, 1888 |
| The Earl of Aberdeen, K.T., G.C.M.G.... | May 22, 1893 | Sept. 18, 1893 |
| The Earl of Minto, G.C.M.G.. | July 30, 1898 | Nov. 12, 1898 |
| The Earl Grey, G.C.M.G. | Sept. 26, 1904 | Dec. 10, 1904 |
| Field-Marshal H.R.H. the Duke of Connaught, K.G. | Mar. 21, 1911 | Oct. 13, 1911 |
| The Duke of Devonshire, K.G., G.C.M.G., G.C.V.O. | Aug. 19, 1916 | Nov. 11, 1916 |


| 3.-Dominion Parliaments, 1867-1917. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Parliaments. | Session. | Date of Opening. | Date of Prorogation. | Days of session. | Elections, writs returnable, dissolutions and length of Parliaments. |
| $\stackrel{\text { lst }}{\text { Parliament. }}$ | 1st | Nov. 6, 1867 | May 22, 1868 | $118{ }^{1}$ |  |
|  | 2nd | April 15, 1869 | June 22, 1869 | 69 | $\text { Sept. 24, } 1867.4$ |
|  | 3 rd | Feb. 15, 1870 | May 12, 1870 | 87 | July $8,1872{ }^{\text {s }}$ |
|  | 4th | Feb. 15, 1871 | April 14, 1871 | 59 | 4 y ., 9 m ., $15 \mathrm{~d}^{6}$ |
| $\underset{\text { Parliament. }}{\text { 2nd }}$ ( | 5th | April 11, 1872 | June 14, 1872 | 65 | July, Aug., Sept |
|  | 1st | Mar. 5, 1873 | Aug. 13, 1873 | $81^{2}$ | Sept. 3, 1872.4 |
|  | 2nd | Oct. 23, 1873 | Nov 7, 1873 | 16 | $\left\{\begin{array}{l} \text { Jan. } 2,1874 .{ }^{5} \\ 1 \text { y. } 4 \mathrm{~m} ., 0 \mathrm{~d}^{6} \end{array}\right.$ |
| 3rdParliament. . | 1st | Mar. 26, 1874 | May 26, 1874 | 62 |  |
|  | 2nd | Feb. 4, 1875 | April 8, 1875 | 64 | Jan. 22, 1874. ${ }^{3}$ <br> Feb. 21, 1874. |
|  | 3 rd | Feb. 10, 1876 | April 12, 1876 | 83 | Aug. 17, $1878 .{ }^{5}$ |
|  | 4 th | Feb. Feb. 8, 7, 1878 | April 28, 1877 | 80 93 | $4 \mathrm{y} ., 5 \mathrm{~m} ., 25 \mathrm{~d}^{6}$ |
| Parliament. . $\{$ | $18 t$ | Feb. 13, 1879 | May 15, 1879 | 92 | (Sept. 17, 1878. ${ }^{3}$ |
|  | 2nd | Feb. 12, 1880 | May 7, 1880 | 86 | Nov. 21, 1878.4 |
|  | 3rd | Dec. 9, 1880 | Mar. 21, 1881 | 103 | May 18, 1882.5 |
|  | 4th | Feb. 9, 1882 | May 17, 1882 | 98 | (3 y., 5 m., $38 \mathrm{~d}^{6}$ |

${ }^{1}$ Adjourned from 21st December, 1867, to 12th March, 1868, to allow the Local Legislatures to meet. ${ }^{2}$ Adjourned 23rd May till 13th August. ${ }^{3}$ Period of general elections. Writs returnable. ${ }^{5}$ Dissolution of Parliament. ${ }^{6}$ Duration of Parliament in years, months and days. The life of a Parliament is counted from the date of return of election writs to the date of dissolution, both days inclusive.

## ADMINISTRATION.

3.-Dominion Parliaments, 1867-1917-concluded.

| Number of Parliaments. | Seasion. | Date of Opening. | Date of Prorogation. | $\begin{gathered} \text { Days } \\ \text { of } \\ \text { ses- } \\ \text { sion. } \end{gathered}$ | Elections, writs returnable dissolutions and length of Parliaments. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5thParliament. . | 1st | Feb. 8, 1883 | May 25, 1883 | 107 | (June 20, 1882. ${ }^{2}$ |
|  | 2nd | Jan. 17, 1884 | April 19, 1884 | 94 | Aug. 7, $1882 .{ }^{\text {a }}$ |
|  | 3rd | Jan. 29, 1885 | July 20, 1885 | 173 | Jan. 15, 1887 ${ }^{5}$ |
|  | 4th | Feb. 25, 1886 | June 2, 1886 | 98 | $4 \mathrm{y} ., 5 \mathrm{~m}, 10 \mathrm{~d}^{6}$ |
| $\begin{gathered} \text { 6th } \\ \text { Parliament. . } \end{gathered}$ | 1st | April 13, 1887 | June 23, 1887 | 72 | (Feb. 22, 1887. ${ }^{3}$ |
|  | 2nd | Feb. 23, 1888 | May 22, 1888 | 90 | April 7, 1887.4 |
|  | 3 rd | Jan. 31, 1889 | May 2, 1889 | 92 | Feb. 3, 1891. ${ }^{\text {5 }}$ |
|  | 4th | Jan. 16, 1890 | May 16, 1890 | 121 | (3y., $9 \mathrm{~m} ., 27 \mathrm{~d}^{6}$ |
| $\begin{gathered} \text { 7th } \\ \text { Parliament. } . \end{gathered}$ | 1st | April 29, 1891 | Sept. 30, 1891 | 155 |  |
|  | 2nd | Feb. 25, 1892 | July 9, 1892 | 136 | March 5, 1891. ${ }^{\text {t }}$ |
|  | 3 rd | Jan. 26, 1893 | April 1, 1893 | 66 | April 25, 1891.4 |
|  | 4 4th | Mar. 15, 1894 | July 23, 1894 | 131 | April 24, 1896.5 |
|  | 5th | April 18, 1895 | July 22, 1895 <br> April 23, 1896 | $\begin{gathered} 96 \\ 111 \end{gathered}$ | $5 \mathrm{y}, \mathrm{0} 0 \mathrm{~m}, 0 \mathrm{~d}^{6}$ |
| $\begin{gathered} \text { 8th } \\ \text { Parliament. } \end{gathered}$ | 1st | Aug. 19, 1896 |  | 48 |  |
|  | 2nd | Mar. 25, 1897 | June 29, 1897 | 97 | June 23, 1896. ${ }^{\text {a }}$ |
|  | 3rd | Feb. 3, 1898 | June 13, 1898 | 131 | July 13, 1896.4 |
|  | 4th | Mar. 16, 1899 | Aug. 11, 1899 | 149 | Oct. 9, 1900. ${ }^{6}$ |
|  | 5th | Feb. 1, 1000 | July 18, 1900 | 168 | $4 \mathrm{y}, 2^{\text {m., }} 26 \mathrm{~d}^{\text {d }}$ |
| $\stackrel{\text { 9th }}{\text { Parliament. . }}$, | 1st | Feb. 6, 1901 | May 23, 1901 | 107 | Nov. 7, 1900. ${ }^{2}$ |
|  | 2nd | Feb. 13, 1902 | May 15, 1902 | 90 | Dec. 5, 1900.4 |
|  | 3rd | Mar. 12, 1903 | Oct. 24, 1903 | 227 | Sept. 29, 1904. ${ }^{5}$ |
|  | 4th | Mar. 10, 1904 | Aug. 10, 1904 | 154 | 3 y .9 m m., $26 \mathrm{~d}^{6}$ |
| $\begin{gathered} \text { 10th } \\ \text { Parliament.. } \end{gathered}$ | Ist | Jan. 11, 1905 | July 20, 1905 | 191 | Nov. 3, 1904. ${ }^{3}$ |
|  | 2nd | Mar. 8, 1906 | July 13, 1906 | 128 | Dec. 15, 1904.4 |
|  | 3rd | Nov. 22, 1906 | April 27, 1907 | 157 | Sept. 17, 1908. ${ }^{5}$ |
|  | 4th | Nov. 28, 1907 | July 20, 1908 | 236 | ) 3 y., $9 \mathrm{~m}, 4 \mathrm{~d}^{6}$ |
| $\begin{aligned} & \text { 11th } \\ & \text { Parliament. . } \end{aligned}$ | 1st | Jan. 20, 1909 | May 19, 1909 | 120 | Oct. 26, 1908. ${ }^{3}$ |
|  | 2nd | Nov. 11, 1909 | May 4, 1910 | 175 | July 29, 1911.5 |
|  | 3rd | Nov. 7, 1910 | July 29, 1911 | $196{ }^{7}$ | $\iint_{2 \text { y., } 7 \mathrm{~m} ., 28} \text { der } \mathrm{d}^{6}$ |
| Parliament. ${ }_{\text {12th }}$ | 1st | Nov. 15, 1911 | April 1, 1912 | 139 |  |
|  | 2nd | Nov. 21, 1912 | June 6, 1913 | $173{ }^{8}$ |  |
|  | 3rd | Jan. 15, 1914 | June 12, 1914 | 148 | Oet. 7, 1911.4 |
|  | 4th | Aug. 18, 1914 | Aug. 22, 1914 | 5 | Oct. 6, 1917. |
|  | 5 th | Feb. 4, $19 \mathrm{L5}$ | April 15, 1915 | 71 | 6 y., 0m., od. ${ }^{\text {c }}$ |
|  | 6th | Jan. 13, 1916 | May 18, 1916 | 127 |  |
|  | th | Jan. 18, 1917 | Sept. 20, 1917 | $207^{9}$ |  |
| Parliament. | 1st |  |  |  | Dec. 17, 1917. ${ }^{2}$ <br> ;Feb. 27, 1918.4 |

[^50]DOMINION MINISTRIES.
4.-Dominion Ministries, 1896-1917.

| Office. | Name. |  |
| :---: | :---: | :---: |
| Eighth Ministry. <br> Premier and President of Council... | Right Hon. Sir Wilfrid Laurier... | July 11, 1896 |
| Minister of Trade and Commerce. . | Right Hon. Sir Richard J.Cartwright | July 13, 1896 |
| Secretary of State... ... | Hon. R. W. Scott. . Hon. Charles Murphy | July 13, 1896 <br> Oct. 10, 1908 |
| Minister of Justice.. .. ... | Hon. Sir Oliver Mowat. <br> Hon. David Mills. <br> Hon. Charles Fitzpatrick. . <br> Hon. Sir Allen B. Aylesworth.. | July 13, 1896 <br> Nov. 18, 1897 <br> Feb. 11, 1902 <br> June 4, 1906 |
| Minister of Marine and Fisheries. | Hon. Sir Louis Henry Davies. <br> Hon. James Sutherland. <br> Hon. J. Raymond F. Préfontaine. . <br> Hon. Louis P. Brodeur ${ }^{1}$.. <br> Hon. Rodolphe Lemieux ${ }^{1}$ | July 13, 1896 Jan. 15, 1902 Nov. 11, 1902 Feb. 6, 1906 Aug. 11, 1911 |
| Minister of Militia and Defence. | Hon. Sir Frederick W. Borden. | July 13, 1896 |
| Postmaster General. | Hon. Sir Wiltiam Mulock. <br> Hon. Allen B. Aylesworth. . . <br> Hon. Rodolphe Lemieux. <br> Hon. Henri S. Beland. | July 13, 1896 Oct. 16, 1905 June 4,1906 Aug. 11, 1911 |
| Minister of Agriculture. | Hon. Sydney A. Fisher. | July 13, 1896 |
| Minister of Public Works. | Hon. J. Israel Tarte... <br> Hon. James Sutherland. <br> Hon. Charles S. Hyman. <br> Hon. William Pugsley | July 13, 1896 Nov. 11, 1902 May 22, 1905 Sept. 13, 180 |
| Minister of Finance.. | Hon. William S. Fielding. . | July 13, 1896 |
| Minister of Railways and Canals. .. | Hon. Andrew G. Blair. <br> Hon. Henry R. Emmerson. <br> Hon. George P. Graham., | July 13, 1896 Jan. 15, 1904 Sept. 13, 1907 |
| Minister of Interior. . . | Hon. Clifford Sifton.. .. .. <br> Hon. Frank Oliver | Nov. 17, 1896 <br> April 8, 1905 |
| Minister of Customs. | Hon. William Paterson. | June 30, 1897 |
| Minister of Inland Revenue. | Hon. Sir Henri G. Joly de Lotbinière. <br> Hon. M. E. Bernier <br> Hon. Louis P Brodeur <br> Hon. William Templeman. | $\begin{aligned} & \text { June } 30,1897 \\ & \text { June } 22,1900 \\ & \text { Jan. } 19,1904 \\ & \text { Feb. } 6,1906 \end{aligned}$ |

ADMINISTRATION
4.-Dominion Ministries, 1896-1917-con.

| Office. | Name. | Date of appointment. |
| :---: | :---: | :---: |
| Eighth Ministry-con. |  |  |
| Minister of Labour Without portfolio.... | Hon. William Lyon Mackenzie King. | June 2, 1909 |
|  | Hon. Richard R. Dobell. | July 13, 1896 |
|  | Hon. C. A. Geoffrion. | July 13, 1896 |
|  | Hon. James Sutherland. | Sept. 30, 1899 |
|  | Hon. W. Templeman. | Feb. 25, 1902 |
|  | Hon. Charles S. Hyman. | Feb. 5, 1904 |
| Not in the Cabinet. Solicitor-General. | Hon. Charles Fitzpatrick. | July 13, 1896 |
|  | Hon. Henry Carroll... | Feb. 11, 1902 |
|  | Hon. Rodolphe Lemieux. | Jan. 29, 1904 |
|  | Hon. Jacques Bureau.. Hon. William Paterson. | Feb. 14, 1907 |
| Controller of Inland Revenue | Hon. Sir Henri G. Joly de Lotbinière. | July 13, 1896 |
| Ninth Ministry. |  |  |
| Premier and President of the Privy Council. | Right Hon. Sir Robert Laird Borden. | Oct. 10, 1911 |
| President of the Privy Council.... | Hon. Newton Wesley Rowell. | Oct. 12, 1917 |
| Minister of Trade and Commerce. | Right Hon. Sir George Eulas Foster. | Oct. 10, 1911 |
| Minister of Interior. | Hon. Robert Rogers.. | Oct. 10, 1911 |
|  | Hon. William J. Roche. Hon. Arthur Meighen. | Oct. 29,1912 <br> Oct 12,1917 |
| Minister of Public Works. . | Hon. Frederick D. Monk... <br> Hon. Robert Rogers.. <br> Hon. Charles C. Ballantyne. <br> Hon. Frank B. Carvell.... | Oct. 10, 1911 |
|  |  | Oct. 29, 1912 |
|  |  | Oct. 3, 1917 |
|  |  | Oct. 13, 1917 |
| Minister of Railways and Canals. | Hon. Francis Cochrane. Hon. John D. Reid. | Oct. 10, 1911 |
|  |  | Oct. 12, 1917 |
| Minister of Finance.. | Hon. Sir William T. White. | Oct. 10, 1911 |
| Postmaster General. |  | Oct. 10, 1911 |
|  | Hon. Thomas C. Casgrain. | Oct. 20, 1914 <br> Jan 8, 1917 |
|  | Hon. Pierre E. Blondin. |  |

## DOMINION MINISTRIES.

4.-Dominion Ministries, 1916-1917-concluded.

| Office. | Name. | Date of of appointment. |
| :---: | :---: | :---: |
| Ninth Ministry-con. |  |  |
| Minister of Marine and Fisheries and Naval Service. | Hon. John D. Hazen... - | Oct. 10, 1911 |
|  | Hon. Charles C. Ballantyne. | Oct. 13, 1917 |
| Minister of Justice.. <br> Minister of Militia and Defence. | Hon. Charles J. Doherty | Oct. 10, 1911 |
|  | Lieut.-Gen. the Hon. Sir Sam Hughes | Oct. 10, 1911 |
|  | Hon. Sir Albert Edward Kemp..... | Nov. 23, 1916 |
|  | Major-Gen. the Hon, Sydney $C$. Mewburn. ... | Oct. 12, 1917 |
| Minister of Overseas Forces for Canada in the United Kingdom |  |  |
|  | Hon. Sir George Hasley Perley | Oet. 31, 1916 |
|  | Hon. Sir Albert Edward Kemp. | Oct. 12, 1917 |
| Secretary of State. | Hon. William J. Roche. | Oct. 10, 1911 |
|  | Hon. Louis Coderre.: | Oct. 29, 1912 |
|  | Hon. Pierre E. Blondin ${ }^{1}$. | Oct. 6, 1915 |
|  | Hon. Esioff L. Patenaude ${ }^{1}$ | Jan. 8, 1917 |
|  | Hon. Arthur Meighen ${ }^{1}$. | Aug. 25, 1917 |
|  | Hon. Martin Burrell ${ }^{1}$... | Oct. 12, 1917 |
| Minister of Inmigration and Colonization.... | Hon. Thomas W. Crothers.. | Oct. 10,1911 Oct. 12,1917 |
| Minister of Inland Revenue. | Hon. Wilfrid B. Nantel. . | Oct. 10, 1911 |
|  | Hon. Pierre E. Blondin ${ }^{1}$ | Oct. 20, 1914 |
|  | Hon. Esioff Leon Patensude. | Oct. 6, 1915 |
|  | Hon. Albert E. Sevigny | Jan. 8, 1917 |
| Minister of Customs. | Hon. John D. Reid. ${ }^{\text {a }}$ | Oct. 10, 1911 |
|  | Hon. Arthur L. Sifton. | Oct. 12, 1917 |
| Minister of Agriculture. | Hon. Martin Burrell.. . | Oct. 10, 1911 |
|  | Hon. Thomas A. Crerar. | Oct. 12, 1917 |
| Ministers without portfolio.. | Hon. Sir George H. Perley... | Oct. 10, 1911 |
|  | Hon. Albert E. Kemp. ${ }^{\text {a }}$ | Oct. 10, 1911 |
|  | Hon. Sir. James A. Lougheed. . Hon. Francis Cochrane. | Oct. 10, 1911 |
|  | Hon. A. K. MacLean. | Oct. 23,1917 |
|  | Hon. G. D. Robertson. | Oct. 23, 1917 |
| Not in the Cabinet. <br> Solicitor-General. . | Hon. Arthur Meighen. | June 26, 1913 |
|  | Hon. Hugh Guthrie. | Oct. 4, 1917 |
| Parliamentary Secretary Militia and Defence.... | Franklin B. McCurdy.. | July 19, 1916 |
| Parliamentary Under Secretary of State for External Affairs .... | Lieut.-Col. Hugh Clark... .. | Oct. 21, 1916 |

${ }^{1}$ Also Minister of Mines.
Notn.-A complete list of the Dominion Ministries from Confederation to 1913 appeared in the Year Book of 1912, pp. 422-429.

ADMINISTRATION
5.-Lieutenant-Governors of Provinces, 1867-1917.

PRINCE EDWARD ISLAND.

| Name. | Date of appointment. | Name. | Date of appointment. |
| :---: | :---: | :---: | :---: |
| W. C. F. Robinson. | June 10, 1873 | Geo. Wm. Howlan... | Feb. 21, 1894 |
| Sir Robert Hodgson. | Nov. 22, 1873 | P A. MacIntyre. | May 13, 1899 |
| Sir Thomas H. Haviland | July 14, 1879 | D. A. McKinnon. | Oct. 3, 1904 |
| Andrew Archibald |  | Benjamin Rogers.. | June 1, 1910 |
| Jedediah S. Carvell..... | Aug. 1, 1,1884 Sept. 21, 1889 | A. C. Macdonald... | June 2, 1915 |

NOVA SCOTIA.

| Lieut.-Gen. Sir W. Wiliams | July | 1,1867 | Matthew Henry Richey .\| JulyA. W McLelan... 18839, |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Major-Gen.SirC.Hastings |  |  | Malachy Bowes Daly.. | July | 11, 1890 |
| Doyle | Oct. | 18, 1867 | Malachy Bowes Daly | ${ }^{1}$ July | 29, 1895 |
| Lieut.-Gen.SirC.Hastings |  |  | Alfred G. Jones. |  | 7, 1900 |
| Doyle | ${ }^{1} \mathrm{Jan}$. | 31, 1868 | Duncan C. Fraser |  | 27, 1906 |
| Sir E. Kenny (acting) | May | 31, 1870 | James D. McGregor |  | 18, 1910 |
| Joseph Howe. | May | 1, 1873 ${ }^{4}, 1873$ | David MacKeen |  | 19, 1915 |

NEW BRUNSWICK.

|  |  |  | Dec. 20,1893 |
| :---: | :---: | :---: | :---: |
| Col F P Darding Doyle | July 1, 1867 | John A. Fraser.. | Dec. 20, 1893 |
| Col. F. P. Harding. | Oct. 18, 1867 | A. R. McClelan. | Dec. 9, 1896 |
| Samuel Leonard Tilley | July 14, 1868 | L. J. Tweedie. | Feb. 5, 190 <br> Mar. <br> 1007 |
| E. Baron Chandler. | July 16, 1878 | Josiah Wood. | Mar. 6, 1912 |
| Robert Duncan Wilmot.. | Feb. 11, 1880 | G. W Ganong | June 29, 1916 |
| Sir Sam'l Leonard Tilley. | Oct. 31, 1885 | William Pugsley. | Nov. 6, 1917 |

QUEbec.

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Jan. 31, 1868 |  |  |  |
| Réné Edouard Car | Feb. 11, 1873 | L. A. Jet |  |  |
| Luc Letellier de St. Just | Dec. 15, 1876 | Sir Cha |  |  |
| Tbéodore Robitaille.. | July 26, 1879 | eti |  |  |
| L, F. R. Masson. | Nov. 7, 1884 | . | May | 5, 1911 |
| A. R. Ange | Oct. 24, 1 | Sir. Pierre E. Leblanc |  | 9,1915 |

## ONTARIO.

| W | Juy 1, 180 | - | Nov 18, 1897 |
| :---: | :---: | :---: | :---: |
| W. P. Howland. | July 14, 1868 | Sir Oliver Mowat. | Nov. 18, 1897 |
| John W. Crawiord | Nov. 5, 1873 | Sir Wiliiam Mortimer |  |
| D. A. Macdonald. | May 18, 1875 | Cla |  |
| John Beverly Robinson. | June 30, 1880 | Sir John M. Gibson | Se |
| Sir Alexander Campbell. | Feb. 8, 1887 | Lieut.-Col. Sir. John S. Hendr | Sept. 26, 1914 |

## MANITOBA.

| A. G. Archibald. . <br> Francis Goodschall Johnson | May 20, 1870 J. C. Schultz..  <br> Apr. 9, 1872 J. C. Patterson...i <br> Sir D. H. McMilan.   |  | July  <br> Sept. 1, <br> 2, 1888  <br> Oct. 1695 <br> 1900  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
| Alexander Morris. | Dec. 2, 1872 | Sir D. H. McMillan. | ${ }^{\text {² May 11, }} 1906$ |
| Joseph Ed. Cauchon.. | Dec. 2, 1877 | D. C. Cameron | Aug. 1, 1911 |
| James C. Aikins | Sept. 22, 188 | Sir. James M. Aik | Aug. |

## 1Second term.

## LIEUTENANT-GOVERNORS OF PROVINCES

> 5.-Lieutenant-Governors of Provinces, 1867-1917-concluded.

SASKATCEEWAN.

| Name. | Date of appointment | Name. | Date of appointment. |
| :---: | :---: | :---: | :---: |
| A. E. Forget. . Geo. W. Brown. . | Sept. <br> Oct. <br> 5,19105 | Richard Stuart Lake. | Oct. 6,1915 |
| alberta. |  |  |  |
|  |  |  | Oct. 6, 1915 |
| british columbia. |  |  |  |
|  |  |  |  |
|  |  | Lotbinière | June 21,1900 |
|  |  | James Dunsmuir | May 11, 1906 |
|  |  | T. W. Patterson. | Dec. 3, 1909 |
|  |  | Frank S. Barnard | Dec. 5, 1914 |
| the territories. |  |  |  |
| A. G. Archibald | May 10, 1870 | Joseph R | July 1,1888 |
| Francis Goodschall |  | C. H. Mackintosh. | Oct. 31, 1893 |
| Johnson | April 9, 1872 | M. C. Cameron | May 30, 1898 |
| Alexander Morris. | Dec. 2, 1872 | A. E. Forget. . | Oct. 11, 1898 |
| David Laird, P.C. . | $\begin{array}{ll}\text { Oet. } & 7,1876 \\ \text { Dec. } & 3,1881\end{array}$ | A. E. Forget.. | ${ }^{1}$ Mar. 30, 1904 |

second term.

## HONORARY ADVISORY COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH IN CANADA.

One of the most striking results of the great war is the sudden awakening of the English-speaking world to the importance of scientific and industrial research, and the realization by governments of the necessity of applying scientific research to the whole range of problems which present themselves in both war and peace.

With the declaration of war, the supplies of several classes of products for which Great Britain had come to rely almost exclusively upon Germany-in the manufacture of which that country had gradually secured a practical monopoly-were suddenly cut off. Some of these, such as dye stuffs, optical glass, etc., were of vital importance to certain of Great Britain's industries, which were very seriously threatened by the impossibility of securing adequate supplies of these necessary materials. Some of these materials were even needed for the manufacture of arms and munitions of war, and the necessity of making Great Britain independent of foreign countries, not only for the requirements of industry but also for the essentials of national defence, was thus made clear.

The Government of Great Britain, having been brought to a realization of these facts, appointed in July, 1915, a Committee of the Imperial Privy Council for Scientific and Industrial Research, with an Advisory Council composed of eight men distinguished in the world of science and industry "for the development of scientific and industrial research" applicable to the problems of war and the development of the industries of peace that follow the war.

The Government of Australia thereupon established "a Commonwealth Institute of Sicience and Industry " along similar lines. New Zealand and India also expressed a desire to co-operate with the Imperial Government in every possible way.

If, after the war, the industries and manufactures of Canada are to develop and expand in the face of the very vigorous competition which will grow up after the declaration of peace, it is necessary that our industrial and manufacturing operations shall be carried on with much more efficiency than has, as a general rule, characterized them in the past.

On June 6th, 1915, the Government of Canada appointed, therefore, a Sub-Committee of the Privy Council, consisting of the Minister of Trade and Commerce (Chairman) and the Ministers of the Interior, Agriculture, Mines, Inland Revenue and Labour, to devise and carry out measures to promote and assist scientific and industrial research, with a view to the fuller development of Canadian industries and production, in order that during and after the present war they may be in a position to supply all Canadian needs and to extend Canadian trade abroad.

Under this Sub-Committee of the Privy Council there was constituted, on November 29, 1915, an Honorary Advisory Council for Scientific and Industrial Research, composed of the following eleven members, representative of the scientific and industrial interests of Canada:-
A. B. Macallum, M.D., Ph.D., Sc.D., LL.D., F.R.S., Administrative Chairman, Ottawa.
F. D. Adams. Ph.D., Sc.D., LL.D., F.R.S., Dean, Faculty of Applied Science, McGill University, Montreal.
T. Brenvenu, Vice-President and General Manager, La Banque Proviociale du Canada, Montreal.
R. Hobson, President, Steel Company of Canada, Hamilton, Ont.
S. F. Kirispatrice, M.Sc., Professor of Metallurgy, Queen's University, Kingston, Ont.
J. C. McLennan, Ph.D., F.R.S, Professor of Physice and Director of the Physics Laboratory, University of Toronto, Toronto, Ont.
A. S. Macefnzie, Ph.D., D.C.L., President, Dalhousie University, Halifax, N.S.

W C. Murray, M.A., LL.D., President, University of Saskatchewan, Saskatoon, Sask.
R. A. Ross, E.E. (Tor.), M. Can. Soc. C.E., Consulting Engineer, 80 St. Francois Xavier St., Montreal, Que.
R. F RuTran, M.A.' M.D., Sc.D., Professor of Chemistry, and Director of the Chemical Laboratories, McGill University, Montreal, Que.

Arthur Surveyer, B.A.Sc., M. Can. Soc. C.E., Consulting Engineer, 274 Beaver Hall Hill, Montreal.

Secretary: J. B. Cealles, C.E. (Tor.), M. Can. Soc. C.E., Superintendent, Dominion Water-Power Branch, Department of the Interior, Ottawa.
This Advisory Council, by direction of the Chairman of the Committee of the Privy Council, has been charged with the following duties:--
(a) To ascertain and tabulate the various agencies in Canada which are now carrying on scientific and industrial research in the universities and colleges, in the various laboratcries of the Government, in business organizations and industries, in scientific associations or by private or associated investigators.
(b) To note and schedule the lines of research or investigation that are being pursued by each such agency, their facilities and equipment therefor,

## SCIENTIFIC AND INDUSTRIAL RESEARCH.

the possibilities of extension and expsasion, snd particularly to ascertain the scientific man power available for research and the necessity of adding thereto.
(c) To co-ordinate these agencies so as to prevent overlapping of effort, to induce co-operation and team work, and to bring up a community of interest, knowledge and mutual helpfulness between each other.
(d) To make themselves acquainted with the problems of a technical and scientific nature that are met with by our productive and industrial interests, and to bring them into contact with the proper research agencies for solving these problems, and thus link up the resources of science with the babour and capital employed in production so as to bring about the best possible economic results.
(e) To make a scientific study of our common unused resources, the waste and by-products of our farms, forests, fisheries and industries, with a view to their utilization in new or subsidiary processes of manufacture and thus contributing to the wealth and employment of our people.
(f) To study the ways and means by which the present small number of competent and trained research men can be added to from the students and graduates of science in our universities and colleges, and to bring about in the common interest a more complete co-operation between the industrial and productive interests of the country and the teaching centres and forces of science and research.
(g) To inform and stimulate the public mind in regard to the importance and utility of applying the results of scientific and industrial research to the processes of production, by means of addresses to business and industrial bodies, by the publication of bulletins and monographs, and sucb other methods as may seem advisable.
In pursuance of the work with which it has been charged, the Counch, in order to develop in Canada a body of men who have been thoroughly trained in science and its application to industry,-such as that which has aided so greatly in the industrial development of Germany in recent years-has recommended to the Government the establishment of twenty or more studentships and fellowships in Canadian universities and technical schools, to be given to men who have completed their regular course of study and have displayed a special aptitude for scientific research. These will enable such men to pursue a course of advanced work for a further period and thus acquire a practical training in the methods and conduct of research. Arrangements are also contemplated whereby students will be placed in one or other of the great manufacturing establishraents of the Dominion, where they will continue their training under the conditions of actual commercial practice.

For the purpose of making a complete census or inventory of all work in scientific and industrial research which is being carried on in the Dominion at the present time by all the agencies now at work, and also for the purpose of ascertaining the various lines and directions in which the application of research was most necessary and might be made most fruitful in the development of our industries and manufactures, the Council in the spring of 1917 issued questionnaires to all the universities, Government departments and techmical societies, as well as to all Canadian manufacturers, asking for specific information on the various subjects which come within the purview of the Council. In the distribution and in the collection of proper returns from these questionnaires the Council has received the active, energetic and sympathetic assistance of the engineering and the various technical societies of the Dominion, as well as of the Canadian Manufacturers' Association.

## ADMINISTRATION.

The Council has also enlisted the close co-operation of all the Government departments, both federal and provincial, for the purpose of correlating and rendering more easily accessible the wealth of information concerning the natural resources of the Dominion which lie stored in the Government archives and reports.

In addition to this broad and general work, which looks toward the establishment of a substantial basis for the further development of the industries of the Dominion in the immediate future, the Council has examined carefully a large number of specific projects which have been submitted to it, and has approved of certain of these which appear to give promise of valuable results.

They have decided to recommend that two of these projects be at once taken up and work be started upon them immediately. The first has for its object the provision of an adequate supply of good fuel for the Western Plains, more especially in the provinces of Saskatchewan and Manitoba. There are in the former province large supplies of lignite. This is an inferior fuel possessing a relatively low heating power and which, furthermore, will not stand shipment and storage. It is, therefore, of comparatively little value for domestic or manufacturing purposes. The Council, however, believes that by a special treatment there may be produced from this lignite two grades of high class briquetted fuel, one similar to anthracite or hard coal in character, and the other resembling soft coal in general character, and that at the same time certain valuable bye-products may be secured. The Department of Mines and the Commission of Conservation have already carried out a good deal of investigation in connection with this problem, and the former Department is now making some further studjes for the Council. If they give satisfactory results, the Council will advise that a plant to turn out this high grade fuel on a commercial scale be erected, and the possibility of producing this fuel at a cost considerably lower than that at which coal from the United States is now laid down in Manitoba and Saskatchewan be demonstrated on a large scale, the coal being actually placed on the market. With an abundant supply of good cheap fuel the conditions of life on the great plains in winter will be mucb improved.

The other project has to do with the preservation of the forests of eastern Canada. These, contrary to the opinion which prevails generally, are not inexhaustible. They have already been seriously depleted and are rapidly deteriorating in character. In most of the leading countries of Europe the forests, whether owned by the Government or by private interests, have, by the application of modern scientific knowledge, been immensely improved in character, and, instead of being plundered and then abandoned, have been converted into assets of enormous national value, and year by year yield large revenues to the Government, or to their private owners, which are as regular and as continuous as those from any other gilt-edged investment, the forest all the time being maintained with its capital unimpaired.

Different methods of forest management have been adopted in different parts of Europe to secure this most desirable result. The Canadian forests present special problems of their own. The Council has recommended that the necessary means be provided in order to

SCIENTIFIC AND INDUSTRIAL RESEARCH
enable the Forestry Branch of the Department of the Interior to carry out certain investigations for the purpose of ascertaining which of these methods can best be applied to the Canadian forests with a view to stopping the destruction which now threatens them, and of making these forests a great and permanent source of wealth to the people of the Dominion.

Many other projects and many additional lines of work are under consideration by the Council, but these require further examination before the Council is in a position to decide what action should be taken with reference to them.

The Research Council Act of the Dominion Parliament ( $7-8 \mathrm{Geo}$. V, c. 20), which was assented to on August 29, 1917, gave statutory authority to the constitution of the Council under the Sub-Committee of the Privy Council on Industrial and Scientific Research.

## PUBLIC LANDS.

Dominion Lands.-The Crown lands of the Dominion of Canada are situated in the Prairie Provinces and in the Railway Belt of British Columbia. Of these lands large areas are offered in free grants as homesteads for settlers ${ }^{1}$. The lands are laid out in townships of 36 sections. Each section contains 640 acres and is divided into quarter sections of 160 acres. A quarter section of 160 acres may be obtained by a settler on payment of an entry fee of $\$ 10$ and fulfilment of certain conditions of residence and cultivation. To qualify for the issue of the patent for his homestead a settler must have resided upon his homestead for at least six months in each of three years, must have erected a habitable house thereon, must have at least 30 acres of his holding broken of which 20 acres must be cropped, and must be a British subject.

Disposal of Dominion Lands in Manitoba, Saskatchewan and Alberta.-According to figures supplied by the Department of the Interior, a total area of $139,148,956$ acres, equal to 6,039 townships, or 217,420 square miles, has been alienated from the Crown. The total number of acres surveyed to January 1, 1917, was $220,215,856$ and of this area there remain for disposal $61,066,900$ acres, of which $3,931,500$ acres are under timber licenses, $5,398,800$ acres are under grazing leases, $25,615,500$ acres are under forest reserves and parks and $26,121,100$ acres are now available for homestead entry.

In addition to the surveyed area, there are large tracts of land in the northern parts of these three provinces which have, as yet, been explored only in a very partial way. The total area of this unsurveyed tract is $285,426,842$ acres, of which $22,616,262$ acres are watercovered.

Railway Lands.-Table 6 is a record for the three fiscal years 1914 to 1916 of the sales of lands by the Hudson's Bay Company and by railway companies having government land grants. The total sales in 1915-16 amounted to $\$ 5,435,949$ for 354,886 acres, as compared with $\$ 3,279,031$ for 192,801 aeres in 1914-15.

[^51]
## ADMINISTRATION

6.-Land Sales by Rallway Companies having Government Land Grants, and by the Hudson's Bay Company, in the fiscal years 1914-1916.

| Companies. | 1914. |  | 1915. |  | 1916. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Acres. | Amount. | Acres. | Amount. | Acres. | Amount. |
| Hudson's Bay Co. | 26,292 |  | 16,400 |  | 79,310 | $\underset{1,273,144}{\$}$ |
| Canadian Pacific Ry | 268,962 | 4,242,089 | 151,262 | 2,496,872 | 242,215 | 3,670,421 |
| Colonization Ry | 7,626 | 91,948 | 489 | 5,508 | 4,780 | 58,808 |
| Qu'Appelle, Long Lake and Saskatchewan Ry . \& Steamboat Co. | 1,629 | 21,546 | 2 | 19,118 | 1,280 | 8,803 180,361 |
| Calgary and Edmonton Ry Co | 19,575 | 21,56 460,129 | 23,042 | 19,118 44,018 | 12,246 11,689 | 180,361 |
| Canadian Northers Ry Co. | 182,491 | 2,009,642 | 23,02 | ,018 |  |  |
| Great Northwest Central Ry. Co. | - |  | 316 | 6,965 | 4,646 | 81,182 |
| Total. | 501,575 | 7,398,191 | 192,801 | 3,279,031 | 354,886 | 5,435,949 |

Homestead Entries.-In 1916, the total number of ordinary homestead entries for lands of the Dominion Government was 12,568 , as compared with 17,532 in 1915, 25,623 in 1914 and 31,499 in 1913. In 1916, 2,616 entries were made in Manitoba against 4,113 in 1915, 4,252 in 1914 and 2,998 in 1913; 4,519 in Saskatchewan against 6,349 in 1915, 9,752 in 1914 and 14,524 in 1913; 5,169 in Alberta against 6,584 in 1915, 10,722 in 1914, 12,122 in 1913; and 264 in British Columbia against 486 in 1915, 847 in 1914 and 1,855 in 1913. The number of pre-emptions under the Dominion Lands Act was 1,566 in 1916 (1,082 in Saskatchewan and 484 in Alberta) against 2,210 in 1915 ( 1,648 in Saskatchewan and 562 in Alberta). The number of purchased homesteads under the Aet was 271 in 1916 ( 169 in Saskatchewan and 102 in Alberta) against 285 in 1915 ( 197 in Saskatchewan and 88 in Alberta).

Provincial Public Lands.--In the Maritime Provinces, in Quebec and in Ontario the public lands are administered by the Provincial Governments. ${ }^{1}$ In Prince Edward Island all the Iand is settled. In Nova Scotia there are now no free grants of land; but under conditions prescribed by the Crown Lands Act of the Provincial Assembly ( 10 Edw. VII, 1910, c. 4, s. 26) and an amending Act of May 3, 1912, Crown lands, not exceeding in each case 150 acres, may be granted for agricultural or grazing purposes to applicants of not less than 18 years of age at the price of $\$ 1$ per acre, in addition to the expenses of survey. Leases and grants of Crown lands may also be obtained upon conditions

[^52]
## PUBLIC LANDS

prescribed. The total area of the Crown lands in Nova Scotia is approximately 895,552 acres. All returned soldiers possessing the necessary qualifications who wish to go on the land will be given the benefits of the Act for the Encouragement of Settlement on Farm Lands. By means of this measure a loan will be granted to the settler of 80 p.c. of the appraised value of the property selected for him. A mortgage will be taken on the property purchased by the settler, and repayments arranged for on the amortization principle over a period of years.

The area of the Crown lands in New Brunswick is about 7,250,000 acres. Probably not more than one-quarter of this area is suitable for agriculture. Under the provisions of Acts of the New Brunswick Legislative Assembly, lots of 100 aeres each may be granted to settlers of 18 years of age and over, subject to conditions which include the clearance and cultivation of ten acres, the building of a house, three years' residence on the lot and payments or labour in aid of the construction of roads and bridges. The Government of New Brunswick have commenced a survey with a view to the separation of agricultural lands from those suitable only for timber and to the opening up of homestead lands through which roads will be built, assisted by the province.

In the province of Quebec the area of public lands subdivided and unsold on June 30, 1915, was 7,022,254 acres. During the year ended June 30, 1916, 339,725 acres were surveyed; 103,658 acres reverted to the Crown; 207,380 acres were sold, the receipts, including arrears, being $\$ 75,703$; and 150 acres were granted free for religious purposes and for colonization roads. Adding to the acreage available at June 30, 1915, the areas surveyed and the areas that reverted and deducting sales and grants, there remained subdivided and uasold on June 30, 1916, $7,258,107$ acres. The average price of the areas sold was about 36 cents per acre. Agricultural lands in 100 acre lots are available for settlement upon prescribed conditions in Timiskaming ( $3,500,000$ acres) at the price of about 30 cents per acre, in Abitibi ( $3,000,000$ acres) at the price of about 30 cents per acre and in Beauce ( 50,000 to 60,000 acres) at the price of from 30 to 40 cents per acre.

In Ontario the public lands which are open for disposal are chiefly situated in the districts of Muskoka, Parry Sound, Nipissing, Sudbury, Algoma, Timiskaming, Thunder Bay, Kenora and Rainy River, and in the counties of Haliburton, Peterborough, Hastings, Frontenac, Lennox and Addington and Renfrew. In northern Ontario, which comprises the territory lying north and west of the Ottawa and French rivers, the townships open for sale are subdivided into lots of 320 acres, or sections of 640 acres, and a half lot or quarter section of 160 acres is allowed to each applicant at the price of 50 cents per acre, payable onefourth cash and the balance in three annual instalments with interest at six p.c. The applicant must be a male (or sole female) head of a family, or a single man over 18 years of age. The conditions of purchase include occupation by the purchaser within six months from date of purchase, the erection of a house, the clearance and cultivation of at least ten p.c. of the area and three years' residence. Proxy regulations enable an individual to purchase a half lot of 160 acres and place an agent in residence, but the duties to be performed before issue of patent
are double those required in ordinary purchases. Free grants and homesteads are available on lands within the districts of Algoma, Nipissing, Thunder Bay, Sudbury, Rainy River and. Kenora, and between the Ottawa river and the Georgian bay, comprising portions of the counties of Renfrew, Frontenac, Addington, Hastings, Peterborough and Haliburton and the districts of Muskoka and Parry sound. Grants of 160 acres are made to either single or married men in free grant territories where the land is subdivided in sections of 320 acres. In the Huron and Ottawa territory an allowance for waste lands may increase the grant of a single man to an area not exceeding 200 acres, while heads of families may secure 200 acres free and purchase an additional 100 acres at fifty cents an acre. The settiement duties for free grants are as follows: (a) at least fifteen acres to be cleared and brought under cultivation, of which two acres at least are to be cleared and cultivated annually during the three years; (b) a habitable house to be built at least sixteen by twenty feet in size; (c) actual and continuous residence upon and cultivation of the land for three years after location and thence to the issue of the patent. The mines and minerals and all timber other than pine, and in some cases the pine, are covered by the patent.

Ranching lands of prospective quality may be obtained on reasonable terms in waste and wooded areas, the valley of the Trent river lying between lake Ontario and the Georgian bay affording good opportunities for eattle and sheep raising.

Ontario includes $230,000,000$ acres of land, of which only $13,500,000$ acres are under cultivation. More than $20,000,000$ acres of the very finest arable land await the plough. Ontario is three and a half times as large as the British Isles; one and a half times as large as Texas. From east to west its borders are 1,000 miles apart, and from north to south 1,075 miles. Recent railway construction and colonization road building have made accessible vast tracts of untilled farm land and virgin forests in northern Ontario.

Loans are made to settlers in the northern and northwestern districts of Ontario. The maximum amount of any loan to be made to a sectler is $\$ 500$, with interest at six p.c. per annum, upon such terms and conditions as the Loan Commissioner may approve. The Government of Ontario is anxious that all bonâ fide settlers shall take full advantage of the opportunity provided to secure any needed loan, and full information with respect to same may be secured on application to the various Crown Lands Agents, or direct from the Settlers Loan Commissioner, Parliament Buildings, Toronto.

All returned soldiers who wish to go upon the land and are desirous of obtaining practical instruction in farming and of learning something of the conditions in northern Ontario, will be sent to an agricultural training depot now being established on the Government Experimental Farm at Monteith. Those desiring to practise fruit farming and chicken raising will be given free instruction at the public institutions of the province. As soon as a soldier wishes to go upon a farm and work for himself, an eighty-acre lot with a ten-acre clearing will be allotted to him. He will be supplied with the necessary machinery and tools, and such

## PUBLIC LANDS

cattle, pigs, poultry, etc., as competent authority may determine, up to the value of $\$ 500$. The lien will be repayable in 20 years at six p.c., but no payment on account of either principal or interest will be required until after the expiration of three years. At the expiration of five years from the settler locating upon his land, and upon due performance of certain conditions in the meantime, he will be entitled to receive a patent from the Crown ${ }^{\text {. }}$

In British Columbia there are large areas of free grant land. Any British subject being the head of a family, a widow, a femme sole who is over eighteen years of age and self-supporting, a woman deserted by her husband, a woman whose husband has not contributed to her support for two years, a bachelor over eighteen years, or any alien on his making a declaration of his intention to become a British subject, may pre-empt free 160 acres out of the unoccupied and unreserved Crown lands, not being an Indian settlement. The fees payable include $\$ 2$ for recording, $\$ 2$ for certificate of improvement and $\$ 10$ for the Crown grant. Of the total area of the province, approximately $200,000,000$ acres are vacant, and $90,000,000$ acres of vacant lands have been placed in reserve against sale, but are open to settlement by pre-emption. It is the practice to continue surveys each year of the lands most favourable to settlement, and at the close of the year 1915 there were vacant and available $2,400,000$ acres surveyed for settlers.

The Government of British Columbia has announced its intention to improve large areas of public lands within the province and to sell them to actual farmers. Under Section 45 of the Land Settlement and Development Act, 1917, every returned soldier of British Columbia, irrespective of rank, who purchases land will be entitled to an abatement on the purchase price to the amount of $\$ 500$. This abatement is applicable only to the first purchase of land by the returned soldier, and the title to the land is subject to the fulfilment of prescribed conditions. For the purposes of the section a "returned soldier " means any person who, having theretofore resided in the province, has at any time during the present war served overseas or who may at any time during the present war serve overseas as a sailor, soldier, chaplain, surgeon, or nurse, or in any other capacity in the naval or military forces of Canada, or in any other of His Majesty's naval or military forces, and who, having been honourably discharged from the service, has returned to the province. The widow of a soldier who has died in service will be entitled to the rights of a returned soldier under the section.

[^53]7.-Homestead Entries in Manitoba, Saskatchewan, Alberta and British Columbia, by Nationalities, made during the Fiscal Years 1911-1916.

| Nationalities. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No: | No. |
| Canadians from Ontario. | 4,438 | 3,152 | 2,223 | 2,996 | 2,009 | 1,885 |
| Quebec. | 1,101 | 951 | 790 | 883 | 648 | 505 |
| Nova Scotia. | 237 | 182 | 143 | 258 | 198 | 137 |
| New Brunswick. | 140 | 118 | 101 | 182 | 117 | 82 |
| Prince Edward Island. | 68 | 69 | 55 | 105 | 60 | 54 |
| Manitoba.. | 1,495 | 998 | 853 | 889 | 1,032 | 1,137 |
| Saskatchewan.. | 4,061 | 3,085 | 2,323 | 709 | 383 | 280 |
| Alberta. ${ }^{\text {a }}$. $\cdot$. | 980 | 863 | 006 | 551 | 434 | 310 |
| British Columbia | 136 | 123 | 57 | 104 | 76 | 63 |
| Persons who had previous entry... | 1,834 | 2,132 | 3,669 | 4,411 | 3,639 | 3,779 |
| Newfoundlanders... ${ }^{\text {a }}$ : ${ }^{\text {a }}$ | 7 | 6 | 7 | 6 | 15 | 14 |
| Canadians returned from the United States. | 553 | 401 | 180 | 121 | 48 | 19 |
| Americans . | 12,485 | 10,577 | 8,895 | 7,172 | 4,286 | 2,416 |
| English. | 6,161 | 5,739 | 4,452 | 3,894 | 2,974 | 2,374 |
| Scotch. | 1,291 | 1,041 | 836 | 966 | 800 | 700 |
| Irish. | 492 | 476 | 307 | 400 | 363 | 314 |
| French.. | 376 | 437 | 344 | 343 | 251 | 111 |
| Belgians. | 133 | 159 | 163 | 143 | 109 | 103 |
| Swiss. . | 74 | 80 | 86 | 91 | 83 | 37 |
| Italians. | 68 | 45 | 61 | 96 | 108 | 100 |
| Rumanians. | 175 | 141 | 88 | 82 | 38 | 40 |
| Syrians. | 64 | 56 | 51 | 29 | 16 | 5 |
| Germans. | 845 | 790 | 772 | 887 | 474 | 170 |
| Austro-Hungarians. | 2,804 | 3,121 | 2,280 | 2,516 | 2,879 | 1,745 |
| Dutch. | 201 | 153 | 129 | 143 | 104 | 50 |
| Danes (other than Icelanders). | 206 | 201 | 203 | 245 | 149 | 100 |
| Icelanders... | 96 | 69 | 57 | 50 | 70 | 74 |
| Swedes.: | 937 | 964 | 939 | 842 | 628 | 342 |
| Norwegians. | 1,092 | 1,180 | 1,148 | 1,062 | 645 | 309 |
| Russians (other than Mennonites and Doukhobors). | 1,858 | 1,781 | 1;462 | 1,586 | 1,382 | 719 |
| Mennozites... | 6 |  | $\stackrel{-1}{12}$ |  | 3 | - |
| Chinese. | 5 | 8 | 12 | 5 | 3 | 4 |
| Japanese. | 3 | 6 | 9 | 3 | 7 | 2 |
| Persians. .. | 9 | 3 | $-$ | - | 2 |  |
| Australians.. | 10 | 13 | 24 | 13 | 4 | 2 |
| New Zealanders. | 6 | 12 | 5 | 6 | 23 | 3 |
| Greeks. . | 13 | 3 | 3 | 2 | 20 | 3 |
| Bindus. | 4 | 11 | 25 | $\stackrel{4}{7}$ | 5 | 4 |
| Bulgarians. | 3 | 5 | 22 | 4 | 4 | 4 |
| Serbians. | 3 | 4 | 1 | - | 7 |  |
| Turks. . | 7 | 9 | 7 | 5 | 8 | 4 |
| Hebrews.... | 3 |  | 1 | ${ }^{6}$ | 45 | $\begin{array}{r}8 \\ 19 \\ \hline\end{array}$ |
| Other nationalities. | 3 | 7 | 26 | 12 | 9 | 19 |
| Total. | 44,479 | 39,151 | 33,699 | 31,829 | 24,088 | 17,030 |

HOMESTEAD ENTRIES.
8.-Receipts of Patents and Homestead Entries in the fiscal years 1912-1916.

| Sources of receipts. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\leqslant$ | \$ | \$ | \$ | \$ |
| Homestead fees... | 391,703 | 337,055 | 317,412 | 238,295 | 170,350 |
| Cash sales. | 1,967,183 | 1,650,492 | 1,279,224 | 691,123 | 1,073,970 |
| Scrip sales. . | 3,257 | 6,157 | 240 | 80 | - |
| Timber dues. | 400,669 | 463,739 | 378,365 | 310,934 | 378,961 |
| Hay permits, mining, stone quarries, etc., cash. | 729,240 | 781,283 | 889,863 | 1,600,455 | 493,281 |
| All other receipts. | 485,985 | 416,476 | 448,716 | 335,964 | 327,078 |
| Gross revenue... | 3,978,087 | 3,655,202 | 3,313,820 | 3,176,851 | 2,443,640 |
| Refunds. ..... .. | 197,631 | 246,106 | 277,309 | 317,765 | 143,943 |
| Net revenue. | 3,780,406 | 3,409,096 | 3,036,511 | 2,859,086 | 2,299,697 |
| Total revenue, 1872-1916. . | 39,174,066 | 42,583,162 | 45,619,673 | 48,478,759 | 50,778,457 |
| Letters patent for Dominion lands.. | 19,354 | 24,965 | 31,053 | 24,260 | 18,989 |
| Homestead entries. a | 39,151 | 33,699 | 31,829 | 24,088 | 17,030 |

## DEPARTMENT OF THE SECRETARY OF STATE.

Charters of Incorporation.-The number of companies incorporated under The Companies Act during the fiscal year 1916-17 was 606, with a total capitalization of $\$ 207,967,810$, and the number of existing companies to which supplementary letters patent were issued was 77, of which 36 increased their capital stock by $\$ 26,540,000$ and 3 decreased their capital stock by $\$ 5,050,000$. The remaining 38 were granted supplementary letters patent for various objects, such as changing names, extending powers, etc., making a total of 683 charters and supplementary charters issued during the year; this is an increase of 78 as compared with the previous year. The total capitalization of new companies and the increased capital of existing companies amounted to $\$ 229,457,810$.

Canada Temperance Act.-The Act prohibits the sale of intoxicating liquors in the places that have adopted it, and is administered by the Department of the Secretary of State. Since April 1, 1916, the Act has been brought into force in the counties of Perth, Ontario, and Stanstead and Brome, Quebec. It has been repealed in the counties of Queen and Shelburne, N.S., and in the counties of Sudbury and Charlotte, and in the City of Fredericton, N.B. Elections have also taken place in the counties of Missisquoi and Compton and city of Quebec, P.Q., resulting in the carrying of the Act, which will come into force on May 1, 1918. Petitions have also been received from the counties of Carleton, Northumberland and York, N.B., asking for a vote on the repeal of the Act. During the 1917 Session of Parliament, provision was made for the repeal of the Act by Order-in-Council without a vote, and further rer eals will probably be effected accordingly. The purpose of the repeal Act in New Brunswick counties is to make way for the Provincial prohibition law. The Act is now (October, 1917) in force in the following places: Ontario: Counties of Peel, Huron and Perth and district of Manitoulin; Quebec: City of Thetford Mines and counties of Stanstead and Brome; Nova Scotia: counties of Digby, Guysborough, and Yarmouth; New Brunswick: Counties of Albert, Carleton, Kings, Northumberland, Queens, Westmorland and York, Manitoba: Lisgar and Marquette.

Naturalizations.-The naturalizations effected under the Naturalization Act (R.S. 1906, c. 77), for the 12 months ended June 30, 1916, numbered 9,767 Of these 4,326 were formerly citizens of the United States. Table 9 shows by principal nationalities the number of naturalizations effected in Canada during the years 1907 to 1915 under the Act.

## 9.-Number of Naturalizations in Canada by Principal Nationalities during the Calendar years 1907-1915.

| Nationalities. | $1907{ }^{1}$. | 1908. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | $\left\lvert\, \begin{gathered} \text { Total } \\ 1907-15 . \end{gathered}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No. | No. | No. | N | No. | No. |
| Austrians | 1,915 | 3,982 | 1,588 | 1,902 | 3,833 | 2,030 | 2,766 | 7,128 | 1,810 | 26,954 |
| BeIgians. | 129 | 318 | 205 | 191 | 350 | 152 | 288 | 380 | 250 | 2,263 |
| Chinese.. | 283 | 355 | 241 | 78 | 180 | 136 | 173 | 69 | 135 | 1,650 |
| Danes. | 124 | 146 | 154 | 92 | 169 | 158 | 201 | 290 | 201 | 1,535 |
| Dutch. | 34 | 78 | 65 | 85 | 136 | 81 | 178 | 219 | 133 | 1,009 |
| Finns.. | 122 | 328 | 231 | 328 | 534 | 1,259 | 884 | 835 | 219 | 4,740 |
| Frebch. | 256 | 652 | 344 | 397 | 534 | 346 | 359 | 588 | 216 | 3,692 |
| Galicians. | 807 | 1,083 | 512 | 686 | 818 | 295 | 406 | 1,024 | 183 | 5,814 |
| Germans. | 319 | 585 | 293 | 333 | 484 | 344 | 539 | 1,070 | 326 | +4,293 |
| Greeks. | 60 | 83 | 96 | 63 | 268 | 205 | 233 | 224 | 199 | 1,431 |
| Hungarians. | 279 | 580 | 164 | 254 | 395 67 | 217 34 | $\begin{array}{r}214 \\ 53 \\ \hline\end{array}$ | 382 | 129 40 | 1,624 950 |
| Icelanders. | 238 881 | 187 1,852 | 68 | 114 | 67 2,009 | 1,598 | [ 53 | 149 3,221 | 1,592 | 16,004 |
| Japanese.. | 306 | 1,439 | 341 | 306 | 229 | 161 | 292 | 1,120 | 561 | 3,755 |
| Norwegians. | 352 | 444 | 399 | 429 | 597 | 653 | 1,074 | 1,180 | 641 | ,769 |

NATURALIZATIONS
9.-Number of Naturalizations in Canada by Prineipal Nationalities during the Calendar years 1907-1915-concluded.

| alities. | 19071. | 1908. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. | $\begin{aligned} & \text { Total } \\ & \text { 1907-15. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. ${ }_{62}$ | $75$ | $51$ | No. $102$ |  | $\begin{gathered} \text { To. } \\ 31 \end{gathered}$ | $10$ | 77 | No. 29 | No. $598$ |
| Rumanians | 499 | 271 | 184 | 278 | 442 | 184 | 278 | 344 | 168 | 2,648 |
| Russians.. | 2,127 | 3,046 | 1,944 | 2,865 | 2,787 | 1,588 | 3,696 | 5,737 | 2,418 | 26,206 |
| Swedes | 674 | 905 | 623 | 516 | 844 | 845 | 1,752 | 1,693 | 690 | 8,542 |
| Swiss. | 37 | 81 | 44 | 45 | 67 | 46 | 69 | 145 | 95 | 629 |
| Syrians.. | 152 | 221 | 162 | 140 | 204 | 176 | 185 | 95 | - 30 | 1,365 |
| Turks. | 104 | 59 | 92 | 95 | 236 | 252 | 226 : | 501 | 79 | 1,644 |
| U. S of America. | 7,2 | 9,0 |  | 5,8 | 8,02 | 6,890 | 11,3 | 05 | ,301 |  |
| Otherna tionalities |  |  |  |  |  |  |  |  |  |  |
| Re-admission. | 215 | 715 | 294 |  | 505 | 300 | 348 | 214 | 139 | 2,926 |
| Tota | 17, | 25 |  |  |  |  | 29, | 3 | 8 | 198,44 |

${ }^{1}$ For eighteen months.

## INDIAN AFFAIRS.

Department of Indian Affairs.-By section 5 of the British North America Act, 1867, the Indians of Canada and the lands reserved for them came under the control of the Dominion Government, and in 1873 an Act of the Canadian Parliament (R.S., c. 81) provided that the Minister of the Interior should be Superintendent General of Indian Affairs and as such have the control and management of the lands and property of the Indians in Canada. The aim of the Department of Indian Affairs is the advancement of the Indians in the arts of civilization, and Agents have been appointed to encourage the Indians under their charge to settle on the reserves and to engage in industrial pursuits.

Tables 10-19, compiled from the Reports of the Department, give for the years named particulars respecting population, religion, education, agriculture and financial status. Table 10 shows that during the year 1916 crops to the value of $\$ 2,246,507$ were raised by the Indians, as compared with $\$ 1,813,619$ in 1915 . Educational advantages are provided for the Indians in day, boarding and industrial schools, and for educational purposes appropriations were made by Parliament for the year 1917-18 amounting to $\$ 734,115$. Several bands of Indians assist, and during the fiscal year $1915-16$ the sum of $\$ 27,975$ was available from this source. As shown in Table 13 the total number of Indian children enrolled as attending school during the fiscal year 1916 was 12,799 , and the average attendance was 8,070 .

The total parliamentary appropriation for the Indian Department for the year 1917-18 is $\$ 1,741,960$. On March 31, 1916, the Indians had to the credit of their trust funds $\$ 8,444,067$, derived from sales of lands and timber and from rentals of grazing and other lands. The amount named represents an increase of $\$ 705,921$ over that of the preceding year.

## ADMINISTRATION

10.-Indian Population in Canala by Provinces, 1911-1917.

| Provinces. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prince Edward Isl'd | 292 | 300 | 292 | 288 | 288 | 302 | 292 |
| Nova Scotia. | 2,020 | 1,969 | 2,018 | 2,050 | 2,042 | 2,119 | 2,031 |
| New Brunswick. | 1,802 | 1,903 | 1,920 | 1,906 | 1,862 | 1,874 | 1,846 |
| Queber. | 11,462 | 12,817 | 12,842 | 12,935 | 13,174 | 13,348 | 13,366 |
| Ontario.. | 22,496 | 26,393 | 26,077 | 26,419 | 26,162 | 26,305 | 26,411 |
| Manitoba. | 6,104 | 10,373. | 10,822 | 10,290 | 10,798 | 11,935 | 11,583 |
| Saskatchewa | 9,439 | 9,545 | 9,699 | 9,779 | 9,775 | 9,962 | 10,646 |
| Alberta. | 8,088 | 8,113 | 8,229 | 8,281 | 8,500 | 8,682 | 8,837 |
| British Columbia | 24,581 | 24,781 | 25,172 | 25,370 | 25,339 | 25,737 | 25,604 |
| Yukon. | 3,500 | 3,500 | 1,389 | 1,528 | 1,528 | 1,528 | 1,528 |
| Northwest Territories. . | 13,871 | 5,262 | 8,030 | 4,928 | 4,003 | 3,769 | 3,764 |
| Indians in Canada | 103,6 | 104,9 | 106,490 | 103,7 | 103,531 | 105,561 | 105,998 |
| Eskimos. . | 4,600 | 4,600 | 3,447 | 3,447 | 3,447 | 3,296 | 3,296 |

## 11.-Distribetion of Indian Population by Age, Sex and Province, with Births and Deaths by Provinces, 1916.



Nots.-There are no official returns for the ages of 21,384 Indisns.

## INDIAN POPULATION

12.-Rellgion of Indian Population by Provinces as at March 31, 1916.


Note.-There are no official returns for the religious belief of 19,943 Indians.
13.-Attendance of Pupils at Indian Schools by Provinces, 1916.

| Provinces. | Number of Pupils on Roll. |  |  | Average Attendance. | Percentage of attendance. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Boys. | Girls. | Total. |  |  |
| Prince Edward Island. | 24. | 24 | 48 | 23 | 47.91 |
| Nova Scotia. | 157 | 141 | 298 | 137 | 45.97 |
| New Brunswick. | 184 | 151 | 28.5 | 174 | 81.05 |
| Quebec. | ${ }^{809}$ | 647 | 1,256 | 802 | 63.85 |
| Ontario.. | 1,881 | 1,753 | 3,634 | 2,083 | 57.59 |
| Manitoba... | 1,036 | 989 | 2,025 | 1,2937 | 60.59 |
| Saskatchewan... | 671 | 725 | 1,396 | 1,057 | 75.71 |
| Alberta.. ${ }^{\text {a }}$ | 515 | 437 | 952 | 800 | 84.03 |
| British Columbia. | 1,296 | 1,218 | 2,514 | 1,528 | 60.78 |
| Yukon.. ${ }_{\text {Nosthw }}$ Territories.. | 94 111 | [58 | 152 239 | 63 176 | 41.44 73.64 |
| Total.... ... | 6,528 | 6,271 | 12,799 | 8,070 | 63.05 |

14.-Literacy of Indian Population by Provinces, 1916.

| Provinces. | Number who speak English. | Number who speak French. | Number who write English. | Number who write French. |
| :---: | :---: | :---: | :---: | :---: |
| Prince Edward Island. | 189 | 1 | 139 | 1 |
| Nova Scotia. . | 1,804 | 10 | 779 | 3 |
| New Brunswick. | 1,323 | 83 | 493 | 14 |
| Quebec... | 3,761 | 2,432 | 1,531 | 944 |
| Ontario. | 14,509 | 1,370 | 8,909 | 82 |
| Manitoba. .. | 4,148 | 103 | 1,946 | 7 |
| Saakatchewan. | 2,444 | 268 | 1,840 | 17 |
| Alberta. . ${ }^{\text {a }}$. | 1,052 | 67 | 792 | 9 |
| British Columbia.. | 8,955 | 123 | 2,898 | 3 |
| Total................. | 38,185 | 4,457 | 19,327 | 1,080 |

## ADMINISTRATION

15.-Acreage and Value of Indian Lands by Provinces, 1916.

| Provinces. | Land cleared butnotunder cultivation. | Land under cultivation. | Value of Lands. |
| :---: | :---: | :---: | :---: |
|  | Acres. | Acres. | \$ |
| Prince Edward Island. | 404 | 397 | 20,214 |
| Nova Scotia. | 3,090 | 2,090 | 88,665 |
| New Brunswick. | 965 | 839 | 71,200 |
| Quebec. | 14,080 | 8,736 | 1,318,210 |
| Ontario.. | 70,256 | 65,749 | 4,827,957 |
| Manitoba.. | 110,078, | 9,997 | 2,303,690 |
| Saskatchewan.. | 851,019 | 27,803 | 10,587,557 |
| Alberta.: ${ }^{\text {a }}$ | 832,448 | 20,119 | 12,646,537 |
| British Columbia. | 257,464 | 37,468 | 13,494,015 |
| Total................. | 2,139,804 | 173,198 | 45,356,045 |

16.-Numbers of Indian Population engaged in Agriculture, Stock-raising and other occupations by Provinces, 1916.

| Provinces. | Agriculture. | StockRaising. | Hunting, Trapping and Fishing. | Other Industries. |
| :---: | :---: | :---: | :---: | :---: |
| Prince Edward Island. | No. 15 | No. | No. ${ }_{45}$ | No. |
| Nova Scotia. | 210 | 71 | 397 | 378 |
| New Brunswick. | 192 | 22 | 153 | 235 |
| Quebec... | 333 | 42 | 849 | 1,128 |
| Ontario. | 1,888 | 889 | 2,416 | 2,379 |
| Manitoba. | 230 | 144 | 1,978 | 358 |
| Saskatchewan. | 828 | 1,037 | 939 | 570 |
| Alberta. | 549 | 850 | 319 | 127 |
| British Columbia., | 2,206 | 1,067 | 4,252 | 1,789 |
| Total.......... | 6,451 | 4,122 | 11,348 | 6,964 |

17.-Area and Yield of Field Crops of Indians by Provinces, 1916.

| Provinces. | Wheat. |  | Oats. |  | Other Grain. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Acres. | Bush. | Acres. | Bush, | Acres. | Bush. |
| Prince Edward Island. Nova Scotia. |  | 136 12 | ${ }_{83}^{35}$ | $\begin{array}{r}525 \\ 1,368 \\ \hline\end{array}$ | 17 | 248 |
| New Brunswick. | $4^{4}$ | 58 | 106 | 2,165 | 24 | 257 |
| Quebec. | 226 | 2,724 | 2;508 | 43,138 | 867 | 13,616 |
| Ontario. | 3,629 | 71,227 | 7,662 | 229,456 | 3,651 | 98,454 |
| Manitoba. | 3,877 | 68,569 | 2,494 | 55,302 | 473 | 7,326 |
| Saskatchewan. | 8,512 | 147,762 | 10,171 | 390,418 | 438 | 5,983 |
| Alberta. | 6,315 | 187,924 | 5,912 | 200,138 | 568 | 14,735 |
| British Columbia.. | 1,937 | 35,150 | 5,488 | 155,922 | 877 | 17,171 |
| Tot | 24,5157 | 513,562 | 34,459 | 1,078,432 | 6,913 | 157,790 |

## INDIAN POPULATION

17.-Area and Yield of Field Crops of Indians by Provinces, 1916-concluded.

18.--Numbers of Farm Live Stock of Indians with Total Values by Provinces, 1916.

| Provinces. | Horses. | Cattle. | Other Stock. | Poultry. | Value of LiveStock and Poultry. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Prince Edward Island. | No. ${ }_{14}$ | No. ${ }_{16}$ | No. ${ }_{2}$ | No. ${ }_{160}$ | ${ }^{5} 1.500$ |
| Nova Scotia. | 63 | 287 | 132 | 1,094 | 10,912 |
| New Brunswick. | 42 | 96 | 13 | 494 | 22,053 |
| Quebec. | 843 | 1,903 | 1,409 | 11,125 | 141,596 |
| Ontario.. | 3,740 | 5,812 | 5,630 | 53,341 | 586,829 |
| Manitoba. | 1,384 | 2,523 | 132 | 2,903 | 212,758 |
| Saskatchewan.. | 3,931 | 7,389 | 529 | 5,508 | 808.530 |
| Alberta.. ${ }^{\text {a }}$, | 10,349 | 7,952 | 502 | 4,121 | 934,627 |
| British Columbia. | 14,949 | 11,210 | 5,226 | 29,650 | 961,287 |
| Total. | 35,315 | 37,188 | 13,575 | 108,396 | 3,680,092 |

19.-Sources and Value of Income of Indians, 1916.

| Provinces. | Value of |  |  | Re-ceived from Land Rentals. | Earned by |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Farm Products including Hay. | Beef Sold. | Wages Earned. |  | Fishing. | Funting and Trapping | Other Industries. |  |
| P. E. I |  | 160 | \% | $\$$ | 4,500 | 40 |  |  |
| Nova Scotia | 18,990 | 4,095 | 45,700 | 410 | 4,920 | 9,360 | 41,395 | 124,870 |
| N.Brunswick | 6,482 | 200 | 56,820 | 25 | 7,460 | 1,172 | 8,540 | 80,999 |
| Quebec... | 146,678 | 25,306 | 235,453 | 11,627 | 4,865 | 69,268 | 69,044 | 562,241 |
| Ontario. | 603,918 | 33,138 | 607,672 | 79,378 | 145,565 | 160,518 | 106,235 | 1,726,424 |
| Manitoba. | 162,451 | 13,891 | 124,504 | 2,254 | 92,598 | 233,981 | 60,055 | 689,734 |
| Saskatchewan. | 349,362 | 74,059 | 71,215 | 7,712 | 24,660 | 133,412 | 69,330 | 729,750 |
| Alberta. | 301,711 | 62,513 | 103,986 | 13,025 | 5,795 | 30,654 | 65,209 | 582,893 |
| Br.Columbia | 655,490 | 94,417 | 285,023 | 2,695 | 365,165 | 152,181 | 168,490 | 1,723,461 |
| Total. | 2,246,507 | 307,779 | 1,530,373 | 117,126 | 655,528 | 790,886 | 593,298 | 6,241,497 |

${ }^{1}$ Includes estimated value of meat and fish used for food.

## ADMINISTRATION

## PUBLIC WORKS.

Since Confederation and before, the Department of Public Works has been known as the constructing department. In 1879, the railways and canals were placed under control of a new department; the building and maintenance of penitentiaries were transferred to the Department of Justice, the maintenance and construction of lighthouses to the Marine and Fisheries Department and the smaller drill halls and armouries to the Department of Militia and Defence. The work of the Department of Public Works is now divided into three principal branches, viz., Engineering Branch, the Architect's Branch and the Telegraph Branch. The National Gallery of Canada is also administered by this Department. (See Year Book of 1914, p. 645.)

Engineering.-The Engineering Branch comprises the construction and repair of wharfs, piers, breakwaters, dams, weirs, bank and beach protection works; the improvement of harbours and rivers by dredging; the construction, maintenance and operation of government dredging plant; the construction and maintenance of graving docks; the construction, maintenance and working of slides and booms; the construction and maintenance of interprovincial bridges and approaches thereto, and of bridges on highways of federal importance in the Northwest Territories and the maintenance of military roads; also hydrographic and ordinary surveys and examinations, inclusive of precision levelling and geodetic measurements which are required for the preparation of plans, reports and estimates; the testing of cements, etc. The Branch has charge of about 1,700 harbour works, 3 graving docks, 4 slide and boom works, interprovincial bridges, 51 dredges and 84 tugs and other dredging plant.

Architecture.-The Architect's Branch builds and maintains government buildings, post offices, custom houses, examining warehouses, and constructs quarantine, immigration and experimental farm buildings, armouries and drill halls, land offices and telegraph offices.

Telegraphs.-The Telegraph Branch has control over the construction, repair and maintenance of all government-owned telegraph lines and cables. These lines are located in the provinces of Nova Scotia, New Brunswick, Quebec, Ontario, Saskatchewan, Alberta, British Columbia and the Yukon, and statistics relating to them are given on page 480.

Graving Docks.-There are three graving or dry docks completed and owned by the Canadian Government, and a fourth is under contract. The dimensions of these three docks are shown in Table 20. The dock at Kingston, Ontario, is under lease to the Kingston Shipbuilding Company. The dock under contract is to be at Lévis, Quebec, east of the old dock, and is to be 1,150 feet long, divided into two parts ( 650 and 500 feet, respectively, ) and 120 feet wide; it is to have a depth at high water of 40 feet. It will probably cost about $\$ 2,750,000$. Under the Dry Dock Subsidies Act, 1910 (9-10 Edw. VII, c. 17), ${ }^{1}$ several docks have been subsidized by payments of 3 or $3 \frac{1}{2}$ p.c. per annum on the original cost for a given number of years, as shown by Table 21.
'For description of this Act, see Canads Year Book, 1910, p. xxviii.

PUBLIC WORKS.
20.-Dimensions of Graving Docks owned by the Dominion Government.

| Location. | Leagth. | Width at |  |  | Depth of water on sill. | Rise of tide. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Coping. | Bottom. | Entrance. |  | Spring. | Neap. |
|  | Feet. | Feet. | Feet. | Feet. | Feet. | Feet. | Feet. |
| Lévis, Que... | 600 | 100 | 73 | 62 | 26\% | $26 \frac{1}{2}$ | $20 \frac{1}{2}$ |
| Esquimalt,B.C. | 430 | 90 | 41 | 65 | $26 \frac{1}{2}$ | 7 to 10 | 3 to 8 |
| Kingston, Ont.. | 315 | 70 | 47 | 69 | $14 \frac{1}{2}$ \& $16 \frac{1}{2}$ | - | - |

## 21.-Dimensions and Cost of Graving Docks subsidized under the Dry Dock Subsidies Act, 1910.

| Location. | Length. | Width. | Depth over sill. | Total cost. | Subsidy. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Collingwood, Ont. .$\text { " No. } 2 \ldots$ | Feet. <br> 350 <br> 420 | Feet. 55 | Feet. | \$ |  |
|  |  |  | 16. | 500,000 | 3 p.c. for 20 years. |
|  |  | 95 | 16 | 306,965 | 3 p.c. for 20 years. |
| Port Arthur, Ont... | 700 | 66 | 15 | 1,258,050 | 3 p.c. for 20 years. |
| Montreal, Que. .. .. | 600 | 100 | 271 | 3,000,000 | $3 \frac{1}{2}$ p.c. for 35 years. |
| Prince Rupert, B.C.... | 600 | 100 | 25 | 2,199,168 | $3 \frac{1}{2}$ p.c. for 25 years. |
| Sault Ste. Marie, Ont.. | 650 | 77 | 181 | 1,326,529 | 3 p.c. for 20 years. ${ }^{1}$ |
| Toronto, Ont. | 300 | 80 | 15 | 894,121 | 3 p.c. for 20 years. ${ }^{1}$ |
| St. John, N.B.. | 1,150 | (Plans those of | not yet the new | approved, <br> Lévis dock. | but will be similar to |

${ }^{1}$ Not yet commenced.
Expenditure and Revente.-Table 22 shows the expenditure and revenue for the fiscal years $\mathbf{1 9 1 2 - 1 6}$ of the Public Works Department of the Dominion Govermment. For the year 1915-16, the expenditure was $\$ 19,539,298$, as compared with $\$ 29,283,317$ in 1914-15, a decrease of $\$ 9,744,019$. The revenue for the year shows an increase of $\$ 22,470$, accounted for by increases in slides and booms, graving dock and casual returns amounting to $\$ 87,724$ and decreases in rents and telegraph returns of $\$ 65,254$.

ADMINISTRATION.
22.-Erpenditure and Revenue of the Public Works Department for the fiscal years 1912-1916.

Expexditure.

| Items. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $3,168.087$ | $3,021,001$ | 7,608135 | 9 | \$ |
| Harbour and river works.. | 3,168,987 | 3,921,001 | 7,696,135 | 10,529,346 | 7,401,896 |
| Slides and Booms. | 5,029,147 | 5,980,030 | 6,228,303 | 5,120,611 | 3,875,713 |
| Roads and Bridges. . | 197,628 | 152,581 | 130,628 | 76,165 | 114,418 |
| Public buildings.. | 4,141,327 | 7,420,885 | 12,397,465 | 11,648,645 | 6,857,206 |
| Telegraphs. | 641,759 | 741,145. | 768,378 | 1,003,590 | -742,692 |
| Miscellaneous.. | 574,985 | 504,362 | 602,993 | 571,341 | 501,631 |
| Total. | 13,928,667 | 18,844,224 | 27,991,337 | 29,283,317 | 19,539,298 |

Revenue.

| Slides and booms. | 87,790 | 110,108 | 76,883 | 80,598 | 108,228 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Graving docks. | 50,615 | 47,928 | 61,490 | 35,305 | 64,216 |
| Rents. | 33,355 | 88,852 | 113,670 | 111,098 | 30,129 |
| Telegraph lines. | 200,330 | 215,526 | 253,112 | 225,512 | 181,227 |
| Casual revenue.. | 46,541 | 25,780. | 37,302 | 33,923 | 65,106 |
| Total. | 418,631 | 488,194 | 542,457 | 486,436 | 508,906 |

## HARBOUR COMMISSIONS.

Certain of the more important Canadian harbours are controlled by Harbour Commissions, constituted by special act of the Dominion Parliament for each case. The number of commissioners varies, but is, in most cases, three. In every case the property of the harbour is vested in the commission, which has authority to administer the harbour, appoint the harbour master, make by-laws and regulations concerning the harbour and ships using it, fix and collect dues payable for the use of the harbour and control the expenditure of the revenue received from this source. For the purpose of harbour construction and improvement a commission may expropriate land and borrow money on debentures issued against security of the real and other property of the harbour. In the cases of Quebec and Montreal, money has been advanced by the Dominion Government against such debentures. The commissions are under the inspection of the Marine Department and make reports to the Minister of Marine. The harbours at the following places are administered by commissions, the date given in each case being that of the Act of Parliament under which the commission received its present constitution and powers: Pictou (1879); Quebec (1899); Three Rivers (1882); Montreal (1894); Belleville (1889); Toronto (1911) ; Hamilton (1912); Winnipeg and St. Boniface (1912); Vancouver (1913); New Westminster (1913); North Fraser (1913).

## PUBLIC HEALTH AND QUARANTINE.

The Public Health Service of the Dominion, considered chiefly in connection with the relations of Canada with other countries, is under the charge of a Director General of Public Health, whose office is a branch of the Department of Agriculture. The report for the year 1915-16 of the Director General of Public Health, printed as an Appendix to the Report of the Minister of Agriculture, describes the prevalence in foreign countries of endemic diseases, including Asiatic cholera, bubonic plague, smallpox, typhus fever, leprosy, beri-beri, enteric fever and trench fever, and of the inspection work of the quarantine stations at Canadian ports of entry.

During the year 1915-16, 1,582 vessels and 138,576 persons were inspected at 8 quarantine stations, and there were 80 admissions into hospitals. The corresponding figures for 1914-15 were 1,458 vessels and 349,190 persons inspected and 542 admissions to hospitals.

## PUBLIC DEFENCE.

Military Forces.-Before the outbreak of the war, the Canadian Militia consisted of a Permanent Force, which on March 31, 1914, numbered 3,000 officers, non-commissioned officers and men, and an Active Militia, which at the same date numbered 5,615 officers and 68,991 non-commissioned officers and men. Since the outbreak of the war on August 4, 1914, successive contingents of troops of all arms have been recruited, equipped, trained and despatched by the Canadian Government to Great Britain for active service as part of the Imperial forces.

Up to September 1, 1917, there had been sent overseas for active service in the Canadian Expeditionary Force 331,578 officers, noncommissioned officers and men. ${ }^{1}$ At the same date there were training in Canada, in camps in the various military districts, 831 officers and 20,719 other ranks, a total of 21,550 . In addition, there have been maintained on guard duty in Canada (canals, certain railway bridges and public buildings) about 11,830 of all ranks.

Table 23, showing the Militia Expenditure and Revenue for the five fiscal years 1912 to 1916, is taken from the Report for the year ended March 31, 1916, of the Militia Council. This table shows that the ordinary expenditure of the Department of Militia and Defence for the year ended March 31, 1916, was $\$ 4,681,502$, as compared with $\$ 9,991,817$ for 1915 and $\$ 10,988,162$ for 1914 . The ordinary revenue amounted to $\$ 292,273$ for the year ended March 31, 1916, as compared with $\$ 125,785$ for 1915 and $\$ 105,962$ for 1914.

[^54]
## ADMINISTRATION

23.-Expenditure and Revemue of Militia for the Fiscal Years 1912-1916.

| Schedule. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Allowances for drill instruction, |  |  |  |  |  |
| Annual drill. | 1,169,068 | 1,85,474 | 1,830 | 6,513 |  |
| Cadet corps | 35,947 | 1,93,723 | 392,207 | +327,679 | 84,972 |
| Clothing and necessari | 475,175 | 508,788 | 699,572 | 510,810 |  |
| Contingencies-including guards of honour, escorts and salutes | 39,920 | 47,674 | 49,957 | 36,557 | 1,670 |
| Custom dues | 143,069 | 38,424 | 47,630 | 115,791 | ,004 |
| Departmental library | 975 | 1,010 | 1,055 | 1,113 | 985 |
| Domidion arsenal. | 236,790 | 325,863 | 358,315 | 265,262 | 299,678 |
| Engineer services. | 487,222 | 791,895 | 1,452,729 | 1,111,196 | 600,755 |
| Grants towards construction of City Regimental Armouries.. |  | 12,0 |  |  |  |
| Grants to artillery and rifle associations and to regimental bands. | 56,270 | 64,315 | 79,506 | 605 | ,878 |
| Gratuitiea and compassionste allowances. | 2,55 | 2,170 | 4,300 | 15,190 | 500 |
| Maintenance of military properties. | 80,937 | 88,925 | 107,214 | 209,231 | 175,053 |
| Pay of Insp.-Gen. and military members of Militia Council (statutory) | 21,600 | 21,600 | 21,600 | 1 | 50 |
| Pay of headquarters staff | 66,178 | 78,617 | 74,002 | 72,050 | 74,956 |
| Pay of division and district staffs | 99,300 | 115,844 | 123,772 | 107,410 | 109,241 |
| Permanent force-pay, provisions and supplies. | 1,946,636 | 2,200,183 | 2,198,453 | 2,114,493 | 2,116,245 |
| Printing and stationery | 53,489 | 59,828 | 72,209 | 69,880 | 70,000 |
| Royal Military College | 134,949 | 131,241 | 149,039 | 153,987 | 135,685 |
| Salaries and wages of civil employees. | 155,645 | 170,700 | 197,823 | 243,936 | 232,797 |
| Schools of instruction-pay of active militia attending. |  | 77, | 7,847 | 164,669 | 78,898 |
| Topographical survey | 24,714 | 35,055 | 39,059 | 35,038 | 25,440 |
| Transport and ireigh | 138,230 | 175,054 | 199,247 | 208,774 | 60,567 |
| Warlike stores.. | 531,332 | 683,080 | 703,375 | 496,867 | - |
| Coronation contingents. | 134,835 | - |  |  |  |
| Training Areas |  |  |  | 234,592 | 233, 085 |
| Miscellaneous small yotes | 21,047 | 17,202 | 6,508 | - |  |
| Ordnance, ammunition, tents, ragons and equipment gen erally, excepting clothing, saddlery and harness. | 649,276 | 372,486 | 967,804 | 593,167 | - |
| Saddicry ard harbess. | 6,713 | 942 | 103,732 | 146,006 |  |
| Clothing-reserve stock and outfitting new units. | 110,468 | 100,000 | 217,419 | 219,077 | - |
| Ross rifles, spare parts, bayonets, scabbards, arm chests and inspection. | 419,937 | 552,07 | 640,61 | 478,5 | - |
| Lands and construction of new rifle ranges. | 183,703 | 341,208 | 51,237 | 29,216 | - |
| Total ordnance, equipment, lands, etc. . <br> Total Militia expenditure. | $1,370,097$ $7,579,884$ | $1,566,709$ $\mathbf{9 , 1 1 2 , 3 9 6}$ | 1,980,805 | $\begin{aligned} & 1,466,069 \\ & 9,991,817 \end{aligned}$ | 4,681,502 |

[^55]
## PUBLIC DEFENCE

23.-Expenditure and Revenue of Militia for the Fiscal Years 1912-1916 - concluded.

| Schedule. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ |
| Aid to civil power (statutory and recoverable from municipalities) | 716 | 78 | 187,857 | 68,800 |  |
| Toronto barracks-special account... | 2,012 | 148,889 | 45 | 87,768 | 25 |
| Winnipeg barracks-special account. |  | 137,053 |  |  |  |
| Point St. Charles Armoury |  |  | - | $\stackrel{\rightharpoonup}{7}$ |  |
| Montreal barracks site | - | 180,000 | - | 217 |  |
| Transferred from Public Works Department. |  | 940 | 221,849 | 19,722 |  |
| Pensions-Rebellion, 1837-8..... | 80 | 40 |  |  |  |
| Pensions-Fenian Raids. ${ }^{\text {a }}$. | 1,82S | 1,822 | 1,788 | 2,819 | 1,896 |
| Peasions-Northwest Rebelion and general. | 17,118 | 17,689 | 17,834 | 20,227 | 21,164 |
| Pensions-Pension Act, 1901. | 45,698 | 50,470 | 70,940 | 79,845 | 82,877 |
| Pensions-European War ... |  |  |  |  | 307,693 |
| Total pensio | 64,724 | 70,021 | 90,562 | 102,8 | 413,630 |
| Civil Government-salaries. | 137,251 | 146,718 | 157,137 | 168,545 | 172,534 |
| Civil Goverament-contingencies | 11,963 | 22,029 | 27,997 | 20,216 | 28,351 |
| Total Civil Government. | 149,214 | 168,747 | 185,134 | 188,761 | 200,885 |
| Revenue received- |  |  |  |  |  |
| Militia. | 59,829 | 51,359 | 36,641 | 64,831 | 192,300 |
| Casual | 1,806 | 2,601 | 1,790 | 1,625 | 41,318 |
| Royal Military College. | 34,286 | 36,785 | 36,817 | 32,047 | 35,142 |
| Pension Act, 1901. | 25,209 | 28,393 | 30,714 | 27,282 | 23,513 |
| Total revenue, | 121,130 | 119,228 | 105,962 | 125,785 | 292,273 |

Expenditure on Account of War Appropriation.-Table 24 shows that the total expenditure on account of war appropriation for the year ended March 31, 1916, was $\$ 166,197,755$, of which $\$ 160,433,416$ ( $\$ 122,840,863$ paid out in Canada and $\$ 37,592,553$ paid out in England) was expended by the Department of Militia and Defence and $\$ 5,764,339$ was expended by other departments. To these sums may be added the expenditure on account of war appropriation prior to April 1, 1915, viz., $\$ 60,750,476$, of which $\$ 53,176,614$ ( $\$ 44,467,958$ paid out in Canada and \$8,708,656 paid out in England) was expended by the Department of Militia and Defence and $\$ 7,573,862$ by other Departments. Altogether, therefore, the grand total to March 31, 1916, amounted to $\$ 226,948,231$, of which $213,610,030$ was expended by the Department of Militia and Defence and $\$ 13,338,201$ by other Departments. The details of the expenditure to March 31, 1915, were given in Table 23 of the Year Book of 1915 , pages 649 and 650 .

## ADMINISTRATION

## 24.-Expenditure on Account of War Appropriation for the Year ended March 31, 1916.

| Items of Expenditure. | Paid out |  | Total. |
| :---: | :---: | :---: | :---: |
|  | in Canada year ended Mar. 31, 1916. | in London, Eng., year ended Mar. 31, 1916. |  |
| (A) By the Department of Militia and Defence:- | \$ | \$ | \$ |
| Pay and allowances (includes subsistence, <br> billeting, rations and assigned pay). | 58,574,116 | 29,720,759 | 88,294,875 |
| Clothing (except boots). | 12,4834,847 | $\begin{array}{r}2,010,899 \\ 431,995 \\ \hline\end{array}$ | 12,493,465 |
| Boots and repairs to boots. | 4,584,127 | 123,995 | 4,708,122 |
| Necessaries (kit bags and articles of kits). | 2,642,598 |  | 2,642,598 |
| Outfit allowances. | 841,314 | 779,624 | 1,620,938 |
| Saddlery and horse equipment... ${ }^{\text {a }}$ ( ${ }^{\text {a }}$. | 1,039,057 | 317,151 | 1,356,208 |
| Motor trucks, ambulances and other vehicles. | 1,545,722 | 212,272 | 1,757,994 |
| Accoutrements.... | 1,531,911 | 116,175 | 1,648,086 |
| Binoculars, telescopes, heliographs, prisms, compasses, range finders. | 314,834 | 5,905 | 320,739 |
| Drugs and surgical instruments... | 368,807 | 998,511 | 1,367,318 |
| Dominion Arsenal (from war vote). | 967,418 |  | 967,418 |
| Dominion Cartridge Co., ammunition. | 1,982,384 | , | 1,982,384 |
| Ammunition from other sources. . |  | 7,021 | -7,021 |
| Ross Rifle Co., rifles and bayonets. | 4,206,644 | - | 4,206,644 |
| Machine guns. | 1,570,053 | - | 1,570,053 |
| Vickers Limited, payment on account. | 365,000 | - | 365,000 |
| Heavy ordnance. | 345,389 |  | 345,389 |
| Travelling and transport, sea. | 4,730,644 | 120,900 | 4,851,544 |
| Travelling and transport, land. | 3,681,376 | 153,431 | 3,834,807 |
| Forage and stabling. | 441,415 | 802,248 | 1,243,663 |
| Pay, etc., of Censors. | 163,177 |  | 163,177 |
| Pay of civil employees. | 948,704 | 15,722 | 964,426 |
| Rent, water, fuel and light. | 843,334 | 65,198 | 908,532 |
| Stores (furniture, bedding and utensils). | 3,532,525 | 1,392,253 | 4,924,778 |
| Engineer services and works... | 1,764,790 | 153,814 | 1,918,604 |
| Funeral expenses., | 23,088 | 3,273 | 26,361 |
| Recruiting (medical examination, attestation and advertising). | 152,840 | 196 | 153,036 |
| Telegrams, telephones, cables and postage | 215,678 | 34,261 | 249,939 |
| Printing and stationery : | 293,985 | 92,759 | 386,744 |
| Conservancy and contingencies. | 261,135 | 32,099 | 293,234 |
| Purchase of remounts, expenses of purchasers, ete.... | 1,141,189 | 2,092 | 1,143,281 |
| Customs dues... . | 1,427,471 | 2,092 | 427,471 |
| Lindsay arsenal site. | 22,725 | - | 22,725 |
| Total. | 122,840,863 | 37,592,553 | 160,433,416 |

This sum includes items for saddlery and horse equipment, clothing, necessaries, and boots purchased from the War Office.

## PUBLIC DEFENCE

24.-Expenditure on Account of War Appropriation, for the Year ended March 31, 1916-concluded.


## ADMINISTRATION

War Pensions.-A Board of Pension Commissioners for Canada, consisting of three members, was created by Order in Council of June 3, 1916, with exclusive jurisdiction and authority to deal with the granting and payment of naval and military pensions and other allowances to persons in the Canadian Naval Forces and the Canadian Expeditionary Force and to their dependents. There is no appeal from the decisions of the commission, but applicants may appear in person or by counsel before the commission to present complaints. The scale of pensions was revised by Order in Council of October 22, 1917 Under the new scale twenty classes are provided ranging from five p.c. disablement up to one hundred p.c., or total disablement. The pensions range for the rank and file, according to the class of disablement, from $\$ 30$ up to $\$ 600$ per annum, and for disablement from $\$ 600$ for rank and file up to $\$ 2,700$ for persons of and above the rank of commodore or brigadier-general. A further annual allowance is made for each child, which, for all men below the rank of commander or lieutenant-colonel, ranges, according to class of disablement, from $\$ 6$ up to $\$ 96$. Married men, not above the rank of naval sub-lieutenant or lieutenant of militia, receive an additional allowance which ranges, for all ranks, from $\$ 4.80$ up to $\$ 96$. Men of these same ranks may also receive an addition not exceeding $\$ 300$ if totally disabled and helpless. In the case of dependents of deceased sailors and soldiers, payments to widows are made only until re-marriage, and to dependent parents and brothers and sisters only when there is no widow or child. The age limit for the payment of pensions to children is 16 for boys and 17 for girls. This scale of pensions, which is set out in tabular form in Tables 25 and 26, replaces that which was recorded in the Canada Year Book, 1915, pp. 650 and 651 . The total amount of the European war pensions paid by the Canadian Department of Militia and Defence and the Board of Pension Commissioners from May, 1915, to March 31, 1917, is $\$ 2,148,033.77$
25.-Scale of Annual Pensions granted to Dependents of Deceased Sailors and Soldiers of the Canadian Naval Forces and the Canadian Expeditionary Force, as amended to October 22, 1917.

| Rank or Rating. | Widows or <br> Dependent Parents. | Each child or each dependent Brother or Sister. |
| :---: | :---: | :---: |
| All ratings below Petty Officier (Naval); Rank and File (Militia) | $\begin{aligned} & 8 \mathrm{cts} . \\ & 480.00 \end{aligned}$ | $\$ \mathrm{etz} .$ |
| Chief Petty Officer and Petty Officer (Naval); Squad. Battery or Company Sergt.-Major and Q.-M. Sergt., | 510.00 | 96.00 |
| Naval Cadet and Midshipman (Naval); Master Gunner |  |  |
| not Warrant Officer, Regimental Sergt--Major, not W. O., Regimental Q.-M. Sergt. (Militia). | 620.00 | 96.00 |
| Warrant Officer and Chief Warrant Officer (Naval); Warrant Officer (Militia) | 680.00 | 96.00 |
| Sub-Lieutenant (Naval); Lieutenant (Militia). | 720.00 | 96.00 |
| Lieutenant (Naval); Captain (Militia). | 800.00 | 96.00 |
| Lieutenant Commander (Naval); Major (Militia) | 1,008.00 | 96.00 |
| Commander and Captain under three years' seniority (Naval); Lieutenant-ColoneI (Militia). | 1,248.00 | 120.00 |
| Captain (Naval); Colonel (Militia) . ... | 1,512.00 | 120.00 |
| Commodore and higher ranks (Naval);Brigadier-General and higher ranks (Militia) | 2,160.00 | 120.00 |

## 26.--Scale of Amnual Pensions to Disabled Sailors and Soldiers of the Canadian Naval Forces and the Canadian Expeditionary

 Force, as amended to October 22, 1917.(a) Payable to the disabled man.
(b) Payable in addition for each child.

Percentage of Disability and Amount of Pensions and Allowances.

| Rank or Rating. |  | $\begin{gathered} \text { Class } 1 \\ 100 \\ \text { p.c. } \end{gathered}$ | $\begin{gathered} \text { Ciass } 2 \\ 99-95 \\ \text { p. c. } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { Class } 3 \\ 9490 \\ \text { p. c. } \end{gathered}\right.$ | $\begin{gathered} \text { Class } 4 \\ 8985 \\ \text { p.c. } \end{gathered}$ | $\begin{gathered} \text { Class } 5 \\ 8480 \\ \text { p. c. } \end{gathered}$ | $\begin{gathered} \hline \text { Class } 6 \\ 79.75 \\ \text { p.c. } \end{gathered}$ | $\begin{gathered} \hline \text { Class } 7 \\ 74-70 \\ \text { p.c. } \end{gathered}$ | $\begin{gathered} \hline \text { Class } 8 \\ 69-65 \\ \text { p.c. } \end{gathered}$ | $\begin{gathered} \hline \text { Class } 9 \\ \text { 64-60 } \\ \text { p.c. } \end{gathered}$ | $\begin{aligned} & \text { Case } 10 \\ & 59-55 \\ & \text { p.c. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All ratings below Petty Officer | (a) | ${ }_{600.00}^{c}$ | ${ }_{570.0}^{8} .$ | $\begin{array}{cc} 8 & c \\ 540.00 \\ 50 \end{array}$ | $510.0$ | $\begin{gathered} 8 c \\ 480.00 \end{gathered}$ | $\underset{\substack{8 \\ 450.00}}{c}$ | $\begin{array}{cc} 5 & c \\ 420.00 \end{array}$ | $\begin{gathered} \$ 0 . \\ 390.00 \end{gathered}$ | $\begin{gathered} \$ c \\ 360.00 \end{gathered}$ | $\${ }_{380.00}^{c}$ |
| (Naval); Rank and File (Militia) | (b) | 96.00 | 93.00 | 90.00 | 87.00 | 84.00 | 81.00 | 78.00 | 75.00 | 72.00 | 66.00 |
| Chief Petty Officer and Petty Officer (Naval); Squad., Battery or Co. |  |  |  |  |  |  |  |  |  |  |  |
| Sgt.-Maj. and Q.-M. Sgt, Staff | (a) | 637.50 | 605.63 | 573.75 | 541.88 | 510.00 | 478.13 | 446.25 | 414.38 | 382. 50 | 350.63 |
| Sgt. and Colour Sgt. (Militia). | (b) | ${ }^{96} .00$ | 93.00 | ${ }_{697}^{90.00}$ | 87.00 | 84.00 | 81.00 | 78.00 | ${ }^{750.00}$ | 72.00 | ${ }_{6}^{66.00}$ |
| Naval Cadet \& Midshipman(Naval); Master Gunner not Warrant Off., | (a) | 775.00 96.00 | 736.25 93.00 | 697.50 90.00 | 658.75 87.00 | 620.00 84.00 | 581.25 81.00 | 542.50 78.00 | 503.75 75.00 | 465.00 72.00 | 426.25 |
| Regimental Sgt.-Maj., not W. O., Regimental Q.M. St, (Militia).. |  |  |  |  |  |  |  |  |  |  |  |
| Warrant Officer and Chief Warrant | (a) | 850.00 | 807.50 | 765.00 | 722.50 | 680.00 | 637.50 | 595.00 | 552.50 | 510.00 | 467.50 |
| Officer (Naval); Warrant Officer (Militia). | (b) | 96.00 | 93.00 | 90.00 | 87.00 | 84.00 | 81.00 | 78.00 | 75.00 | 72.00 | 66.00 |
| Sub-Lieutenant (Naval); Lieutenant. | (a) | 900.00 | 855.00 | 810.00 | 765.00 | 720.00 | 675.00 | 630.00 | 585.00 | 540.00 | 495.00 |
| (Militia) | (b) | 96.00 | 93.00 | 90.00 | 87.00 | 84.00 | 81.00 | 78.00 | 75.00 | 72.00 | 66.00 |
| Additional allowance to married men of above Ranks. |  | 96.00 | 91.20 | 86.40 | 81.60 |  | 72.00 | 67.20 | 62.40 | 57.60 | 52.80 |
| Licutenant (Naval) and Captain | (a) | 1,000.00 | 950.00 | 900.00 | 850.00 | 800.00 | 750.00 | 700.00 | 650.00 | 600.00 | 550.00 |
| (Militia) | (b) | 96.00 | 93.00 | 90.00 | 87.00 | 84.00 | 84.00 | 84.00 | 84.00 | 84.00 | 66.00 |
| Lieutenant Commander (Naval); and | (a) | 1,260.00 | 1,197.00 | 1,134.00 | 1,071.00 | 1,008.00 | 945.00 | 882.00 | 819.00 | 756.00 | 693.00 |
| Major (Militia) | (b) | 96.00 | 96.00 | 96.00 | 96.00 | 96.00 | 96.00 | 96.00 | 96.00 | 96.00 | 66.00 |
| Commander and Captain, under 3 | (a) | 1,560.00 | 1,482.00 | 1,404.00 | 1,326.00 | 1,248,09 | 1,170.09 | 1,092.00 | 1,014.00 | 936.00 | 858.00 |
| years' seniorite (Naval); Lieuten-ant-Colonel (Militia). | (b) | 120.00 | 120.00 | 120.00 | 120.00 | 120.00 | 120.00 | 120.00 | 120.00 | 120.00 | 66.00 |
| Captain (Naval); Colonel (Militia) | (a) | 1,890.00 | 1,795.50 | 1,701. 00 | 1,606.50 | 1,512.00 | 1,417.50 | 1,323.00 | 1,228.50\| | 1,134.00 | 1,039.50 |
|  | (b) | 120.00 | 120.00 | 120.00 | 120.00 | 120.00 | 120.00 | 1, 120.00 | 120.00 | 120.00 | 166.00 |
| Commodore \& higher ranks (Naval); | (a) | 2,700.00 | 2,565.00 | 2,430.00 | 2,295.00 | 2,160.00 | 2,025.00 | 1,890.00 | 1,755.00 | 1,620.00 | 1,485.00 |
| Brigadier-General and higher ranks (Militia). | (b) | 120.00 | 120.00 | 120.00 | 120.00 | 120.00 | 120.00 | 120.00 | 120.00 | 120.00 | 66.00 |

26.-Scale of Annual Pensions to Disabled Sailors and Soldiers of the Canadian Naval Forces and the Canadian Expeditionary Force, as amended to October 22, 1917-concluded.
(a) Payable to the disabled man.
(b) Payable in addition for each child.

Percentage of Disabtlity and Amount of Penstons and Allowances.

| Rank or Rating. |  | $\left\lvert\, \begin{gathered} \text { Class 11 } \\ 54-50 \\ \text { p. c. } \end{gathered}\right.$ | Class 12 $49-45$ p. c. | Class 13 44-10 p. c. | $\begin{gathered} \text { Class 14 } \\ 39-35 \\ \text { p. c. } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { Class 15 } \\ 34-30 \\ \text { p. c. } \end{gathered}\right.$ | $\begin{gathered} \text { Class 16 } \\ \text { 29-25 } \\ \text { p. c. } \end{gathered}$ | $\begin{aligned} & \text { Class } 17 \\ & 24-20 \\ & \text { p. c. } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { Class 18 } \\ 19-15 \\ \text { p.c. } \end{gathered}\right.$ | $\begin{gathered} \text { Class } 19 \\ \text { 14-10 } \\ \text { p. c. } \end{gathered}$ | $\begin{gathered} \text { Class } 20 \\ 9-5 \\ \text { p. e. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Ratings below Petty Officer | (a) | ${ }_{300.00}$ | ${ }_{270.00}{ }^{\text {c }}$ | $\begin{array}{r} \$ 1 \\ 240.00 \end{array}$ | $\underset{210.00}{c}$ | $\begin{array}{cc} 9 & e^{2} \\ 180.00 \end{array}$ | $\begin{array}{cc} 8 \\ 150.00 \end{array}$ | $\stackrel{\$}{c}$ | $\begin{array}{lr} \$ & c \\ 90.00 \end{array}$ | $\begin{gathered} 8 \\ 60.00 \end{gathered}$ | $3 . c$ |
| (Naval); Rank and File (Militia). | (b) | 60.00 | 54.00 | 48.00 | 42.00 | 36.00 | 30.00 | 24.00 | 18.00 | 12.00 | 6.00 |
| Chief Petty Officer and Petty Officer | (a) | 318.75 | 286.88 | 255.00 | 223.13 | 191.25 | 159.38 | 127.50 | 95.63 | 63.75 | 31.88 |
|  | (b) | 60.00 | 54.00 | 48.00 | 42.00 | 36.00 | 30.00 | 24.00 | 18.00 | 12.00 | 6.00 |
| Staff Sgt. \& Colour Sgt. (Militıa). | (a) | 387.50 | 348.75 | 310.00 | 271.25 | 232.50 | 193.75 |  |  | 77.50 | 38.75 |
| (Naval); Master Gunner, | (b) | 60.00 | 54.00 | 48.00 | 42.00 | 36.00 | 30.00 | 24.00 | 18.00 | 12.00 | 6.00 |
| Warrant Off., Regimental Sgt.Maj., not W.O., Regimental Q.-M. Sgt. (Militia). |  |  |  |  |  |  |  |  |  |  |  |
| Warrant Officer and Chief Warrant | (a) | 425.00 | 382.50 | 340.00 | 297.50 | 255.00 | 212.50 | 170.00 | 127.50 | 85.00 | 42.50 |
| Officer (Naval); Warrant Officer (Militia). | (b) | 60.00 | 54.00 | 48.00 | 42.00 | 36.00 | 30.00 | 24.00 | 18.00 | 12.00 | 6.00 |
| Sub-Lieutenant (Naval); Lieutenant | (a) | 450.00 | 405.00 | 360.00 | 315.00 | 270.00 | 225.00 | 180.00 | 135.00 | 90.00 | 45.00 |
| (Militia). | (b) | 60.00 | 54.00 | 48.00 | 42.00 | 36.00 | 30.00 | 24.00 | 18.00 | 12.00 | 6.00 |
| Additional allowance to married men of above Ranks. |  | 48.00 | 43.20 | 38.40 | 33.60 | 28.80 | 24.00 | 19.20 | 14.40 | 9.60 | 4.80 |
| Lieutenant (Naval); Captain (Militia) | (a) | 500.00 | 450.00 | 400.00 | 350.00 | 300.00 | 250.00 | 200.00 | 150.00 | 100.00 | 50.00 |
|  | (b) | 60.00 | 54.00 | 48.00 | 42.00 | 36.00 | 30.00 | 24.00 | 18.00 | 12.00 | ${ }^{6.00}$ |
| Lieutenant Commander (Na | (a) | 630.00 | 567.00 | 504.00 | 441.00 | 378.00 | 315.00 | 252.00 | 189.00 | 123.00 | 63.00 |
| Major (Mulitia) | (b) | 60.00 | 54.00 | 48.00 | 42.00 | 36.00 | 30.00 | 24.00 | 18.00 | 12.00 | 6.00 |
| Commander and Captain, under 3 | (a) | 780.00 | 702.00 | 624.00 | 546.00 | 488.00 | 390.00 | 312.00 | 234.00 | 156.00 | 78.00 |
| years' seniority (Naval); Lieuten-ant-Colonel (Militia). | (b) | 60.00 | 54.00 | 48.00 | 42.00 | 36.00 | 30.00 | 24.00 | 18.00 | 12.00 | 6.00 |
| Captain (Naval); Colonel (Militia) | (a) | 945.00 | 850.00 | 756.00 | 661.50 | 567.00 | 472.50 | 378.00 | 283.50 | 189.00 | 94.50 |
|  | (b) | 600.00 | 54.00 | 48.00 | 42.00 | 36.00 | 30.00 | 24.00 | 18.00 | 12.00 | 6.00 13500 |
| ommodore and higher ranks (Naval); Brizadier-General and higher ranks (Militia). | (b) | $1,350.00$ 60.00 | 1,215.00 | $1,080.00$ 48.00 | 945.00 42.00 | 810.00 36.00 | 675.00 30.00 | 540.00 24.00 | 405.00 18.00 | 270.00 12.00 | 135.00 6.00 |

## PUBLIC DEFENCE

Naval Service.- The Naval Service of Canada was established by the Naval Service Act, 1910 ( $9-10$ Edw. VII, c. 43), the main provisions of which were described in the Year Book of 1910, pp. xxvi-xxix. The Department of the Naval Service, then created, now consists of eight branches:-(1) Naval, (2) Fisheries, (3) Fisheries Protection, (4) Tidal and Current Survey, (5) Hydrographic Survey, (6) Radiotelegraphy, (7) Patrol of Northern Waters and (8) Life Saving Service. The total financial appropriation of the Department for the year $1916-17$ was $\$ 3,819,250$, of which the sum of $\$ 2,027,215$ was expended to January 31, 1917 The appropriation for the Naval Branch was $\$ 1,000,000$, of which the sum of $\$ 447,807$ was expended to January 31,1917 In addition to the foregoing, the sum of $\$ 6,640,209$ was expended for the same period out of the war appropriation.

Royal Naval College.-The officers of the Royal Naval College continue to report most favourably, both as to their mental and physical progress, on the cadets in attendance during the past year. The midshipmen who have been serving in ships of the Royal Navy and the Royal Canadian Navy have also been favourably reported upon, and have proved themselves capable and efficient. There are, at present, fifty-four officers of the Royal Canadian Navy who have been lent to the Royal Navy for service. They include six lieutenants, one naval instructor, four engineer lieutenants, fourteen sub-lieutenants, nine acting sub-lieutenants and twenty midshipmen. At the examinations held in May, 1916, fifteen cadets were successful; thirteen of these joined the Royal Naval College. The course of the Royal Naval College at Halifax corresponds to that of the Royal Military College at Kingston, except that it is on a naval basis. Graduates of the Naval College have the option of adopting a seafaring career, of accepting positions in the Canadian Government, in the Hydrographic or Tidal and Current Surveys, or of entering the course of applied science in the second year at the Universities of McGill or Toronto. Arrangements have been made with the Admiralty whereby eight graduates of the Royal Naval College may be entered yearly in the Royal Navy. The same rules that govern other officers of the Royal Navy apply to entrants from the Canadian Naval College. As the result of the examinations for cadetships held on May 16, 17 and 18, 1917, 20 successful cadets entered the College on August 2, 1917

Northwest Mounted Police.-The Royal Northwest Mounted Police are distributed in Manitoba, Saskatchewan, Alberta, the Northwest Territories and the Yukon Territory, with headquarters at Regina, Saskatchewan, and the operations of the force for the year ended September 30, 1916, are described in the Commissioner's Report dated November 1, 1916. On September 30, 1916, the strength of the force was 57 officers, 740 non-commissioned officers and constables and 804 horses, a decrease of 3 officers, 129 non-commissioned officers and constables and 83 horses, as compared with the previous year. The force at this date was 103 under the authorized strength, due to the difficulty in securing recruits owing to the war.

ADMINISTRATION.
27.-Strength and Distribution of the Royal Northwest Mounted Police on September 30, 1916.

| Description. | Alberta. | Saskatchewan. | Manitoba. | New <br> Mani- <br> toba. | Northwest Territories | Yukon Territory. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commissioner. . | - | 1 | - | - | - | - | 1 |
| Assistant Commissioners... | 1 | - | - | - | - | - | - 1 |
| Superintendents. | 5 | 5 | - | 1 | - | 1 | 12 |
| Inspectors... | 14 | 18 | 1 | 1 | 2 | 3 | 39 |
| Surgeons. | 1 | 2 | - | - | - | - | 3 |
| Veterinary Surgeons | - | 1 | - | - | - | - | 1 |
| Staff Sergeants..... | 21 | 28 | 1 | $\sim$ | 1 | 5 | 50 |
| Sergeants. | 28 | 33 | 1 | 1 | 2 | 5 | 70 |
| Corporals. | 51 | 50 | 2 | 4 | 3 | 5 | 115 |
| Constables. | 146 | 195 | 23 | 14 | 4 | 31 | 413 |
| Special Constables.. | 45 | 29 | - | 4 | 6 | 2 | 86 |
| Total.. | 312 | 362 | 28 | 25 | 18 | 52 | 797 |
| Horses.... | 343 | 407 | 36 | - | 2 | 16 | 804 |
| Doga.... .. .. | 9 | 21 | - | 66 | 45 | 25 | 166 |

## CRIMINAL STATISTICS AND PENITENTIARIES.

The criminal statistics of Canada are collected, compiled and published annually by the Census and Statistics Office under statutory authority of the Census and Statistics Act, 1905 (4-5 Edw. VII, c. 5). They relate to the year ended September 30, and the last issued annual report is for 1915. The statistics are divided into the two classes of (1) indictable offences and (2) summary convictions, the former comprising all cases tried by police or other magistrates and the latter all cases of minor importance disposed of by justices of the peace under the Summary Convictions Act.

Indictable Offences.-Table 28 shows by provinces in respect of indictable offences the number of charges and convictions and the percentage of acquittals for the years 1914 and 1915. There were

26,714 charges and 20,625 convictions for indictable offences throughout Canada during the year ended September 30, 1915, as compared with 28,007 charges and 21,438 convictions in 1914, a decrease of 1,293 , or 4.62 p.c., for charges and of 813 , or 3.79 p.c., for convictions during the year. As shown by the table, a decrease in the number of charges is found in every province except Nova Scotia, New Brunswick, Manitoba and Saskatchewan.

Summary Convictions.-The number of summary convictions in 1915 was 132,430 , as compared with 161,597 in 1914 . This represents a decrease of 29,167 , or 18.05 p.c.

Death Sentences.-During 1915, 34 persons were sentenced to death for murder, as compared with 27 in 1914. Death sentences in 1915 were carried out in 21 cases, compared with 11 in 1914, and were commuted to life imprisonment in 13 cases in 1915, compared with 16 in 1914. Seven persons were sentenced in 1915 to be imprisoned for life, as compared with eight persons in 1914.

## 28.-Charges, Convictions and Percentages of Acquittals for Indictable Offences by Provinces, 1914 and 1915.

| Provinces. | 1914. |  |  | 1915. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Charges. | Convictions. | Acquittals. | Charges. | Convictions. | Acquittals. |
|  | No. | No. | p.e. | No. | No. | p.c. |
| Prince Edward Island. | 37 | 25 | 32.43 | 27 | 16 | 40.74 |
| Nova Scotia... . | 1,141 | 766 | 32.86 | 1,469 | 950 | 35.33 |
| New Brunswick. | 273 | 229 | 16.12 | 345 | 278 | 19.42 |
| Quebec... | 4,428 | 3,586 | 19.01 | 3,924 | 3,053 | 22.20 |
| Ontario. | 11,263 | 8,932 | 20.70 | 10,906 | 8,934 | 18.08 |
| Manitobs. | 1,733 | 1,494 | 13.79 | 1,859 | 1,577 | 15.17 |
| Saskatchewan. | 2,688 | 1,928 | 28.27 | 2,754 | 2,022 | 26.58 |
| Alberta... | 3,162 | 2,237 | 29.75 | 2,894 | 2,088 | 27.85 |
| British Columbia.. | 3,239 | 2,213 | 31.67 | 2,494 | 1,680 | 32.64 |
| Yukon. | 43 | 28 | 34.88 | 42 | 27 | 35.47 |
| Canada. | 28,007 | 21,438 | 23.45 | 26,714 | 20,625 | 22.79 |

## ADMINISTRATION

29.-Indictable Offences by Classes, 1914 and 1915.

| Class. | 1914. |  | 1915. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Charges. | Convictions. | Charges. | Convic tions. |
|  | No. | No. | No. | No. |
| I. Offences against the person.. | 6,143 | 4,428 | 5,599 | 3,979 |
| II. Offences against property with violence | 2,193 | 1,810 | 2,652 | 2,234 |
| III. Offences against property without violence. . | 16,771 | 13,000 | 16,038 | 12,631 |
| IV Malicious offences against property.. | 397 | 248 | 384 | 256 |
| V Forgery and other offences against the currency.. | 608 | 519 | 432 | 347 |
| VI. Other offences not in the foregoing classes. | 1,895 | 1,433 | 1,609 | 1,178 |
| Total.. | 28,007 | 21,438 | 26,714 | 20,625 |

30.-Convictioas and Sentences for all Offences, by Provinces, 1909-1915.

| Provinces. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No. | No. | No. |
| Canada. Convictions. | 89,952 | 102,903 | 113,260 | 146,527 | 173,138 | 183,035 | 153,055 |
| Sentences- | 8\%,92 | 102,003 | 113,200 | 140,227 |  | 183,080 | 153,055 |
| Penitentiary.. | 1,121 | 882 | 1,085 | 1,248 | 1,303 | 1,216 | 1,322 |
| Gaol or fine. | 73,335 | 86,096 | 93,827 | 122,491 | 142,016 | 141,807 | 115,150 |
| Reformatory | 300 | 433 | 315 | 433 | 551. | 592 | 517 |
| Death.. | 18 | 21 | 17 | 25 | 23 | 27 | 34 |
| Other Sentences.. | 15,178 | 15,471 | 18,016 | 22,330 | 29,245 | 39,393 | 36,032 |
| Prince Edward I. Convictions. | 302 | 384 | 396 | 448 | 455 | 523 | 362 |
| Sentences- |  |  |  |  |  |  |  |
| Penitentiary.. | 6 | 3 | 12 | 5 | 4 | - | 8 |
| Gaol or fine. | 274 | 360 | 367 | 434 | 447 | 504 | 350 |
| Reformatory | - | - | - | - | - | - |  |
| Death.. | - | - | - | 1 | - | 10 |  |
| Other Sentences. . | 22 | 21 | 17 |  | 4 | 19 | 4 |
| Nova Scotia. |  |  |  |  |  |  |  |
| Convictions. <br> Sentences- | 4,880 | 6,097 | 5,689 | 6,649 | 7,038 | 7,379 | 6,724 |
| Penitentiary., | 69 | 103 | 56 | 73 | 83 | 70 | 93 |
| Gaol or fine. | 4,494 | 5,273 | 5,237 | 6,174 | 6,417 | 6,769 | 5,963 |
| Reformatory. | 30 | 24 | 14 | 31 | 42 | 46 | 55 |
| Death... .. | -287 | 697 | 380 | 369 | 494 | 4913 | 611 |

CRIMINAL STATISTICS.
30.-Convictions and Sentences for all Offences, by Provinces, 1909-1915-con.

| Provinces. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No. | No. | No. |
| New Brunswick. |  |  |  |  |  |  |  |
| Convictions. | 2,637 | 2,595 | 2,912 | 3,157 | 3,324 | 3,101 | 3,111 |
| Sentences- |  |  |  |  |  |  |  |
| Penitentiary... | ${ }_{2}^{24}$ | -34 | $\stackrel{21}{21}$ | ${ }_{3}^{28}$ | ${ }^{19}$ | ${ }_{2} 245$ | ${ }^{33}$ |
| Gaol or fine. | 2,499 | 2,391 | 2,764 | 3,007 | 3,166 | 2,935 | 2,834 |
| Reformatory |  |  |  | 5 | 10 | 11 | 24 |
| Other Sentences.. | 106 | 166 | 126 | 117 | 129 | 131 | 220 |
| Quebec. |  |  |  |  |  |  |  |
| Convictions. | 18,855 | 18,514 | 19,773 | 26,850 | 32,703 | 34,149 | 27,205 |
| Sentences- |  |  | 243 |  |  |  |  |
| Penitentiary.. Gaol or fine... | 13,939 | 14,597 | 15,671 | 21,966 | 25,881 | 26,112 | - 20.021 |
| Reformatory . | 79 | 105 | 69 | 94 | 121 | 139 | 141 |
| Death... ... |  |  | 2 |  |  | 2 | 5 |
| Other Sentences.. | 4,525 | 3,602 | 3,788 | 4,604 | 6,513 | 7,670, | 6,765 |
| Ontario. |  |  |  |  |  |  |  |
| Convictions. | 36,636 | 41,401 | 40,782 | 48,552 | 58,799 | 65,806 | 58,876 |
| Sentences- |  |  |  |  |  |  |  |
| Penitentiary.. | 353 | 210 | ${ }_{2} 279$ | 300 | 289 | 355 | 409 |
| Gaol or fine. | 29,265 | 33,971 | 32,097 | 38,846 | 45,134 | 48,763 | 41,303 |
| Reformatory | 169 | 247 | 147 | 235 | 263 | 242 | 234 |
| Death... . |  |  |  |  |  |  |  |
| Other Sentences.. | 6,841 | 6,964 | 8,252 | 9,168 | 13,109 | 16,442 | 16,923 |
| Manitoba. |  |  |  |  |  |  |  |
| Convictions. ... | 9,093 | 10,026 | 13,413 | 15,287 | 18,095 | 16,334 | 12,843 |
| Sentences- | 133 | 69 |  |  |  |  |  |
| Gaol or fine. | 7,142 | 8,335 | 11,526 | 13,057 | 15,573 | 13,302 | 10,277 |
| Reformatory . |  |  | - 44 | - 44 | 15, 63 | - 106 | 10, 33 |
| Death.. ... |  | - |  |  |  |  | 6 |
| Other Sentences. . | 1,809 | 1,614 | 1,716 | 2,025 | 2,282 | 2,851 | 2,398 |
| Saskatchewan. |  |  |  |  |  |  |  |
| Convictions. | 5,120 | 7,248 | 8,294 | 10,404 | 13,328 | 13,782 | 11,672 |
| Sentences- |  |  |  |  |  |  | 11,672 |
| Penitentiary.. . | 45 | ${ }_{4} 41$ | ${ }_{6}^{66}$ | 93 | 70 | 107 | 60 |
| Gaol or fine. .. | 4,797 | 6,716 | 7,688 | 9,702 | 12,170 | 12,184 | 10,586 |
| Reformatory. . |  |  | 15 |  |  | 8 | - 3 |
| Death.: ... |  |  | 1 | 2 |  | 4 | 1 |
| Other Sentences.. | 276 | 486 | 524 | 603 | 1,076 | 1,479 | 1,022 |

ADMINISTRATYON.
30.-Convictions and Sentences for all Offences, by Provinces, 1909-1915-concluded.

| Provinces. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alberta. | No. | No. | No. | No. | No. | No. | No. |
| Convictions.. | 6,878 | 9,515 | 10,269 | 16,775 | 19,426 | 19,043 | 14,419 |
| Sentences- | 46 | 124 | 104 | 192 | 220 | 185 | 157 |
| Gaol or fine... | 6,016 | 8,234 | 9,113 | 15,274 | 17,504 | 16,271 | 12,558 |
| Reformatory , |  | 19 | 3 | - 3 |  |  | - 4 |
| Death.. . Other Sentences. . | $8{ }_{8}^{2}$ | 1,136 ${ }^{2}$ | 1,047 | - $\begin{array}{r}4 \\ 1,302\end{array}$ | - $\begin{array}{r}3 \\ 1,684\end{array}$ | - $\begin{array}{r}4 \\ 2,579\end{array}$ | 1,098 |
| British Columbia, |  |  |  |  |  |  |  |
| Convictions. .... | 5,248 | 6,868 | 11,529 | 18,125 | 19,786 | 22,694 | 17,673 |
| Sentences- | 106 | 88 | 173 | 216 | 252 |  | 160 |
| Gaol or fine. . | 4,703 | 6,033 | 9,206 | 13,812 | 15,582 | 14,794 | 11,186 |
| Reformatory . | 6 | 24 | 22 | 17 | - 29 | - 36 | 23 |
| Death... .. . | 3 | 6 | 2 |  | 7 | 7 | 10 |
| Other Sentences.. | 430 | 717 | 2,126 | 4,076 | 3,916 | 7,681 | 6,344 |
| Yukon Territory. |  |  |  |  |  |  |  |
| Convictions. . | 294 | 238 | 171 | 189 | 184 | 224 | 170 |
| Sentences- |  |  |  |  |  |  |  |
| Penitentiary.. | 5 | 1 | 5 | 3 | ${ }_{4}^{4}$ | 173 | 12 |
| Grol or fine. | 225 | 169 | 127 | 130 | 142 | 173 | 122 |
| Reformatory | - | - | - | - | - | 1 | 1 |
| Other Sentences. | 69 | 68 | 39 | 56 | 38 | 50 | 47 |
| The Territories. |  |  |  |  |  |  |  |
| Convictions. . | 9 | 17 | 32 | 91 | - | - | - |
| Sentences- |  |  | , |  |  |  |  |
| Penitentiary.. . | 9 | $\overline{17}$ | 31 | $\overline{89}$ | - | $\square$ | - |
| Reformetory .. | ${ }^{\circ}$ | 1 | $-$ | - | - | - | - |
| Death.. .. | - | - | - | - | - | - | - |
| Other Sentences. | - | - | 1 | 2 | - | - | - |

Juvenile Delinquents' Act.-Since the last issue of the Year Book, this Act has been put into force throughout the province of Saskatchewan and in the town of St. Mary's, Ontario. It is also in force in the following places: County of Pictou, N.S.; Halifax, N.S.; Toronto, Ont.; the City of Brantford and county of Brant, Ont.; Montreal, Que.; Victoria and Vancouver, B.C.; Winnipeg, Man.; Ottawa, Ont.; Charlottetown, P.E.I.; Stratford, Kitchener, the counties of Perth and Waterloo and the district of Timiskaming, Ont.; the Dauphin Judicial District of Manitoba; the province of Alberta.

## CRIMINAL STATISTICS.

31.-Javenile Criminals convicted of Indictable Offences by Classes of Offences, 1915, with the total and yearly average for the period 1885-1915.

| Classes of Offences. | Under 16 years. |  | 16 years and under 21. |  | Totals. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M. | F | M. | $F$. | M. | F. |
| I. Offences against the person..... .. | $\mathrm{No}_{7}{ }_{7}$ | ${ }^{\text {No. }} 7$ | No, 265 | No. | No. | No. 27 |
| II. Offences against property with violence. . . | 605 | 1 | 605 | 1 | 1,210 | 2 |
| III. Offences against property without violence... | 2,177 | 65 | 1,545 | 124 | 3,722 | 189 |
| IV. Malicious offences against property. | 77 | - |  | - | 88 |  |
| V. Forgery and offences against the currency... | 3 | 1 | 34 | 3 | 37 | 4 |
| VI. Other offences not included in the above offences. | 33 |  | 105 | 6 | 138 | 10 |
| Total.. | 2,972 | 78 | 2,565 | 154 | 5,537 | 232 |
| Total 1885-1915.. | 30,569 | 1,285 | 34,206 | 2,570 | 64,775 | 3,85 5 |
| Yearly average 1885-1915 | 986 | 41 | 1,103 | 83 | 2,089 | 124 |

32.-Charges, Acquittals, Convictions and Sentences in respect of Indictable Offences, 1910-1915.

| Charges and Sentences. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No. | No. |
| Chargee. | 15,305 | 16,625 | 20,168 | 24,078 | 28,007 | 26,714 |
|  | 3,589 | 3,975 | 4,584 | 5,732 | 6,543 | 6,060 |
| Persons detained for lunacy. |  |  |  |  |  | 29 |
| Convictions. | 11,700 | 12,627 | 15,567 | 18,320 | 21,438 | 20,825 |
| Males. | 11,140 | 12,008 | 14,858 | 17,380 | 20,528 | 19,624 |
| Females.. |  |  | 709 |  | 910 | 1,001 |
| First conviction. | 10,283 | 11,233 | 14,372 | 15,725 | 18,315 | 17,695 |
| Second conviction... | 796 | 800 | ${ }_{564} 63$ | 1,409 | 1,819 | $\xrightarrow{1,776}$ |
| Sentences-- |  |  |  |  |  |  |
| Option of a fine. | 3,088 | 3,071 | 4,144 | 4,655 | 5,518 | 5,344 |
| Under one year in | 3,621 | 3,994 | 4,779 | 5,263 | 6,306 | 5,774 |
| One year and over in gaol. <br> Two years and under five in penitentiary | 444 | 568 | 738 | 798 | 946 | 893 |
|  | 729 | 821 | 931 | 1,007 | 967 | 1,074 |
| Five years and over in penitentiary. | 151 |  |  |  | 241 | 1 |
| For life |  | 1 | 9 | 3 | 8 | 7 |
| Committed to reform | 33 | 315 | 43 | 5 | ${ }^{27}$ | 7 |
| Other sentencea.. | 3,211 | 3,577 | 4,200 | 5,727 | 6,833 | 6,741 |

Includes cases where proceedings were stayed, disagreement of jury, etc.

## ADMINISTRATION

33.-Classification of Persons Convicted of Indictable Offences, 1910-1915.

| Classes. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Occupations- | No. | No. | No. | No. | No. | No. |
| Agricultural. | 642 | 545 | 664 | 702 | 1,267 | 1,312 |
| Commercial. | 1,373 | 1,601 | 1,773 | 2,580 | 1,957 | 2,039 |
| Domestic.. | -565 | 654 | , 766 | 1,012 | 1,106 | ,955 |
| Industrial. | 938 | 887 | 1,193 | 1,441 | 1,798 | 1,573 |
| Professional | 92 | 112 | 49 | 149 | 149 | 238 |
| Labourer. | 4,647 | 4,767 | 5,844 | 6,191 | 7,768 | 6,736 |
| Not given. | 3,443 | 4,061 | 5,278 | 6,245 | 7,393 | 7,773 |
| Civil condition- |  |  |  |  |  |  |
| Married. | 2,724 | 3,278 | 3,368 | 4,025 | 4,584 | 4,323 |
| Single. . .. .. ... | 6,634 | 7,000 | 8,631 | 10,074 | 10,968 | 11,320 |
| Widowed. | 128 | 188 | 232 | 138 | 154 | 136 |
| Not given. | 2,214 | 2,161 | 3,336 | 4,083 | 5,732 | 4,846 |
| Educational status- |  |  |  |  |  |  |
| Unable to read or write. | 787 | 737 | 243 | 274 | 769 | 1,066 |
| Elementary. | 8,612 | 9,514 | 11,996 | 13,311 | 14,865 | 14,138 |
| Superior.. | 212 | 244 | 269 | 295 | 415 | 332 |
| Not given. | 2,089 | 2,132 | 3,059 | 4,440 | 5,389 | 5,089 |
| Ages- |  |  |  |  |  |  |
| Under 16 years. | 1,373 | 1,439 | 1,881 | 2,313 | 2,628 | 3,050 |
| 16 years and under 21. | 1,589 | 1,640 | 1,781 | 2,442 | 2,652 | 2,719 |
| 21 years and under 40.. | 5,006 | 5,795 | 6,815 | 7,630 | 8,831 | 8,114 |
| 40 years and over. | 1,532 | 1,562 | 1,675 | 1,560 | 2,158 | 2,036 |
| Not given.... | 2,200 | 2,191 | 3,415 | 4,375 | 5,169 | 4,706 |
| Use of liquors- |  |  |  |  |  |  |
| Moderate... | 7,163 | 7,931 | 9,339 | 8,044 | 7,539 | 7,394 |
| Immoderate. | 2,396 | 2,499 | 3,063 | 3,183 | 3,174 | 2,348 |
| Not given. | 2,141 | 2,197 | 3,165 | 7,093 | 10,725 | 10,883 |
| Birthplace- |  |  |  |  |  |  |
| England and Wales. | 925 | 1,246 | 1,319 404 | 1,961 | 1,872 472 | 1,482 327 |
| Ireland... | 258 | $\begin{array}{r}302 \\ 365 \\ \hline\end{array}$ | 404 | 451 | 675 | 473 |
| Canada | 6,267 | 6,376 | 6,713 | 7,619 | 9,162 | 9,172 |
| Other British possessions... | 49 | 16 | 101 | 87 | 151 | 132 |
| United States... | 557 | 734 | 910 | 1,216 | 1,015 | 980 |
| Other foreign countries.. | 1,315 | 1,547 | 2,065 | 2,674 | 3,516 | 3,741 |
| Not given. | 2,072 | 2,041 | 3,604 | 3,741 | 4,575 | 4,318 |
| Religion- |  |  |  |  |  |  |
| Baptist. | 241 | 285 | 383 | 374 | 333 | 379 |
| Roman Catholic. | 4,083 | 4,194 | 4,721 | 5,633 | 6,355 | 6,245 |
| Church of England.. .. | 1,486 | 1,705 | 1,951 | 2,193 | 2,515 | , 288 |
| Methodist. | 900 | 1,097 | 1,218 | 1,127 | 1,434 | 1,387 |
| Presbyterian. | 916 | 1,178 | 1,224 | 1,380 | 1,4 | 1,367 2,294 |
| Protestant.. | 1,137 | 1,132 | 1,174 | 1,240 |  |  |
| Other denominations.. | 615 | 590 | 1,174 3,571 | 1,240 4,069 | 1,425 | 1,777 4,966 |
| Not given. .. | 2,322 | 2,446 | 3,571 | 4,069 | 5,379 | 4,966 |
| Residence- ${ }^{\text {- }}$ |  |  |  |  |  |  |
| Cities and towns.. | 8,763 1,355 | 9,610 1,459 | 11,474 1,355 | 14,061 | 12,210 | 2,434 |
| Rural districts.. Not given...... | 1,582 | 1,558 | 2,738 | 2,853 | 3,684 | 3,529 |

## CRIMINALSTATISTICS.

34.-Convictions by Classes of Offences and Proportion per cent. of each class to the total, 1909-15.

| Classes of Offences. | 1909. | 1910. | 1911. | 1912. | 1913. | 1914. | 1915. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No. | No. | No. |
| Offences against the person | 6,856 | 7,793 | 8,352 | 9,371 | 12,272 | 12,889 | 11,366 |
| Offences against property with violence.. | 848 | 943 | 977 | 1,195 | 1,472 | 1,810 | 2,234 |
| Offences against property without violence. | 7,228 | 7,375 | 8,228 | 9,695 | 13,241 | 15,985 | 15,019 |
| Malicious offences against property | 643 | 816 | 796 | 981 | 1,522 | 1,255 | 1,465 |
| Forgery and offences against the currency.. |  |  |  |  | 541 | 519 | 347 |
| Other indictable offences. | 1,053 | 894 | 866 | 1,125 | 1,183 | 1,433 | 1,178 |
| Offences against municipal by-laws. | 14,918 | 20,969 | 18,108 | 27,712 | 34,283 | 33,570 | 31,312 |
| Offences against liquor laws | 3,999 | 4,665 | 4,775 | 5,671 | 5,969 | 5,871 | 5,452 |
| Drunkenness. - | 31,105 | 34,068 | 41,379 | 53,271 | 60,975 | 60,067 | 41,161 |
| Vagrancy, disorderly conduct and kindred offences | 15,659 | 16,404 | 19,359 | 23,457 | 25,069 | 30,483 | 24,345 |
| Other minor offences. | 7,364 | 8,739 | 10,092 | 13,684 | 16,611 | 19,153 | 19,176 |
| Total. . | 89,952 | 102,903 | 113,260 | 146,527 | 173,138 | 183,035 | 153,055 |
| Classes of Offences. | Proportion of each class to the total. |  |  |  |  |  |  |
|  | p.c. | p | p.c. | p.c. | p.e. | p.c. | p.e. |
| Offences against the person | 7.6 | 7.5 | 7.3 | 6.4 | 7.1 | 7.0 | 7.4 |
| Offences against property with violence. | 0.9 | 0.9 | 0.9 | 0.8 | . 7 | 0 |  |
| Offences against property without violence. | 8.0 | 7.2 | 7.3 | 6.8 | 7.6 | . 7 | 9.8 |
| Malicious offences against property | 0.7 | 0.8 | 0.7 | 0.6 | 0.9 | 8.7 0.7 | 1.0 |
| Forgery and offences against the currency. . | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | - |
| Other indictable offences. | 1.2 | 0.8 | 0.8 | 0.8 | 0.7 | 0.8 | 0.7 |
| Offences against municipal by-laws. | 16.6 | 20.3 | 16.0 | 19.0 | 19.8 | 18.3 | 20.5 |
| Offences against liquor laws | 4.4 | 4.5 | 4.2 | 3.8 | 3.6 | 3.2 | 3.6 |
| Drunkenness.. | 34.6 | 33.1 | 36.5 | 36.3 | 35.2 | 32.8 | 26.9 |
| Vagrancy, disorderly conduct and kindred offences | 17.3 | 16.2 | 17.0 | 16.0 | 14.5 | 16.7 | 16.0 |
| Other minor offences. .. | 8.4 | 8.5 | 9.0 | 9.2 | 9.6 | 10.5 | 12.5 |
| Total. | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

## ADMINISTRATION

Penitentiaries.-The statistics of penitentiaries are compiled from the annual reports to the Minister of Justice of the Inspectors of Penitentiaries. The report for the fiscal year 1916-17, in reference to the parole system, states that the total number of paroles granted during an eighteen years' operation is 10,214 . A total of 8,711 men have completed their probation on parole and occupy positions in good citizenship to-day, and 869 prisoners are now reporting and have in prospect the completion of their probation on parole. The total delinquency for non-compliance with conditions of license is 374 , or 3.66 p.c., and for subsequent conviction 260 , or 2.53 p.c., making a total delinquency of 6.19 p.c.

## 35.-Movement of Convicts, 1911-1916.

| Schedule. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No. | No. |
| In custody at beginning of fiscal year | 1,859 | 1,865 | 1,895 | 1,968 | 2,003 | 2,0\%4 |
| Received- |  |  |  |  |  |  |
| By forfeiture of parole. | 12718810 | $\begin{array}{r} 9 \\ 6 \\ 3 \\ 55 \\ 801 \end{array}$ | $\begin{array}{r} 10 \\ 7 \\ 7 \\ 21 \\ 888 \end{array}$ | 2610616870 | 124218991 | 114124900 |
| Paroles revoked. |  |  |  |  |  |  |
| Recaptured. |  |  |  |  |  |  |
| From gaol, |  |  |  |  |  |  |
| Totals. | 2,697 | 2,739 | 2,828 | 2,896 | 3,030 | 3,004 |
| Released by- |  |  |  |  |  |  |
| Death. | 22 | 20 | 23 | 16 | 24 | 11 |
| Escape.... . | 2 | 9 | 6 | 10 | 2 | 1 |
| Expiry of sentence. | 394 | 322 | 232 | 274 | 293 | 304 |
| Order of the court. | 5. | - | 2 | 4 | 6 | 9 |
| Pardon. | 15 | 17 | ${ }^{3}$ | ${ }^{5}$ | ${ }_{4}{ }^{6}$ | $\stackrel{4}{4}$ |
| Parole. | 334 | 380 | 445 | 480 | 495 | 423 |
| Transfer | 8 | 55 | 21 | 15 | 214 | 101 |
| Deportation... | 45 | $\stackrel{40}{-}$ | 73 | 84 | 114 | 1 |
| Sent to Rerormatory | -7 | -1 | -5 | 4 | - | 8 |
| Sent to Hospital. . . | - | - | - | - | 1 | - |
| In custody at end of fiscal year | 1,865 | 1,895 | 1,968 | 2,003 | 2,064 | 2,118 |

PENITENTIARIES
36.-Number of Deaths, Escapes, Pardons and Paroles, 1911-1916.

| Schedule. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Deaths. | 22 | 20 | 23. | 16 | 24 | 11 |
| Escapes. | 2 | 9 | 6. | 10 | 2 | 1 |
| Pardons. | 15 | 17 | 3 | 5 | 6 | 4 |
| Paroles . . . . . . . . | $334 t$ | 380 | 445 | 480 | 495 | 423 |

37.-Age of Convicts, 1911-1916.

| Schedule. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 20 years. | ${ }^{\text {No. }} 187$ | ${ }_{\text {No. }}{ }^{173}$ | No. 209 | ${ }^{\text {No. }} 186$ | ${ }^{\text {No. }} 187$ | ${ }^{\text {No. }}$ |
| From 20 to 30. | 823 | 840 | 875 | 890 | 917 | 911 |
| From 30 to under 40. | 474 | 481 | 496 | 534 | 553 | 563 |
| From 40 to under 50. | 235 | 251 | 249 | 243 | 240 | 253 |
| From 50 to under 60. | 107 | 103 | 104 | 108 | 121 | 119 |
| Over 60 years. | $39{ }^{\text {c }}$ | $47^{2}$ | 35 | 42 | $46^{3}$ | 30 |
| Totals..... | 1.865 | 1,895 | 1,968 | 2,003 | 2,064 | 2,118 |

[^56]38.-Classification of Convicts, 1911-1916.

| Classes. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| By RaceÁrican. Caucasian. Indian. Indian half breed. Mongolian. Totals. | No. ${ }_{52}$ | No. ${ }_{52}$ | No. ${ }^{6}$ | No. ${ }_{57}$ |  | No. |
|  | 1,747 | 1,777 | 1,831 | 1,867 | 1.929 | 1.970 |
|  | 25 | 21 | 23 | 22 | 20 | 19 |
|  | 19 | 18 | 23 | 16 | 14 | 19 |
|  | 21 | 27 | 29 | 41 | 39 | 47 |
|  | 1,8651 | 1,895 | 1,968 | 2,003 | 2,064 | 2,118 |
| By Nationality-British- |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Australian. | 4 | 6. | 5 | - | 7 | - |
| Canadian. | 1,004 | 958 | 984 | 993 | 1,088 | 1,185 |
| English. | 198 | 208 | 206 | 221 | 195 | 169 |
| Irish. | 54 | 64 | 67 | 58 | 59 | 43 |
| Scoteh. | 45 | 52 | 56 | 59 | 47 | 40 |
| Other British. | 21 | 15 | 21 | 37 | 28 | 26 |
| Foreign-- |  |  |  |  |  |  |
| American (U.S.)... | 229 | 226 | 260 | 246 | 210 | 204 |
| Austrian and Hungarian. | 61 | 74 | 73 | 97 | 126 | 148 |
| Chinese.. .. | 13 | 18 | 20 | 26 | 22 | 32 |
| French... | 20 | 19 | 12 | 11 | 12 | 11 |
| German. | 18 | 28 | 34 | 32 | 29 | 23 |
| Italian... | 94 | 114 | 117 | 102 | 95 | 68 |
| Russian. | 41 | 35 | 49 | 51 | 53 | 86 |
| Scandinavian ${ }^{2}$ | 24 | 26 | 25 | 30 | 28 | 29 |
| Other foreign..... | 39 | 51 | 39 | 40 | 65 | 54 |
| Totals................ | 1,865, | 1,895* | 1,968 | 2,003 | 2,064 | 2,118 |

[^57]> ADMINISTRATION
> 38.-Classification of Convicts, 1911-1916-concluded.

| Classes. | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| By Conjugal State- | No. | No. | No. | No. | No. | No. |
| Single... | 1,251 | 1,280 | 1,291 | 1,306 | 1,356 | 1,358 |
| Married. | 548 | 545 | 615 | 631 | 634 | 677 |
| Widowed.. | 65 | 70 | 59 | 63 | 70 | 79 |
| Divorced. | - | - | 3 | 3 | 4 | 4 |
| Totals. | 1,865 | 1,895 | 1,968 | 2,003 | 2,064 | 2,118 |
| By Sex- |  |  |  |  |  |  |
| Male... | 1,839 | 1,875 | 1,941 | 1,977 | 2,033 | 2,081 |
| Female. | 26 | 20 | 27 | 26 | 31 | 37 |
| Totals. | 1,865 | 1,895 | 1,968 | 2,003 | 2,064 | 2,118 |
| By Social HabitsAbstainers. | 311 | 281 | 283 | 310 | 359 | 376 |
| Temperate. | 848 | 944 | 995 | 1,016 | 987 | 1,008 |
| Intemperate. .. | 704 | 666 | 687 | 677 | 717 | 734 |
| Totals.. | 1,8652 | 1,895 ${ }^{3}$ | 1,968 | 2,003 | 2,064 ${ }^{1}$ | 2,118 |
| By Educational StatusCannot read or write. | 253 | 273 | 229 | 247 | 277 | 300 |
| Can read only | 96 | 30 | 20 | 27 | 34 | - |
| Can read and write. | 1,514 | 1,591 | 1.719 | 1,729 | 1,753 | 1,818 |
| Totals. | 1, $865^{2}$ | 1,895 | 1,968 | 2,003 | 2,064 | 2,118 |
| By ReligionAdventist. | - | - | - | 2 | - | - |
| Anglican. | 317 | 326 | 345 | 348 | 340 | 330 |
| Baptist. | 83 | 84 | 85 | 97. | 112 | 101 |
| Budd ${ }^{\text {ast. }}$ | 18 | 15 | 15 | 31 | 20 | 40 |
| Congregationalist. | 3 | 3 | 6 | 4 | 9 | 7 |
| Greek Catholic. | 11 | 4 | 30 | 33 | 45 | 52 |
| Jewish. | 19 | 18 | 12 | 12 | 17 | 26 |
| Lutheran. | 54 | 61 | 60 | 79 | 71 | 71 |
| Methodist. | 182 | 195 | 215 | 218 | 218 | 205 |
| Mormon. : | - | - | - | - | 1 | 1 |
| Presbyterian. | 219 | 203 | 213 | 216 | 228 | 222 |
| Quaker - | 2 | 1 | , | - | - | 1,025 |
| Roman Catholic... | 930 | 934 | 947 | 929 | 961 | 1,025 |
| Salvation Army | 3 | ${ }^{3}$ | 3 | 4 | 5 | 7 |
| Unitarian. .. | 2 | 2 | 1 | 1 | $-^{2}$ | - |
| Universatist... | -8 | 10 | - 27 | $\stackrel{8}{8}$ | $\overline{27}$ | 18 |
| Otber creeds. <br> No creed... | 14 | 40 5 | 9 | 19 | 88 | 13 |
| Totals. | 1,865 | 1,895 | 1,968 | 2,003 | 2,064 | 2,118 |

${ }^{1}$ Includes one not given (insane).
${ }^{2}$ Includes two not given (insane).
${ }^{3}$ Includes four not given (insane).
${ }^{4}$ Ipcludes three not given (insane).
39.-Statistics of Divorce, 1868-1916.

| Year. | Granted by the Dominion Parliament. |  |  |  | Granted by the Courts. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ontario. | Quebec. | Northwest Territories. | Manitoba. | Nova Scotia. | New Brumswick. | British Columbia. |
| 1868... | - | - | - | - | 3 | - | - |
| 1869... | 1 | 1 | - | - | 1 | 2 | - |
| 1870..... | - | - | - | - | ${ }_{2}^{2}$ | 1 | - |
| 1871. | - | - | - | - | 2 | 2 | - |
| 1872.. | - | - | - | - | 1 | 3 | $\pm$ |
| 1873.. | 1 | - | - | - | 3 | - | - |
| 1875.. | 1 | - | - | - | 4 | - | - |
| 1876.. | - | - | - | - | 1 | 2 | - |
| 1877.. | 3 | - | - | - | 5 | - | 1 |
| 1878.. | 2 | 1 | - | - | 1 | 3 | 1 |
| 1879.... | 1 | - | - | - | 1 | 2 | - |
| 1880.. | - | - | - | - | 3 | 2 | - |
| 1881.... | - | $\sim$ | - | - | 2 | 2 | 3 |
| 1882.... | - | - | - | - | 4 | 1 | 1 |
| 1883. .... . | - | - | - | - | 3 | 7 | 3 |
| 1884. | 1 | - | - | - | 4 | 3 | 2 |
| 1885. .... | 4 | 1 | - | - | 4 | 3 | - |
| 1886. .. | $\frac{1}{2}$ | - | - | - | 4 | 5 | 1 |
| 1887 .. | 2 | 3 | - | - | 1 | 3 | 1 |
| 1888. | 2 | 1 | - | - | 3 | 1 | 2 |
| 1889.. | 3 | 1 | - | - | 3 | 6 | 2 |
| 1890. | 2 | - | - | - | 4 | 3 | 3 |
| 1891....... . | 4 | - | - | - | 3 | - | 3 |
| 1892....... . | 1 | 1 | 1 | 1 | 3 | 5 | 3 |
| 1893... .. | 3 | 4 | - | - | 5 | 2 | 1 |
| 1894.. .. . | 5 | 1 | - | - | 1 | $-$ | 2 |
| 1895... | 3 | - | - | - | 5 | 5 | - |
| 1896... | $\stackrel{\square}{1}$ | - | - | - | 6 | 1 | 3 |
| 1897.. | 1 | $\overline{-}$ | - | - | $\stackrel{2}{2}$ | - | 3 |
| 1898.. | 2 | 1 | $\overline{-}$ | - | 2 |  | 6 |
| 1899. | 2 | 1 | 1 | - | 5 | 3 | 2 |
| 1900. . | 2 | 1 | 1 | 1 | 1 | 1 | 4 |
| 1901. | 2 | - | - | - | 10 | - | 7 |
| 1902. | 2 | - | $\cdots$ | - | 9 | 1 | 3 |
| 1903. | 2 | 1 | 1 | 1 | 8 | 4 | 4 |
| 1904. | 5 | 1 | - | - | 6 | 2 | 5 |
| 1905... | 2 | 3 | 2 | 2 | 6 | 2 | 18 |
|  |  |  | Alber. Sask. |  |  |  |  |
| 1906. | 10 | 3 | 1 - | - | ${ }_{8}^{5}$ | 1 | 17 |
| 1907 | 3 <br> 8 | 1 | - - | 1 | $8{ }^{8}$ | 3 | 9 |
| 1908. | 8 | - | - - | $\stackrel{\rightharpoonup}{\square}$ | 5 | 5 | 12 |
| 1909.. | 8 | 4 | $1 \quad 1$ | 2 | 81 | 5 | 22 |
| 1910. | 14 | 2 | $-1$ | 3 | 131 | 6 | 12 |
| 1911. | 13 | 4 | $2 \quad-$ | 3 | 101 | 6 | 19 |
| 1912. | 9 | 3 | 21 | 1 | 4 | $4^{2}$ | 11 |
| 1913.. | 20 | 4 | 41 | 6 | - | 4 | 20 |
| 1914.. .. .. | 18 | 7 | $4{ }^{4} 2$ | 2 | 10 | 12 | 15 |
| 1915.. | 10 | 3 | 31 | 1 | 13 | 6 | 16 |
| 1916........... | 18 | 1 | 1 1-2 | 2 | 14 | 11 | 18 |

Nones.-In Prince Edward Island only one divorce has been granted from 1868 to 1916; the divorce was granted in 1913. In British Columbia, in addition to the divorce, 13 judicial separations have been gratted: one in 1892, one in 1893, one in 1899, two in 1900, two in 1903, three in 1913, three in 1914; "Decree Nisi"' has been granted in 20 cases: four in 1900, two in 1909, six in 1912, five in 1913 and three in 1914. Includes one judicial separation. ${ }^{2}$ Includes one not effective till court costs are paid.

## ADMINISTRATION

## List of the Principal Acts of Parliament adrainistered by Departments of the Government of the Dominion of Canada, as compiled from information supplied by the respective Depariments.

Numbers within brackets denote the chapter of the Revised Statutes of Canade, 1900 (R.S. C. 1906).
Justice.-Department of Justice (21); Solicitor General's (22); Northwest Territories (62); Yukon (63); Dominion Police (92); Judges (138); Supreme Court (139); Exchequer Court (140); Admiralty (141); Petition of Right (142); Criminal Code (146); Penitentiary (147); Prisons and Reformatories (148); Identification of Criminals (149); Ticket of Leave (150); Fugitive Offenders' (154); Extradition (155); Juvenile Delinquents (7-8 Edw. VII, c. 40, 1908)

External Affairs,-The functions and duties of this Department are defined by the Department of External Affairs Act, 1912 ( 2 Geo. V, e. 22) and by the International Boundary Waters Treaty Act (1-2 Geo. V, 1911, c. 28), as amended by the statute of April 3, 1914 (4 Geo. V, c. 5).

Customs.-Customs Tariff; Customs; Canada Shipping (in part); Infectious and Contagious Diseases affecting Animals (in part); Destructive Insect and Pest (in part); Export; Copyright (in part); Petroleum and Naphtha Inspection (in part).

Post Office.-Post Office; Government Annuities; Pacific Cable; Parcel Post; Special War Revenue, 1915.

Agriculture.-Experimental Farm Stations; Inspection and Sale, Part IX (Fruit and Fruit Marks); Dairy Industry; Cold Storage; Cold Storage Warehouse; Milk Test; Seed Control; Live Stock Pedigree; Animal Contagious Diseases; Meat and Canned Foods; Destructive Insect and Pest; Agricultural Instruction; Quarantine; Leprosy; Public Works (Health); Patent; Trade Mark and Design; Timber Marking; Copyright.

Interior.-Department of the Interior; Immigration; Dominion Lands; Dominion Lands Surveys; Forest Reserves and Parks; Irrigation; Railway Belt; Railway Belt Water; Yukon; Yukon Placer Mining.

Finance.-Department of Finance and Treasury Board; Appropriation; Civil Service; Superannuation and Retirement; Contingencies; Consolidated Revenue and Audit; Currency; Ottawa Mint; Dominion Notes; Provincial Subsidies; Bank; Savings Bank; Penny Bank; Quebec Savings Banks; Loan Companies; Trust Companies; Bills of Exchange; Interest; The Special War Revenue Act, 1915 (in part); The Business Profits War Tax Act, 1916.

Insursnce.-Insurance; Civil Service Insurance.
Militia and Defence.-Militia and Defence of Canada; Royal Military College; Militia Pension; An Act to enable Canadian Soldiers on active military service during the present war to exercise their electoral franchise.

Public Werks of Canada.--Public Works (39); Government Harbours and Piers, s. 5 (112); Navigable Waters Protection, s. 7 (115); Telegraph Secrecy (126); Dry Dock Subsidies ( 9 -10 Edw. VII, 1910, c. 17); An Act to amend the Navigable Waters Protection Act (9-10 Ed. VII, 1910, c. 44); An Act to authorize the payment of a subsidy to the Collingwood Shipbuilding Co., Ltd. (2 Geo. V, 1912, c. 17); An Act to Amend the Dry Dock Subsidies Act, 1910 (2 Geo. V, 1912, c. 20); An Act to amend the Government Works Toll Act, R.S.C. 1906, c. 40 (2 Geo. V, 1912, e. 26); An Act to incorporate the National Gallery of Canada (3-4 Geo. V, 1913, c. 33); An Act to authorize the payment of a subsidy to the Western Dry Doek and Shipbuilding Co., Ltd. ( 34 Geo. V, 1913, c. 57); An Act to amend the Dry Dock Subsidies Act, 1910 (4-5 Geo. V, 1914, c. 29 ).

Trade and Commerce.-The Canada Grain; Inspection and Sale; Cuiling and Measuring of Timber in the provinces of Ontario and Quebec; Manufacture of Binder Twine in Canada; Petroleum Bounty, 1909; Bounties on Lead contained in lead-bearing ores mined in Canada; Gold and Silver Marking; Census and Statiotics; Bounties on Zinc.

Labeur.-Conciliation and Labour (96); Industrial Disputer Investigation (6-7 Edw. VII, 1907, c. 20); Combines Investigation (9-10 Edw. VII, 1910. c, 2); Fsir Wages Resolution of the House of Commons; White Phosphorus Matches (4-5 Geo. V, 1914, c. 12).

Secretary of State.-Companies; Naturalization (c. 77 R.S.C., 1906, and c. 44, 1914); Canada Temperance; Civil Service; Board of Trade; Trade Unions.

## LIST OF DOMINION ACTS OF PARLIAMENT

Naval Service,-Naval Service (9-10 Edw. VII, 1910, c. 43); Radiotelegraph (3-4 Geo. V, 1913, c. 43) and Regulations issued thereunder; Fisheries (4-5 Geo. V, 1914, c. 8) and Regulations issued thereunder; Fish Inspection (4-5 Geo. V, 1914, c. 45 ).

Railways and Canals.-Department of Railways and Canals (35); Government Railways (36); Intercolonial and P.E.I. Railway Employees' Provident Fund (6-7 Edw. VII, c. 22); The Government Railways Small Claims (2-10 Edw. VII, c. 26). The Railway Act (Companies) (37) and its amendments confer certain powers upon the Minister of the Department. In the case of subsidized railways the authorizing Acts are carried out under the Department, which has also certain jurisdiction with respect to the Grand Trunk Pacific and the Canadian Northern Railway Acts, where Government guarantee has been given, and with respect to the Transcontinental Railway.

Marine.-Department of Marine and Fisheries; Government Vessels Discipline; Government Harbours and Piers; Canada Shipping and amending Acts (6-7 George V, cc. 12 and 13); Navigable Waters Protection; Quebec Harbour and River Police; Live Stock Shipping; An Act to amend the Vancouver Harbour Commissioners'Act (6-7 George V, c. 9).

Indian Affairs.-The Indian Act, 1906, with amendments to date.
King's Printer and Controller of Stationery.-Public Printing and Stationery (80).
Inland Revenue.-Inland Revenue; and the Acts respecting the adulteration of food and other articles; Weights and Measures; Inspection of Electricity and Inspection of Gas and Gas Meters; Public Ferries; Proprietary or Patent Medicines; Agricultural Fertilizers; Commercial Feeding Stuffs; Petroleum and Naphtha; Special War Revenue, 1915.

Mines.-Geology and Mines (6-7 Edw. VII, 1907, c. 29).
Commission of Conservation.-Conservation Act (8-9, Edw. VII, c. 27, 1909) and amending Acts (9-10, Edw. VII, c. 42, 1910; 3-4, Geo. V, c. 12, 1913).

## List of Principal Publications of Departments of the Government of the Dominion

of Canada, as compiled from information supplied by the respective Depart. ments.
Customs.-Annual Report containing Tables of Imports, Exports and Navigation. Monthly Statements of Imports entered for Consumption and Exports of the Dominion.

Post Office.--Annual Report of the Postmaster General. Official Postal Guide. Regulations as to parcel post, rural mail delivery and government annuities.

Agriculture.-The Agricultural Gazette of Canada, Subscription, \$1 per year (monthly). Annual Reports of the Minister, of the Experimental Farms and Stations, of the Dairy and Cold Storage Commissioner, of the Veterinary Director General and of the Entomological Branch. Bulletins, pamphlets, circulars and Seasonable Hints of the Experimental Farms Branch on a great variety of agricultural subjects, including publications of the following ten divisions: Field Husbandry; Animal Husbandry; Horticulture; Cereal; Chemistry; Forage Plants; Botany; Poultry and Tobacco. Guide to the Experimental Farms and Stations. Bulletins of the Dairy and Cold Storage Branch relating to the history of the dairying and cold storage industry in Canada; the making of butter and cheese, cow-testing, dairying experiments; co-operation, etc. Report of the Canadian Record of Performance; sheep and swine; beef raising; horse breeding; poultry and the marketing of eggs. Bulletins of the Health of Animals Branch, with regulations as to contagious abortion; rabies; sheep scab; actinomycosis; anthrax; glanders; hog cholera; maladie du coit; tuberculosis; quarantine; meat inspection and foot-and-mouth disease. Bulletins and Reports of the Seed Branch as to seedtesting; the production and use of seed grains and the Seed Control Act. Bulletios and Circulars of the Entomological Braneh and instructions to importers of nursery stock. Reports of the Canadian Seed Growers' Association. Fodder and Pasture Plants, by George H. Clark, B.S.A., and M. Oscar Malte, Ph.D., 143 pages, 27 plates, price 50 cents. Bulletin on the Maple Sugar Industry; Agricultural WarBook; Agricultural Instruction Act.

Nore.--The foregoing is a selection from the publications of the Department. A complete list of publications available for distribution is issued, and so long as the supply lasts copies of publications will be sent free on application to the Publications Branch, Department of Agriculture, Ottawa.

## ADMINISTRATION

Interior-Annuai Report, including Reports from the Dominion Lands, Immigration, Surveys, Dominion Parks, Forestry, Irrigation and Water Power branches. Pamphlets, reports, builetins, etc., of the respective branches:Immigration Branch: Canada West (English, French, Danish, Norwegian, Swedish); Atlas of Canada (English and French); Country Called Canada (English). What Irishmen say of Canada; Canada as Seen Through Scottish Eyes; CanadaThe Land of Opportunity (English); Where Should You Go ? Settling on Canada's Free Land; Classes Canada Calls For; Homestead Regulations; Woman's Work in Canada; Prince Edward Island; Nova Scotia Pamphlet; New Brunswick Pamphlet; Eastern Quebec-Région de Lac St. Jean, etc. (French and English); Western Que-bec-Timiskaming, etc. (French and English); Eastern Townships of Quebec; Ontario - Canada's Farthest South; Ontario - Improved Ontario Farms; Ontario-The Heart of Canada; Ontario-Thunder Bay; Kenora and Rainy River Districts of New Ontario; Rivière de la Paix; Prairie Provinces in 1912; British Columbia-Canada's Western Heritage; Canadian Vinter; Law and Regulations respecting Immigration and Immigrants; Immigration Facts and Figures. Topographical Surveys: (1) Annual Report of the Topographical Surveys Branch, and accompanying maps; (2) Manual of Instruction for the Survey of Dominion Lands. Price 50c. Supplement to the Manual. Price 50c. (3) Rules and Regulations of the Board of Examiners for Dominion Land Surveyors, and programme of the subjects of the various examinations. (4) The Selkirk Range (in two volumes), by A. O. Wheeler, F.R.G.S. Price \$1. (5) Copying Camera of the Surveyor General's Office. (6) Photographic Methods Employed by the Canadian Topographical Survey, by A. O. Wherler, F.R.G.S. (7) Precise Measuring with Invar Wires and the Measurement of the Kootenay Base, by P. A. Carson, D.L.S. (8) Report on Levelling Operations, from 1908 to 1914, by J. N. Wallace, D.L.S. Price 35c. (9) Triangulation of Part of the Railway Belt of British Columbia, by H. Parry, D.L.S. (10) Description, Adjustments and Methods of Use of the $6^{\prime \prime}$ Micrometer Block Survey Reiterating Transit Theodelite, by W. H. Herbert, B. Sc. (11) Papers on Descriptions for Deeds. (12) Dascription of the townships surveyed in the different Provinces, issued yearly since 1809. (13) Description of the surveyed townships in the Peace River District. (14) Descriptions of lands comprised within the Fort Pitt Sectional Map, consisting of townships 49 to 56, ranges 15 to 28, west of the third meridian. (15) Description of Surveyed Lands in the Railway Belt of British Columbia (in threeparts). (16) Extractsfrom Reports on townships east of the principal meridian, received from surveyors to July 1st, 1914. (17) Extracts from Reports on townships 1 to 16 west of the principal meridian, received from surveyors to July 1st, 1914. (18) Extracts from Reports on townships 17 to 32 west of the principal meridian, received from surveyors to July 1st, 1914. (19) Extracts from Reports on townships 33 to 88 west of the principal meridian, received from surveyors to March 31st, 1915. (20) Extracts from reports on townships 1 to 16 west of the second meridian, received from surveyors to March 31st, 1915. (Publications of the Topographical Surveys Branch may be obtained on application to the Distribution Office, Department of Public Printing and Stationery, for No. 1; to the Secretary, Board of Examiners for Dominion Land Surveyors, for No. 3; to the Secretary, Department of the Interior, for No. 4; and to the Surveyor-General for the other Nos.). Dominion Astronomical Observatory : Annual Reports of Chief Astronomer for years 1904 to 1911, Publications of Dominion Observatory, Vol. 1-No. 1, Stereographic Projection Tables by Otro Klotz, LL.D., F.R.A.S.; No. 2, Precise Levels, by D. H. Nflles, D.L.S.; No. 3, Precise Levelling, by F B. Reid, D.L.S.; No. 4, Orbit of $88 \delta$ Tauri, by W. E. Harper, M.A.; No. 5, Earthquake of April 28, 1913, by Otro Klotz, LL.D., F.R.A.S.; No. 6, Spectrum of Nova Geminorum, by J. S. Plaskert, B.A., F.R.S.C.; No. 7, Experiments regarding Efficiency of Spectographs, by J. S. Plaskert, B.A.z D.Sc., F.R.S.C.; No.8, Precise Levelling, by F.B. ReID, D.L.S.; No.9, Orbit of $\sigma$ Geminorum, by W. E. Harper, M.A.; No. 10 , Orbit of b Persei, by J. B. Gannon, M.A.; No. 11, Orbits of the Spectroscopic Components of dBodtis, by W. E. Harper, M.A.; No. 12, Radial Velocity of $\rho$ Leonis, by W. E. Harper, M.A.; No. 13, Orbit of $\xi$ Persei from the $H$ and $K$ Lines, by J. B. Cannon, M.A.; No. 14, Orbit of $\beta$ Corone Borealis, by J. B. Cannon, M.A.; No. 15, Measures of $\gamma$ Aquarii, by J. B. Cannon, M.A.;No. 16, Measures of $\sigma$ Leonis, byJ. B. Cannon, M.A. Vol. 2-No. 1, Precise Levelling, by F. B. Reid, D.L.S.; No. 2 Spectroscopic Binary $\theta^{2}$ Tauri, by J. S. Plaskett, B.A., D.Sc., F.R.S.C.; No. $3^{\prime}$ Orbit of $\omega$ Cassiopeiz, by R. K. Young,

## DOMINION GOVERNMENT PUBLICATIONS

Ph.D.; No. 4, Orbit of 136 Tauri, by J. B. Cannon, M.A.; No. 5, Orbits of the Spectroscopic Components of 50 Draconis, by W. E. Harper, M.A.; No. 6, Orbit of $\zeta$ Andromedæ, by J. B. Cannon, M.A.; No. 7, A Meteor Star Atlas, by R. K. Young, Ph.D.; No. 8, Orbit of the Spectroscopic Binary 1149, Groombridge, by W. E. Harper, M.A.; No. 9, Orbit of the Spectroscopic Binary 23, Cassiopeiæ, by R. K. Young, Ph.D.; No. 10, Gravity, by F A. McDiarmid, B.A.; No. 11, Tests made to Ascertain where Conditions were Most Suitable for the 72 -inch Reflector, by W. E. Harper, M.A.; No. 12, Mean Distance of Stars whose Radial Velocities, Proper Motion and Parallaxes have been Determined, by R. K. Young, Ph.D.; No. 13, Orbit of B.A.C. 5890, by T. H. Parker, M.A.; No. 14, Orbit of $\mu$ Persei, by J. B. Cannon, M.A.; No. 15, Orbit of Boss 3323, by J. B. Cannon, M.A. Vol. 3-No. 1, Earthquake of Feb. 10, 1914, by Otro Klotz, LL.D., Ph.D., F.R.A.S.; No. 2, Seismological Tables, by Otто Klotz, LL.D., Ph.D., F.R.A.S.; No. 3, The Spectroscopic Orbits of 12 Lacertæ, by R. K. Young, Ph.D.; No. 4, Orbit of the Spectroscopic Binary A Boötis, by R. K. Young, Ph.D.; No. 5, Orbit of the Spectroscopic Binary a Trianguli, by W. E. Harper, M.A.; No. 6, Precise Levelling, by F. B. Reid, D.L.S.; No.7, Orbit of the Spectroscopic Binary 14 Aurigæ, by W. E. Harper, M.A.

Dominion Parks.-A Sprig of Mountain Heather; Glaciers of the Rockies and Selkirks; Classified Guide to Fish and their Habitat in the Rocky Mountains Park; The Nakimu Caves; Guide to the Geology of the Canadian National Park on the C.P.R. between Calgary and Revelstoke. (1) Handbook to the Rocky Mountains Park Museum; Hints to Householders re Fire Protection.

Forestry.-Annual Reports of the Director of Forestry, 1905 to 1908, inclusive, and 1913 to 1916. Bulletins (where number and title are omitted, the document is out of print): (1)Tree Planting on the Prairie; (8) Forest Products of Canada,1908; Forest Products of Canada, 1909; (11) Lumber, Square Timber, Lath and Shingles; (12) Pulpwood; (14) Cross-ties purchased; (15) Forest Products of Canada, 1909 (being Nos. 11, 12, 13, 14, 19 and 20), French edition only; (16) Forest Fires and Railways; Forests Products of Canada, 1910; (22) Cross-ties; (23) Timber used in Mining Operations; (24) Wood-using Industries of Canada, 1910; Agricultural Implements and Vehicles, Furniture and Cars and Veneer; (27) Forest Products of Canada, 1910; Cooperage; (29) Timber Conditions in the Lesser Slave Lake Regions; (32) The Turtle Mountain Forest Reserve; (33) Forest Conditions in the Rocky Mountains Forest Reserve; Forest Products of Canada, 1911; (34) Lumber, Square Timber, Lath and Shingles; (35) Poles and Cross-ties; (36) Woodusing Industries of Ontario; (37) Forest Products of Canada, 1911 (being Nos. 30, 31, 34 and 35); Forest Products of Canada, 1912; (38) Pulpwood; (39) Poles and Ties; (40) Lumber, Square Timber, Lath and Shingles; (42) Co-operative Forest Fire Protection; (44) Wood-using Industries of the Maritime Provinces; Forest Products of Canada, 1913; (46) Pulpwood Consumption; (47) Poles and Cross-ties; (48) Lumber, Lath and Shingles; (49) Treated Wood-block Paving; (50) Wood-using industries of the Prairie Provinces; (51) Game Preservation in the Rocky Mountains Forest Reserve; (52) Forest Products of Canada, 1913 (being Nos. 46, 47 and 48); (53) Timber Conditions in the Smoky River Valley and Grand Prairie Country; Forest Products of Canada, 1914; (54) Pulp Wood; (55) Poles and Cross-ties; (56) Lumber, Lath and Shingles; (57) Forest Products of Canada, 1914 (being 54, 55 and 56); Forest Products of Canada, 1915; (58a) Lumber, Lath and Shingles; (58b) Pulpwood; (58c) Poles and Cross-ties. Circulars: (5) Planning and Tree Plantation for a Prairie Homestead; (6) Preservative Treatment of Fence posts; (7) Manitoba, a Forest Province; (8) The Forest Products Laboratories; (9) Chemical Methods for Utilizing Wood Wastes; (11) The Relation of Forestry to the Development of the Country.

Irrigation.-Annual Irrigation Reports, 1912 to 1915. The Annual Reports of the Branch previous to 1912 are included in the Annual Reports of the Department. Annual Stream Measurements Reports, 1909 to 1915; Reports of Irrigation Surveys and Inspections, 1915 and (1915-16); Reports of the Western Canada Irrigation Association Conventions (1st to 10th); Report of the International Irrigation Congress, 1914. Bulletins: (1) Irrigation in Saskatchewan and Alberta; (2) Alfalfa Culture; (3) Climatic and Soil Conditions in C.P Ry. Co.'s Irrigation Block; (4) Duty of Water Experiments and Farm Demonstration Work. Pamphlets: Address by Mr. S. G. Porter on " Practical Operation of Irrigation Works;"

## ADMINISTRATION

Address by Dr. Rutrerford on "Inter-dependence of Farm and City"; Addresses by Mr. Don H. Bare on "The Actual Problem that confronts the Irrigator," "Practical Irrigation Hints for Alberta," and "Alfalfa Growing." Dominion Water Powers: Annual Reports for 1912-13 to 1915-16. The Annual Reports of the Branch previous to 1913 are included in the Annual Report of the Department. Water Resources Papers: (1) Report of the Railway Belt Hydrometric Survey for 1911-12, by P. A. Carson; (2) Report of Bow River Power and Storage Investigations, by M. C. Hendry; (3) Report on Power and Storage Investigations, Winnipeg River, by J. T. Joinsmon; (4) Report of the Manitoba Hydrometric Survey to the end of year 1914, by M. C. Hendry; (5) Preliminary Report on the Pasquia Reclamation Project, by T. H. Duns; (6) Report on Cost of Various Sources of Power for Pumping in Conuection with the South Saskatchewan Water Supply Diversion Project, by H. E. M. Kensir; (7) Report on the Manitoba Water Powers, by. D. L. McLean, S. S. Scovil and J. T. Johnston; (8) Report of the British Columbia Hydrometric Survey, for 1913, by R. G. Swan; (9) Report of Red River Navigation Surveys, by S. S. Scovil; (10) General Guide for Compilation of Water Power Reports of Dominion Water Power Branch, prepared by J. T. Jonnsron; (11) Final Report on the Pasquia Reclamation Project, by T. H. Dunn; (12) Report on Small Water Powers in Western Canada and Discussion of Sources of Power for the Farm, by A. M. Beale; (13) Report on the Coquitlam-Buntzen Hydro-Electric Development, by G. F. G. Conway; (14) Report of the British Columbia Hydrometric Survey for 1914, by R. G. Swan; (15) Report of the Water Powers of Alberta and Saskatchewan, by C. H. Artwood; (16) Report of the Water Powers of Canada. A series of five pamphlets prepared for distribution at the Panama-Pacific Exposition, 1915, by G. R. G. Conway, P. H. Mitcerel, H. G. Acres, F. T. Kaflen and K. H. Smith; (17) Canadian Hydratlic Power Development and Electric Power in Canadian Industry, by C.H. Mrtceell; (18) Report of the British Columbia Hydrometric Survey for 1915, by R. G. Swan. (19) Report of the Manitoba Hydrometric Survey for 1915, by M. C. Hendry; (20) Report on the Interest dependent on Winnipeg River Power, with special reference to the capital invested and the labour employed, by H. E. M. Kensir; (21) Report of the British Columbia Hydrometric Survey, for 1916 by R. G. Swan; (22) Report of the Manitoba Hydrometric Survey for 1916, by M. C. Hendry. Natural Resources Intelligence.-The Unexploited West. Preparing Land for Grain Crops on the Prairie. The Peace River Country. Handbook for the Information of Intending Settlers. The Athabaska Country. Maps: Manitoba Homestead Map. Saskatchewan Homestead Map. Southern Alberta Homestead Map. Northern Alberta Homestead Map. Cereal Map of Manitoba. Cereal Map of Saskatchewan. Cereal Map of Alberta. British Columbia Dominion Railway Belt Homestead Map (2 sheets). Sectional Sheets of Dominion Railway Belt in British Columbia ( 4 sheets). Combined Land and Pre-emption Map of Manitoba, Saskatchewan and Alberta. Grande Prairie, Peace River and Grouard Land Districts. Elevator Map of Manitoba, Saskatchewan and Alberta. Bank Map of Manitoba, Saskatchewan and Alberta. Land Registration and Judicial Districts Map of Manitoba, Saskatchewan and Alberta. Bank Map of the Maritime Provinces. Map of Canada (fifty-eight miles to one inch), for School Teachers and Officials of Public Institutions only. Small Map of Canada ( 200 miles to one inch). Mining Lands and Yukon: The Yukon Territory: Its History and Resources. Chief Geographer: Statistics of the Dominion of Canada.

Finance.--Annual Reports on the Public Accounts of the Dominion of Canads: Loan and Trust Companies. Monthly Statement of the Chartered Banks of Canada. Unclaimed Balances in the Chartered Banks. List of Shareholders in Chartered Banks.

Insurance.-Quarterly Statement of List of Licensed Companies. Annual Abstract of Statements of Insurance Companies in Canada (subject to correction). Annual Reports of the Insurance Department, Vol. I (Fire and Miscellaneous), Vol. II (Life Companies). Annual List of Securities held by Insurance Companiea in Canada with Department'a Valuation thereof.

Militia and Defence.-Annual Report. Quarterly Militia_Liat. I Militia Daily Orders. Militia General Orders.

## DOMINION GOVERNMENT PUBLICATIONS

Trade and Commerce.-Annual Report: Part I, Imports into and Exports from Canada (itemized and general statements); Part II, Canadian Trade with (1) France, (2) Germany, (3) United Kingdom, (4) United States; Part III, Canadian Trade with British and Foreign Countries, except France, Germany, United Kingdom and United States; Part IV, Miscellaneous Information (Bounties; Lumber and Staple Products; Revenue and Expenditure of the Department; Statistical Record of the Progress of Canada; Tonnage Tables; Trade Commissioner Service); Part V, Grain Statistics; Part VI, Subsidized Steamship Services; Part VII, Trade of British and Foreign Countries. Monthly Reports of Trade Statistics; Weekly Bulletin circulated within Canada only, containing Reports of Trade Commissioners and general trade information. Miscellaneous publications during 1914: Directory of Foreign Importers, Directory of Canadian Exporters, "The German War and its Relation to Canadian Trade," Timber Import Trade of Australia, List of Licensed Elevators, Grain Inspection in Canada, Canada and the British West Indies, Canada the Country of the Twentieth Century. Publications of the Census and Statistics Office: Canada Year Book. Report on the Census of 1911, Vol. I (Areas and Population); Vol. II (Religions, Origins, etc.); Vol. III (Manufactures); Vol. IV (Agriculture); Vol. V (Forest, Fishery, Fur and Mineral Production); Vol. VI (Occupations). Special Report on the Foreign-born Population. Report on the Postal Census of Manufactures, 1916. Report on the Production of Creameries and Cheese Factories, 1915 and 1916. Monthly Bulletin of Agricultural Statistics. Criminal Statistics.

Labour.-Monthly: The Labour Gazette (published at the nominal subscription price of 20 cents per annum, averaging 130 or 140 pages). Annually: Report of Department of Labour. Report of Proceedings under the Industríal Disputes Investigations Act, 1907. Report of Proceedings under the Combines Investigation Act. Wholesale Prices in Canada, 1915 (a report is published for each year about May or June). Labour Organization in Canada, 1915 (a report is published for each year about May or June). Special Reports: Strikes and Lockouts in Canada, 1901-1912 (published in October, 1913). Report of Royal Commission on Industrial Training and Technical Education (Four volumes). Special Bulletins, etc.

Secretary of State.-Annual Report. Civil Service List (annual). Information respecting Incorporation of Companies; List of Companies incorporated under the various Companies Acts of the Parliament of Canada from 1867 to December 31st, 1913. Copies of Proclamations, Orders in Council and Documents relating to the European War.

Naval Service.-Annual Report. Royal Naval College of Canada Calendar, containing general idea of scheme of training, prospects of Cadets, regulations for entry, etc. Naval Branch: Regulations for the Entry of Naval Instructors and of Medical Officers. Tidal and Current Survey: Tide Tables, published annually, for the East Coast, Pacific Coast and Hudson Bay and Strait; also abridged editions for St. Lawrence region, Bay of Fundy and Strait of Georgia. Currents in the Gulf of St. Lawrence, the entrance to the St. Lawrence, and the South-east Coasts of Newfoundland. Tables of Currents in the Bay of Fundy. Tide Levels on the Pacific Coast. Radiotelegraph Branch: Proceedings of the International Radiotelegraph Conference of London, 1912. Chart showing the Radiotelegraph stations in the Dominion of Canada. Postmaster General's Handbook for Radiotelegraph Operators (Instructions re handling of traffic, etc.) Hydrographic Survey: Sailing directions, St. Lawrence Pilot, above and below Quebec. Sailing directions for the Canadian shores of Lake Huron and Georgian Bay. Charts of the River St. Lawrence above and below Quebec, St. Lawrence River above Montreal, viz., Lake St. Louis, Lake St. Francis, Coteau Landing to Lancaster, Lancaster Bar to Cornwall. Ottawa River; Lake of Two Mountains, Eastern Portion and Western Portion. Lake Winnipeg. Red River to Berens River, Berens River to Nelson River. Lake Ontario. Main Duck Island to Presqu'Ile. Presqu'Ile Bay. Lake Erie (plans of harbours). Lake Huron. Georgian Bay and North Channel. Lake Superior. Pacific Coast. Hudson Bay. Fisheries Branch: Fisheries Annual Report. Biological Report. Reports of Fisheries of Hudson Bay. Fish and How to Cook it. Report of Fish Culture (contained in Fisheries Annual Report). Check List of Canadian Fishes. Monthly Bulletin of Sea Fishery Statistics.

## ADMINISTRATION

Railways and Canals.-Annual Report of the Department. Annual Reports of the Commissioners of the Transcontinental Railway and of the Board of Railway Commissioners for Canada. Annual Reports of the Comptroller of Statistics comprising (1) Railways; (2) Canals; (3) Telephones; (4) Telegraphs and (5) Express Companies.

Marine. - Marine Annual Report, containing Harbour Commissions, ete, Steamboat Inspection. List of Canadian Shipping. Reports of Expeditions to Hudson Bay. List of Lights, etc., in Canada: (a) Pacific Coast; (b) Atlantic Coast; (c) Inland Waters.

Indian Affairs.-Annual Report. Indian Act, 1906, with Amendments to date. Schedule of Indian Reserves, 1913. Indian Treaties and Surrenders, Vols. I, II, III.

King's Printer and Controller of Stationery.-The Canada Gazette, published weekly by authority, with occasional supplements and extras, subscription, \$4 per annum payable in advance, single copies, 10 cents each number. Contains weekly a list of current Government publications, as required by Order in Council 1,522. Judgments of the Board of Railway Commissioners, bi-monthly, $\$ 3$ per annum; single copies, 20 cents; Exchequer Court Reports, $\$ 4$ per annum. Prices of blue-books are in nearly every case printed upon the front cover and are based practically on the cost of paper and press work. They may be ordered direct from the Chief Clerk of Distribution, Department of Public Printing and Stationery, or through any bookseller in the Dominion.

Inland Revenue.-Besides the Annual Report the principal official publications issued are circulars establishing standards under Section 26 of the Adulteration of Food Act and Bulletins issued in connection with the inspection of samples collected under the provisions of this Act.

Mines.-The Department of Mines examines the most important mineral deposits and sections of geological interest, makes scientific investigations of the mining and metallurgical industries of Canada and carries on exploratory work in the little-known parts of the country. Detailed reports and geological maps of mining camps, and maps and notes on explored routes have been published. Memoirs have also been issued dealing with economic mineral deposits that have a wide distribution throughout the country. High grade contoured topographical maps of a number of sections have been issued in recent years. Publications also appear from time to time, giving the results of investigations in palantology, botany, zoology, mineralogy and anthropology. A summary report of the operations for the calendar year is published annually by each Branch of the Department, i.e., Geological Survey Branch and Mines Branch, and other reports appear at irregular intervals throughout the year. The total number of publications exceeds 1,600 . The most important recent publications are mentioned on pp. 68 to 72 of this volume. A copy of a report or map of any particular section may be obtained by applying to the Deputy Minister, Department of Mines, Ottawa.

Commission of Conservation.-Annual Reports, 1910-1915. Reports on Agriculture, Fisheries, Game and Fur-bearing Animals, Forests, Minerals, Public Health, Town Planning, Waters and Water-powers. Monthly Bulletin, entitled "Conservation"; Quarterly Bulletin entitled "Conservation of Life."

Civil Service Commission.-Annual Report. Regulations of the Civil Service Commission. General Information respecting Civil Service Examinations.

Other Departments.-In addition to the publications above enumerated, Annual Reports are issued by the Department of Justice on the Penitentiaries of Canada. the Departments of External Affairs, of Public Works and of the Auditor General, The Department of Public Works has also published the Interim Report of the Georgian Bay Commission, by W Sanford Evans, Chairman of the Commission.

## PROVINCIAL GOVERNMENT PUBLICATIONS

List of Principal Publications of the Provincial Governments of Canada, as compiled from information supplied by the respective Governments.
Note.-The numbers within brackets are the numbers of the Bulletins. The publications of the larger provinces are arranged by Departments.

## PRINCE EDWARD ISLAND.

Journal of the Legislative Assembly. Statutes of the Legislative Assembly. Royal Gazette. Annual Reports of the Provincial Auditor on Public Accounts and of the Departments of Public Works, Education, Agriculture, Falconwood Hospital (for the Insane) and Vital Statistics. Field Reports and Bulletins. Year Book and Periodical Reports of the Publicity Agent.

## NOVA SCOTIA.

Royal Gazetze. Journal of Education. Annual Reports on Public Accounts• Vital Statistics, Statistics of Incorporated Towns and Municipalities, Public Health, Education, Industries and Immigration, Agriculture, Crown Lands, Mines. Subsidized Railways and other Public Works, Rural Telephones, Humane Institutions, Public Charities, Penal Institutions, Neglected Children, Temperance and Utilities. Also Annual Reports of the Provincial Secretary, the Factory Inspector and of the Road and Game Commissioners.

## NEW BRUNSWICK.

Annual Reports of the Auditor General, of the Board of Health, of the Departments of Education and Agriculture (including Horticulture), Annual Reports on Public Works, Crown Lands, the Hospital for tbe Insane, the Factory Report, Report on the Jordan Memorial Tuberculosis Sanatorium at River Glade and Report of Women's Institutes.

## QUEBEC.

Note.-The titles of publications available in the English language are printed in English.
Attorney General.-Annual Report of Prison Inspectors; Annual Report of Public Utilities Commission.

Provincial Secretary.-Annual Report of the Secretary and Registrar; Annual Report of Inspectors of Reformatory Sebools and Insane Asylums; Annual Report of the Superior Board of Health of the Province of Quebec; Statistical Year Book; Educational Statistics; Financial Statistics of School Corporations; Municipal Statistics (annual); Judicial Statistics (annual); Statistics of the Penal Establishments and the Benevolent Institutions (annual); The Official Gazette (weekly); The Statutes of the Province (Annual); Revised Statutes of the Province (1909); Municipal Code.

## Treasury,-Annual Statement of Public Accounts; Annual Estimates.

Lands and Forests.-Annual Report of the Minister; La Gaspesie, J.-C. Lanaelier, 1885; Surveyed Townships and Explored Territories, 1889; Richesse Forestière de la Province de Québee, J.-C. Langelier, 1905; The Forest, Fernow, 1905; Arbres de Commerce de la Province de Québec, 1906; Table of Families of Twelve Children, Eugene Routllard, 1004, 1906; Townships Surveyed and Territories Explored, 1908; List of Timber License Holders, 1911; List of Persons Authorized to Act as Cullers, 1911, 1912; Dictionnaire des Lacs et Rivières de la Province de Québec, Eugene Rodilard, 1914; Bulletin No. 1 of the Forestry Service; Scieries et Marchands de Bois de la Province de Québec, T. Giroox, 1913; Table of Water Powers granted by the Province of Quebec, from Ist July, 1863, to 31st December, 1913, A. Amos; Bulletin No. 2, of the Forestry Service, Piché and Bedard, 1914; Water Powers in the Province of Quebec (Illustrated), 1917.

Agriculture.-Annual Reports: Department of Agriculture; Competition for Agricultural Merit; Dairymen's Association; Pomological Society; Report of the Quebec Society for the Protection of Plants from Insects and Fungus Diseases; Rapport des Concours de Récoltes sur pied (annual); Rapport de la Convention des Missionnaires Agricoles; Rapport des Sociétés d'Agriculture et des Cercles

## ADMINISTRATION

Agricoles; Journal of Agriculture and Horticulture, illustrated (monthly). Bulletins: On the Appearance of Crops, July; On the Yield of Crops, October; (1) Plans of Cheese Factories or Creameries and of Combined Factories; (2) Le Drainage Pratique, C. Michatd, 1914; (3) Les Engrais Chimiques, H. NAGANT, 1913; (4) Dix Années de Pratique et d'Expérience à la Basse-cour, Inst. d'Oka, 1914; (5) Engraissement de la Volaille, Inst. d'Oka, 1914; Culture du Tabac, Garead \& Plante, 1914; (7) Le Cheval du Cultivateur, J. D. Duchêne, 1914; (8) Culture des Céréales, Collège Macdonald, 1914; (9) L'Elevage du Porc à Bacon, A. Hansen, 1914; (10) Le Potager Canadien; (11) List of Butter and Cheese Factories of the Province of Quebec; (12) Le Jardin Şcolaire; (13) L'Agriculture et l'Etat Agricole; (14) La Culture du Trèfe; (15) La Culture du Blé-d'Inde Fourrager; (16) Guide de l'Arboriculteur; (17) La Culture Fruitière dans la Province de Québec; (18) Breeding and Preparing Hogs for Market; (19) La Désertion des Campagnes; (20) Hygiène de l'Alimentation; (21) Pour avoir de Belles Pommes; (22) Les Bovides; (23) Les Principales Espèces d'Insectes Nuisible et des Maladies Végétales; (24) La Grande Erreur du Pain Blanc; (25) Etude Sommaire sur les Céréales; (26) Le Blé; (27) L'Avoine; (28) L'Orge, le Seigle et le Sarrasin; (29) Sélection de la Semence; (30) Ce que doit être la Machine Animale; (31) Ce que doit être le Cheval; (32) Ce que doit être la Vache Laitière; (33) Ce que doit être le Mouton de Boucherie; (34) Ce que doit être le Porc à Bacon. Circulars: (1) Semis des Pépins de Pommes en Caisses; (2) Maple Sugar and Maple Syrup Industries; (3) Incubation Naturelle et Elevage Naturel; (4) La Guerre et l'Agriculture; (5) Augmentons la Production de nos Récoltes par l'Emploi de Meilleures Semences; (6) Les Semailles; (7) Alimentation Economique des Troupeaux de la Basse-cour; (8) Drainage Plans for Farmers; (9) Fruit Tree Culture; (10) Manière d'Arracher et de Conserver les Jeunes Plantes; (11) Engraissement et Préparation de la Volaille pour le Marché; (12) Production des Oeufs en Hiver; (13) L'Engraissement du Veau; (14) Competition in Fattening Bacon Hogs; (15) La Diarrhée chez les Poussins; (16) Important Advice to Farmers supplying Milk to Factories; (17) Production des Chapons pour le Marché; (18) Les Musées Scolaires Agricoles; (19) Les Expositions Scolaires Agricoles; (20) De la Culture des Arbres Fruitiers. Miscellaneous Publications: Veterinary Medicine, J. D. Duchêne, M.V., 1901; Horse Breeding, J. D. Duchêne, M.V., 1903; Vache Laitière, J. D. Duchêne, M.V.; La Province de Québec, A. Girard; The Cultivation of Fruit Trees and Shrubs; La Ruche Canadienne, A. Girard, 1904; Le Poulailler de la Ferme, A. Girard, 1904; La Province de Québec, A. Buies, 1900; Sheep, Their Breeding and Management; Traité de Constructions Rurales, Gareau \& Plante, 1912; The Weeds, O.-E. Dalaire, 1914; Culture des Arbres Fruitiers, Rev. F. Ĺsopold, 1898.

## Roads.-Annuad Report of the Minister of Roads.

Colonization, Mines and Fisheries.-Minéralogie Pratique à l'Usage des Prospecteurs, par J. Oralski, 1910; The Fish and Game Clubs of the Province of Quebec, 1914; La Gaspésie, par Alfred Pelland; L'Elevage Domestique des Animaux à Fourrure, par E. T. D. Chambers, 1914; Mines et Minerais de la Province de Québec, par Theo. C. Denis, 1914; Note Préliminaire sur la Statistique Minérale, par Theo. C. Denis, (annual); Rapport du Ministère de la Colonisation, etc., sur les Opérations Minières dans la Province de Québec, (annual); Report on the Copper Deposits of the Eastern Townships, by J. Austen Bancroft, 1915; Les Minerais de Fer de la Province de Québec, par P E. Dulieux, 1915; Extraits de Rapports sur le District de l'Ungava, par T. C Denis, 1915; Happy Homes in the Province of Quebec, by E.T.D. Chambers, 1915; La Province de Québec, 1915; General Report of the Minister of Colonization, Mines and Fisheries, (annual); Un Nouveau Centre de Colonisation, l'Abitibi, par l'Abbé I. Caron, missionnairecolonisateur, 1915; Relevé des Fermes à Vendre ou à Louer dans la Province de Québec, publié par le Bureau d'Immigration de Montréal, 1915; The Fisheries of the Province of Quebec, by E. T. D. Chambers, 1912; La Région du Lac Saint-Jean, par Hormisdas Magnan, 1916; La Région du Témiscamingue, par l'abbé I. Caron, 1916; La Région de la Gatineau, ou Comté d'Ottawa, par Hormisdas Magnan, 1916; La Région du Nord-Ouest de Montréal, ou Comté de Labelle, par Hormisdas Magnan, 1916.

Public Works and Labour.-Annual Report of the Minister.

## PROVINCIAL GOVERNMENT PUBLICATIONS

Public Instruction.-Annual Report of the Superintendent; School Code, 1912; Manuel de l'Instituteur Catholique, 1906; Regulations of the Catholic Committee, 1915; Regulations of the Protestant Committee, 1915; Manuel des Commissaires d'Ecoles, 1908; Education in the Province of Quebec, 1914; Protestant Rural Schools, 1912; Protestant Schools in the Eastern Townships, 1913; Memoranda of Instructions to Teachers, (1916); Financial Statement of the Superintendent of Public Instruction (annual); Mon Premier Livre (1st and 2nd parts), a fresh edition of which is furnished every year; L'Enseignement Primaire (monthly), Educational Record (quarterly). (The above two monthly magazines are distributed free of charge to all the schools of the Province by order of the Government.) Yearly circulars containing instructions to school boards and school inspectors.

Legislative Assembly.-Annotated Rules and Standing Orders of the Legislative Assembly of Quebec; Private Bills in the Legislative Assembly of Quebec (a manual containing the rules relative to); Agenda Paper of the Legislative Assembly; Votes and Proceedings of the Legislative Assembly; Journals of the Legislative Assembly; Reports of the Departments (Sessional Papers); Returns to Orders and Addresses of the Legislative Assembly (Sessional Papers); Report of the Clerk of the Crown in Chancery on Elections (published after every general election); Report of the Librarian of the Legislature; Government and Legislature of the Province of Queber; List of the Chairmen and Members of the Committees of the Legislative Assembly.

## ONTARJO.

Provincial Secretary.-Annual Reports: Hospitals and Charitable Institutiona; Hospitals for the Insane; Prisons and Reformatories; Institutions for the Feebleminded and Epileptics; Neglected and Dependent Children. Hospital Bulletin (issued quarteriy). Annual Report on the Liquor License Acts. Digest of the Ontario Social Laws. Annual Report of the Secretary and Registrar of the Province of Ontario.

Treasury.-Annual Statements: Estimated Expenditures; Receipts and Expenditures; Financial Statement delivered in the Legislative Assembly.

Attorney General.-Reports of Inspectors: Legal Offices; Registry Offices; Insurance; Division Courts. Reports of the Mydro-Electric and Workmen's Compensation Commissions.

Registrar General,-Vital Statistics Act. Act ressecting the Solemnization of Marriage. Physicians' Pocket Reference to the International List of Causes of Death. Annual Report of Births, Marriages and Deatbs.

Board of Health.-Public Health Act Pamphlet. Annual Report. Sewage Disposal for Residences. Fscts about Flies, Mosquitoes, and How to Prevent Thern. A Iittle Talk about the Baby. A Simple Method of Water Purification. Simple Methods of House Ventilation in Winter. Regulations: Control of Communicable Disease; Slaughter Houses, etc.; Undertakers' Circulars; Prevention of Typhoid Fever; Anti-toxin. Vaccination. Smallpox, Messles, Typhoid Fever, Scarlet Fever. Diphtheria. Consumption (General). Venereal Diseases. Consumption (General Precautions). Consumption (Personal Precautions). Instrue tions on Disinfection. Leaflet containing Statistics respecting Waterworks and Sewerage Systems. Regulations and Application Forms: Waterworks Approvals; Sewerage Approvals.

Public Works.-Annual Report of the Minister with reports of the Architect, Engineer, Superintendent of Colonization Roads and Statements of Law Clerk and Accountant. Report of the Trades and Labour Branch with Factory Inspector (Shops and Office Buildings), Chief Boiler Inspector, Inspector of Stationery Engineers and Bureau of Labour. Regulations of Boiler Inspection. Report of Timiskaming and Northern Ontario Railway Commission.

Lands, Forests and Mines,-Anntal Report of the Minister. Preliminary Statistics of Mineral Production, issued annually by the Bureau of Mines. Annual Report of the Bureau of Mines. Forestry, Northern Ontario Development.

## ADMINISTRATION

Agriculture.-Annual Reports: Minister of Agriculture; Agricultural College and Experimental Farm; Agricultural and Experimental ('nion; Dairymen's Associations and Dairy Schools; Live Stock and Poultry Associations; Veterinary College; Corn Growers' Association; Bureau of Industries: Part I, Agricultural Statistics; Part II, Chattel Mortgages; Part III, Municipal Statistics; Bee-keepers' Association; Fruit Growers' Association; Vegetable Growers' Association; Entomological Society; Agricultural Societies; Horticultural Societies; Farmers' Institutes; Women's Institutes. Crop Bulletins: (180) Flour and Breadmaking; (183) Notes on Cheddar Cheese Making; (187) Codling Moth; (188) Weeds of Ontario; (193) Tuberculosis of Fowls; (194) Apple Orcharding; (200) Fruit Juices; (203) Cabbage and Caulifower, (205-6) Dairy School Bulletins: I, Cheese-making and Butter-making; II, Dairying on the Farm; (207) Ice-cold Storage on the Farm; (208) Farm Poultry and Egg Marketing Conditions in Ontario County; (209) Farm Forestry; (210) Strawberry Culture and the Red Raspberry; (211) Fruits Recommended for Ontario Planters; (212) Orchard Surveys in Dundas, Stormont and Glengarry; (214) Sheep Raising in Ontario-Does it Pay ?; (216) Box Packing of Apples: (217) Farm Poultry; (218) Birds of Ontario; (210) San José and OysterSheU Scales; (220) Lightning Rods; (221) Value of Milk and its Producte; (222) Currants and Gooseberries; (223) Fertilizers; (224) Greenhouse Construction; (225) Swine: (226) Plum Culture in Ontario; (227) Cherry Fruit Flies; (228) Farm Crops; (229) Smuts and Rusts of Grain Crops; (230) The Cherry in Ontario; (231) Vegetable Growing; (232) Field Beans; (233) Natural Swarming of Bees; (234) Co-operative Marketing; (235) Sweet Clover; (236) Home Cannmg; (237) The Grape in Ontario; (238) Lime and its use in Agriculture; (239) Potatoes; (240) Bacterial Diseases of Vegetables; (241) Peach Growing in Ontario; (242) Diseased Mouths a Cause of Ill-Health; (243) Nature Study, orStories in Agriculture; (244) Hints for Settlers in Northern Ontario; (245) Food Values; (246) Suggestions on Feeding Stock.

Education.-Annual Report of the Minister of Education. Archæological Report. School Acts. Regulations and Courses of Study: Public and Separate Schools; Continuation Schools; High Schools and Collegiate Institutes; Summer Courses and Fxaminations for Teachers; Sumaner Model Schools for Training of Teachers; Fall Model Schools for Training of Teachers; English French Model Schools; Normal Schools for Training of Teachers. Official Calendar of the Department of Education. Recommendations and Regulations for Industrial, Technical and Art Schools. Recommendations and Regulations for Commercial High Schools, etc. Recommendations and Regulations for Agriculture and Household Science Departments. Junior High School Entrance and Junior Public School Graduation Examination Instructions. Annual Departmental Examination Instructions. Literature Selections for Examinations. Manuals: Teaching English to French-speaking pupils; Manual Training; Topies and Sub-Topics; Sewing; Education Pamphlets; Visual Aids in Teaching of History; List of Reproductions of Works of Art; Auxiliary Classes; Medical School Inspection; Laboratory Accommodation in High and Continuation Schools. Apricultural Bulletins. Instructions to Public and Separate School Inspectors on Regulations. Instructions to Public and Separate Schools Inspectors on Apportionment of Grants. Teachers' Institute Lecturers and list of Lecturers and Subjects. Junior Matriculation Regulations and Courses of Study. Manual Training and Household Science in the High, Continuation, Public and Separate Schools. Regulations for the establishment and Maintenance of Courses and for Teachers' certificates. Ontario Library Review (quarterly).

Department of Public Highways.-Annual Report on Highway Improvement; Report of Annual Meeting of Ontario Good Roads Association; Motor Vehicle Act and Regulations; General Specifications for Concrete Bridges; General Specifications for Steel Bridges; General Plans for Highway Bridges; Principles of Road Making; Highway Laws; Regulations Respecting Highways (County Roads); Regulations respecting Township Road Superintendents; Road Construction for Township Road Superintendents and Overseers; Report on Street Improvements in Towns and Cities.

Department of Game and Fisheries.-Annual Report of Game and Fisheries. Game and Fisheries Laws.

## PROVINCIAL GOVERNMENT PUBLICATIONS

## MANITOBA.

Agriculture.-Annual Report. Booklets: Manitoba-First Province of Weatern Canada; Manitoba-The Home of Mixed Farming. Farming in Manitobs. Periodical Crop and Live Stock Reports. Map of the Province. Calendar of the Manitoba Agricultural College Bulletins: (1) Horses; (2) Twelve Noxious Weeds; (3) Care of Milk and Cream; (5) The Farm Garden); (6) Farm Poultry in Manitoba; (7) Hog Raising in Manitoba; (8) Cow Testing; (9) Repairing Farm Equipment and Roads; (10) Plans for Farm Buildings; (11) Canning and Preserving; (12) The Farm Flock; (14) Care of Cream for Creameries; (15) Boys' and Girls' Clubs; (16) Hay and Pasture Crops in Manitoba; (17) Silo Construction and Ensilage Production; (18) Bee-keeping in Manitoba; (21) Farm Cost Accounting; (22) Manual of Mechanical Drawing. Circulars: (1) The Farmers' Beef Ring; (6) A Plea for Bird Houses; (7) Our Friends, the Birds; (8) Hints on Home Nursing; (10) Meat and its Substitutes; (11) What every girl should know; (12) Poison Ivy and other Poisonous Plants; (13) Cream for Creameries; (14) Method in Dressmaking; (16) Porkmaking on the Farm; (17) Servants in the House; (18) Alfalfa in Manitoba; (19) Fodder Corn in Manitoba; (20) Alfalfa Inoculation; (21) Barley Growing; (23) Improving the Farm Egg; (24) Growing Plums in Manitoba; (25) Growing Cherries in Manitoba; (26) Control of Insect Pests; (27) Pruning Trees for a Cold Climate; (28) Spray Mixtures; (29) Tree Pests and Cutworms; (30) Treatment of Alkali Soils; (31) Rye as a Weed Eradicator; (32) Cultivation after Harvest for Weed Control; (33) Marketing Manitoba's Wool Crop; (34) Care of Cream for Creameries (Ruthenian Edition); (35) Care of Cream for Creameries (German Edition); (36) Winter Feeding of Cattle, utilizing Rusted, Unthreshed Grain; (37) Hints for the Housewife on buying Dressed Poultry; (38) Rusted Wheat and the Seed Situation for 1917. Farmers' Library Extension Bulletins: (1) Lightning Control; (2) Barn Ventilation; (3) Standing Crop Competitions and Seed Fairs; (4) Control of the Sow Thistle in Manitoba; (5) Hand Selection and Harvesting of the Seed Plot; (6) Home Economics Handbook; (7) Fattening, Killing and Dressing Chickens for Market; (8) Sending the College to the Country; (9) Common Breeds of Poultry; (10) Boys' and Girls' Clubs. Home Economics Literature: Lessons on Cookery; Home Nursing; Personal Hygiene; Laundry, Sewing and Food.

Education.-Annual Report. Empire Day Booklet. Monthly Bulletin of Schools. Consolidation of Schools. Progress of Studies. Annual Report of the Superintendent of Neglected Children.

Municipal Commissioner--Annual Report on Public Health. Statistical Information respecting the Municipalities of the Province, with names and addresses of administration and health officials of each municipality.

Public Works.-Annual Report, including reports on Public Institutions.
Aftorney General.-Annual Report included in Sessional Papers. Annual Reports: Public Utilities Commission; Good Roads Commission; Government Telephone Commission.

Provincial Treasurer.-Public Accounts.
Provincial Secretary.-Annual Report.
King's Printer.-Manitoba Gazette. Report on Iibrary and Museum. Journals and Sessional Papers. Statutes of the Province. List of Incorporated and Licensed Companies operating in Manitoba.

Publicity Commissioner.-Manitoba Public Service Bulletin (monthly).

## SASKATCHEWAN.

Agriculture.-Annual Report of the Department of Agriculture. Annual Report of Branches, etc.: Dairy, Live Stock, Weeds and Seed, Game, Statistics, Bureau of Labour, College of Agriculture. Acts: Horsebreeders, Brand, Game, Noxious Weeds, Dairymen's Agricultural Co-operative Associations, Live Stock Purchase and Sale, Saskatchewan Co-operative Elevator Company, Hail Insurance, Threshers' Lien, Thresher Employees, Line Fence, Stray Animals, Fires Prevention, Wolf Bounty, Agricultural Societies, Farm Machinery, Saskatchewan Co-operative Creameries, Rural Credits. Commission Reports: Elevator, Grain Markets, Agricultural Credit, Farm Machinery. Bulletins, etc.: Sheep in Saskatchewan (No. 37), Horse Breeding in Saskatchewan, Care and Feeding of Beef Cattle, Care and Feeding of Sheep, Care and Feeding of Swine, Hog Cholera, Blackleg, Foot and Mouth Disease, Stallion Enrolment in Saskatchewan (No. 39), Grading of

## ADMINISTRATION.

Cream (No. 30), Care of Milk and Cream on the Farm (No. 15), Fleshing Chickens for Market (No. 25), Housing and Feeding Poultry.-The Care of Breeding Stock, The Management and Preservation of Eggs, Planning the Farmstead and Buildings, Plans and Specifications for Dairy Barn, Housing and Fencing for Sheep, Poultry Houses and Specifications, Farm Forestry, Summerfallow, Tillage of Prairie Land, Tillage of Stubble Land, Corn Growing in Saskatchewan, Hints to Flax Growers (No, 24), Seed Grain Treatment and Seeding, Varieties of Small Grain, Alfalfa in Saskatchewan, Alfalfa Seed Production, Winter Rye, Suggested Lines of Co-operative Production (No. 42), Co-operative Live Stock Marketing (No. 41), Household Conveniences, Recipes for Desserts and Sauces, How Debtors and Creditors may Comoperate, Practical Pointers for Farm Hands, Control of Common Insect Pests, Explanation of the Provisions of the Agricultural Co-operative Associations Act, Why the Appointment of an Agricultural Secretary is a Solution to the Weed Question, Advantages of Early Fall Cultivation, Map of Saskatchewan, Variation in Cream Test (No. 43), Laws affecting Women (No. 44), Sweet Clover, Potato Growing, Explanation of Noxious Weed Act, Bracing Wire Fences, General Purpose Barns, Dairy Barns and Ice-Houses, Beef Cattle Barns, Horse Barns, Sheep Barms, Piggeries and Smoke-houses, Poultry Houses, Implement Sheds and Granaries, Silos and Root-Cellare, Farm Houses.

## ALBERTA.

Agriculture-Annual Report of the Department of Agriculture. Reports: Commission on Agricultural Credit; Schools of Agriculture; Demonstration Farms and Schools of Agriculture. Bulletins of the Live Stock Branch: Live Stock and Mixed Farming in Alberta; (1)Suggestions reWintering Brood Sows; (2) Why Sows Eat Their Pigs; (3) Housing of Swine; (4) Preparing for the Pig Crop (New Edition); Meat Curing on the Farm, Circular No. 1-Pork. Successful Poultry Raising, Bulletin No. 3; Farm Crops of Alberta. Bulletins of the Provincial Health Branch; Consumption; Dairies and Milk; Disinfection; Faets about Flies; Infectious Diseases; Infectivity of Tuberculosis; Notifiable Diseases; Objects of the Public Health Act. Health Bulletin, Vol, 1, 1916 (monthly). Handbook of Women's Institutes. Report of First Annual Convention. Bread. Women's Institute Bulletins: Recipes; A Little Talk about the Baby.

Department of Education.-Technical Education, Bulletins Nos. 1 and 2. Surnmer School for Teachers.

Department of the Attorney General.-Annual Report on Dependent and Delinquent Children.

Annual Reports are also issued by the Departments of Municipal Affairs; the Provincial Secretary; Public Works; Railways and Telephones; Treasury (Insurance Branch); and Public Accounts.

## BRITISH COLUMBIA.

Department of Lands.-Skeena Land Recording Division. South Fork of the Fraser River. Land and Forest Policies: Speeches by the Hon. W. R. Ross, K.C., Minister of Lands. Kitimat Valley. Fort Fraser Land Recording Division. Kamloops Land Recording Division, Lands for Pre-emption in Lower Mainland, Malcolm and Nootka Islands and Coast Islands. Cariboo Land Recording Division. Reports of the Survey, Forest and Water Branches. How to Pre-empt or Purchase Land. Series of Maps on varying scales at prices ranging from 10 cents to $\$ 1$ per copy, or from 50 cents to $\$ 10$ per dozen. Pre-emptors' series of maps free for single copies. Bulletins of the Forest Branch, Farm Building Series: (1) Combination or General Purpose Barms for Prairie Farms; (2) Dairy Barns, Milk and Ice Houses for Prairie Farms; (3) Beef Cattle Barns for Prairie Farms; (4) Horse Barns for Prairie Farms; (5) Sheep Barns for Prairie Farms; (6) Piggeries and Smoke Houses for Prairie Farms; (7) Poultry Houses for Prairie Farms; (8) Implement Sheds and Granaries for Prairie Farms; (9) Silos and Root Cellars for Prairie Farmb; (10) Farm Houses for Prairie Farms. These Bulletins are for distribution in Western Canada only, and may be obtained free from the Chief Forester, Victoris. B.C. Timber Series: (12) How to Finish British Columbia Woods; (14) British Columbia Douglas Fir Dimension; (15) British Columbia Timber fcr Export; (16) British Columbia Western Larch; (17) British Columbia

PROVINCIAL GOVERNMENT PUBLICATIONS.
Western Soft Pine; (18) British Columbia Red Cedar Shingles; (19) British Columbia Manufacturers of Forest Products; (20) Directory of Lumber Dealers stocking B.C. Woods, and Lumber Wholesalers handling B.C. Woods, in Eastern Canada. These Bulletins may be obtained free from the Chief Forester, or the nearest B.C. Lumber Commissioner.

Department of Agriculture.-Reports: Fifteenth Annual Report, Farmerg' Institutes, 1913-14; Fourth Annual Report, Agricultural Fairs Association; Third Annual Report, B.C. Markets Commissioner (1914) ; B.C. Dairymen's Report ( 8 tb and 9th Annual); Second and Third International Egg-laying Contest, at Victoria, B.C.; Women's Institutes, Annual Report, 1914. Bulletins on Live Stock and Mixed Farming: (32) Control of Tubercuiosis; (33) Fruit Growing Possibilities, Skeena River; (60) Hog Raising in B.C.; (61) Field Crop Competitions, 1914-15; (62) Boys' and Girls' Field Crop Competitions, 1914-15; (64) Angora and Milch Goats; (66) Silos and Silage; (67) Feeding and Management of Dairy Cattle; (69) Field Crop Competitions, 1915-16; (70) Boys' and Girls' Field Crop Competitions 1915-16; (71) Butter-making on the Farm; (72) Milk Testing and Dairy Records; (73) Field Crop and Seed Competitions, 1917; (74) Breeding and Selection of Commercial Poultry; (75) Boys' and Girls' Competitions, 1917 Poultry Bulletins: (26) Practical Poultry Raising (4th Edition); (39) Natural and Artificial Brooding and Incubating (3rd Edition); ( $\$ 9$ ) Market Poultry (3rd Edition); (55) Care and Marketing o. "'4n (2nd Edition); (63) Poultry-House Construction. Women's In:titute E: $\quad$ (55) Place and Purpose of Family Life; (54) B.C. Women's Handiook (1シie-14). Bulletin on Fruits and Vegetables: (33) Fruit-growing Possibilities, Skeena River (Reprint); (48) Exhibiting Fruits and Vegetables (2nd Edition); (58) Farm Storages for Fruits and Vegetables; (68) Diseases and Pests of Cultivated Plants in B.C. Miscellaneous Bulletins: (30) Guide to Bee-Keeping (2nd Edition); (42) Apiculture in B.C.; (44) Irrigation in B.C.; (59) Agricultural Statistics for the Year 1918, including Specisl Reports on Agricultural Conditions in the Province; (65) Agricultural Statisties of B.C., 1914. Circulars : (6) Gardening on a City Lot; (7, 9 and 11) Honey Production in B.C., 1913-14, 1915, 1916; (12) Seed-growers' Directory; (13) Instructions re Co-operative Variety Tests; (14) Community Breeding. Circuiar Bulletins; (1) Thousand-headed Kale (2nd Edition); (2) Tuberculosis in Poultry (2nd Edition); (3) Construction of Fresh-air Brooders (2nd Edition; (4) Management of Turkeys; (5) Clover Dodder; (6) Seed Improvement; (7) Keeping Poultry Free from Lice; (8) Corn; (10) Care of Milk and Cream; (11) Poultry-keeping on a City Lot (2nd Edition); (12) Management of Geese; (13) Root-geed Growing; (14) Use of Agricultural Lime; (15) Profitable Ducks; (16) Poison Weeds; (17) Control and Eradication of Lamb's Quarters; (18) Noxious Weeds, their Identification and Eradication; (19) Poultry Rations and their Practical Application. Horticultural Circulars: (2) Commercial Onion Culture; (3) Selection of Orchard Sites and Soils; (4) Insects Injurious to Orchards; (6) Spray Calendar; (7) Fungous Diseases of Orehard and Garden; (8) Packing Orchard Fruits; (9) Sprays and Spraying; (10) Commercial Potato Culture; (11) Progress and Prospects in Fruit and Vegetable Growing; (12) Orchard Intercrops; (14) Practical Irrigation; (16) Culture of Small Fruits in the Coast Sections; (17) Planting Plans and Distances; (18) Report of the Markets Commissioner; (19) Propagation and Selection of Nursery Stock; (20) Orehard Cultivation and Cover Crops; (21) Pruning Fruit-trees; (22). Thinning Treefruits; (23) Fire-blight (Bacillus amylovorus, Burrill) (3rd Edition); (24) The Home Vegetable Garden for Interior Sections; (27) Methods of Fruit Picking and Handling; (28) Fertilizers for Fruits and Vegetables; (29) Varieties of Fruit recommended for Commerical Planting; (30) Potato Recipe Book. Miscellaneous: Rules and Regulations, Women's Institutes; List of Books and Magazines recommended for Women's Institutes; Rules and Regulations, Farmers' Institutes; Instructions to Secretaries, Farmers' Institutes; Agricultural Journal (monthly); Stock-breeders' Directory; List of Agricultural Books recommended for Farmers; Revised Rules and Regulations, Board of Horticulture; Women's Institute Quarterly, 1918; Kaslo Women's Institute Cook Book. Finance in Relation to Women's Citizenship, by A. C. Flomerfelt. Poultry-breeders' Directory.

Notz.-Applications for copies of the publications of the Department of Agriculture should be addressed to the Department at Victoria, B.C.

Bureau of Provincial Information.-Bulletins: (27) Climate of British Columbia. Strathcona Park Booklet.

## LEGISLATION AND PRINCIPAL EVENTS OF THE YEARS 1916 AND 1917

Other Publications: Journal of the Legislative Assembly; British Columbia Gazette. Annual Reports: Board of Health; Births, Marriages and Deaths; Mental Hospitals. Reports of the Ministers of Lavds, Mines, Public Works, Auditor General, Superintendent of Insurance, Fisheries Commissioner, Provincial Game Warden, Cbief Inspector of Machinery, Boys' Industrial School. Girla' Industrial School, Agricultural Department (Sth and 9th Reports), Forest Branch (Lands Department), Survey Branch (Lands Department), Water Rights (Lands Department). Agent General for B.C.; Provincial Museum; Public Accounts; Public Schools; Botanical Office; Printing Office; Archives.

Note.-Departmentai Reports are mailed to applicants by the King's Printer at 50 cents per copy. Copies of publications ayailable for free distribution may be obtained on applicstion to the Bureau of Provincial Information, Victoria, B.C.

## YUKON TERRITORY.

Ordinary Journals and Sessional Papers of the Territorial Council. The Sessional Papers contain Reports of the Territorial Offeers, including those of the Stperintendent of Works, Health Officer, Territorial Assayer, Chief License Inspector and Superintendent of Schoola, Revenue and Expenditure.

## XII.-LEGISLATION AND PRINCIPAL EVENTS OF THE YEARS 1916 AND 1917

## DOMINION LEGISLATION, 1916.

The sixth session of the twelfth Parliament of Canada was heid at Ottawa from January 12 to May 18, 1916, in the sixth and seventh years of the reign of George $V$ During the session twenty-nine public general acts and ninety-four local and private acts were passed. The War Appropriation, the Customs Tariff Amendment and the Business Profits War Tax Acts were among the more important of the public general statutes.

Finance.-The War Appropriation Act, 1916 (chapter 28), authorized the expenditure of $\$ 250,000,000$ beyond the ordinary grants of Parliament for the defence and security of Canada, the conduct of military and naval operations, the promotion of trade and industry and the carrying out of measures necessitated by the war. By the Public Service Loan Act, 1916 (chapter 3), a loan not to exceed $\$ 75,000,000$ was authorized. The Customs Tariff Amendment Act (chapter 7) raises the import duties payable upon apples to sixty cents per barrel for the British preferential tariff and ninety cents for the intermediate and general tariffs. The duties previously in force were twenty-five cents, thirty-five cents and forty cents for these tariffs, respectively. The Act also reduces the duties payable upon fuel oil, including heavy distillates used in traction engines, to one-third of a cent per gallon for the British preferential tariff and to one-half cent per gallon for each of the other two tariffs. Both items are made exempt from the special customs rates specified in the Customs Tariff War Revenue Act, 1915, section 3.

The Business Profits War Tax Act (chapter 11) imposes a tax of twenty-five p.c. of the amount by which the profits earned in any business exceed, in the case of a business owned by an incorporated company, the rate of seven p.c. per annum, and in the case where it is owned by
any other person or association, the rate of ten p.c. per annum upon the capital employed in the business. The Act applies to all trades and businesses carried on in Canada, with the following exceptions: (a) businesses, the capital employed in which has been throughout the accounting period less than $\$ 50,000$; (b) the business of life insurance companies; (c) any business of which not less than ninety p.e. of the stock or capital is owned by a province or municipality. However, businesses are not exempt which are engaged in manufacturing or dealing in munitions, materials or supplies of war, nor are businesses exempt of which twenty p.c. or more in value relate to war materials or supplies. The Act contains provisions for computation of profits, calculation of capital, collection of taxes and hearing of assessment appeals.

The Life Insurance Companies Investment Act (chapter 18) makes it obligatory upon Canadian life insurance companies licensed under the Life Insurance Act, 1910, to hold and own during the two years ending December 31, 1917, securities of Canada to the amount of not less than fifty p.c. of the increase in the net ledger assets of the company, the orfect being to provide a market for the securities of Canada issued in consequence of the war. After February 15, 1916, the deposits of securities required to be made by non-Canadian life insurance companies must consist of bonds, debentures or debenture stock of the Govermment of Canada.

Railway Legislation.-Chapter 2, an act to amend the Railway Act, gives the Railway Commissioners power to order the transfer of grain from one railway to another for transportation from the western provinces at through rates. Chapter 6, an act to amend the Caneda Grain Act, gives the Grain Commissioners power to order the supply of cars when needed for the despatch of grain which is liable to become damp or injured. Chapter 17 amends the Government Railways Small Claims Act by extending its operation to claims on all railways under government control. The Act respecting rentals payable to the Mount Royal Tunnel and Terminal Company, Limited (chapter 20), is intended to explain the Company's Act of 1914 as to rentals payable by the Canadian Pacific Railway Co. Chapter 22 is an act to authorize the acquisition by the Government of lines of railway between the city of Quebec and Nairn Falls, and between Lyster and St. Jean des Chaillons. The St. John and Quebec Railway Act, 1916 (chapter 23), authorizes the making of an agreement between the Minister of Railways and the Government of New Brunswick and the St. John and Quebec Railway Co., relating to the construction of a railway and to the granting of a subsidy thereon.

Acts Concerning the Judiciary.-An Act to amend the Winding-up Act (chapter 5) gives to the Supreme Court of Ontario powers which were held by the High Court of Ontario. The Exchequer Court Amendment Act, 1916 (chapter 16), extends the jurisdiction of the Exchequer Court to enable it to determine questions of value where the existence of claim is not in dispute. Chapter 25, an Act relating to the Superior Courts of Saskatchewan and to amend the Judges Act, gives effect to the provincial Acts of 1915 constituting the courts of appeal and king's bench for Saskatchewan.

## LEGISLATION AND PRINCIPAL EVENTS OF THE YEARS 1916 AND 1917.

Temperance Acts.-Chapter 19, an Act in aid of provincia! legislation prohibiting or restricting the sale or use of intoxicating liquors, makes it an offence, punishable by fine or imprisonment, to send intoxicating liquors into any province to be dealt with contrary to the law of that province, or to sell liquor with the knowledge that it will be so sent. The provisions of this Act are extended by chapter 14, an Act to amend the Canada Temperance Act, to provincte: in which the Canada Temperance Act is in force. Liquor is to be sold only in wholesale quantities in places which are under that Act.

Shipping Acts.-Chapters 12 and 13 are Acts to amend the Canada Shipping Act. The first of these enables captains who hold coasting certificates to navigate as far south as forty degrees south latitude, instead of only five degrees north latitude. The second makes provisions relating to the issue of certificates to persons who are qualified to take charge of boats with internal combustion engines; it also ariends the clauses relating to Quebec pilotage. Chapter 9, an Act to amend the Vancouver Harbour Commissioners Act, removes the restrictions of the Canada Shipping Act from the commissioners' powers of imposing tolls, etc.

Miscellaneous.-Chapter 10 amends the Bank Acts by making permanent the authority to lend money to occupiers of land for the purchase of seed grain upon security of the crop grown, and also authorizes the banks to lend money to farmers and stock owners upon the security of their live stock. The Act provides that in provinces where statutes or ordinances are in force relating to bills of sale and chattel mortgages, the security may be taken in the form of a bill of sale or chattel mortgage, valid and lawful according to the laws in those provinces. In provinces where there are no such statutes or ordinances in force it is provided that the security may be taken in the form of a memorandum in the terms of a schedule to the Act, this memorandum to be published in the Official Gazette of the province within thirty days after its execution. The Zinc Bounties Act (chapter 27) provides for a bounty on zinc produced in Canada when the price in London, England, is less than $£ 36$ 19s. 3d. per long ton. No bounty, however, is payable under the Act for zine produced during the continuance of the war, nor for zine produced after July 31, 1917

Chapter 21 amends the Prisons and Reformatories Act (R.S., 1906, chapter 148) by making that Act applicable to the system of reformatories and industrial farms established by the Provincial Government of Ontario. Provision is made in the Act for the transfer of prisoners from the gaols to the industrial farms or for their transfer to gaol where necessary; the Act also gives wider powers to the parole board established in connection with reformatories by the Lieutenant-Governor of Ontario in respect of the termination or suspension of indeterminate sentences. Chapter 8 provides for extension of the time during which an insurance company may apply for a license under the Insurance Act, 1910, on payment of a fee of $\$ 100$. Chapter 15, an Act to amend the Dominion Forest Reserves and Parks Act, empowers the Minister of the Interior to cancel letters patent containing errors of name, etc., and to issue correct letters patent for lands in

## DOMINION LEGISLATION, 1916 AND 1917

Dominion reserves. An Act to amend the White Phosphorus Matches Act (chapter 4) extends the time for the sale of white phosphorus matches to July 1, 1916, and for the use of them to January 1, 1917 Chapter 24, an Act relating to the St. Peter's Reserve, confirms certain patents and sales of land in that reserve, and the Taber Irrigation District Act (chapter 26) autborizes the use and sale of certain school and Dominion lands in that district.

The sixty-five local and private acts included two incorporating railway companies (chapters 30 and 31 ), twenty amending railway company acts (chapters 32-51), two insurance company and two trust company acts (chapters 52-55), eleven other company acts (chapters $56-66$ ), four acts relating to patents (chapters 67-70) and 24 acts of divorce (chapters 71-94). The company acts include two (chapters 63 and 64), providing for the division of the governing body of the Salvation Army into two governing councils, one for Canada east and one for Canada west. Another of these Acts (chapter 62) provides for the amalgamation of the Kingston School of Mining and Agriculture with Queen's University.

By Act of the Imperial Parliament (6-7, Geo. V, chapter 19), passed June 1, 1916, on petition from both Houses of the Canadian Parliament, the duration of the twelfth Parliament of Canada was extended until October 7, 1917 It would otherwise have expired by effluxion of time on October 7, 1916.

## DOMINION LEGISLATION, 1917.

The seventh session of the twelfth Parliament of Canada was held at Ottawa from January 18 to September 20, 1917, in the seventh and eighth years of the reign of George $V$ At the opening of the session on January 18, 1917, Mr. Edgar N. Rhodes, M.P for Cumberland, N.S., was elected Speaker of the House of Commons in succession to the Hon. Albert Sévigny, appointed Minister of Inland Revenue; and on February 1, 1917, Mr. J. H. Rainville, M.P for Chambly-Verchères, P.Q., was elected Deputy Speaker. From February 7 to April 19, 1917, Parliament was adjourned to permit of the attendance at Imperial Conferences in England of the Prime Minister and of colleagues accompanying him. By the Military Voters' and War Time Elections Acts, described below, the parliamentary franchise is, for the first time in Canada, conferred upon women. The following were among the more important Acts passed during this session.

War Taxation.-The Income War Tax Act (chapter 28) imposes a tax of four p.c. on incomes exceeding $\$ 2,000$ in the case of unmarried men and widows and widowers without children, and exceeding $\$ 3,000$ in the case of other persons. There is further a supertax, progressing from two p.c. on the amount by which an income exceeds $\$ 6,000$, but does not exceed $\$ 10,000$, up to twenty-five p.c. on the amount by which an income exceeds $\$ 100,000$. In the case of companies the tax is four p.c. on incomes exceeding $\$ 3,000$. Certain exemptions and deductions are provided for. An Act to amend the Business Profits War Tax Act, 1916 (chapter 6), provides for a tax of fifty p.c. on profits in excess of

## LEGISLATION AND PRINCIPAL EVENTS OF THE YEARS 1916 AND 1917.

fifteen p.c. per annum but not exceeding twenty p.c. per annum, and a tax of seventy-five p.c. on profits in excess of twenty p.c. per annum. The Public Service Loan Act, 1917 (chapter 3), authorizes a loan not exceeding $\$ 100,000,000$ in addition to sums remaining unborrowed of loans already authorized.

Military Service.-The Military Service Act, 1917 (chapter 19), makes every British subject between the ages of twenty and fortyfive, who is, or has been since August 4, 1914, resident in Canada, liable to be called out on active service, excepting clergy and persons exempted by the Act. Men who are liable to be called out are divided into six classes: (1) those between twenty and thirty-four who are unmarried or widowers with no child; (2) those of the same age who are married or widowers with a child; (3) those between 35 and 40 who are unmarried or widowers with no child; (4) those of the same age who are married or widowers with a child; (5) those between forty and forty-five who are unmarried or widowers with no child; (6) those of the same age who are married or widowers with a child. A man who is liable to be called out may be exempted on the following grounds: that it is expedient he should continue his usual work, or be engaged in other non-military work, continue to be educated or trained; hardship arising from exceptional business obligations or domestic position; ill health or infirmity; conscientious objection on religious grounds. Claims of exemption are to be heard by local tribunals from which appeals may be made to provincial appeal tribunals and from these to a central appeal judge. Provisions are made in the Act for the appointment of these tribunals. Men are to be called out, by classes, by proclamation of the Governor-in-Council, and men so called out are to be deemed to be on leave of absence without pay until placed on active service. The Act authorizes the calling out of only one hundred thousand men. Penalties are imposed for contravention of the Act and for incitement to contravention of or resistance to the Act.

Parliamentary Franchise. - The Military Voters' Act, 1917 (chapter 34), is an Act to amend the Dominion Elections Act, and gives the right to vote to every person, male or female, who, being a British subject, whether or not ordinarily resident in Canada and whether or not an Indian, has gone on active service in the Canadian naval or military forces, or has, while within Canada, joined the British Royal Flying Corps, the Royal Naval Aviation Service, or the Auxiliary Motor Boat Patrol Service. The Act makes regulations for the manner of taking and counting the votes. The War Time Elections Act (chapter 39) replaces certain parts of the Dominion Elections Act during the present war and until complete demobilization after the conclusion of peace. The right to vote is given to every female who has the provincial qualification as required in the case of males and is the wife, widow, mother, sister or daughter of any person, male or female, who is serving or has served with the naval or military forces of Canada or Great Britain in the present war. Male voters are those having provincial qualifications who are neither conscientious objectors to combatant military service, nor persons, naturalized subsequent to March 31, 1902, who were born in enemy countries or whose mother tongue was a language of an

## PROVINCIAL LEGISLATION, 1916 AND 1917

enemy country: provided that a naturalized subject may vote if he, his son, grandson, father or brother is serving or has served in the war, or if he has applied for service and been found medically unfit, or if he is or has been a member of the Dominion or a provincial parliament or if he is a Syrian or Armenian Christian. Disqualified aliens are to be exempt from military service, and persons who have voted at a Dominion election after October 7, 1917, cannot claim such exemption.

Other Acts.-An Act respecting the Minister of the Overseas Military Forees, the Parliamentary Secretary of the Department of Militia and Defence and the Parliamentary Under Secretary of State for External Affairs (chapter 35), provides for the creation of these offices and is to remain in force during the continuance of the war. An Act providing for the acquisition by His Majesty of the capital stock of the Canadian Northern Railway Company (chapter 24) authorizes the Government to buy the six hundred thousand shares of the railway, which are not now held by the Minister of Finance, for a price to be determined by arbitration.

The twelfth Parliament of Canada was prorogued on September 20, 1917, and dissolved on October 6, 1917, having thus lasted for six years, or longer than any previous Parliament of the Dominion.

## PROVINCIAL LEGISLATION, 1916 and 1917

Provincial Acts Arising out of War Conditions.-In New Brunswick provision is made by chapter 6 of 1916 for the granting of land to settiers who are unable to fulfil the homestead conditions on account of wounds received while serving in the war, or to the heirs of those who are killed. An Ontario Act, chapter 13 of 1917, empowers the Lieutenant-Governor to set apart lands for settlement by those who have enlisted for active service, the administration of the Act being combined with that of the Northern Ontario Development Act of 1912. Chapter 59 of the British Columbia statutes of 1916 provides that certain pending land purchases from the province shall be cancelled and that the land so resumed shall be held for pre-emption by returned soldiers; but by chapter 64 of 1917 this Act is repealed; the lands resumed are to be Crown Lands, for which any volunteer or reservist may make application, not losing his right to complete title by default in his payments, provided that he files a notice of his service overseas and of his intention to complete the title. Protection of men on active service against claims for debt is provided in Alberta by chapter 6 of 1916, which prohibits action against a volunteer or reservist, his wife or dependent, for enforcement of a mortgage or a debt, including rates and taxes. In Saskatchewan, chapter 7 of 1916 provides that proceedings under mortgages, bonds, etc., shall not be taken till six months after the conclusion of the war against volunteers and reservists of the British and allied forces. In British Columbia, chapter 24 of 1916 relieves sailors and soldiers from certain payments due under the Forest Act, during the war, and chapter 35 of 1916 provides that every person on active service, who has a preemption claim, and his heirs, shall be entitled to a free grant of the land under his claim until one year after the end of the war. In Ontario,
chapter 3 of 1916 confirms and extends an Order-in-Council which establishes a Soldiers' Aid Commission to assist, and to find employment and arrange for technical instruction for returned soldiers of the Canadian, Imperial and allied forces. The Saskatchewan Returned Soldiers Commission is constituted by chapter 30 of 1917 . For Alberta, chapter 18 of 1917 authorizes and regulates the organization of War Veterans' Associations.

Chapter 41 (1916) of the British Columbia statutes makes arrangements for voting in provincial elections by men on active service. In Saskatchewan, chapter 4 of 1917 provides that three members of the Legislature shall be elected by persons serving overseas, one by those in Great Britain and two by those in France and Belgium. In Alberta, under chapter 12 of 1917, two additional members of the Legislative Assembly are to be elected to represent the soldiers and nurses serving overseas, the Act to remain in force until the dissolution of the fourth legislature; further, under chapter 38 of 1917, certain members of the third legislature, who are on active service overseas, are to be declared elected at the election for the fourth legislature. The right to vote in Saskatchewan is given by chapter 5 of 1917 to every person over 21 years of age who has served as soldier, nurse, etc., in the war. The same right is given in Ontario under chapter 5 of 1917, which specifically gives the right of voting to Indians who have gone on active service.

Taxation to provide money for the Patriotic Fund and other similar purposes is to be levied as follows: New Brunswick (chapter 8 of 1916), the amount to be fixed by Order-in-Council, the assessment so made being confirmed by chapter 29 of 1917; Manitoba (chapter 3 of 1916), one and one-half mill on the dollar of the total assessments of all municipalities, which is increased to two mills by chapter 67 of 1917; Saskatchewan (chapter 6 of 1916), one mill on the dollar of all assessments, which is increased to one and one-half mill by chapter 2 of 1917; Alberta (chapter 17 of 1917), the amounts being unlimited by the Act. In Saskatchewan there is further, under chapter 2 of 1917, a special poll tax of $\$ 2$ on every male over the age of 21 , who is not otherwise. assessed and is not in the naval or military forces on active service nor in the Royal Northwest Mounted Police. The Ontario Act of 1915 (chapter 37) is amended by chapter 41 of 1917, and extended to allow municipalities to make expenditures for armaments, etc. In Quebec a provincial subscription of one million dollars to the Canadian Patriotic Fund is authorized by chapter 2 of 1916. The Ontario Organization of Resources Act (chapter 4 of 1916) establishes a committee to assist in securing the organization of resources in the prosecution of the war and the maintenance of agricultural and industrial production.

Acts Relating to Elections and the Suffrage.-The right of voting in provincial and municipal elections on the same conditions as men is given to women in Ontario by chapters 5, 6 and 43 of 1917, in Manitoba by chapters 36 of 1916 and 57 of 1917, in Saskatchewan by chapter 5 of 1917, in Alberta by chapter 5 of 1916 and in British Columbia by chapters 76 of 1916 and 16 of 1917 Manitoba, under chapter 38 of 1916, is to be divided into forty-five instead of forty-two electoral divisions. Chapter 28 of 1917 forbids the making of contributions or dona-

## PROVINCIAL LEGISLATION, 1916 AND 1917

tions by candidates and the conveyance of voters in vehicles to the polls, and provides that a candidate's expenses shall not exceed $\$ 750$ in Winnipeg nor $\$ 500$ elsewhere, and that the total electoral expense of the central committee of any political party shall not exceed $\$ 25,000$. Saskatchewan, under chapter 4 of 1916, is to be divided into 59 instead of 54 electoral divisions. Chapter 73 of the British Columbia statutes of 1917 authorizes any municipality to adopt " proportional representation" in municipal elections if it is so decided by a plebiscite, which is to be taken on the petition of five p.c. of the electors.

Temperance and Prohibition Acts.-Most of the provinces have passed strict temperance legislation during the last two sessions, and practical prohibition of the sale of alcoholic liquors, excepting for medical and scientific purposes, is now in force in all provinces except Quebec. The New Brunswick (chapter 20 of 1916), Ontario (chapter 50 of 1916) and Manitoba (chapter 112 of 1916) Acts, which are very similar, take the form of licensing Acts, but are " intended to prohibit and shall prohibit transactions in liquor." Intoxicating liquors may be sold for export only, and may be consumed only in private dwelling houses. The Alberta (chapters 4 of 1916 and 22 of 1917) and British Columbia (chapter 49 of 1916) Acts provide that vendors may be licensed to sell liquors for medical, scientific, etc., purposes, but that no other liquor shall be kept for sale, nor kept elsewhere than in a private dwelling house, excepting for export. A British Columbia Act (chapter 83 of 1917) orders that the Prohibition Act shall come into force on October 1, 1917 In Saskatchewan chapter 23 of 1917 repeals the Liquor License Act of 1915 and confines the sale of intoxicating liquors to physicians and druggists, to whom permits may be issued. Under chapter 24 brewers or distillers licensed by the Dominion Government, but no.one else, may keep liquors for export. The Prince Edward Island Acts (chapters 5 and 6 of 1917) make provisions for the better enforcement of the existing prohibition law. In Quebec, under chapter 17 of 1916, the number of licenses to be allowed in each city in the province is to be reduced, hotel bars are to be prohibited after May 1, 1918, treating is prohibited, increased duties are to be paid on licenses and limitations are put on the quantities of liquor which may be kept and sold by druggists.

Agricultural Credit.--In Ontario, Manitoba, Saskatchewan, Alberta and British Columbia, Acts were passed in 1917 empowering the provincial governments to provide money for loans to farmers. The Ontario Act (chapter 25 of 1917) authorizes the Provincial Treasurer to lend money to a township corporation against debentures of the township, to enable the corporation to make loans to farmers, principally for permanent improvements. In Manitoba, a Farm Loans Association directed by a board of five members is created by the Act (chapter 33 of 1917) with a capital of one million dollars in shares which can be held only by the Provincial Government and borrowers under the Act. The board may lend money on mortgage to the amount of not more than fifty p.c. of the value of the land mortgaged. The Saskatchewan Farm Loans Board, created by chapter 25 of 1917, is to consist of a commissioner and two other members, and may make loans for thirty years of not more than fifty p.c. of the property mortgaged, the interest to be fixed by

LEGISLATION AND PRINCIPAL EVENTS OF THE YEARS 1916 AND 1917.
the board. The Alberta Act (chapter 10 of 1917) provides for the making of loans on mortgage by a board established for the purpose, money being advanced to the board by the Provincial Treasurer. In British Columbia, under chapter 10 of 1917, a Land Settlement Board is to be formed to replace the former Agricultural Credit Commission and to have powers, among others, to make loans on mortgage for the acquiring and development of land and for the purchase of live stock, machinery, etc. Smaller credits are dealt with in Manitoba by chapter 73 of 1917 and in Alberta by chapter 11 of 1917, which make provisions for the formation of local co-operative credit societies among farmers. A Manitoba Act (chapter 80 of 1917) permits municipalities to borrow limited amounts of money for the purchase of seed grain; chapter 8 of 1917 in Alberta regulates the making of loans for seed grain purposes and authorizes the Provincial Treasurer to guarantee payments for seed grain to bankers and others making such loans. For the encouragement of live stock in Manitoba chapter 3 of 1916 authorizes the Government to buy and to raise animals and to sell them conditionally to settlers, reserving the right to inspect such animals and to resume possession thereof in certain cases; milk and cream not used by the owners of the animals are to be sent to a Government co-operative dairy. The Live Stock Commissioner of Alberta is empowered by chapter 9 of 1917 to make loans for the purchase of animals. In Nova Scotia, by chapters 11 and 12 of 1917, the Government is empowered to appropriate money to assist and encourage the purchase of agricultural machinery.

Other Agricultural Legislation.-Chapter 6 (1917) of Nova Scotia is an Act for the prevention and treatment of diseases among bees. Of the Manitoba statutes of 1917, chapter 24 authorizes the establishment and operation of demonstration farms under the direction of the Provincial Minister of Agriculture; chapter 44 prohibits the killing or taking of certain insectivorous birds and the taking of their eggs, and chapter 65 deals with the suppression of noxious weeds. The protection of sheep from injury by dogs is dealt with by chapter 82 (1917) in Manitoba, and chapter 14 (1917) in British Columbia. Chapter 16 of the statutes of British Columbia for 1916 requires the licensing of creameries, dairies, etc., and their inspection by licensed inspectors. Chapter 18 (1916) orders, under penalty, the marking of eggs according to grades. Chapter 15 of 1917 provides that brands and sale-marks of cattle and horses shall be registered and certificates of registration issued, a board of commissioners being appointed to administer the Act.

Forestry Legislation, 1917.-In Ontario the Forest Fires Prevention Act (chapter 54) provides for the appointment of a provincial forester in charge of its enforcement. The portion of the province lying north of a line running approximately from the southern end of Georgian bay to the upper Allumette lake in the Ottawa river is included in so-called fire districts. In these districts special fire regulations apply during a close season from April 15 to September 30, which may be extended by regulation. The main requirement of these regulations is the taking out of a permit before setting-out fire for clearing land, destroying debris, or any industrial purpose. By subsequent regulation, this requirement is confined to a district including mainly the Clay Belt

## PROVINCIAL LEGISLATION, 1916 AND 1917

and Cobalt regions. The provincial forester is empowered to order the clearing up of areas in which he thinks fires liable to start. Regulations are made in the Act as to the operation of engines (both locomotive and stationary) in the " close season."

In Manitoba the Fires Prevention Act (chapter 35) was passed. By this Act a "wooded district" is set aside, and power is given the Lieutenant Governor in Council to proclaim other such districts. In such districts a " close season" (April 1 to November 15) is provided; during this season no fires may be lighted without a permit from the nearest fire guardian. Every adult male within fifteen miles of a fire may be called upon to help fight it, under penalty for refusal. Burning brush or felled trees at a time where there is danger of the fire spreading is forbidden, under penalty of fine or imprisonment. A minimum fine of twenty dollars is fixed. Organized municipalities are required to appoint fire guardians, and additional fire guardians may be appointed by the Minister or Dominion forest or fire rangers authorized to act, especially in unorganized territory.

In Saskatchewan the Prairie and Forest Fires Act of 1917 (chapter 21) enacts that brush caused by clearing land for any purpose must be piled and burned at the time of cutting, unless there is danger of the fire spreading; in such cases the burning must be postponed until the end of the "close season." Anyone setting fire to trees or timber under circumstances that make a spread of the fire likely is liable to fine or imprisonment. In certain specified areas a "close season" for fres (April 1 to November 15) is instituted, during which no one may burn standing trees, brush or slashing without a permit from a fire guardian.

Appointment by the Lieutenant Governor in Council of fire guardians in the district where burning permits are required is provided for. In organized municipalities, fire guardians are to be appointed by the Councils. All fires are to be reported to the Provincial Fire Commissioner (provided for by previous legislation) and he is to investigate fires of doubtful origin and prosecute apparent offenders. A minimum penalty of twenty-five dollars is prescribed.

In New Brunswick, chapter VII, an Act to facilitate the collection of stumpage makes more stringent regulations regarding the submission of returns on the part of operators of timber limits and exporters of pulpwood.

Labour Legislation.--Chapter 33 of the New Brunswick statutes of 1917 orders the early closing of shops engaged in any business in a city or town on petition from three-quarters of the persons engaged in that business, and chapter 35 confirms and enlarges the powers of a commission appointed to inquire into the workmen's compensation legislation of other provinces and countries. The Manitoba Workmen's Compensation Act (chapter 125 of 1916) requires the employer to compensate a workman for injury by aceident arising out of and in the course of the employment, and workmen may not agree to forego the benefits of the Act. A compensation fund is to be established from contributions by employers who carry their own liability and from insurance companies, and a commissioner is to be appointed, with jurisdiction over the matters in the Act, who is to pay the compensation and recover the amount from
the person or company that is liable. A schedule is given of industries to which the Act applies, and it is provided that in other industries the workman shall be compensated for injuries due to defects of equipment, etc., and to the negligence of other employees. The British Columbia Act (chapter 77 of 1916) provides that compensation is to be paid from a fund to be raised by assessment of industries, which are divided into classes for the purpose. Wages at mines must be paid at intervals of not more than two weeks in Ontario under chapter 12 of 1916, and in British Columbia, under chapter 75 of 1917, wages must be paid at least semi-monthly to employees in manufacturing industries, mining, lumbering and fishing.

In Ontario a Trades and Labour branch of the Government service is formed by chapter 13 of 1916 to deal with labour statistics, the distribution of employment, employment bureaux, conditions of labour, wages, etc. Chapter 121 (1916) of Manitoba creates a Fair Wages Board which is to act on information of the Bureau of Labour, investigate the wages of men employed on public works and report to the Minister of Public Works. Chapter 68 (1917) of British Columbia establishes a Department of Labour, under a Minister, to administer laws affecting labour, control the distribution and conditions of labour, collect statistics and information, establish employment bureaux, etc. The Alberta Factory Act (chapter 20 of 1917) makes provisions regarding the inspection of factories, conditions of labour, sanitary regulations, employment of women and children, etc. In Alberta, chapter 7 of 1917 makes regulations for the safety of workers in electrical industries; and in British Columbia, chapter 75 of 1916 requires the closing of shops, with certain exceptions, on one afternoon in every week.

Laws Concerning Children.-In Nova Scotia, chapter 2 of 1917 establishes a special court for juvenile delinquents, constitutes the office of Superintendent of Neglected and Delinquent Children, provides for the formation of Children's Aid Societies, and regulates the hours of employment of young persons. Chapter 54 of 1916 in Ontario orders the establishment of a Juvenile Court wherever the Juvenile Delinquents Act is in force, and chapter 62 of 1916 deals with the attendance at school of adolescents. Under chapter 97 of 1916 in Manitoba every child between the ages of seven and fourteen is to attend school, with certain exemptions, and no child under fourteen is to be employed in school hours, unless, if over ten, exempted by a magistrate for agricultural or household work during not more than six weeks in any school term. In Saskatchewan, under chapter 19 of 1917, no child under fourteen is to be employed during the school session unless excused by certificate of the trustees. A British Columbia Act (chapter 18 of 1917) makes provisions as to the appointment, rights and duties of guardians of infants and gives husbands and wives equal rights in the guardianship of their children.

New Government Departments.-In addition to the new Departments mentioned under Labour Legislation, a Bureau of Municipal Affairs is created for Ontario by chapter 14 of 1917 to superintend the accounts, liabilities, revenues, etc., of public utilities and municipalities. Chapter 72 (1916) of Manitoba authorizes the appoint-

PROVINCIAL LEGISLATION, 1916 AND 1917
ment of an administrator of a munieipality that is "in financial difficulties." Chapter 78 (1916) authorizes the appointment of a Commissioner of Northern Manitoba to supervise the enforcement of law and the administration of justice. Chapter 116 (1916) establishes a Controlling and Audit Branch of the Provincial Treasury under a Comptroller General. Chapter 6 of the Saskatchewan statutes of 1917 deals with the organization of the Treasury Department. Chapter 7 creates a Department of Highways under a Minister, and chapter 8 creates a Local Government Board of three members to supervise loans and, in certain cases, assessments of local authorities and the expenditure of borrowed money. A provincial police force for Alberta, controlled by a board of three commissioners, is established by chapter 4 of 1917 In British Columbia a Civil Service Commission is constituted by chapter 12 of 1917 The civil service is divided into classes, and appointments, with certain exceptions, are to be made by competitive examination. Provisions are made as to temporary employment, salaries, retirement, etc. A Controlling and Audit Branch of the Treasury Department is established by chapter 67 of 1917, and by chapter 73 a Board of Taxation to investigate and study systems of taxation and taxation laws.

Municipal Trading.-Under chapter 9 of 1917, in Nova Scotia, a municipality may establish a yard for the storage and sale of fuel; under chapter 32 of 1917 in New Brunswick, a municipality may borrow money for the purchase of food and other necessaries; and in Ontario, by chapter 42 of 1917, powers are given to municipalities to deal in fuel and food.

Ship-Building.-A Ship-building Commission is constituted in Nova Scotia, by chapter 1 of 1917, to encourage the development of the ship-building industry in the province, and with power to construct, own and operate ships, A Commission with similar functions is constituted in British Columbia by chapter 57 of 1916, and provision is made for the payment of subsidies to owners of ships to be built in the province.

Miscellaneous.-The improvement and maintenance of roads is provided for in Nova Scotia by chapter 3 of 1917, in New Brunswick by chapters 2, 3 and 4 of 1917, in Quebec by chapter 10 of 1916, in Ontario by chapter 16 of 1917, in Saskatchewan by chapters 8 of 1916 and 7 of 1917 and in British Columbia by chapter 6 of 1916 . General Fire Prevention Acts were passed in 1916 by Saskatchewan (chapter 17) and by Alberta (chapter 23).

Other Acts of the provincial legislatures are as follows:-
Nova Scotia.-Chapter 5 of 1916 provides that not less than fifteen persons actually engaged in fishing may form a co-operative society to carry on the trade of fishing, deal in fish, build and deal in boats, etc., and in so doing are relieved from compliance with certain parts of the Companies' Acts.

Ontario.-Chapter 20 of 1916 authorizes developments by the Hydro-Electric Power Commission, and chapter 21 establishes inspectors to secure the economical use of water powers. Chapter 58 of 1917 institutes and regulates a system of superannuation for the school
teachers and inspectors of the province. Chapter 63 of 1917 cou - 1 ! $1!$ ? a Board of Parole with powers to release prisoners on parole anti :.. assist them in securing employment.

Manitoba.-Chapter 57 of 1916 authorizes the establishment of an Industrial Farm to which any person convicted of an offence against an Act of Manitoba may be transferred from any jail. Chapter 23 of 1916 makes provisions under which seven or more persons may form a cooperative association, with limited liability on the shares, to carry on business for cash only. Dividends are not to exceed seven p.c., and remaining profits are to be divided among patrons who are sharehoiders. Under the Initiative and Referendum Act (chapter 59 of 1916) a law may be proposed in a petition submitted by eleators numbering not less than eight p.c. of the total votes polled at the preceding provincial general election, and such proposal, if not enacted by the Legislative Assembly, is to be submitted to the people either by a special referendum or at the next general election, unless it is decided by the courts to be ullra vires of the Legislature. If a special referendum is asked for it is to be taken not more than six months after the presentation of the petition. On the petition of electors, being not fewer than five p.c. of the votes polled at the preceding general election, any Act of the Legislative Assembly is to be submitted to the people by referendum or at a general election, and no Act of the Assembly is to take effect until three months after the termination of the session unless it is declared to be an emergency measure by a two-thirds vote of the members voting. No grant or subsidy is to be declared an emergency measure.

Alberta.-The Sale of Shares Act, chapter 8 of 1916, regulates the sale in Alberta of shares, bonds and other securities of companies, and provides that securities not in certain specified categories may only be sold in the province under certificate and license of the Board of Public Utilities Commissioners.

British Columbia.-Chapter 43 of 1916 authorizes the Minister of Mines to construct tracks, bridges, etc., to mineral districts. Chapter 11 of 1917 provides for a mineral survey of the province, the appointment of a resident engineer in each of six survey districts for aid to prospectors and others by supply of information, examination of samples, etc., and for the protection of wage earners employed on mines or claims. It also provides for the protection of investors by the notification of false statements about any mineral property. Chapter 54 of 1917 empowers the Minister of Mines to construct and operate such sampling plants, smelters, refineries and the like as may appear necessary.

## PRINCIPAL EVENTS OF THE YEARS 1916 and 1917.

H.R.H. The Governor General.-On October 13, 1916, the Duke of Connaught completed five years' service as Governor General and Commander in Chief of the Dominion of Canada. Originally appointed for a period of two years, His Royal Highness eventually fulfilled the entire term of five years during which it is customary for the GovernorsGeneral of Canada to hold office. Throughout this time the Duke mingled freely with the people of Canada, winning their sincere esteem

## CANADA AND THE EUROPEAN WAR

and loyal affection. The Royal party left Canada on October 16th, 1916. The death in England on March 14, 1917, of the Duchess of Connaught was deeply and universally regretted in Canada, where Her Royal Highness had devoted herself unsparingly to efforts in alleviation of the suffering and distress occasioned by the war.

Appointment of New Governor General of Canada.-The Duke of Devonshire, K.G., G.C.M.G., G.C.V.O., appointed on August 19, 1916, to succeed H.R.H. the Duke of Connaught, landed at Halifax, N.S., on November 11, 1916, where he was immediately sworn in as Governor General and Commander in Chief of Canada. His Excellency, accompanied by Her Excellency the Duchess of Devonshire and other members of their family, then proceeded to take up residence at the Government House, Ottawa.

Canada and the European War.-The great war has continued to engage the chief national energies of Canada. On January 12, 1916, an Order in Council gave legal authority for an increase of the Canadian troops to 500,000 men, and earnest efforts to recruit, train and equip additional soldiers have been put forth throughout the whole of Canada. Regulations respecting national service were promulgated under the provisions of the War Measures Act, 1914, by Orders in Council of October 5, November 14 and 30, 1916. These provided for the appointment of a National Service Board for Canada with local National Service Boards and a Committee for the Public Service of Canada under a Director General of National Service. The object of the regulations was to secure the largest available military forces in the present war and to co-operate with and afford all possible information to the military authorities engaged in recruiting. An inventory of the man-power of Canada was taken by the Director General of National Service by means of cardsissued to and collected from all males of military age throughout the Dominion. On November 15, 1917, the total number of recruits enlisted in the Canadian Expeditionary Force since the beginning of the war reached 441,862 (see also page 639).

During the two years 1916 and 1917 the Canadian troops have splendidly maintained their high reputation for valour ard endurance on the field of battle. On May 9, 1916, Lieut-Gen. the Hon. Sir Julian Byng was appointed to succeed General Alderson in command of the Canadian troops at the front, and on June 19, 1917, on his promotion to command the Third Army, he was succeeded in this command by Major-Gen. Sir Arthur Currie, K.C.M.G., C.B. After the second battle of Ypres in 1915 (see Canada Year Book, 1915, page 685), the Canadian troops were occupied for some months chiefly with minor operations and raids; but they also took part in the severe fighting at St. Eloi in April, 1916, at Sanctuary Wood in June, 1916, and on the Somme in September, 1916. The year 1917 was one of special distinction for the Canadian Army Corps, which then consisted of four divisions and a considerable number of corps troops. The corps bore a brilliant part in the victory of Vimy in April, and distinguisked itself in the subsequent fighting at the end of April and the beginning of May at Arleux-en-Gohelle and Fresnoy. Shifting northwards towards Lens, during June and July they did much fighting in the
western suburbs of that city; on August 15 they attacked and captured Hill 70, near Loos, and for some days were engaged in heavy fighting which took them close to Lens on the west and northwest. September and part of October were passed in comparative quiet, but towards the end of the latter month the corps was moved once more to the Ypres battlefield, and four attacks made in the last days of October and early in November resulted in the capture of Passchendaele and the bighly important ground on which that village stands. In addition to the combatant troops, valuable services were rendered by the Canadian Forestry and Railway Corps. Canadians have also specially distinguished themselves as aviators. There were numerous awards of the Victoria Cross, the Distinguished Service Order, the Military Cross, the Distinguished Conduct Medal, and other recognitions of valour and skill; the names of the recipients of these honours have been published in the Canada Gazette. Up to October 17, 1917, the casualties amongst the Canadian forces totalled 5,125 officers and 120,431 of other ranks; they included 1,015 officers and 20,263 other ranks killed in action; 314 officers, 6,867 other ranks died of wounds; 81 officers, 1,473 other ranks died of diseases; 3,458 officers, 84,955 other ranks wounded; 120 officers, 2,566 other ranks prisoners of war; 96 officers, 3,248 other ranks presumed to have died; 41 officers, 1,059 other ranks reported missing.

An Order in Council of June 3, 1916, provided for the establishment of a Board of Pension Commissioners for Canada consisting of three members, and by Order in Council of October 22, 1917, a revised scale of pensions was authorized to take effect as from April 1, 1917 (see page 644).

On October 29, 1917, resolutions expressing the thanks of both Houses of the Imperial Parliament were voted unanimously to the naval and military forces of the Empire, and the following clauses which have special reference to the troops of the Overseas Dominions may be recorded here as applicable to Canada:
> " That the thanks of this House be accorded to the gallant troops from the Dominions Overseas, from India and from the Crown Colonies, who have travelled many thousands of miles to share with their comrailes from the British Isles in the sacrifices and triumphs of the battlefield, and to take their full part in the struggle for human freedom.
> "That this House doth acknowledge with grateful admiration the valour and devotion of those who have offered their tives in the service of their country, and tenders its sympathy to their relatives and friends in the sorrows they have sustained."

The resolutions were supported by eloquent speeches in both Houses, including those of the movers and seconders, viz., Earl Curzon and the Marquis of Crewe in the House of Lords and Mr. David Lloyd George and Mr. Herbert Asquith in the House of Commons.

Canadian Contributions for Patriotic Purposes.-At home the efforts of the Canadian people on behalf of the cause for which their troops are fighting at the front bave been worthily sustained. Returns collected by the Census and Statistics Office show that up to March

## OANADIAN PATRIOTIC CONTRIBUTJONS.

31, 1917, the total value of Canadian patriotic contributions actually paid amounted to $\$ 49,271,012$ as follows:

| Fund. | $\begin{gathered} \text { Value of } \\ \text { contributions } \\ \text { paid. } \end{gathered}$ |
| :---: | :---: |
|  | \$ |
| Canadian Patriotic. | 22,981,616 ${ }^{1}$ |
| Donations of Dominion and Provincial Governments to the Imperial | 5,469320 |
| Manitoba Patriotic Fund. | 2,311,292 |
| Canadian Red Cross. | 4,926,139 ${ }^{3}$ |
| British Red Cross. | 3,712,303 |
| Hospitals and Military Hospitals Commission. | 2,048,109 ${ }^{4}$ |
| Belgian Relief. | 2,633,458 ${ }^{5}$ |
| Serbian Relief. | 95,397 |
| Polish (Jewish) Relief. | 205,460 |
| French Relief... | 393,160 |
| British Sailors Relief ... | 655,330 |
| Contributions for machine gums, etc., and to military units. | 1,984,740 |
| Miscellaneous. | 386,193 |
| Salaries to dependents of men on active service by the Provincial Governments of Ontario and Manitoba. <br> Expenditures by Ontario Municipalities not otherwise accounted for | 263,151 $1,205,344$ |
| Total. | \$49,271,012 |

[^58]The various funds included in the foregoing statement are as follows: Canadian Patriotic; Manitoba Patriotic; Donations of Dominion and Provincial Governments; Canadian Red Cross; British Red Cross; Contributions for machine fund, field kitchens, field ambulances, etc., general military expenses and military units; Belgian Relief; Jewish Relief; Serbian Relief; Polish (Jewish) Relief; French Relief; Comité France-Amérique; Soldiers' Comforts; British Sailors' Relief; Canadian War Contingent Association; Field Comforts Commission; Committee of New Brunswick; Aeroplane Fund of Winnipeg; Soldiers' Gazette; Miscellaneous; Returned Soldiers; Newspaper Tobacco Funds; European War Veterans' Association of Calgary; Manitoba Telephone Employees; Ontario Municipalities and the following Hospital Funds: Military Hospitals Commission; Ontario Military (Orpington and Cobourg) ; Women's Hospital Ship; Seamen's Hospital (Greenwich); Scottish Women's Hospitals; Toronto University; Queen's University; Luton House; Clarence House; Cliveden; Sir Sandford Fleming Home; Hôpital des Paroisses Canadiennes Françaises, Paris; Canadian Hospital, Dinard.

LEGISLATION AND PRINCIPAL EVENTS OF THE YEARS 1916AND 1917.
The distribution of the contributions paid by provinces is as follows:


## ${ }^{1}$ Includes $\$ 738,150$ contributed by the three Maritime provinces to the Belgian Relief Fund.

Not included in the total are sums pledged to the Canadian Patriotic Fund, but not collected by March 31, 1917 These aggregated $\$ 14,973,037$, and if added to the amount collected as shown in the above tables would increase the total to $\$ 64,244,049$. Moreover, the returns obtained are limited to organized contributions to Canadian, Imperial and Allied Funds. They do not include numerous local contributions and gifts in kind that have necessarily escaped compilation. From the available data it is estimated that the total Canadian contributionsfor patriotic purposes connected with the war from August 4, 1914, until March 31, 1917, has not been less than $\$ 55,000,000$, and that on August 4, 1917, at the end of the third year of the war, the total was between $\$ 60,000,000$ and $\$ 70,000,000$.

Military Hospitals Commission.-The Military Hospitals Commission was established by Order in Council of June 30, 1915, to provide hospital accommodation and convalescent homes in Canada for officers and men of the Canadian Expeditionary Force who return invalided from the front. By later Orders in Council it has received wider powers, including the securing of employment for returned soldiers. The following matters are now dealt with by the Commission: hospitals for sick and wounded, convalescent homes, sanatoria for the tuberculous,

## MILITARY HOSPITALS COMMISSION

care of the insane, treatment of men suffering from shell shock, manufacture of artificial limbs, re-education or vocational education of men who pass through the hospitals, finding of employment for discharged men. All men passing through the Commission's institutions are required to take some educational course unless excused on medical grounds. Men whose disability, caused or aggravated by service, prevents them from resuming their former trade may claim free training for a new occupation. About 1,500 such applications have been approved up to the end of November, 1917. Such men receive pay and allowances in accordance with a special scale. If a soldier, who has been discharged, subsequently requires treatment for a disability due to his service, he may be re-attested and receive the pay and allowances of his rank during the treatment. In finding employment for discharged men the Commission is assisted by a commission or committee in each province. The number of men receiving care and treatment under the Commission was 10,953 on November 15, 1917 Returned soldiers have been divided into three classes, viz., (1) men for immediate discharge without pension; (2) men whose condition may be benefited by further medical treatment or rest in a convalescent home, hospital or sanatorium; and (3) men having a permanent disability which would not be benefited by further medical treatment, and whose cases are considered by the Pensions Board with a view to pension. Up to March 31, 1917, the number of men returned was 13,826 , of whom 2,891 were of class 1, 9,125 were of class 2,828 were of class 3, 864 were men not classed as invalids, and of 119 there was no record. The total had increased by October 31, 1917, to 29,092, of whom 18,099 were invalids coming under the care of the Commission. In May, 1917, the various institutions available or under construction throughout Canada numbered 110, providing accommodation for 14,949 cases. At the end of September, 1917, there were 113 institutions in use, of which 71 were operated by the Commission, 21 were new centres provided, and 45 were remodelled during the year 1917 A Disablement Fund bas been started by the Commission, contributions to which have been received amounting to $\$ 125,550$. The principal of the amounts contributed has been invested, and it is proposed to apply the fund for the relief of men and their families who, without baving any claim on the Government, may be in financial difficulties.

Military Organization.-On November 11, 1916, General Sir Sam Hughes, who had been Minister of Militia and Defence since October, 1911, tendered his resignation of this office at the request of the Prime Minister, conveyed by letter of November 9, 1916, in consequence of disagreement on matters connected with the overseas administration of the Department. The questions in dispute were referred to in a series of letters exchanged between the Prime Minister and Sir Sam Hughes from October 18, 1916, to November 11, 1916, and published on November 15, 1916. In one of these letters, dated October 18, 1916, Sir Robert Borden wrote: "I thoroughly appreciate the great ability, the wonderful energy and the unequalled resourcefulness which you have placed at the service of the country ever since the outbreak of
the war." General Hughes' resignation was accepted, and on November 23, 1916, the Hon. A. E. Kemp was appointed to succeed him as Minister of Militia and Defence. On October 28, 1916, Sir George Perley, Acting High Commissioner in London, was appointed by Order in Council as Minister of the Overseas Military Forces for Canada in the United Kingdom.

Visits to Canada of Australian, French and British Statesmen.-On February 18, 1916, the Hon. William Morris Hughes, Premier of the Commonwealth of Australia, when passing through Canada on his way to England, was sworn in at Ottawa as a member of the Canadian Privy Council; and he was also present, by invitation, at a meeting of the Dominion Cabinet. On April 6, 1917, war against Germany was declared by the United States whose entrance into the great conflict was warmly welcomed in Canada, as in the rest of the Empire, not only because the vast resources of the new Ally rendered still more certain a victorious issue, but also because of the moral weight which the American Republic, after a display of forbearance unexampled in the history of nations, thus threw into the scale on behalf of democratic freedom. In May, as a consequence of the action thus taken, important missions from France under M. René Viviani, French Minister of Justice, and Marshal Joffre, formerly Commander-in-Chief of the French Armies in the field, and from Great Britain under the Right Hon. A. J. Balfour, M.P., Secretary of State for Foreign Affairs, visited the United States and Canada. On May 12, 1917, M. Viviani, who was accompanied by the Marquis de Chambrun, Vice-President of the French Committee for Foreign Affairs, and General Vignal, Military Attaché of the French Embassy at Washington, were received at Ottawa by both Houses of Parliament in joint session. M. Viviani on this occasion delivered a deeply impressive oration, which on the motion of the Acting Prime Minister (Sir George Foster), seconded by the Leader of the Opposition (Sir Wilfrid Laurier) was ordered to be inserted in Hansard as part of the permanent record of Parliament. On May 28, 1917, Mr. Balfour was likewise tendered a reception by both Houses of Parliament, when he delivered a notable speech, which on the motion of the Prime Minister (Sir Robert Borden), seconded by the Leader of the Opposition (Sir Wilfred Laurier), was ordered to be published in the Official Debates of the House of Commons.

Visits to England of Canadian Cabinet Ministers.-On February 12, 1917, the Prime Minister (Sir. Robert Borden), accompanied by two of his colleagues in the Cabinet (the Hon. Robert Rogers, Minister of Public Works and the Hon. J. D. Hazen, Minister of Marine and Fisheries and of the Naval Service) left for England to attend meetings of Imperial representatives in London for the consideration of matters connected with the prosecution of the war, the terms of peace and the problems that will arise after the conclusion of peace. An Imperial War Cabinet, consisting of members of the British War Cabinet, the Secretary of State for Foreign Affairs, the Secretary of State for the Colonies, and the Secretary of State for India, as well as the Prime Ministers of all the self-governing Dominions of the British Empire (with the exception of Australia, whose representatives were unable

## COMPULSORY MILITARY SERVICE

to be present), and India being represented by the Secretary of State, met in London on March 20, 1917, and held fourteen sittings lasting until May 2, 1917 During fifteen days of the period March 21 to April 27, 1917, meetings were held of the Imperial War Conference of which, besides Sir Robert Borden, Sir George Perley, Mr. Hazen and Mr. Rogers were Canadian members. After the resumption of the Parliamentary Session on April 19, 1917, and the return to Canada on May 15, 1917, of the Canadian Ministers, the Prime Minister, in the House of Commons on May 18, 1917, made a statement as to the proceedings of the meetings of these two bodies and referred particularly to development in the constitutional relations between the United Kingdom and the Overseas Dominions, which had been thus inaugurated and which involved a decision to hold yearly meetings of the Imperial Cabinet for the consideration of matters of common concern to the Empire.

Compulsory Military Service.-At the conclusion of his speech in Parliament on May 18, 1917, the Prime Minister announced that early proposals would be made on the part of the Government to provide, by compulsory military enlistment on a selective basis, such reinforcements as might be necessary to maintain the Canadian army in the field as one of the finest fighting units of the Empire. Accordingly on June 11, 1917, the Military Service Bill was introduced, and on July 5, 1917, a motion for its second reading was carried by 118 votes to 55 , after various amendments to the motion for second reading had been put and declared lost on division. The principal amendment, moved by the Leader of the Opposition (Sir Wilfrid Laurier), was to the effect that " the further consideration of the Bill be deferred until the principle thereof has, by means of a referendum, been submitted to and approved of by the electors of Canada." This amendment was lost on a division, the yeas being 62 and the nays 111. The Bill was assented to on August 29, 1917

War Loans.-In addition to the first domestic war loan of $\$ 100,000,000$, raised in November, 1915 (see Canada Year Book, 1915, page 679), a second war loan of $\$ 100,000,000$ was raised in September, 1916, in the form of bonds, at the price of $97 \frac{1}{2}$ p.c. maturing on October 1, 1931, and bearing interest at 5 p.c. per annum. In March, 1917, a third war loan of $\$ 150,000,000$ in the form of bonds bearing interest at 5 p.c. per annum and maturing on March 1, 1937, was issued at the price of 96 p.c. and was considerably over-subscribed. On November 12, 1917, preparations were completed for the issue of a fourth Canadian War Loan in the form of five, ten and twenty year "Victory Bonds," in denominations as low as $\$ 50$, issued at par bearing interest at $5 \frac{1}{2}$ p.e. and maturing on December 1, 1922, 1927 and 1937 The subscriptions closed on December 1, 1917, and according to statements issued by the Vietory Loan Organization Committee the amount subscribed exceeded $\$ 400,000,000$. For all these loans the interest is payable half-yearly and is exempt from taxation.

Food Control.-An Order in Council of June 16, 1917, made under the provisions of the War Measures Act, 1914, provided for the appointment of a Food Controller for Canada, and on June 21, 1917, the Ron.

LEGISLATION AND PRINCIPAL EVENTS OF THE YEARS 1916 AND 1917.
W J. Hanna, K.C., of Toronto, was appointed Food Controller for Canada, without salary. In pursuance of the provisions of the Order in Council, the Food Controller has taken steps with the object of rendering available as large a quantity as possible of foods (a) for the allied armies; (b) for the civilian populations of the United Kingdom and the allied countries, and (c) for the civilian population of Canada at reasonable prices. Various Orders in Council regulating the sale and distribution of food products have been passed on the recommendation of the Food Controller, including Orders dated August 9, 24, September 18, October 11, 19, 23, November 2 and 15, 1917 Under these Orders public eating houses have been brought under regulation (August 9); the manufacture and free importation of oleomargarine is permitted, under license, as a war measure only (October 3); no grain or food substance may be used in Canada for the distillation of potable liquors (November 2); exports of food and other specified commodities are controlled (November 15); flour mills are licensed and regulated (November 15); and the Food Controller is given authority to license any or all food manufacturers and other dealers in foodstuffs and to prescribe conditions which shall govern the trade (November 15).

Fixation of Wheat Prices.-On June 11, 1917, a Board of Grain Supervisors of Canada, with offices at Wimnipeg, was appointed by Order in Council under the War Measures Act, 1914, with wide powers of control over the disposition of grain, including the power to fix maximum prices at which grain may be sold. In pursuance of these powers the following prices per bushel of 60 lb . have been fixed for different grades of wheat to remain in force until August 31, 1918: from September 12, 1917, No. 1 Hard and No. 1 Manitoba Northern, \$2.21; Manitoba Northern No. 2, \$2.18; No. 3, \$2.15; Alberta Red Winter No. 1, $\$ 2.21$; No. 2, $\$ 2.18$; No. 3, \$2.15. Prices for other grades of wheat taking effect from October 1 and. November 1, 1917, have also been fixed by the Board. These prices are based upon grain in store at the public terminal elevators at Fort William and Port Arthur.

Wheat Placed on the Free List.-By Order in Council of April 16, 1917, passed under the War Measures Act, 1914, wheat, wheat flour and semolina were placed on the Customs Free List from April 17, 1917, instead of being subject to the import duties previously payable. Under the provisions of the American tariff the removal of the Canadian import duties on wheat secures the entry, duty free, of Canadian wheat into the United States.

Destruction of the Houses of Parliament.-A fire which broke out in the reading room of the House of Commons at Ottawa at about 8.55 p.m. on Thursday, February 3, 1916, totally destroyed the Houses of Parliament and resulted in the loss of seven lives and in injuries to others who escaped with difficulty. Amongst those who lost their lives were Mr. Bownan Law, M.P., for Yarmouth, N.S., and Mr. J. B. R. Laplante, Assistant Clerk of the House of Commons. Mr. Martin Burrell,

## JUBILEE OF CONFEDERATION

Minister of Agriculture, was seriously injured. Owing to the direction of the wind the Parliamentary Library fortunately escaped serious damage. A Royal Commission appointed on February 7, 1916, to inquire into the origin of the fire reported on May 15, 1916 [No. 72a 1916], but failed to ascertain conclusively the cause of the outbreak. The Dominion Houses of Parliament, thus destroyed, were completed in 1866, and formed one of the finest examples of Gothic architecture on the American continent. The demolition of the ruins and the rebuilding of the Houses on the same site were immediately undertaken, and considerable progress has been made with the erection of the new Houses under the control of a Parliamentary Committee, according to plans providing for improved accommodation. Meanwhile, arrangements have been made for the session of both Houses in a part of the building of the Victoria Memorial Museum at Ottawa, specially adapted for the purpose. On September 1, 1916, the ceremony of laying the corner stone of the new buildings was performed by the GovernorGeneral (H. R. H. the Duke of Connaught), the stone being that which was laid as the corner stone of the original buildings on September 1, 1860, by the Duke's brother, the Prince of Wales, afterwards King Edward VII.

When returning from England in May, 1917, the Prime Minister brought back with him a gold Mace to replace the one destroyed by fire. The new Mace was presented to the Canadian House of Commons in 1916 by the Lord Mayor and Sheriffs of the City of London (Col. the Right Hon. Sir Charles Cheers Wakefield, Lord Mayor; Sir George Alexander Touche, M.P., and Sir Samuel George Shead, Sheriffs). On May 16, 1917, a resolution accepting the gift and conveying the warm thanks of the House to the donors was adopted on the motion of Sir Robert Borden, seconded by Sir Wilfrid Laurier.

Jubilee of Confederation.-Sunday, July 1, 1917, being the fiftieth anniversary of the Union of Upper and Lower Canada, Nova Scotia and New Brunswick under the British North America Act, 1867, a special Committee was appointed conjointly by the Senate and the House of Commons, under the Chairmanship of Sir George Foster, to consider the arrangements that should be made for celebration of the event ${ }^{1}$. On May 31, 1917, the Committee recommended: (1) the issue of a topical pamphlet comparing and contrasting Canada of 1867 with Canada of 1917; (2) a proclamation inviting churches, Sabbath and day schools, colleges, municipal authorities, Canarlian Clubs and other associations to co-operate in the working out of fitting commemorative services for the day; (3) that the provincial authorities be requested to arrange for a special official celebration of the anniversary; (4) that the Federal Government issue a commemorative postcard and postage stamp with appropriate design and legend representative of the work of the Fathers of Confederation; (5) that appropriate memorial services be held at London and Paris on July 1, 1917; (6) that upon the central

[^59]
## LEGISLATION AND PRINCIPAL EVENTS OF THE YEARS 1916 AND 1917.

stone column upholding the roof of the great entrance hall of the new Parliament buildings the following inscription be incised:
1867 JULY
ANNIVERAARY OF THE CONFEDERATION
OF BRITISH COLONIES IN NORTH
AMERICA
AS
THE DOMINION OF CANADA
THE CANADIAN PARLIAMENT AND
PEOPLE
DEDICATED THIS BUILDING
THEN IN PROCESS OF CONSTRUCTION
AFTER DAMAGE BY FIRE
AS A MEMORIAL OF
THE DEEDS OF THEIR FOREFATHERS
AND OF THE VALOUR OF THOSE
CANADIANS
WHO IN THE GREAT WAR FOUGHT FOR
THE
LIBERTIES OF CANADA
OF THE EMPIRE
AND OF HUMANITY
and (7) that the Government arrange a fitting ceremonial service for setting in place and dedicating this inscribed stone at 12 noon on July 2, 1917

This report was adopted, and the recommendations made were carried into effect. By Royal Proclamations of June 6, 1917, Sunday, July 1, 1917, was observed throughout Canada as a " day of humble prayer and intercession to Almighty God on behalf of the cause undertaken by the British Commonwealth and the Allies, and for those who are offering their lives for it, and for a speedy and enduring peace"; and Monday, July 2, 1917, was appointed as Dominion Day and for the special celebration throughout Canada of the Fiftieth Anniversary of Confederation. The Memorial Tablet bearing the inscription above recorded was unveiled by His Excellency the Governor-General (the Duke of Devonshire, K.G.) in the presence of a large representative assembly at noon on July 2, 1917, when speeches appropriate to the occasion were delivered by His Excellency and by Sir Robert Borden and Sir Wilfrid Laurier.

The Quebec Bridge.-The bridge which since 1900 has been in course of erection across the St. Lawrence, about eight miles above the

## BILINGUAL CONTROVERSY IN ONTARIO

city of Quebec, was completed in September, 1916, with the exception of the placing of the central span. This span, having a length of 640 feet and a weight of 5,100 tons had been built on scows and taken up to the bridge to be hoisted into position. On September 11, 1916, when in the presence of a large gathering of people the span had been hoisted about twenty feet, a supporting shoe, used in the hoisting but not forming any part of the bridge, broke, owing to a defective casting, and the whole span fell into the river. This accident, which unhappily entailed the loss of the lives of twelve workmen, is the second that has occurred in the course of this work, the steel superstructure of the southern cantilever and anchor arms of the bridge having collapsed on August 29, 1907, when 60 lives were lost and eleven persons were injured ${ }^{1}$ The construction work of a new span was begun immediately, and the work of hoisting this into place, started on September 17, was successfully accomplished on September 20, 1917, thus completing the structure of the bridge.

Bilingual Controversy in Ontario.-During recent years an educational controversy has turned upon the rights of the Iren h-speaking population of Ontario to the use of the French language in the public schools. On August 17, 1913, the Ontario Department of Education issued a "Circular of Instructions No. 17," providing that in what are known as English-French schools in Ontario the French language as a medium of instruction should not be used beyond Form I, except, on approval of the chief inspector, for pupils who were unable to speak or understand English. It was claimed by the opponents of the Circular that the rights of the French-speaking inhabitants under the British North America Act, 1867, were thereby infringed, and after legal decisions of the Canadian courts had been given against them, they carried an appeal to the Judicial Committee of the Privy Council in England. Judgment was pronounced by Lord Chancellor Buckmaster on November 2, 1916, which dismissed the appeal and upheld the legal validity of the "Instructions" issued by the Ontario Education Department. Another appeal at the same time, contending that an Act of the Ontario Legislature (5, Geo. V., Ch. 3) providing for the appointment of a commission to conduct the English-French schools of the city of Ottawa instead of the elected board of trustees was illegal, was allowed, and the Act was pronounced ultra vires.

Census of the Prairie Provinces, 1916.-The quinquennial census of population and agriculture was taken for the three Prairie Provinces of Manitoba, Saskatchewan and Alberta, for the date of June 1, 1916. The detailed results already available are included in other parts of this volume (see pages 95 to 105). The total population of the three provinces was returned as $1,698,220$, as compared with $1,328,725^{2}$ in 1911.

Dominions Royal Commission.-On September 2, 1916, the Dominions Royal Commission returned to Canada to complete the labours which, as noted in the Caneda Year Book of 1914 (page 680), were suspended on the outbreak of the war. The members of the Com-

[^60]mission opened their tour in the Sudbury-Cobalt-Porcupine region, and inspected the mining operations carried on there. They then held sessions at Saskatoon, Edmonton and Prince Rupert, retuming east from Victoria where a session was held, visiting and holding sessions at Vancouver, Calgary, Regina, Winnipeg, Fort William, Toronto, Ottawa, Montreal and Quebec, whence they sailed for England on November 4, 1916. While in Toronto, members of the Commission visited Hamilton and the Niagara Falls. A great deal of information was gathered in Canada for the use of the Commission, and papers were prepared in advance of their visit by acknowledged Canadian authorities. Supplementary information was obtained from those who appeared personally before the Commission. At the various sittings further memoranda were suggested and subsequently prepared.

The following is a complete list of the Reports and Minutes of Evidence of the Dominions Royal Commission, which have been published in London, England, as Parliamentary Papers since the appointment of the original Commission on April 15, 1912 :

Interim Reports: First, United Kingdom [Cd. 6,515]; Second, Australasia [Cd. 7,210); Third, South Africa [Cd. 7,505]; Fourth, Newfoundland [Cd. 7,711]; Fifth, Canada [Cd. 8,457]; Final [Cd. 8,462]. Minutes of Evidence: London, 1912, Part I, Migration [Cd. 6,516], Part II, Natural Resources, Trade and Legislation [Cd. 6,517]; New Zealand, 1913, [Cd. 7,170]; Australia, 1913, Part I [Cd. 7 171], Part II [Cd. 7,172]; London, November, 1913 [Cd. 7,173]; London, January. 1914 [Cd. 7,351); South Africa, Part I [Cd. 7,706], Part II \{Cd. 7,707]; London, June and July, 1914 [Cd. 7,710]; Newfoundiand, 1914 [Cd. 7,898]; Maritime Provinces of Canada, 1914 [Cd. 7,971]; Central and Western Provinces of Canada, 1916, Part 1 [ Cd . 8,458], Part II [Cd. 8,459]. Memorandum and Tables relating to the Food and Riw Material Requirements of the United Kingdom [Cd. 8,123]; Memorandum and Tables as to the Trade Statistics and Trade of the Self-Governing Dominions (Cd. 8,156]. ${ }^{1}$
The Final Report giving the conclusions and recommendations of the Commission was published under date of February 21, 1917

Obituary.-1915: Dec. 16. The Hon. F. S. Tourigny, puisne judge of the Superior Court of Quebec. 1916: Jan. 4. E. A. Lancaster, M.P for Lincoln and Niagara, Ont. Jan. 6. Richard Grigg, Commissioner of Commerce. Jan. 8. The Hon. H. C. St. Pierre, judge of the Superior Court of Quebec. Jan. 19. The Hon. George Riley, of Victoria, B.C. Feb. 3. Bowman Law, M.P for Yarmouth, N.S.; J. B. R. Laplante, Assistant Clerk of the House of Commons. Feb. 19. The Hon. F M. Young, of Killarney, Man. June 3. Lt.-Col. G. H. Baker, M.P for Brome, P.Q. (killed in action). July 28. The Hon. Sir Pierre Landry, Chief Justice of New Brunswick. Aug. 20. MajorGen. Sir Frederick William Benson, K.C.B. Aug. 24. The Hon. F. T Frost, of Smith's Falls, Ont. Aug. 31. The Hon. Napoléon Charbonneau, Justice of the Superior Court of Quebec; the Hon. J. T Garrow, member of the Supreme Court of Ontario. Sept. 29. The Hon. John Costigan, of Victoria, N.B. The Hon. W J. Macdonald, of Victoria, B.C. Oct. 17 C. H. Lovell, M.P for Stanstead, P.Q. Nov. 7 The Hon. John Dunlop, Judge of the Admiralty Court,
${ }^{1}$ Copies of these reports may be obtained, while the supply lasts, from the Department of Trade and Commerce, Ottawa.

## OBITUARY, 1916 AND 1917

Montreal. Nov. 13. The Hon. David MacKeen, Lieutenant-Governor of Nova Scotia. Nov. 17 The Hon. James A. Duff, Minister of Agriculture for Ontario, 1908-1916. Nov. 23. The Hon. Sir John A. Boyd, K.C.M.G., Chancellor of Ontario. Dec. 4. The Hon. James Kirkpatrick Kerr, of Toronto, Ont. Dec. 12. William Gray, M.P for London, Ont. Dec. 19. The Hon. Robert McKay, of Montreal, Que. Dec. 29. The Hon. T. Chase Casgrain, M.P for Quebec County and Postmaster General, 1914-1916. 1917: Jan. 6. The Hon. J. B. R. Fiset, of Rimouski, Que. The Hon. Sir Frederick William Borden, Minister of Militia and Defence, 1896-1911. Jan. 23. The Hon. Thomas O. Davis, of Prince Albert, Sask. Jan. 27 Brigadier-Gen. Walter Long, Aide-de-Camp to H.R.H. the Governor General, 19111913 (killed in action). Jan. 30. The Hon. Abner R. McClelan, Lieutenant-Governor of New Brunswick, 1896-1902. Feb. 10. The Hon. Sir Melbourne MeTaggart Tait, formerly Chief Justice of Quebec. March 14. H.R.H. The Duchess of Connaught. April 6. Sir Henry N. Bate, Chairman of the Ottawa Improvement Commission. April 15. The Hon. Sir Lyman Melvin Jones, of Toronto. April 23. The Hon. Henry Corby, of Belleville, Ont. April 24. The Hon. G. T. Baird, of Victoria, N.B. May 27 The Hon. A. E. Richards, judge of the Court of Appeal, Man. June 8. The Hon. William Owens, of Montreal. Aug. 6. Sir Richard McBride, K.C.M.G., premier of British Columbia, 1903-1915. Aug. 11. The Hon. Sir William Mortimer Clark, Lieutenant-Governor of Ontario, 1903-1908. Aug. 29. Earl Grey, G.C.M.G., Governor-General of Canada, 1904-1911. Sept. 20. Col. Henry R. Smith, C.M.G., I.S.O., Sergeant-at-Arms, House of Commons, Ottawa. Oct. 31. The Hon. Gilbert W Ganong, Lieutenant-Governor of New Brunswick. Nov. 10. The Hon. Thomas S. Sproule, M.D., of East Grey, Ont., Speaker of the House of Commons, 1911-1915.

General Thanksgiving.-Monday, October 9, 1916, and Monday, October 8, 1917, were observed as days of general thanksgiving to Almighty God for the bountiful harvests and other blessings with which Canada has been favoured.

## XIII.-EXTRACTS FROM THE CANADA GAZETTE, 1916 AND 1917.

Privy Councillors.-1917: Jan. 8. The Hon. Albert Sévigny, of Quebec. Oct. 3. Charles C. Ballantyne, of Montreal. Oct. 12. Major-General Sydney C. Mewburn, Adjutant-General of Militia; James A. Calder, of Regina, Sask.; Arthur L. Sifton, of Edmonton, Alberta; Thomas A. Crerar, of Winnipeg, Man.; Newton Wesley Rowell, of Toronto. Oct. 13. Frank B. Carvell, of Woodstock, N.B. Oct. 23. The Hon. Gideon D. Robertson, of Welland, Ont.; Alexander K. MacLean, of Halifax, N.S. Nov. 10. Hormisdas Laporte, of Montreal.

Lieutenant-Governors.-1916: June 29. Gilbert W Ganong, of St. Stephen, N.B., to be Lieutenant-Governor of the province of New

## EXTRACTS FROM THE CANADA GAZETTE, 1916 AND 1917

Brunswick. Nov. 29. McCallum Grant, of Halifax, N.S., to be Lieutenant-Governor of the province of Nova Scotia. 1917: Nov. 6. The Hon. William Pugsley, of St. John, N.B., to be LieutenantGovernor of the province of New Brunswick, in the room and stead of the Hon. Gilbert W Ganong, deceased.

New Senators.--The following were appointed members of the Senate in 1917: Jan. 22. Frederic Nicholls, of Toronto, Ont.: Henry W Richardson, of Kingston, Ont.; Gideon D. Robertson, of Welland, Ont.; George Lynch Staunton, of Hamilton, Ont., Adam B. Crosby, of Halifax, N.S.; Charles E. Tanner, of Pictou, N.S.; Thomas Jean Bourque, of Richibucto, N.B. Jan. 31. Henry Willoughby Laird, of Regina, Sask. June 26. Lytton Wilmot Shatford, of Vancouver, B.C.; Albert E. Planta, of Nanaimo, B.C. June 29. George W Fowler, of Sussex, N.B. July 26. John Henry Fisher, of Paris, Ont.; Richard Blain, of Brampton, Ont.; Lendrum McMeans, of Winnipeg, Man.; David Ovide Lesperance, of Quebec, Que. July 27 George Green Foster, of Montreal, Que. July 30. Richard Smeaton White, of Montreal, Que. Aug. 1. Roderic Harold Clive Pringle, of Cobourg, Ont.; Angus Claude Macdonald, of Toronto, Ont. Sept. 3. Aimé Bénard, of Bénard, Man. Oct. 23. George H. Barmard, K.C., of Victoria, B.C.; Wellington B. Willoughby, of Moosejaw, Sask., Lieut.-Col. James Davis Taylor, of New Westminster, B.C.; Frederick L. Schaffner, M.D., C.M., of Boissevain, Man.

Cabinet Mixisters and other Members of the Government. 1916: July 19. Franklin Blanchard McCurdy, of Helifax, M.P., to be Parliamentary Secretary of the Department of Militia and Defence. Oct. 21. Lt.-Col. Hugh Clarke, of Kincardine, Ont., M.P for North Bruce, to be Parliamentary Under-Secretary of State for External Affairs during the continuance of the present war. Oct. 31. The Hon. Sir George Halsey Perley, Acting High Commissioner, to be Minister of Overseas Military Forces for Canada in the United Kingdom. Nov. 23. The Hon. Albert Edward Kemp, to be Minister of Militia and Defence in the room and stead of the Hon. Sir Sam Hughes, K.C.B., resigned.

1917: Jan. 8. The Hon. Pierre Edouard Blondin, of Grand'Mère, Que., to be Postmaster-General; the Hon. Esioff Léon Patenaude, of Montreal, to be Secretary of State and Minister of Mines; the Hon. Albert Sévigny, of Quebec, to be Minister of Jnland Revenue. Aug. 25. The Hon. Arthur Meighen, of Ottawa, to be Secretary of State and Minister of Mines. Oct. 3. The Hon. Charles C. Ballantyne, to be Minister of Public Works in the room and stead of the Hon. Robert Rogers, resigned. Oct. 4. Hugh Guthrie, of Guelph, Ont., to be Solicitor General of Canada. Oct. 12. Major-General the Hon. Sydney C. Mewburn, to be Minister of Militia and Defence; the Hon. Arthur L. Sifton, to be Minister of Customs; the Hon. Sir George Halsey Perley, K.C.M.G., to be High Commissioner for Canada; the Hon. Sir Albert Edward Kemp, K.C.M.G., to be Minister of Overseas Military Forces of Canada; the Hon. Martin Burrell, to be Secretary of State and Minister of Mines; the Hon. John D. Reid, to be Minister of Railways and Canals; the Hon. Arthur Meighen, to be Minister of Interior; the Hon. Thomas

Crerar, to be Minister of Agriculture; the Hon. Newton Wesley Rowell, to be President of the Privy Council; the Hon. James A. Calder to be Minister of Immigration and Colonization. Oct. 13. The Hon. Charles C. Ballantyne, to be Minister of Marine and Fisheries and Minister of Naval Service; the Hon. Frank B. Carvell, to be Minister of Public Works.

Judicial Appointments.-1916: Feb. 29. Victor Allard, of Berthier, Que., to be a puisne judge of the Superior Court of Quebec in the room and stead of the Hon. H. C. St. Pierre, deceased. Louis Joseph Alfred Desy, of Three Rivers, Que., to be a puisne judge of the Superior Court of Quebec in the room and stead of the Hon. F S. Tourigny, deceased. Aug. 19. The Hon. Harrison Andrew McKeown, Judge of the King's Bench Division, to be Cbief Justice of the King's Bench Division of the Supreme Court of New Brunswick. William Botsford Chandler, of Moncton, to be a judge of the King's Bench Division of the Supreme Court of New Brunswick. Sept. 9. Joseph Mathias Tellier, of Joliette, to be a puisne judge of the Superior Court of Quebec in the room and stead of the Hon. Napoléon Charbonneau, deceased. The Hon. Oswald Smith Crockett, judge of the King's Bench Division of the Supreme Court, to be judge of the Court of Divorce and Matrimonial Cases of New Brunswick. Nov. 14. the Hon. Frank Egerton Hodgins, of Toronto, Justice of Appeal of the Appellate Division of the Supreme Court of Ontario, to be local judge in Admiralty of the Exchequer Court in and for the district of Toronto. Dec. 4. William Nessau Ferguson, of Toronto, to be a judge of the Supreme Court of Ontario and a member of the Appellate Division of the said court in the room and stead of the Hon. J. T. Garrow, deceased. Hugh Edward Rose, of Toronto, to be a judge of the Supreme Court of Ontario and a member of the High Court Division and ex officio a member of the Appellate Division in the room and stead of the Hon. Sir John Boyd, decessed. Dec. 29. Charles Albert Duelos, of Montreal, to be a puisne judge of the Superior Court of Quebec. 1917: May 1. David MacEwen Eberts, of Victoria, to be puisne justice of the Court of Appeal of British Columbia. June 13. The Hon. John Alexander Mathieson, of Charlottetown, to be Chief Justice of the Supreme Court of Judicature of Prince Edward Island in the room and stead of the Hon. Sir Wilfred Sullivan, retired. July 20. Charles Percy Fullerton, of Winnipeg, to be a judge of the Court of Appeal of Manitoba in the room and stead of the Hon. A. E. Richards, deceased. The Hon. Lyman P Duff, judge of the Supreme Court of Canada, to be Central Appeal judge under the Military Service Act, 1917

Commissions.-1916: Feb. 7 Robert A. Pringle and His Honour D. B. MacTavish, of Ottawa, to be commissioners to inquire into and concerning the origin of the recent disastrous fire which destroyed the Parliament Buildings of Ottawa. Mey 9. Hector Edmond Dupré, of Quebec; Warren Hatheway, of St. John, N.B.; Theophilus Hatton Wardleworth, of Montreal; Frank Urgel Pause, of Montreal; James William Woods, of Toronto and George William Allan, of Winnipeg, to be commissioners to inquire in the United Kingdom, France, Belgium and Italy into the possibilities for the supply of Canadian products,

EXTRACTS FROM THE CANADA GAZETTE, 1916 AND 1917
natural and manufactured, which may be needed for the work of reconstruction in the said countries during and after the war, and also as to sources of supply in those countries for commodities needed in Canada and which formerly were obtained from Germany and Austria, and to report upon the same. July 13. Alfred Holland Smith, of New York, U.S.A.; Sir Henry Lumley Drayton, of Ottawa; Sir George Paish, of London, England, to be commissioners to inquire into, investigate and report upon the general problem of transportation in Canada, the status of each of the three transcontinental railway systems, the reorganization of any of the said railway systems or the acquisition thereof by the State, and all matters pertinent or relevant to the general scope of the inquiry. Sept. 1. John K. L. Ross, of Montreal; Col. Robert H. Labatt, of Hamilton, Ont. and Major John L. Todd, of Ottawa, to he pension commissioners to constitute the commission provided for by the pension regulations, the said John K. L. Ross to be chairman of the said commission, and the appointments to take effect from and after September 11, 1916. 1917: April 16. Robert A. Pringle, of Ottawa, to be a commissioner to inquire into and report concerning the manufacture, sale, price and supply of news print paper within Canada. Oct. 3. Adam Shortt, C.M.G., of Ottawa; Arthur G. Doughty, C.M.G., of Ottawa; Prof. Charles W Colby, of Montreal; Thomas Chapais, of Quebec, and Prof. George M. Wrong, of Toronto, to constitute a board in connection with the Public Archives, to be called The Historical Documents Publication Board, with power to select and publish, with notes or otherwise as they may deem best, documents connected with the history and development of the constitution, trade, commerce, finance, industries and defence of Canada, the said Adam Shortt to be chairman of the said board.

Imperial Honours and Decorations.--To be Barons of the United Kingdom: Jan. 28, 1916. Sir Thomas George Shaughnessy, K.C.V.O. (Baron Shaughnessy of Montreal and Ashford, county Limerick, Ireland). May 15, 1917 Sir Hugh Graham (Baron Atholstan of Huntingdon, Quebec, and of the city of Edinburgh, Scotland). Nov. 18, 1916. The dignity of a Baronet of the United Kingdom was conferred upon Henry Vincent Meredith, president of the Bank of Montreal. To be Knight Grand Cross of the Order of St. Michael and St. George (G.C.M.G.): July 28, 1916. His Grace the Duke of Devonshire, K.G., G.C.V.O., on appointment as Governor-General of Canada. To be Knight Commander of the Order of St. Michael and St. George (K.C.M.G.) : June 3, 1916. His Honour Pierre E. Leblanc, LieutenantGovernor of Quebec. The Hon. James A. Lougheed, of Calgary, Alberta. September 14. Col. Arthur Percy Sherwood, C.M.G., M.V.O., Chief Commissioner of the Dominion Police. Feb. 12, 1917 The Hon. Albert Edward Kemp, Minister of Militia and Defence. The Hon. William Howard Hearst, Premier of Ontario. June 4. Col. (temp. Maj-Gen.) Arthur W Currie, C.B. Col. (temp. Maj.-Gen.) Ri hard W Turner, V.C., C.B., D.S.O. Robert Alexander Falconer, LL.D., C.M.G., President of the University of Toronto. The dignity of a Knighthood of the United Kingdom was conferred upon the following: Jan. 1, 1916. Brig.-Gen. Alexander Bertram, Deputy Chairman of the

## IMPERIAL HONOURS AND DECORATIONS.

Imperial Munitions Board in Canada. The Hon. Frederick W G. Haultain, Chief Justice of Saskatchewan. John Kennedy, Consulting Engineer to the Montreal Harbour Commission. The Hon. Louis Olivier Taillon, K.C., member of the Privy Council of Canada. June 3, 1916. The Hon. Wallace Graham, Chief Justice of the Supreme Court of Nova Scotia. The Hon. Pierre A. Landry, Chief Justice of the King's Bench Division of the Supreme Court of New Brunswick. Robert Frederick Stupart, Director of the Meteorological Service of Canada.

To be Companions of the Order of the Bath (C.B.): Jan. 14, 1916. Lt. Col. (temp. Brig.-Gen.) David Watson, Second Can. Infy. Brig. Jan. 1, 1917 Col. (temp. Brig.-Gen.) A. C. de L. Joly de Lotbinière, C.S.I., C.I.E.; Col. H. S. Birkett, C.A.M.C.; Col. J. A. Roberts, C.A.M.C. June 4, 1917 Col. (temp. Brig.-Gen.) A. D. McRae; Col. (temp. Brig.-Gen.) P E. Thacker, C.M.G.; Lieut.-Col. (temp. Brig.Gen.) G. S. Tuxford, C.M.G.; Lieut.-Col. (temp. Brig.-Gen.) A. C. Macdonell, C.M.G.

To be Companions of the Order of St. Michael and St. George (C.M.G.): Jan. 14, 1916. Col. Murray MacLaren, C.A.M.C.; Lt.-Col. (temp. Brig.-Gen.) C. J. Armstrong, Can. Engs.; Lt.-Col. G. G. Nasmith, C.A.M.C.; Lt.-Col. A. C. Macdonald, D.S.O., Strathcona's Horse; Lt.-Col. C. M. Nelles, R.C.D.; Lt.-Col, A. E. Ross, C.A.M.C.; Lt.-Col. G. S. Tuxford, Fifth Can. Infy. Bn.; Hon. Maj. Rev. F. G. Scott. May 2, 1916. Lt.-Col. F Etherington, C.A.M.C.; Lt.-Col. S. H. McKee, C.A.M.C.; Major E. G. Davis, C.A.M.C. June 3, 1916. Col. P E. Thacker; Lt.-Col. W O. H. Dodds, Can. Arty.; Lt.-Col. J. F L. Embury, 28th Bn.; Lt.-Col. (temp. Col.) J. T Fotheringham, A.M.C., Lt.-Col. H. T. Hughes, Can. Engs.; Lt.-Col. (temp. Brig.-Gen.) W Bethune Lindsay, Can. Engs.; Lt.-Col. A. H. Macdonell, D.S.O., R. Can. Horse Arty.; Lt.-Col. (temp. Brig.-Gen.) H. C. Thacker, Can. Local Forces; Hon. Lt.-Col. Rev. J. M. Almond, chaplain; Hon. Maj. Rev. W Beattie, chaplain; Lawrence Fortescue, I.S.O., Controller Royal Northwest Mounted Police; Frederick Montizambert, M.D., I.S.O., Director General of Public Health. Sept. 14, 1916. Lt.-Col. E. A. Stanton, Military Secretary to H. R. H. the Governor-General. Jan. 1, 1917 Col. (temp. Brig.-Gen.) H. D. B. Ketchen, Lt.-Col. (temp. Brig.-Gen.) R. Rennie, M.V.O., D.S.O.; Lt.-Col. (temp. Brig.Gen.) G. B. Hughes, D.S.O.; Lt.-Col. (temp. Brig.-Gen.) E. W B. Morrison, D.S.O.; Lt.-Col. E. C. Hart, C.A.M.C. Jan. 25, 1917 Lt.-Col. M. Alexander, Can. Local Forces; Col. G. P Murphy, Can. Local Forces; Hon. Col. Rev. R. H. Steacy, Director of Chaplains' Service, Local Forces; Lt.-Col. J. G. Ross, Can. Local Forces. Feb. 12, 1917 Capt. E. H. Martin, R.C.N. Feb. 15, 1917 Lt.-Col. P J. Daly, D.S.O., Can. Infy.; Lt.-Col. J. E. Leckie, D.S.O., Can. Infy. June 4, 1917. Col. (temp. Brig.-Gen.) H. E. Burstall, C.B.; Col. (temp. Brig.-Gen.) F. O. W Loomis, D.S.O.; Col. R.F.M. Sims, D.S.O.; Lt.-Col. (temp. Brig.-Gen.) J. H. Elmsley, D.S.O.; Lt.-Col. (temp. Brig.-Gen.) Edward Hilliam, D.S.O.; Lt.-Col. (temp. Brig.-Gen.) V W Odlum, D.S.O.; Lt.-Col. C. H. Mitchell, D.S.O.; Lt.-Col. G. E. Sanders, D.S.O.; Lt.-Col. (temp. Brig.-Gen.) D. Watson, C.B.; Col. C. A. Hodgetts, C.A.M.C.; Col. (temp. Brig.-Gen.) J. P Landry;

Col. (temp. Brig.-Gen.) F S. Meighen; Lt.-Col. H. F McDonald, D.S.O.; Col. C. A. Smart; Major and Bt. Lt.-Col. R. J. F Hayter, D.S.O.; G. A. Bell, Financial Comptroller, Department of Railways; W H. Walker, I.S.O., Assistant Under-Secretary of State for External Affairs.

To be Companions of the Imperial Service Order (I.S.O.): June 3, 1916. Edouard Gaston Daniel Deville, Surveyor-General, Topographical Surveys; Frederick Joseph Glackmeyer, Sergeant-atArms of the Legislative Assembly of Ontario. May 31, 1917 Pierre Martial Côté, K.C., Chief of the Remission Branch, Department of Justice; Lt.-Col. Thomas George Johnston Loggie, Deputy Minister of Lands and Mines, New Brunswick.

Foreign Decoration.-March 8, 1916. H. M. the King has granted leave to the Right Hon. Sir Robert Laird Borden, G.C.M.G., to wear the Grand Cordon of the Order of Leopold conferred upon him by H.M. the King of the Belgians.

Imperial Service Medal.-The following retired Government employees have been granted the Imperial Service Medal in recognition of long and meritorious service. All of them belong to the Department of Railways and Canals, except where otherwise stated.
1916. Department of Marine and Fisheries: Cornelius O'Gorman, assistant lockmaster, Welland Canal, Ont.; Jobn Smith, lockmaster, Cornwall Canal, Ont.; Henry Alfred Gilkie, lightkeeper, Sambro, N.S. Post Office Department; Frederick James George, letter carrier, Ottawa, Ont.; John Mahar, letter carrier, Halifax, N.S.; John Webster North, letter carrier, Hamilton, Ont.; Joseph Ward, letter carrier, London, Ont.
1917. Hermenegilde Aubin, conductor, Lévis, Que.; Thomas Clifford Ayer, conductor, Moncton, N.B.; Telesphore Begin, wheel press man, Rivière du Loup, Que.; David Pearson Bell, car inspector, Moncton, N.B.; Joseph Boucher,brakeman, Lévis, Que.; Dennis Bourgeois, section foreman, Memramcook, N.B.; John Herbert Brown, engineer's assistant, Moncton, N.B.; Nathan Burris, hostler, Truro, N.S.; Léandré Chenard, baggageman, Lévis, Que.; Robert Cullen, stores issuer, Truro, N.S.; Joseph Damours, brakeman, Riviere du Loup, Que.; Edward Daley, section foreman, Gloucester Junction, Ont.; William Allan Davies, foreman, Moncton, N.B.; Frank Derouin, conductor, Levis, Que.; Edward Doucett, brakeman, Petite Roche, Que.; Richard Dougan, engineman, Chariottetown, P.E.I.; Xavier Dubé, section foreman, St. Moise, Que. Robert Dumbar, conductor, Loggieville, N.B.; James Essery, section foreman, Kensington, Que.; David Ferguson, section foreman, Wentworth, N.S.; Peter Fogarty, section foreman, Sydney, N.S.; George Forgues, brakeman, Lévis, Que.; George Frève, section foreman, St. Paschal, Que.; Peter Alexander Gallagher, section foreman, Quispamsis, N.B.; Andrew Gallant, trackman, Millstream, Que.; Thomas Gillan, blacksmith, Charlottetown, P.E.1.;John Gillespie, chargehand, Moncton, N.B.; Adam Purdy Giles, roadmaster, Newcastle, N.B.; Frank Gillis, locomotive cleaner, Cape Traverse, N.S.; James Gorham, checker, St. John, N.B.; Alexander Black Gray, roadmaster, New Glasgow, N.S.; John Guess, blacksmith, Halifax, N.S.; Jobn Hackett, engineman, Moncton, N.B.; Thomas Hanway, engineman, Truro, N.S.; Joseph Iouis Hébert, conductor, Rivière du Loup, Que.; William Robert Hoey, fireman, Moncton, N.B.; Aaron Fubley carpenter, Halifax, N.S.; Charles Bedford Keith, station agent, Berrys Mills, N.B.; Forturat Laliberté, conductor, Lévis, Que.; Philippe Leclerc, chargeman, Rivière du Loup, Que.; Edwin Nelson Lackhart, bridge inspector, Moncton, N.B.; William Brouard MacKenzie, right-of-way and lease agent, Moncton, N.B.; William McAdoo, carpenter, St. John, N.B.; Patrick McCloskey, boilermaker, Charlottetown, P.E.I.; James Stewart McClure, carpenter; Moncton, N.B.; John McDonald, section foreman, Millstream, Que.; George Hamilton MeEwen, freight agent, Truro, N.S.; John Thomas McGinn, conductor, Moncton, N.B.; Hugh McLeod, extra gang foreman, Emerald, N.S.; John McPherson, fitter

Charlottetown, P.E.I.; Louis Martin, car repairer, Rivière du Loup, Que.; Samuel Miller, foreman carpenter, Newcastle, N.B.; George Moore, machinist, Moncton, N.B.; Louis Moreau, stationary boiler fireman, Lévis, Que.; John Albert Murray, station agent, Shediac, N.B.; John Eric Oakleaf, engineman, Dalhousie, N.B., Peter Oliver, tool inspector, Charlottetown, P.E.I.; Luc Séraphin Paulet, conductor, Lévis, Que.; William Richard Payne, station agent, Newcastle, N.B.; Pierre Pettigrew, baggagemaster, Rivière du Loup, Que.; John Phelan, porter, Halifax, N.S.; William Robert Powell, section foreman, Painsec Junction, N.B.; James Roche, section foreman, Bedford, N.S.; Didace Rodrigue, operator, Rivière du Loup, Que.; John Ryan, section foreman, Nanwigewauk, N.B.; Charles Edward Simmons, painter, Charlottetown, P.E.I.; William Harvey Steeves, fitter, Moncton, N.B.; Arthur Stockall, foreman, blacksmith, Moncton, N.B.; John Sullivan, section foreman, Rogersville, N.B.; Benjamin Tucker, foreman pipe fitter, Moncton, N.B.; Frederick William Welling, engineman, Moncton, N.B.; Frederick Wright, hostler, St. John, N.B.; James Chapman Wortman, carpenter, Moncton, N.B.; Thomas Baker, lightkeeper, Department of Marine and Fisheries, Peases IsIand, N.S.

Official Appointments.-1916: June 3. The Hon. Joseph Bolduc, of St. Victor de Tring, Quebec, to be Speaker of the Senate, in the room and stead of the Hon. A. C. P R. Landry, resigned.

Nov. 13. To be members of the Staff of His Excellency the Governor-General and Commander-in-Chief of Canada: Lieut.-Col. the Hon. Harold G. Henderson, to be Governor-General's Secretary and Military Secretary: Arthur F Sladen, C.V.O., C.M.G., to be Private Secretary; Lord Richard Neville, C.V.O., C.M.G., to be Comptroller of the Household; Captain Angus Alexander Mackintosh, Royal Horse Guards, Captain R. O. R. Kenyon - Slaney, Grenadier Guards, and Captain V F Bulkeley-Johnson, Rifle Brigade, to be Aides-de-Camp. Nov. 18. Lieut.-Col. Henry R. Smith, C.M.G., I.S.O.; Col. Sir A. Percy Sherwood, K.C.M.G., M.V.O., to be Honorary Aides-de-Camp to His Excellency the Governor-General. 1917: Jan. 18. Captain M. A. T Ridley, Grenadier Guards, Special Reserve, to be Aide-de-Camp to His Excellency the Governor-General, from Jan. 8, 1917

Feb. 20. Austin Ernest Blount of Ottawa, to be Clerk of the Parliaments, Clerk of the Senate and Master in Chancery of the Dominion of Canada, from March 15, 1917, in the room and stead of S. E. St. Onge Chapleau, retired. March 22. Austin Ernest Blount, of Ottawa, Clerk of the Senate and designated as Clerk of the Parliaments, to be commissioner to administer the oath of allegiance to the members of the Senate and to take and receive their declarations of qualifications.

April 12. Captain Edward H. Martin, C.M.G., R.N., to be Honorary Aide-de-Camp to His Excellency the Governor-General.

April 14. Sir Henry Kelly Egan, of Ottawa, who was appointed a member of the Ottawa Improvement Commission on Jan. 18, 1913, to be Chairman of the said commission in the room and stead of Sir Henry N Bate, deceased.

April 18. Prof. R. F Ruttan, of the McGill Medical School, Montreal, to be a member of the Board of Examiners, constituted under the provisions of sec. 9, c. 133, R.S.C., 1906, "An Act Respecting the Adulteration of Food and other Articles," in the room and stead of Dr. G. P Girdwood, resigned. Oct. 3. Clarence Jameson, of Digby, Willard P Purney, of Liverpool, N.S., to be Assistant Clerk of the Crown in Chancery, in accordance with provisions of the Military Voters' Act, 1917 Oct. 9. The Hon. William J. Roche, M.D., of Ottawa, to be a Member and Chairman of the Civil Service Commission; Angus A. McLean, of Charlottetown, P.E.I., to be Comptroller of theRoyal Northwest Mounted Police, from Oct. 15, 1917, in the room and stead of Laurence Fortescue, I.S.O., retired. Oct. 11. William F. O'Connor, of Ottawa, to be General Returning Officer under the provisions of the Military Voters' Act, 1917

# SELECTION OF ARTICLES AND TABLES IN THE CANADA YEAR BOOK OF 1913, 1914 AND 1915 WHICH ARE NOT REPEATED IN THE PRESENT ISSUE. 

## SPECIAL ARTICLES.



## AREA AND POPULATION.

Year Boos, 1913.

## Table.

20. Birthplace of the Population in Cities and Towns of 7,000 and over, Census 1911 ..... 75-78
21. Source of the Population by Province of Residence, 1911 ..... 79
22. Native Population by Province of Residence, 1911 ..... 79
23. Distribution in Western Canada of Natives of the Eastern Provinces, 1911. ..... 80
80
24. Foreign-born Population by Provinces, 1911 ..... 80
25. British and Foreign-borm Male Population, 21 years and over, by Provinces, 1911.
86-94
86-94
33-35. Literacy of the Population.
101-102
101-102
26. Birth-and Death-Rates by Provinces with Natural Increase, 1900-01 and 1911 ..... $106-107$43. Arrivals at Inland and Ocean Ports in Canada in fiscal years 1901-1908

## Year Book, 1914.

Tabee
14. Number of Dwellings and Families in Canada by Provinces, as shown by the Censum in 1911 ..... 59
15. Origins of the people in 1901 and 1911 with increase in the ten years and ratios per cent. of population. ..... 60
16. Religions of the people, 1881 , $189 \mathrm{I}, 1901$ and igit ..... 61
17. Religions numbering 5,000 adherents and over, 1901 and 1911, with absolute and relative increase or decrease for the decade ..... 62
18. Birthplace of the Population, 1901 and 19t1. ..... 63-64
19. British-born and Foreign-born by Population of Provinces, 1901 and 1911
20. Male and Female Population in Canada in Age-Periods, 1911. ..... $64-65$
67
21. Male and Female Population of Canada in Quinquennial Age-Periods and by Prov-inces, 1911.67-70
70
1901.
22. Proportion per 1,000 of the Population in Age-Periods, by Provinces, 1911 , with Totals
71 ..... 71-72
23. Proportion per 1,000 of the Population by Age-Periods, 1871, 1881, 1891, 1001 and 1911 .
24. Conjugal Condition of the Population, is Years of Aze and Over, 1911
24. Conjugal Condition of the Population, is Years of Aze and Over, 191172-73
74
26. Numbers of the Infirm by Provibces, 1911 , with totals tor 1881,1891 and 1901
Year Book, 1915.
7. Population of Incorporated Towns and Villages having 1,000 to 5,000 inhabitants in 1911 and corresponding figures for 190124. Population by Age-Periods and Ses with Percentages for Cenaus Years 1881-191125. Workers by Sex and Province for Census years 188I-191173-7690
26* Workers by Industries for Census years $1 \mathrm{~S} 8 \mathrm{t}-1911$ ..... 91
27. Workers by Industries and Sex for Census Year $1891-1911$ ..... 9128. Workere by Industries and by Canadian- or non-Canadian Birth, 191192
29. Workers by Age-Periods, 1911 29. Workers by Age-Periods, 1911 ..... 22
30. Percentage Distribution of Workers by Industries, Sex and Age-Periods, 1911.

1. Workers by Detailed Classification of Industries and by Sez for Census Years 1901 ..... 92and 1911
2. Area and Population of the United Kingdom and British Possessions, 1911 ..... 00-10298-99
3. Area and Population of the Principal Foreign Countries of the Worid.
4. Number of Chinese in Canada by Provinces, apcording to the Censuses of 1001 and 1911 .108-105117
EDUCATION.
Year Boog., 1914.
5. Numbers attending School by Sex and Age-Periods, 1910 ..... 92-93 ..... 93
PRODUCTION.
Year Book, 1913.
6. Estiruated Values of Farm Live Stock, by Provinces, 1913 ..... 140
7. Numbers of Farm Live Stock, by Provinces, in Census Years, 1871-1911 ..... 159-161
8. Distribution of Farm Holdings, 1910 and 1911 ..... 167-189
188-189
197 ..... 197
9. Summary of Mineral Production in Canada, 1900 and 1910
10. Mineral Ores and other Products of Canada, including Manufactures, by Quantitiee
11. Mineral Ores and other Products of Canada, including Manufactures, by Quantitiee and Values, for the Census Years 1900 and 1910 ..... 197-199
12. Value of Mineral Production in Canada by Provinces, 1900 and 1910. ..... 199
13. Statistices of Manufactures, 1910215-223284
Year Book, 1914.7. Distribution of Land by Provinces, 1901 and 1911170-171
14. Areas of Occupied Farm Lands, Total Value and Value per Acre, as compiled from the Census Returns of 1901 and 1911. ..... 171
15. Farm Values by Provinces, 190 I and 1911 ..... 172-176
16. Areas and Yield of Principal Field Crops in Census Years, $1870-1910$ ..... 177-183
17. Numbers of Pure-bred Live Stock in Canada, 1911 ..... 184
18. Quantities of Anjmal Products of the Farm, 1900 and 1910 ..... 187-188
19. Areas under Orchards and Gardens in Canads, 1891, 1901 and 1011. ..... 189
189
20. Bearing and Non-bearing Fruit Trees in Canada, 1201 and 1911 , ..... 189
21. Orchard Trees in 1901 and 1911 and Production of Fruit in 1900 and 1910 ..... 190-191
191188-201
22. Average total cost of production, value and profit per acre of Wheat, Oata, Barley, Flax and Corn for husking in Canada and the Provinces for 1913, compared with 1911.....2. Aggregate Distribution of the Canadian Wheat Crop, 19t1-15
208
23. Number and Value of the Skins and Furs of Wild Animals, killed in Canada in 1910 . according to the Census of 1911 ..... 228-229
24. Value of Stime and Purs of Wild Animals killed, by Provinces, 1900 and 1910 ..... 229

## Year Book, 1915.

Table,
Number of Cattle, Sheep and Swine, Slaughtered under the Meat and Canned Foods Act, 1907
16. Per Capita Consumption of Meat in the United Kiog dom, the United States, Canada,France and Germany
18. Average Rate of Seeding per acre of the Principal Cereals in Canada, 1915 ..... 187 ..... 190

24. Yearly Average Prices of Wheat in England, 1041-1770.
25. Yearly Average Prices of Wheat in England, 1041-1770. ..... 180
26. Yeariy Average Prices of Wheat. Barley and Oats in England and Wales, 177i-igis.
27. Yeariy Average Prices of Wheat. Barley and Oats in England and Wales, 177i-igis. 26. Annual Average Steamstip Freight Rates for Heavy Grain, from Montreal to Liver-pool tor the Navization Seasons 1861-1915
201
28. Annual Average Steamship Freight Rates, for Wheat from New York to Liverpool,
202
202
 during the St. Lawrence Navigation Seasons, 1203-1915
29. Steamship Freight Rates for Whent from New York to Liverpool, during each week,
30. Numbers of Farm Live Stoek by Primcipal Countries of the World, 1905 and $1914 \ldots . .$.
31. Square. Wapey or Fiat Lumber, cut on Occupied Farm Lands, 1910, with Prices per Unit 1900 and 1910.
224
32. Logs for Lumber cut on Occopied Farm Lands, 19i0, with Prices per Unit 1900 and 1910. ..... 224
33. Miscellaneous Forest Products cut on Occupied Farm Lavds, 19io, with Prices per Unit, 1900 and 1910. ..... 224
TRADE AND COMMERCE.
Year Book, 1915.
34. Quantities and Values of Principal Agricultural and Animal Products imported into the United Kingdom during the calendar years 1914 and 1915years 1911-1915.
444-451
35. Bounties paid to Cordage Companies on Maxila Fibre used in the manufacture of BinderTwine and Cordage, 1914-1915, and with tetals for 1910-1915461
VIII. TRANSPORTATION AND COMMUNICATIONS.
36. Steam Railway Mileage under Construction in Canada at June 30, 1915. ..... 486
37. Average Daily Salaries and Wages paid on Steam Railways, 1909, 1914-. ..... 479
FINANCE.
Year Book, 1914.
38. Assets of Loan Companies and Building Societies by Provinces for the year 1918.558
39. Liabilities of Loan Companies and Building Societies by Provinces for the year 1913. ..... 589
40. Miscellaneous Statistics of Loan Companies and Building Societies by Provinces for the year 1913 ..... 590
41. Assets and Liabilities of Loan Companies and Bualding Societies, 1901-1913 ..... ${ }_{591}^{591}$
42. Detailed Assets of Loan Companies and Building Societies, 1909-1913 ..... 591-599
43. Detailed Liabilities of Loan Companies and Buidding Societies, 1909-1913 ..... 892
ADMINISTRATION.
Year Book, 1913.
1-8. Representation in the House of Commons according to the Representation Acts, 1003. 1904, 1907 and 1914
44. Births and Deaths per 1,000 of Indian Population by Provinces according to returns ..... 605
irom 333 Bands, 1912-1913
irom 333 Bands, 1912-1913 30. Number of Convictions for Indictable Offences and Ratio of Convictions per 10,000 Inhabitants, by Provinces, 1891-1901-1911 ..... 617
45. Total Number and Number per 100,000 Inhabitants of Convictious in Canada, classified according to the Nature of Offences, 1880-1912 ..... 024
46. Total Convictions and Average Convictions per 100,000 ithabitantg in Criminal Cases ..... 625
for Minor Offences in each of the years 1881, 1891, 1901, 1911 and 1912.
for Minor Offences in each of the years 1881, 1891, 1901, 1911 and 1912. 37. Total convictions and Average Convictions per 100,000 lnbabitants for All Óffeices by Provinces in each of the years 1881, 1891, 1901, 1911 abd 1912. ..... 625
Year Book, 1915.
628-432 Commssion of Conservation. ..... 651
47. Duration of Sentences, 1910-1915

## INDEX


British Columbia-

- Agricultural products
- Coal fields.
Page. ..... 25. 104-195
- Forestry. ..... 48, 68
- Goversment, publications of ..... 672.21
- Government, receipts and expenditare of, 1910. ..... 540
- Legislation in ..... 679-686
- Mineral production of ..... 48, 54, 68, 277-279
- Public lands of.......... ..... 624, 627, 628
- Royal Commiseion on Timber and Forestry ..... 31
- Salmon fishery ..... 7, 11
British North America Act ..... 119,609
Broom, corn, importa of 1902-16. ..... 187-195
Building permits, value of, 1915-1B ..... 553-554
Busidess failures ..... $570-572$
$674-677$
Business Profits War Tax Act ..... 203-206
- Values of, in 1910-15-16 ..... 205
Cabinet, Impetial War ..... 602
- Ministers, 1896 ..... 300
Cables, mileage of lives of ..... 486
Canada and the European War ..... 687-688 ..... 417
- Grain Act, amendment of the. ..... 6.30
Canadian Expeditionary Force ..... 687-688
- Gifts to Great Britain ..... 689
Canal, Chicago Drainage ..... 68-690
Canals, statistics of ..... 455-468
- Canadian system of ..... 455
483
- Cost of construction of, 1868-1916 ..... 463
- Expenditure on, 1868-1911 ..... 462
- Prncipal articles carried, ..... 458-459
- Sault Ste. Maris, trafic through Cana dian, 1897-1916 ..... 459
- Tonnage of traffie by canals and classes of products, 1915-16 ..... 458
- Traffic, by months, distribution of, ..... 457
- Trafic, distribution of, 1916 ..... 457
- Trafnc during the navigations ..... 456
Canadian to U.S. ports. ..... 456
U.S. to U.S. ports ..... 436
- Trafic through Canadian, 1910-1918. ..... 460-4 $\hat{6} 1$
Cape Breton Island ..... 2, 29
Coal ..... 43
50
Caribou ..... 34
Casual receipts, 1901-17 ..... 508
Cattle, numbers and values of in Canada by provinces, 1915-16 ..... 200
- Numhers of in Canada, by provinces, 1012-17 ..... 197-198
- Value of by provinces, 1009-10-14-16 ..... 199
Cement, imports of Portland, 1898-1916. ..... 274
Censuan and and value of, $1802-16$..... ..... 512
Census of the Pratrie Provinces, 1816.95-106, 18 ..... 69
Ceatral pold reserve ..... 556
Cereal Division of the Dominion Exper- imental farms ..... 237
Cereals, Wer!d's production of, 1915-16. ..... 231-235
Charters of incorporation. ..... 203-204
Cheere, Oks ..... 242
- Price of Canarian, in ..... $230 \cdot 231$
$203-206$
- 1916 ..... 205
Cbemistry Division of the Dominion Experimental Farms. ..... 238-239
Chieago drainage canal. ..... Page.
Children, legislation concerning ..... 68
China clay
China clay ..... 55 ..... 55
Chinese immigration. ..... 112
- Revenue, 1901-17.
508
508
Chromite ..... 56-68
Cigare, consumption of ..... 526, 528
-Excise tariff for ..... 526
Cigarettes, excise tariff for. ..... 326
Cities and towns, population of.
Cities and towns, population of. ..... 81-89 ..... 81-89
- And towns, gee also under ii Munieipa Statistics."
And towns, statistics of, 1910 ..... 41-547
Ciril government, cost of, 1001-17 ..... 512
Classical Colleges, Roman Catbolic ..... 132-155
Clay and shales ..... 88
Climate and Meteorology ...12,15,16,19, 24,176-183
Clover, area, yield and value of, 1915-16. ..... 187-185
Coal, exports oi, 1903-16. ..... 281
- Imports of bituminots, 1901-16 ..... 281
- Occurrence of ..... 46, 47-49, 68
- Production of, by provinces, 1009-1918. ..... 273 ..... 273
- Quantity and value of, 1909-16.
- Quantity and value of, 1909-16.
Const seivice, cost of, 1901-17. ..... 512
Cobalt ..... 42, 266
Cobalt Camp, production of silver, etc.
Cobalt Camp, production of silver, etc. 1904-16.
278
278
Cod fisheries. ..... 259-280
Coinage at the Ottawa Branch of the Royal Mint. 1913-16 ..... 525
Coin and bullion, exports and importa of ..... 298
Cold storase of perishable producta ..... 207
- Storage Warebouses in Canada 1917 ..... 208-212
Collection of revedue, 1868-1917 ..... 514
Colieges of Agriculture....143-148, 168-175, 240
Commerce, see under 'Trade and Commerce.570-572
Commercial$570-572$
Commissioners, appointment of ..... 701-702
Commodities, prices of ..... 488-504
Commons, House of ..... 609
- Presentation of New Mace. ..... 695 ..... 695
Communications, Transportation and
Communications, Transportation and ..... 426-492 ..... 426-492
Compensation to seigpeurs, 1867-1917
Compensation to seigpeurs, 1867-1917 ..... 522
Compelsory Military Service ..... 678, 698
Condensed Milk, production of
695-696
695-696
Coniedèration, Jubilee of
Coniedèration, Jubilee of
693
693
Conference, Imperish War
Conference, Imperish War
886
886
Connaught, H.R.H. the Duke of.
Connaught, H.R.H. the Duke of. ..... ${ }_{6}^{687}$
Conservation Commission
505-515
505-515
Consolidated fund
506
506
- Expenditure, 1914-17 ..... 514-515 ..... $510-514$
- Expenditure, 1868-1917
- Expenditure, 1868-1917
- Receipts, 1014-17 ..... 18
- Receipts, 1868-1917 ..... 517-518
$508-510$
- Receipts, details of, 1901-17
- Receipts, details of, 1901-17
${ }_{505}$
${ }_{505}$
-Surplus, 1974-17 ..... 506-508
- Surplus, 1868-1917.
- Surplus, 1868-1917.
and " Penitentiaries.'682, 685
682, 685
Co-operation ..... 44, 69
Copper.
272
quantity and value of, 1880-1916
426
426
Copyrights, trade marks, etc ..... 187-195
Com, area, yield and value of, $1915-16$ ..... 231-235
- World's praduction of 1915-16
499-504
499-504
Cost of living
Cost of living
407
675
407
675
Cotton wool, imports of, $1902-10$
Cotton wool, imports of, $1902-10$
Court of Appeal, Saskatchewan ........... Cy
Court of Appeal, Saskatchewan ........... Cy ..... 197-188
provinces, 1912-17.+...iloh in Canads
by provinces, 1915-16.200
- Values of milcb, by provinces, 1909-10-14- ..... 199

16. 
17. ..... 203-204 ..... 203-204
Creameries in Cansds
681-882
681-882
Credit, agricultural ..... 648-658
Criminal Statistics
Criminal Statistics
649, 653
649, 653
Page.

Criminal Statistics-

- Convictions for indictable offences. . 649-650, 653
- Death sentences
- Juvenile criminals convicted of indict-

649

## able offences.

- Juvenile Delinquents, Act.
- Nature of crimes
- Penitentiaries.
-Summary convictions, 1915
Cross-ties and poles, quantity and value of.
Cullers' fees receipts, 1901-17
Customs expenditure, 1901-17
-Tariff War Revenue Act.
Customs tariff amendment
- Taxes receipts, 1901-17.

653

Dairying in Canada.
Death-rate of Canada
Deaths during year.
203-207
... .................. 608
Debt of Canada, statistics of................. 519-523

- Assets of, 1867-1917

519-523
二Assets of, 1807-1917.
519, 520

- Charges on, 1868-1917.
- Charges in detail, 1901-17

514-515

- Funded, 1867-1917.

Funded, payable in London and Canada 1916.

- Interest from investments, $1868-1917 . .$.
- Interest on, 1868-1917.
- Net 1867-1917.

510
521

- Sinking funds, is67-,1917.

523

Debts of cities and towns in ............. 520
Decorations, Imperial
保
Defence, see under " Militia " and " Naval Service.'
Deficit in years 1876-1897-1915............ 506-507
Demonstration Farms....................... 236-249
Density of population.
Deportation of undesirable immigrants............... 114
Devonshire, the Duke of.............687, 696. 702
Discount receipts, consolidated fund account, 1901-17.

509
Dissolution of Parliament.................... 679
Distillation, statistics of, 1912-16........... 527
Distribution of Canadian wheat............. 214-216
Districts, Electoral, under the Representation Act, 1914.

610-612
Divorce in Canads, 1868-1916
Dominion experimental farms and stations. 236-240

- Lands.
- Expenditure, 1901-17.
,
623
- Lands, receipts from, 1901-17.
- Legislation
- Notes, issue and redemption of, 1878 1916.
- Notes, liabilities for, 1867-1917
- Notes, monthly circulation of, 1891-1916.
- Parliaments, 1867-1917
- Steamers, receipts, 1901-17

Dominions Royal Commission
Douglas fir
Drainage basins of Canada.
Dry Docp of Dminion Government $\quad 638$
Dry Docks of Dominion Government
Dry Dock Subsidies Act, 1910
Dun's statistics of commercial failures...
Duties per head paid on spirits, wine, beer and tobacco, 1869-1916.
Duties collected on exports and imports, 1868-1917
Duty, average rates of, collected on imports from U. K., U. S., and all countries, 1868-1916.

- Collected on imports, by provinces, 1916

Economic Geology in Canada, 1916........ 68


- Academies in Quebec

131, 155

- Agricultoral.

143-148

- Average school attendance of pupils.
- Colleges of Canada.
- High Schools.
Education-
- Continuation Schools in Ontario ..... 156
- Denominational Universities and Colleges ..... 143
- Expenditure for public. ..... 149
- General features of Canadian system of.. ..... 118-119
- Higher, in Canada. ..... 143-148
- In Alberta. 122, 139-141, 152, 162
- In British Columbia. 122, 141-142, 152, 156, 162- In Manitoba....121, 135-137, 150, 154, 159-160
- In New Brunswick. ....120, 127-129, 150, 153, 157
- In Nova Scotia.......120, 124-127, 150, 153, 157
- In Ontario....121, 122, 133-135, 150, 154, 156, 158
- In Prince Edward Island. .120, 123, 149, 157
-In Quebec....121, 122, 129-133, 150, 153, 155, 158
- In Saskatchewan. 122, 137-139, 150, 161
- In Yukon Territory ..... 142-143
- Technical ..... 143-148
- Model Schools ..... 123-143, 153-155
- Normal Schools. ..... 123-143, ..... 153-154
- Pupils,
149-152
- Provincial Powers. ..... 119-120
- Religious instruction. ..... 120-123
- Roman Catholic Classical Colleges ..... 132, 155
- Schools, Number of public, in Canada ..... 149-152
- Secondary Schools in Canada. ..... 123-143
- Separate Schools.122-123
- Sources of income ..... 123-143
- Statistics of Canada. ..... 148-175
- Teachers, average annual salaries of. . ..... 163
- Teachers, number of, in Canada ..... 149-152
- Teachers, training of ..... 123-143
Election law, amendments of
Election law, amendments of
- Universities of Canada
- Universities of Canada ..... 143-148, 164-167 ..... 143-148, 164-167
508
Electric light inspection receipts, 1901-17. ..... 526, 530
- Railways ..... 445-448
Electric energy generated or produced
for export and for consumption inCanada, 1913-16531
- Installations of municipalities servedby the Ontario Hydro-ElectricPower Commission, financial statisticsof, 1915

548-552
Elementary education in Canada. ..... 123-143
Elevators, grain ..... 417-419
Eskimos. ..... 687-688
Events of the years 1916 and 1917, principal ..... 686-699
Excise Licenses, number of, issued, 1909-16 ..... 530

- Revenues, 1911-16.
527
527
- Tariff, Canadian. ..... 526
- Taxes, receipts, 1901-17. ..... 508
Expeditionary Force, Canadian. ..... 687-688
Expenditure chargeable to capital, 1868 - 1917 ..... 516
- Chargeable to Consolidated Fund, 1868- ..... $514-515,516$
- Expenditure on Consolidated FundAccount, details, 1910-17510-514
- For collection of revenue, 1868-1917 ..... 514-515
- For premium, discount and exchange,
510
510
- For public education, 1901-16..........149, 157-162
- For railway subsidies, 1884-1917. ..... 516
- Of Canada, 1868-1917. ..... 516
- Per head of population, 1871-1917..... ..... 518
- Of provincial governments ..... 532-540
- Of typical family ..... 503
Experiment Stations of Canada, Agri- cultural ..... 236-249
Experimental farms, Dominion. ..... 236-240
- Station Farms Act, 1886 ..... 236
Exploration during 1916. ..... 72
Exports, see under Trade and Commerce" ..... 699-706
Express companies. ..... 451-454
- Earnings of, 1913-16 ..... 454
- Financial paper of, 1913-16 ..... 453
- Operating expenses of, 1913-16 ..... 453
- Privileges, value of, 1913-16 ..... 453

Failures, commeroial.
Fair Wages Branch of Labour Department
Farm Help in Canada, wozes of

- Lands, Value of, by provinces, 100800 -10-14-15-16.
Foldspar.
Field crops, $1910-1916$
- Crops in Prairie provinces, 1915-16
- Crops, total areas snd vajues of, in Canada, 1911-1916.
- Crops, valtues of
- Hupbandry Division of the Dominion Experimental farms
Finance of the riar
- Statistics of

Financial system, Canadian
Fines, forfeitures and seizures, $1901-17$.
Fires, Forest, prevention Acts
Fish and fisheries, statistics of

- Capital invested, 1914-16.
- Experts and imports of, 1902-15
- Exports of, by principal countries, 1915 1016.
- Exports of, by quantities and values, 1913-16
- Exports of, by values, $\mathbf{1 8 6 8} \mathbf{- 1 9 1 7}$.
- Emorts of, classed as manufactures, 1913-16
- Imports of, by quantities and values, 1913-16
- Imports of, classed as manufactures, 1913-18.
- Imports of, dutiable and free, $1902-16$.
- Markets for fresh.
- Quantity and values of caarketed, 191415 and $1915-16$.
Fisheries of Canada
- Empenditure for, 1901-17
- Government bounties for
- Inland, Quantities and Value of the catch of, 1914-15 and 1915-18
- Materials employed, value of, $1915-16$.
- Men, number of emptoyed in, 191亏-16.
- Receipts, 1901-17.
- Value of, by province, $1912-16$
- Value of total, 1870-1916.
- Veasels and boats, pumber and value of, $1915-16$
Flax fibre, production of, in Ontario.
Flaxseed, area and yield of, in Prairie provinces, 1915-16
- Area, yield and value of, $1915-1$ i
- Prices of, at Winnipeg and Fort William
-Stocks of, in Canada.
Flour, prices of Canadian wteat in Britioh markets
- Stocks of wheat in Canads, 1916-17...

Fhiorspar

- Fodder crops, yield of
- Foreign decorations.

Food control
Forest areas.
Forest products, statistics of
-Cross-ties and poles, 1915-16.

- Exports of, by quantities and values, 1913-16
- Exports of, by values, 1888-19i7.
- Exports of, clased as manufactures, 1913-16
- Imports of, by quantities and values, 1913-16
- Imports of, ciassed as manufactures, 1913-16
- Pulp and pulpwood, 1914-16
- Pulpwood, consumption of, by provinces. 1916.
- Pulpwood exported, 1911-16
- Wood for pulp exported to D.S.
-Quavtity and value of lath $1915-16$
- Quantity end value of lumber, 1915-16.
- Quantity and value of shingles, 1915-16
- Value of, 1913-18
- Wood used in manufacture of palp, 1914 1916.

B74, 875 .774, 675, 677 508
Pagn. 570-572 500 201-202

201 $65-09$
186
195
196
186
29 $505-608$
505
${ }^{508}$
${ }_{256-263}^{683-683}$
256
262
262
316-320
303
398-309
354-35f
400-401
262
258
259
$86-40$
$\$ 12$
256, 258
260
257
250, 257
508
261
261
256-257
213
195
187-195
221-223
216
324-226
214-215
55
70
693-684
28
$242-256$ 254

320-324
304
398-399
856-358
400-401 251-254

Forest Products-

- Lecislation

Page.

Forestry, see under "Forest Products.
Forfeitures, receipts from, 1901-17........ 508
Foxes, silver black. . . . . . . . . . . . . . . . . . . . . . . . . 30.1
Free grant lands............................636 63-627
Funded debt payable in Iondon and in Caneda, March 31, 1916
Fur farming in Canada.
Furs....................
Purnaces, iron blast, in Canada, 1916 .

Game animals. .............................. 33-34

Geographical features of Canadi.......... $\quad$ b1-f8
Geological Survey ................

- Cost of, 1901-17

512
Geology in Canada, 1016, poonomic......... $68-72$
Georgian Bay Canal
Gold in Cabada. ..... 40-88
Gold held by the Reneiver-General, ..... 568

- Production of. in Ontario ..... 41. $360-270$
- Quantity and value of, 1862-1916. ..... 268-270
${ }^{556}$
${ }^{556}$
- World's production, 1914-15 ..... 264, 280
GovernmentAnnuities, see under "Annuities"
GovernmentAnnuities, see under "Annuities"
886-687
886-687
Governor General
Governor General ..... 813
417
Grain Act, Canada
417
675
417
675
- Act. amendment of the Carada
- Act. amendment of the Carada
195
195
Grain erops in Prair ..... 186
- Crops, yield of ..... 184-185
- Elevators, number and storage capacity of, 1901-17
417-413
417-413
- Harvest in Prairie Provinces, 1916.
419-422
- Inspection divisions ..... 419-432
- Sitatistics. ..... 417-423
- Shipments of, 1914-15 and 1915.16 ..... 423
By vessels and all-rail route, 1914-16. ..... 423
By vessels from Fort ..... 423
Grain, stocks of, in Cabads, ..... 214-216
- For Distillation, quantity 1912-16 ..... 527
Graphite
Graphite ..... 37
637
Graving docks of Dominion Government Subsidies Aet, 1910. ..... 636-037
Great Lakes of Салаda ..... 64
Griffin Watson, Natural Resourcos of the Dominion of Canada ..... 1-61
Guelph, Ontario Agricultoral College at.. ..... 243-245 ..... 56
Haanel, Dr. E. on galena of B.C. ..... 42
Hams. prices of Canadian, in British mar- kets. ..... 226-230
Harboru Commissions. ..... 638
638
6
Harbour works, expenditure for, 1912-16..
184
184
Harvest results of 1916 .
Harvest results of 1916 . ..... 187-195
Hemp imple of undressed 1903-16 ..... 407
Hides, inports of, 1902-16 ..... 407
40
-148
Hipher edveation in Cansda ..... 143-148
Hills, elevation of. ..... $12,19,20$
Homestead entries.
702-704
702-704
Honours and Deoorations, Imperial
Honours and Deoorations, Imperial
407
407
Horses, number and values of, in Cansda, by provinces, 1915-16 ..... 200
- Numbers of in Canada, by provinces, 1912-17
- Values of, by provinces, 1909-10-14-16.199
Hospitals Commission, Military ..... 690-691
House of Commons, represontation in.. ..... 609-612
Hudson Bay, elimate. ..... 10
- Fisheries. ..... 4


523
35-36

509 40
682-088
$\qquad$

 8


Insurance-

- Fite losses paid for, 1860-19t6
$\rightarrow$ Fire premiums received for, 1869-1916584
- Fire premiums received and losses paid,1878-1916585
- Fire premiums and losses, by provinces. ..... 589
- Fire, hy companies, etc., not licensed in Canada. ..... 607-608
- Guarantee, 1915-16. ..... 599-f00, 616
- Hail, 1915-16. ..... 599-600, 600
- Inland transportation, 1915-16. ..... $599-090,606$
- Licensees, Provincial and Dominion
576-577. 605-607
- Life ..... 575, 590-598, 607
- Dife companies, 1912-16 590-591
American, assets of, 1912-16 ..... 593
American, liabilitics of, 1912-16.
American, liabilitics of, 1912-16. ..... 594 ..... 594
British, assets of, 1912-16. ..... 593 ..... 593
British, habilities of, 1912-16 ..... 594
Canadian, assets of, 1912-16 ..... 592
Canadian, tiabilities of, 1912-16
595-596
595-596
Cash income of, 1912-16 ..... 595
Cash income of, $1912-1$ ..... 594
- Companies on assessment plan. ..... 576, 597-598
Assets of, 1912-1B ..... 598
Expenditure of, 1912-16 ..... 598
Income of, 1912-16 ..... 598
Liabilities of, 1912-18 ..... 598
- Life companies premiun income of, 1901-1916. ..... 597
- Yife, in alt companies, 1901-16 ..... 596
American companies, 1901-16 ..... 596
British companies, 1901-16.
Canadian companies, 1901-1B ..... 596 ..... 596 ..... 596
- Lifi in Canada, 1911-15. ..... 590-591
- Lifo, iseued and terminated, 1912-16. ..... 590-591
- Life, insurance death-rate in Canada, 1912-15 ..... 592
$\rightarrow$ Life, net amount of, in force, 1901-16 ..... 596
- Life policies in foree, 1901-16. ..... 595
- Life policier issued, new, 1912-16 ..... 590-591
- Life, policies, premiums and claims, 1912-16. ..... 590-591
American companies ..... 591
British companies ..... 590
Canadian companies ..... 590
- Live stock, 1915-18. ..... 599-800, 606
- Other than Fire and Life, 1915 -i6576, 599-804, 605, 606
- Asseta of Canadian oompanies, 1915-16.. ..... 601-602
Expenditure of Canadian companies,1915-16.601-602
Expenditure of other than Canadian companies, 1915-16. ..... 608-604Incompe of Canadian companies, $1915-$16.601-602
Income of other than Canadian com- panies, 1915-16 ..... 603-604
iiabilities of Canadian companies, 1415-16 ..... 001-602
- Plate glass, 1915-16 ..... 599-601, 6006
- Sickness, 1915-16. ..... 599-600, 606
- Spribkler leakage, 1915-18 ..... 599-600, 606
-Steam boiler, 1915-16 ..... 509-600, 606
- Superintendence receipts, 1901-17 ..... 509
608
- Title, 1915-16$599-600,600$
$599-800,606$
- Tornado, $1915-16$ ..... 599-600, 806
International Joint (Waterways) Com-mission.
5.8
Iron hlast furnices in Canada, 1916 ..... 275
- Ore, quantity and value of, $1909-16$
- Ore, quantity and value of, $1909-16$
48-54
48-54
- Quantity and value of pig, 1909-16. ..... 273
Sands ..... 68
Joffe, Marshal, Visit of
692
Jubilec of Confederation ..... 695-896

|  |  |
| :---: | :---: |
| Justice. cost of administration |  |
| Juverile Delinquenta Act, 1908 | B52-653 |
| Juvenile immigration into Ca | 112-114 |
| Kaolin | 55 |
| Kilehthoods conferred. | 702 |
| Labour, etatistice | 493-504 |
| - Conditions in 1910 | 3 |
| - Department, organisation | 493 |
| - Expenditure on Consolidated Fund Ac- count. 1911-17............................. | 12 |
| - Fair Wages Brancb | 498 |
| - Industrial Disputes, | 494-498 |
| - Industrial Disputes Investigation A | 48 |
| - Legislation. | 3-684 |
| - Organization of, in Canada | 4 |
| - Prices of commoditie | 498 |
| - Wages of Farm | 201-20 |
| Lakes, the Great | 84 |
| Land area of Canada | 73 |
| - Ssles of, by raifway companies and Hudson's Bay Co., 1914-16 | 4 |
| $\rightarrow$ Values of farm, by provinces, 1908-09-10- |  |
| 14-15-16. | 201 |
| Lands, area and value of Indian, | 634 |
| - Dominion | 505-523 |
| - Provincial | 624-6 |
| Lath, quantities and values of, 1915 |  |
| Law stampe, receipts for, 1001-17 | 509 |
| Lead, bounties on | 424 |
| Lead, occurrences of | 43,70 |
| - Quantity and value of, 1909 | 273 |
| Legislation, cost of, 1901-17 |  |
| Leqislation Dominion | .674, 679 |
| - Provincial | 679-688 |
| Liabilities of Canada, 1867-1917 | 521-52 |
| Lieutenant-Governors appointed. | 699-700 |
| Lieutenant-Governors of provinces, 18671917. | 618-619 |
| Lichthouse and const service, cost of, 1901- |  |
|  | 512 |
| Life Insurance Companies Investment Aot. . |  |
| Lignite. |  |
| Iimestone |  |
| Liquer 1icenss Act, On |  |
| -License Act, Saskatchews | 0 |
| Live stock, Numbers of, in Cadada, 191217 | 196-198 |
| - Values of, in Canada, 1909-10. 1914-16. | 199 |
| Loan and Trust Companies. | 569-570 |
| - Liabilities and assets of, 1914 | 569-570 |
| Loans, liabilities for temporary, 1869-1917.. | 523 |
| - P |  |
| - War. | 678,683 |
| Lobster Gsheri | 37, 259 |
| Lockouts, | 8 |
| Lumber, quantities and value of. 1915-16... | 280 |
| Macdonald College, Ste. Anne de Bellevue. |  |
| Mackenzie River.................... $4+19$ | 23, 31,36 |
| Magnesite......................... 55.70 , 70 | 266+ 267 |
| Mail subsidies and steamship subventions., | 487-489 |
| - Cost of, 1901-17 | 513 |
| Malcolm, Wyatt, Eeonomic Geology in |  |
| Canads, 191B. | 68-72 |
| Malt, exeise tariff for |  |
| Malt, liguor, consumption of. . . . . . . . . 526, | 528-529 |
| Halt taken out of bond for consumption, 1868-1016. |  |
| Manganese. . . . . . . . . . . . . . . . . . . . . . . . 56, | 266-267 |
| Mangolds, area, yield and value of, 1915-16. | 187-195 |
| Manitoba. Auricultural products o | 21, 102 |
| - Climate |  |
| - College of Ag |  |
| - Education in. . . . . . . . . . . . . 121, 135-137, | 159-180 |
| - Forests | 250 |
| Government, publications of. |  |Prge.

Manitobs, Goversment, receipts and ex- penditure of, 1916 ..... 537

- Leeqistation in ..... 680-686 ..... 680-686
- Physical charecteristics of
7, 10
7, 10
- Water powers of
- Water powers of
282-294
282-294
- Census results of, 1916 ..... 282
- Exports classed as, 1913-16 ..... 398-309
- Exports of, by quantities and values, 1913-16 ..... 324-338
- Exports of, by valies, 1888-1917 ..... 304
- Imports classed as, 1913-16 ..... 400-401
- Imports of, by quantities and values, 1913-16 300-382
- Statistios of, 1915 ..... 285-293
- Statistics of, in census years, 1905-15.
282
284
283
- Statistica of, by provinces, 1900-05-10-15.
- Statistica of, by provinces, 1900-05-10-15.
- War Trade in, 1015 ..... 284-293
Marine, see under "Sbipping "
Marriage-rate of Canada. ..... 107
Merchandise, see under "Trade and Commeree."
Metals, see under " Minerals."
Meteorology ..... 176-183
Mics.
55, 267
55, 267
Michipicoton. ..... 5
Military forces of Canads .....
690-691 .....
690-691
- Hoapitala Commiseion
- Hoapitala Commiseion
691-682
- Organization .....
678 .....
678
二 Voters Act ..... 678
Militis, statistics of ..... 639-643
- sind defence, expeaditure for, 1801-17. ..... 513
- Expenditure and revenje, 1912-16 ..... 640-641
509
Milk, condensed, production of. ..... 206
Mineral production, increase or decrease of, .....
266 .....
266
- Of British Columbis, $1914-16 . . .268-272,277-278$
- Of Cabada, 1915-16 ..... 265-267
-Oi Canads, 1886-1918. ..... 268
- Of New Brunswick. ..... 268-272, 276
- Of Nova Scotia ..... 268-272, 275
- Of Ontario
- Of Ontario ..... 268-272, 276, 278 ..... 268-272, 276, 278
- Of Quebec. ..... 208-272, 276
- Value of, in Canada, by provinces, 1915-16 ..... 268
Minerals in Canada. ..... $40-61$
- Exports of, by values, 1868-1917 ..... 304
- Exports of coal, 1903-16. ..... 231
- Exports of mineral produce by quantities and values, 1913-16 ..... 336-342
- Exporta of mineral produce classed as manulactures, 1913-18. ..... 398-399
- Jmports of anthracite and bituminous coal, 1801-16 ..... 281
- Imports of mineral produce by quan- tities and values, 1913-16. ..... 392-394
- Imports of mineral produce classed as manufactures, 1913-16. ..... 400-401
- Imprits of Portland cement and duty paid thereon, 1898-1916 ..... 281
- Mineral production by provinces 268-273, 275-279
- Production of principal, 1909-16 ..... 273
- Smelter, production ci, in Canada ..... 274
- Statistics of ..... 263-281
Mines Branch ..... $40,42,54,263$
dines Departments, Provincial ..... 275-278
Ministries of the Dominion of Canada, 1898- 1917 ..... 615-617
Mint, coinage at Ottawa Branch of the Royal, 1913-16 ..... 525
Miscellaneous accounts, liabilities of Canada for, 1807-1917
522
522
- Acts of Parliament.
- Acts of Parliament. ..... 676 ..... 676
- Exports of, by values, 1868-1917 ..... 305
- Imports of, by quantities and values, 1913-16 ..... 396
- Products, erports of, by quantities and values, 1913-16 ..... 342
- Publio eccounts. ..... 509, 512-514
- Receipts, consolidsted fund account, 1901-17 ..... 509
Mized grains, area, yield and value of,
Page. 1915-16. ..... 187-195
Molybdenum. ..... 4, 71, 267
Motor vehicles, laws concerning ..... 448-450
- Numbers of, by provinces. ..... -451
451
451
- Speed limits.
- Speed limits. ..... 513 ..... 513
Mounted Police, expenditure for, 1901-17.
Mountains of Canad
541-554
Municipal statisties
- Assets and liabilities of municipalitiesserved by the Ontario Hydro-ElectricCommission, 1913-15552
- Cities and towns, assessment and valua- ..... 543-545
tion of property of, 1916.
tion of property of, 1916.553-554
out in, 1915-16
- Cities and towns, general statistics of, 1916 ..... 541-542
- Cities and towns, population, area,incorporation and mileage of streetsand sewers, 1916541-542
- Cities and towns, receipts, expenditure,assets and liabilities of, 1916 .546-547
- Financial statistics of Electrical installa- tions of municipalities served by the Ontario Hydro-Electric Power Com- mission, 1915. ..... 548-551
-Trading. ..... 685
National Gallery of Canada ..... 636
National Service Board ..... 687
Natural gas ..... 57, 59, 266, 267
Naturalization ..... 630
Naturalizations ..... 87
Naval College of Canada, Royal ..... 647
- Service, cost of, 1911-17 ..... 512
- Service of Canada
14, 189
New Brunswick, agricultural products of
- Climate ..... 12
- Coal fields
- Coal fields ..... 47 120, 127-129, 150, 153, 157
- Education in
- Education in
- Forests of
- Forests of ..... 667
- Government, receipts and expenditure of, 1916 ..... 534
- Legislation of ..... 679-685
- Mines of ..... 47, 51, 276
- Public lands of ..... 625
- Physical characteristics of. ..... 7. 9
- Water Powers of ..... 7, 9
Newfoundland, iron ore
Newfoundland, iron ore ..... 7
Niagara Falls, power.
43, 71
Nickel, occurrences of.
273
273
Northwest Mounted Police
Northwest Mounted Police ..... 647-648 ..... 647-648
21
31
21
31
Northwest Territories, agriculture of
Northwest Territories, agriculture of
- Foresta of
- Foresta of ..... 513
- Government,
Nova Scotia, agricultural products of.....13, 188-189
Nova Scotia, agricultural products of.....13, 188-189
- Agricultural experiments in. ..... 240
- Climate
12
12
- Coal fields ..... 47
- Education in. 120, 124-127, 150, 153, 157
- Forests ..... 28, 29, 250-253
- Government, publications of
- Government, publications of ..... 667 ..... 667
- Government, receipts and expenditure of, 1910 ..... 534
- Legislation of ..... 679-685
- Mineral production of ..... 47, 49, 268-272, 275
- Public lands of ..... 624-625
- Physical characteristics. of ..... 7, 9
Oats, area and yield of, in Prairie Provinces, 1915-16 ..... 195
- Area, yield and value of, 1915-16 ..... 187-195
- Prires of Canadian, in British markets.. 224-226 - Stocks of, in Canada ..... 216
- World's production of, 1015-16 ..... 231-235
Obituary. ..... 698-699
Oil.
Page. ..... 57-59
Agricultural Institute
17, 191
Ontario, agricultural products of
- Agricultural College and Experimental Farm ..... 243
- Climate of ..... 16, 23
- Coal supply of. ..... 47
- Forests of 28. 30 , ..... 250-253
- Education 121, 122 133-135, ..... 156, 158
- Government, publications of ..... 669-670
- Government, receipts and expenditure of,1916
536
- Hydro-Electric Power Commission. ..... 547-552
- Legislation in. ..... 679-655
- Iron ores
52
- Mineral production of ..... 268-272, 276, 278
- Northern ..... 18, 30
- Physical characteristics
625-627
625-627
- Public lands of
- Public lands of
681
681
-Water powers ..... 7, 8
Ores treated in Canadian smelters, 1911-16 ..... 274
117
Oriental immigration ..... 117
Ouananich
Ouananich ..... 37
38
Oysters.
Panama Canal ..... 456, 464-466
- Traffic through ..... 464-466
Parliament building, burning of. ..... 694-695
Parliament, extension of duration of. ..... 677
- Dissolution of ..... 679
Parliaments of the Dominion of Canada,
Parliaments of the Dominion of Canada, 1867-1917 ..... 613-614
Parliamentary legislation, 1916-17 ..... 674-679 ..... 674-679
- Representation of Canada ..... 608-612
Parole system, working of the ..... 650
Patent fees, receipts from, 1901-17 ..... 509
Patentees, Canadian, by province of resi- dence, 1908-16 ..... 425
Patents in Canada ..... 425
Patriotic contributions for the War ..... 688-690
- contributions, by provinces ..... 690
- Fund, Canadian. ..... 689-690
- Taxation for ..... 680
Peas, area, yield and value of, 1915-16 ..... 187-195
Peat
Peat
407
407
Pelts, imports of, 1902-16
Pelts, imports of, 1902-16
656-658
656-658
Penitentiaries, statistics of
Penitentiaries, statistics of
657
657
- Age of convicts, 1911-16
- Age of convicts, 1911-16 ..... 658
- Deaths, escapes, pardons and paroles, 1911-16 ..... 657
- Duration of sentences, 1910-15 ..... 653
- Educational status of conviets, 1911-16. ..... 658
- Expenditure for, 1901-17 ..... 513
- Movement of convicts, 1911-16 ..... 656
- Nationality of convicts, 1911-16 ..... 657
- Race of convicts, 1911-16 ..... 657
- Receipts from, 1901-17 ..... 509
- Religion of convicts, 1911-16 ..... 658
- Ser of convicts, 1911-16. ..... 658
- Social habits of convicts, 1911-16 ..... 658
Pensions Commission ..... 702
Pensions, cost of, 1901-17 ..... 513
- Scale of, to dependents of deceased soldiers................................... ..... 644
- Scale of, to wounded or disabled soldiers ..... 45-646
Petroleum ..... 57-59
- Bounties on. ..... 424
Phosphate. ..... 71
Pigments, mineral ..... 56
Physical characteristics of Canada. ..... 61-72
Page.
Population-
- By sex ..... 84-86
- Conjugal cond ..... 87-91 8 8- Increases of, in other countries73-74
- Natural increase of.
- Estimated, of Canada, 1871-1917 ..... 578
- Of Canada, 1871-1911 ..... 74-75
- Of military age. ..... 91-95
- Of the Prairie Provinces, 1901-1916 ..... 95-106
- Per square mile ..... 75-80 ..... 84-86
- Proportion of male to female
- Rural.83-84. 86
- Urban83-84,
- Porcupine district
Portland cement, imports of, 1898-1916 ..... 281
- Quantity and value of, 1902-16 ..... 274
PQuantit
PQuantit
Ports, Canadian value, of imports entered at, 1916 ..... 406
Post and money orders, receipts, 1901-17 ..... 509
Post Office statistics487-492
Post Office Department, deficits of, 1890 1915 ..... 487
- Expendituro of, 1901-1917 ..... 511
- Mail subsidies and steamship subven- tions, 1914-16 ..... 487-489
- Mileage of mail converance. ..... 487
- Money order system, 1901-16 ..... 489
- Money orders, by provinces, 1912-16 ..... 490
- Net revenue of, 1890-1916 ..... 487, 509491
- Postal notes. 1911-16
- Revenue and expenditure of, 1890-1916 ..... 487
- Savings banks. ..... 565
- Stamps, issue of, 1915-16 ..... 492
- Surplus of, 1905-16 ..... 487
Potatoes, area, yield and value of, 1915-16.
Potatoes, area, yield and value of, 1915-16. ..... 187-19 ..... 187-19 ..... 231-235
- World's production of, 1915-16
Poultry Division of the Dominion Experi-
Poultry Division of the Dominion Experi- mental Farms. ..... 239
Prairies ..... 19
Premium and discount expenditure 1901-17. ..... 510
Precipitation and temperature ..... 176-183
Premium and discount receipts, 1901-17 ..... 509
Prices of Canadian agricultural produce ..... 216-231
- Of commodities
- Of commodities ..... 498-504
Prince Edward Island agricultural products ..... 14, 188 ..... , 188
- Climate of
- Climate of
- Education in 120,123 , ..... 49, 157
- Forest of. ..... 29, 250
- Government, publications of ..... 667
- Government, receipts and expenditure of, 1916 ..... 533
- Legislation of ..... 679-685
- Physical characteristics of7. 9
- Water power of.
- Water power of. Prisons and Reformatories Act, Amend- Prisons and Reformatories Act, Amend- ment of ..... 676
Privy Councillors, new ..... 699
Production, statistics of ..... 184-294
Prohibition Acts. ..... 681
Principsl events of the years 1916 and 1917 ..... 686-699
Proportional Representation in British Columbia ..... 681
Province accounts, assets of debt, 1867-191 ..... 550
- Liabilities of Canada for, 1867-1917
4.73
Provinces, area of ..... 1-4, 73
Provincial Agricultural Experiments
Provincial Agricultural Experiments ..... $240-249$
$684-685$
- Government Departments ..... 684-685
- Governments, receipts and expenditure of, 1911-16 ..... 532-540
- Governments, subsidy allowances to, 1867-1916 ..... 524
- Governments, subsidies and other pay- ments to, 1911-16 ..... 523-524
- Legislation
- Legislation ..... 679-686 ..... 679-686
- Mines Departments ..... 275-278
- Notes, liabilities of Canada for, 1867-1917 ..... 532-540
Publicic accounts ..... 505-525
Publications of the Dominion Government,list of principal661-666
- Of the provincial governments of Canada,667-674
Public buildings, exnenditure for, 1911-15
Pagf. ..... 638
- Defence
- Health and quarantine ..... 639
- Lands of Dominion and provinces ..... 623-629
Public Service Tosn Acts, 1916 and 1917. ..... 674, 678
Public Works Department, architeet's branch ..... 636
- Engineering branch of ..... 636
- Expenditure for, 1901-17 ..... 513
- Expenditure and revenue of, 1912-16 ..... 637-638
- Graving docks of ..... 636-637
- National Gallery of Canada. ..... 636
- Organization of
636
636
- Telegraph branch of ..... ิ̂36
- Receipts from, 1001-17 ..... 509
Pulpwood statistics ..... 249, 251-256
- Exports of, 1911-16 ..... 255
- Kinds of wood, 1914-16 ..... 252, 253
- Process of manifacture, 1914-16. ..... 254
- Wood, quantity and value used, 1914-16. ..... 251
Quarantine, expenditure for, 1901-17.
512
512
- Public health and ..... 639
Quebec bridge ..... 696-697
Quebec agricultural products of ..... 16, 190
- Agricultura! Experiments in ..... 241-243
- Climate ..... $14-23$
47
- Edappiy ..... 47
155, 158
- Forests of ..... 250-253
- Government publications of ..... 667-669
- Government, receipts and expenditure of, 1915. ..... 535
- Iron ores of.
679-686
679-686
- Mineral production of ..... 268-272,276
- Public lands of ..... 624-625
- Physical characteristics ..... 2

7. 

8
Queen Charlotte Islands. ..... 4, 32
Radiotelegraphic service ..... 483-485 ..... 407
Rags, imports of, 1902-16
Rags, imports of, 1902-16
Railway Acts ..... 675, 679

- Lands ..... 623-624
Railways and Canals expenditure, 1901-17.. 511, 513
- Statistics of ..... 445-448
Capital, liability of
445-447
445-447
Earnings of
445
445
Mileage and equipment of, 1914-16
Mileage and equipment of, 1914-16
446-447
446-447
Miles operated, number of, 1916
Miles operated, number of, 1916 .....
445-447 .....
445-447
Persons killed and injured on, 1894-1915 ..... 447
- Expenditure for, 1901-15 ..... 427-428, 513
- Government ..... 427, 436-438
Construction, capital expenditure for to 1916 ..... 438
Construction, cost of before Confedera- tion to 1916 ..... 437
Revenue of with surplus or deficit 1868-1916 ..... 437
Working expenses, 1868-1916
426-44
426-44
- Steam ..... 435
Aid to, analysis of, up to 1916
Aid to, analysis of, up to 1916
428
428
Aid to by governments and munici-
Aid to by governments and munici- palities, up to 1916 ..... 436
Page.

| ailways, steam - |  |
| :---: | :---: |
|  |  |
| Mileage and rolling | 38 |
|  | 29 |
|  | 434 |
|  |  |
|  |  |
|  |  |
|  |  |
| Operating |  |
| Operating expenses per mile of line, 1908-16 |  |
| Passenger and freight statistics, 1875-1916........................ 427, 434 |  |
| Persons injured and killed on, 1888-1916 443-444 |  |
| Ratio of expenses to receipts, 1875-1916. |  |
| Salaries and wages, distribution of, 1915-16. |  |
| Salaries and wages with ratios to gross earnings and operating expenzes 1907- |  |
| Salaries and wages, average daily, 1916. 441-442 |  |
|  | 427 |
| Rainfall of Canada. |  |
| Receipts and expenditure of provincial | 532-540 |
|  | 518 |
| Religious Instruction in public schools..... 120-123 |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| Research, Advisory Council for Scientific and Industrial |  |
| Research Council Act, 1917 .. |  |
| Retail prices of commodities. . . . . . . . . . . . . 500-504 |  |
| Revenue, collection of, 190 |  |
| - Of Canada per Lead, 1871-1917......... 518 |  |
| River and ocean service, co-t of, 1901-17... |  |
| - Works, expenditure foı, 1912-16.......... ${ }_{\text {- Rivers of Canada. . . . . . . . . . . . }}^{\text {- }}$ - 63 , 638 |  |
|  |  |
| Road Materials. ........................ ... 71 |  |
| Roade and bridges, expenditure for, 1911-15 |  |
| Roman Catholic Classical Colleges........ . 132, 155 |  |
|  |  |
| Royal Mint, coinage at Ottawa Branch of, 1913-16. |  |
| - Naval College of Canada. . . . . . . . . . . . . . 647 |  |
| - Northwest Mounted Police. . . . . . . . . . . . . 647-648 |  |
| Rubber, imports of, 1902-16............. . 407 |  |
| Rye, area, yield and value of, 1915-16...... 187-195 <br> - World's production of, 1915-16........... 231-235 |  |
|  |  |

Ste. Anne de la Pocatière School of Agricul- ture ..... 243
St. Lawrence River system ..... 8-9
St, Lawrence water powers
37, 259-260
37, 259-260
Salt ..... 57, 265-267
Saskatchewan, agricultural products of. 21, 192-193

- Climate19
- College of Agriculture at Saskatoon. ..... 245
- Education in ..... 122,137-139,150, 161
- Government publications of ..... 671-672
- Government receipts and expenditure of,
538
538
1916
1916
679-686
679-686
- Legislation in ..... 48
- Physical characteristics of
7-11
- Water powers of ..... -11
- River power of
- River power of
513
Scientific institutions, cost of, 1901-17 . ..... 513
Schools, see under "Education.
Scientific and Industrial Research,AdvisoryCouncil for.619-623
Seals. ..... 38,259
Seamen shipped and discharged at Canadianports, 1908-15475
Secondary Education in Canada ..... 123-143
Seed, Grain, legislation respecting ..... 676
Page.
Seigneurs, compensation to, 1867-1917 ..... 522
Seizures, receipts from, 1901-17 ..... 508
Senate, number of members of the. ..... 609
Senators, new ..... 700
Separate schools in Canada ..... 122-123
Sex of the people. ..... 84-86
Sheep, numbers and values of, in Canada, by provinces, 1915-16 ..... 200
- Numbers of in Canada, by provinces, 1912-17 ..... 197-198
199
- Values of, by provinces, $1909-10-14-16$
Shingles, quantities and values of, 1915-16 ..... 250
Shipbuilding commissions, B.C. and N.S. ..... 685
Shipments of grain, 1914-16 ..... 423
Shipping, statistics of. ..... 467-480
- Marine danger signals, 1906-16
- Marine danger signals, 1906-16 ..... 476 ..... 476
- Marine Department, organization of the. ..... 467
- Marine,expenditure of the Department of ..... $-478$
- Marine hospitals, cost of, 1901-17 ..... 513
- Marine, revenue of the Department of ..... 476-478
-Steamboat inspection, 1915-16. ..... 474-475
- Vessels built and registered in Canada, 1901-16. ..... 473
- Vessels, Canadian and American trading on boundary rivers and lakes, 1912-16... ..... 472-473
- Vessels employed in coasting trade of
Canada, 1912-16. - Vessels, number and tonnage of on ..... 471-472
Canada registry, 1912-15 ..... 474
- Vessels, sea-going and inland, arrived at and departed from Canadian ports, 1901-16 ..... 471
- Vessels, sea-going, entered and cleared at Canadian ports, 1916 ..... 467
- Vessels, sea-going, entered and cleared at principal ports of Canada, 1916. ..... 468
- Vessels, sea-going, entered and cleared at Canadian ports, 1902-16 ..... 470
- Vessels, sea-going, entered inwards and outwards by countries, 1916. ..... 469-470
- Vessels sold to other countries, 1901-16.. ..... 473
- Vessels, wrecks and casualties of, 1870 - 1916 ..... 475
- In the U.K. and British Possessions, 1910-14. ..... 479-480
- Act, Amendments of ..... 676
Silver occurrences ..... 40, 41
- World's production, 1914-15. ..... 264,280
- Production at Cobalt Camp, 1904-16278
278
- Production of, in Ontario 271, 2
- Quantity and value of, 1887-1916. ..... 271
Silver-lead ores ..... 42
510,514
510,514 Sinking funds. ..... 517-518
- Of cities and towns, 1916 ..... 546-547
Slides and booms, expenditure and revenue for, 1912-16 ..... 638
Smelter production in Canada, 1911-16 ..... 274
Snowfall of Canada ..... 183
Snuff, excise tariff for ..... 526
Spirits, consumption of ..... 529
- Duty paid per head on, 1869-1916. ..... 529
- Excise revenue from, 1911-16. ..... 527
- Excise tariff for ..... 526
Staples, inspection of, receipts from, 1902-17 ..... 510
State, Department of the Secretary of ..... 629
Steam railways ..... 426-444
- Cost of, 1901-17. ..... 513
Steamboat inspection, 1915-16 ..... 474-475
- Receipts from, 1901-17. ..... 509
- Miscellaneous expenditure for, 1910-17. ..... 513
teamers, receipts from Dominion, 1901-1 ..... 508
Steamship subventions and mail service, cost of, 1901-17 ..... 513
Stocks of wheat in Canada, 1916-17 ..... 214-215
Strikes, labour ..... 494-498
Subsidies to provincial governments ..... $14,523-524$
Subventions and mail subsidies 1914-16. ..... 487-489
Sudbury, Ont ..... 43
Suffirage for Women ..... 678-680
Sugar Beets, area, yield and value of, 1915-16.
187, 191
- Raw, imports of, 1902-16 ..... 407
Superannuation, cost of, 1901-17 ..... 533


Trade and Commerce-

- Imports of, by quabtity and values, 191318.

Pagis.

Values of exports to U.
$350-354$
Values of exports to U. B., 1868-1917...
Values of exports to other countries 303 1868-1917
Vaiues of total erports, 1868 -1917.
303

- Duty eollected on imports, average p... rates of, from U. K., U. S., and all countries, 1868-1916.

405

- Duty collected on Imports, by provinces, 1915.
- Exports by values which may be classed as manuisctures, 1913-16.
- Exports by values to U. K., $\mathrm{t}, \mathrm{S} ., \mathrm{and}$ other countries which may be classed as manufactures, 1913-16.
- Exports of Canadian produce by pribcipal ports, value of, 391 b
- Frports of coal, the produce of Canada, value of, 1903-16.
- Emprts of fish, value of, 1902-ib. ..... 262
- Exporta of fisb by principal countries. value of, 1915-16. ..... 262
- Exports of fisheries produce by values, 1888-1917 ..... 303
- Exports of home produce, by quantities and values, 1913 -1916.
- Erports of home and foreign produce, byvalues, 1868-1917.
- Duties collected on, 1888 -1892
- Of coin and bullion, 1888-1917
- Exports of bome produce, by values, to British Empire, 1913-17.413
- Emports oi home produce, by values, to foreign countries, 1912-17. 418
- Exports of zuerchandise from Cansda through U.S. to foreign countries, 191516, values of.416
- Export of wood, blocks and other, for palp to the U. S., by quantity and value, 1904-16

$$
258
$$

- Exports of wood pulp, 1911-18. 255
- Exporta, Ratio of each clase, 1913+16.....
- Exports to U. K., U. S. and other countries, of mercbandise the produce of Canadr, 1858-1917301
- Exports to West Indies, 1914-16. ..... 402
- Fisheries produce, exports of, by quan.tities and values, 1913-16.316-320
- Fisherics produce, exports of, by values,
1868-1917 ..... 303
- Imports of, by quantities and vajues, 1913-1916.
Values of exports to U.S., 1868-1917. ..... 303
Values of exports to other conntries, 1868-1917. ..... 308
Values of total exports, 1888-1917 ..... 303
- Forest produce, exports of, by quantities and values, 1913-16. ..... 320-324
-- Forest produce, exports of, by values, 1868-1917 ..... 304
- Importo of, by quantities and values, ..... 356-858Valuea of exports to U. K., 1986-1917...
304Values of exports to U.K., 1868-1917.
Values of exports to U.S., 186S-1917.
Values of exports to other countries, 1869-1917 ..... 304
Values of total exports, 1868-1917 ..... 304
- General tarifif, imports under, 1913-16...
- Imports entered for consumption byvalues, 1868-1917.297
From all countries by values, duti- able, 1865-1917. ..... 297
From all countries by values, free, ..... 297
1808-1917.
1808-1917.
Dutjes collected on, 1868-1917. ..... 299
- Imports entered for bouse consumption, includinz coin and bullion, 1913-17. ..... 414-415303

Trade and Commerce-

- Imports for homevalues, 1913-16
- Imports for consumption, by quantities and values, 1913-1916
- Imports of anthracite and bituminous coal, 1901-16.
- Imports of Canada in quantities and values by classes, 1913-16.
quantities
From United Kingdom in quantities and values by classes, 1913-16.
From United States in quantities and values by classes, 1913-16.
From all countries in quantities and values by classes, 1913-15
- Imports of fish, 1902-16.
- Imports from West Indies, 1914 - 16
- Imports from West Indies, 1901-16
- Imports of merchandise into Canada through U. S. from foreign countries, 1915-16, values of
- Imports of Portland cement, 1898-1916...
- Imports of raw material for home consumption, 1902-16 Broom corn Cotton wool and waste Gutta-percha, India-rubber, etc Hemp, undressed. Hides, horns, pelts, etc Rags, all kinds Sugar, raw.... Tobacco, raw. Wool, raw.
- Imports total, by values, dutiable, 1868 1917.

Of coin and bullion, 1868-1916
Total imports, duties collected on, 1868 1917.

Totals by values free, $1868-1917$.

- Imports by values from British Empire, 1913-17
- Imports by values from foreign countries, 1913-17
- Imports by values which may be classed as manufacturers, 1913-16
- Imports by values from U. K., U.. S... and other countries which may be classed as manufactures, 1913-16.
- Imports from the U.K., U.S. and other countries of merchandise entered for home consumption, 1868-1917
- Imports from U. K. and U. S., proportions to totals of dutiable and free, 18681916.
- Manufactures, exports of, by quantities and values, 1913-16
- Manufactures, exports of, by values, 1868-1917
Values of exports to U.K., 1868-1917....
Values of exporis to U.S., 1868-1917..
Values of exports to other countries, 1868-1917.
Values of total exports, 1868-1917
- Manufactures, imports of by quantities and values, 1913-16.
- Merchandise, the produce of Canada, value of exports, 1913-1916
Values of exports to U.K., 1868-1916....
Values of exports to U.S., 1869-1916...
Values of exports to other countries, 1868-1916.
Values of total exports, 1868-1917
- Mineral produce, exports of, by quan$\mathrm{t}_{\mathrm{t}}$ ties and values, 1913-16
- Mineral produce, imports of, by quantities and values, 1913-16..............
- Mineral produce, exports of, by values,

Values of exports to U.K..., 1868-1917.... Values of exports to U.S., 1868-1917.
Values of exports to other countries, 1868-1917.
Values of total exports, $1868-1917$

- Miscellaneous produce, exports of, by quantities and values, 1913-16
Page.


## Page.

342-397
342-397
Trade and Commerce-

- Misceilaneous produce, exports of, byvalues, 1868-1917
Values of exports to U.K., 1868-1917... ..... 305
Values of exports to U.S., 1868-1917. ..... 305
Values of exports to other countries, 1868-1917 ..... 305
Values of total exports, 1868-1917 ..... 305
- Miscellaneous produce, imports of, by quantities and values, 1913-16 ..... 396
- Per cent duty on dutiable imports from U.K., 1868-1916. ..... 405
From U.S., 1868-1916. ..... 405
- Preferential tariff, imports under, 1913-16 ..... 408
- Imports, Ratio of exports to imports ..... 300
- Ratio of each class, 1913-16. ..... 307
- Trade of Canada, by classes of produce compared as to quantity and value, 1915 and 1916 ..... 410
- Treaty rates, imports under, 1913-16 ..... 408
- Value of goods entered for consumption at certain ports, 1916. ..... 406
- Value of total exports and imports, by provinces, 1916 ..... 406
- Value per capita of total trade, 1868-1917 ..... 300
- Imports under general, preferential and treaty rate tariffs, 1913-1916 ..... 408
Trade of Canada for calendar year 1916.. ..... 295
Trade Marks branch ..... 426
Trades Union membership. ..... 494
Transportation and Communications. ..... 426-492
Treaty rates, imports under, 1913-16 ..... 408-409
Truro College of Agriculture, N.S ..... 240
Trust and Loan Companies ..... 509-570
- Liabilities and assets of, 1914-15 ..... 570
Trust funds, liabilities of Canada for, 1867- 1917 ..... 522
Tungsten ..... 54
Turnips, area, yield and value of, 1915-16...
Tyrrell, J. B. on natural resources of Can- adá. ..... $22,34,46,70$
Tyrrell, J. B. on natural resources of C... 1




Ungava ..... 2, 52United Kingdom, trade with.... 301-307, 308-343,
$\begin{aligned} & \text { U42-397, } \\ & \text { - States, }\end{aligned}$, 401

- States, trade with ..... 393, 401
University education in Canada. . . . . 143-148, 164-167
Urban population. ..... 83-84

Urban population.
Valuation of property in cities and towns,

Valuation of property in cities and towns,1916543-545
Vancouver Island ..... $4,25,32$
Vimy, Canadians and Victory of ..... 687
Vinegar, excise tariff for ..... 526
Visit to Canada of Australian, French and British Statesmen ..... 692

- to England of Canadian Cabinet Min- ..... 692-693
Vital statistics ..... 106-111
- Birth-rate ..... 107
- Death-rate ..... 107
- Marriage-rate. ..... 107
- Natural increase. ..... 107-111
- Of cities ..... 108-111
- Of provinces ..... 106-107
Viviani, M. René, visit of ..... 692
Wages of farm help in Canada ..... 201-202
- Of railway employees ..... 441-442
- Legislation concerning. ..... 683-684
War Appropriation Act, 1916 ..... 674
- Appropriation Expenditure on, for 1916. ..... 641-643
- Canada and the European ..... 657-688
- Conditions, measures arising out of....... 679-680
- Finance of the. ..... 674-675, 677
- Increase of Canadian forces for the ..... 687 ..... 674, 678, 693
- I.oans.
- I.oans.
- Provincial Acts relating to the ..... 679-680
War Tax receipts. ..... 510
678
- Time Elections Act.
283-294
Water area of Canada ..... 73
- Powers of Canada ..... 5-11
Page.

Page.305





83-84




[^61]


[^0]:    1See under notes at foot of page riv.
    Exports of merchandise, domestic and foreign.
    ${ }^{2}$ Imports of merchandise for home consumption. ${ }^{1}$ Coin and bullion ineluded.

[^1]:    It has been established beyond controversy that in the eastern part of the territory north of the Height of Land there is an immense area of excellent agricultural land, apparently equal in fertility to any in older Ontario, with an equable and temperate climate and an abundance of wood and water. The great clay belt comprises an area of at least 24,500 square miles, or $15,680,000$ acres. This almost unbroken stretch of good farming land is nearly three-quarters as great in extent as the whole settled portion of the province south of Georgian bay, lake Nipissing and the French and Mattawa rivers.

[^2]:    ${ }^{1}$ The World's Grain Produetion and Consumption, Census and Statistics Monthly, November, 1915 (Vol. 8, No. 87, p. 290.)

[^3]:    The water of the Salt river, a tributary of the Athabsask, is very sekty. About ten miles from its mouth a district called the Salt Coustry is reached. Every where in this district the sloughs and creeks are saturated with salt, and in many places where small ponds have dried up the mud is covered with a thick deposit of salt. It permeates everything. Even the leaves of the trees when chewed up taste salty. To the south and southeast a. great salt plain stretehes. The ground is covered by a very rich growth of grass which does not seema to be affected by the salt.

[^4]:    ${ }^{1}$ By map measurement. ${ }^{2}$ Total land area.

[^5]:    Includes East Indies.
    ${ }^{2}$ Includes West Indies.

[^6]:    ${ }^{1}$ Exclusive of Yukon and Northwest Territories.

[^7]:    Exclusive of Yukon and Northwest Territories.

[^8]:    ${ }^{2}$ Incomplete.

[^9]:    Saskatceewan (Year ended December 31).

[^10]:    ${ }^{1}$ Jn addition there were 12 Extension lectures and 365 "Short Course" students.

[^11]:    ${ }^{1}$ Observations on the Production and Consumption of Meat and Dairy Products. By R. H. Rew, Journal of the Royal Statistical Society, London, England. Vol. LXVII, Part III, Sept. 30, 1904, pp. 413-429. ${ }^{2}$ The Production and Consumption of Dairy Products, by Eugene Mprritt, Bull.U.S. Department of Agriculture. No. 177 (1915). See Csanda Year Book, 1907, pp. xvi-xvii, and Bulletin 43, July, 1914, of Dairy and Cold Storage Commissioner's Series, Department of Agriculture, Ottawa.

[^12]:    ${ }^{1}$ For the production of flax fibre in Ontario in 1915, see Y.B. 1915, p. 185.

[^13]:    ${ }^{1}$ The five original farms established in 1886 are known as "Experimental Farms"; those added since are styled "Experimental Stations." No distinction in the work is expressed by these titles.

[^14]:    ${ }^{1}$ For further details respecting the Canadian fishing industry, see Annual Reports of the Department of Marine and Fisheries, from which the statistice in the Year Book have been compiled.

[^15]:    ${ }^{1}$ Not including metallic and rubber junk.

[^16]:    ${ }^{1}$ Not including metallic and rubber junk.

[^17]:    Nore.-In the above table the exports are the produce of Canada, exclusive of coin and bullion, and the imports are for home consumption. Values are expressed in thousands of dollars, and the period covered is the fiscal year ended March 31.

[^18]:    Includes $\$ 152,753$ Coin and Bullion not specified by Countries.
    ${ }^{2}$ Includes $\$ 2,527$ Coin and Bullion not specified by Countries.

[^19]:    ' Subject to revision.

[^20]:    The statistics of railways, express companies, canals, telegraphs and telephones are taken from the Reports for the year ended June 30, 1916, of the Department of Railways and Canals, especially the Reports of the Comptroller of Statistics (Nos. $20,20 \mathrm{~A}, 20 \mathrm{~B}, 20 \mathrm{D}, 20 \mathrm{E}, 20 \mathrm{~F}, 1917$ ). The shipping statistics are taken from the Report of the Department of Marine and the Trade and Navigation Returns. The postal statistics are from the Report of the Post Office Department.

[^21]:    ${ }^{1}$ Ineluding consolidated debenture took of the Canadian Pacific Railway, $\$ 163,257,224$ in $1913, \$ 173,307,470$ in $1914, \$ 176,284,882$ in 1915 and $176,284,882$ in 1916 .

[^22]:    ${ }^{1}$ Under construction. ${ }^{2}$ St. Mary's Bridge Co., $\$ 30,000$, Canada Eastern, $\$ 374,840$, Drummond County, $\$ 438936$, Nova Scetia Steel and Coal Co.'s Ry., $\$ 83,840$. ${ }^{\text {'Includes }} \$ 10,189,521$ paid to the company for $6,793,014$ acres of land relinquished. ${ }^{4}$ Includes value of used iron rails. ${ }^{\text {b }}$ Includes $\$ 0,263,716$ paid to the company under the "Implement Clause" by the Dominion Government.

[^23]:    ${ }^{1}$ Under construction. ${ }^{2}$ Owned and operated by New Brunswick Government. Includes value of used iron rails.

[^24]:    ${ }^{1}$ The records relating to cost of construction by Imperial Government were destroyed by fire in 1852, and the statistics are not included in this table.

[^25]:    ${ }^{1}$ Eleven Months.

[^26]:    ${ }^{1}$ For information relating to the Department of the Naval Service, see page 647
    43.-Sea-going Vessels (exclusive of Coasting Vessels) Entered and Cleared at Canadian Ports during the fiscal year 1916.

[^27]:    'Includes 1,042 lives lost in the "Empress of Ireland" disaster.

[^28]:    Nine months.
    'Includes $\$ 493,000$ sale of steamer " Earl Grey" sold to Russian Government.

[^29]:    ${ }^{1}$ This Company leased its property and plant in New York State to the Western Union Co., which accounts for the reduction in the Ggures of 1912.
    ${ }^{2}$ Including the Canadian Northern Reilway Co.

[^30]:    ${ }^{3}$ Not including press mescages. Including 962 miles of cables.
    ${ }^{5}$ These are telephone lioes and are used for both despatching and commercial business.

[^31]:    ${ }^{1}$ Under special statute.

[^32]:    Note.-For 1868 to 1900, see Canada Year Book, 1911, p. 289.

[^33]:    ${ }^{1} \mathrm{~A}$ deduction.

[^34]:    ${ }^{1}$ Including railways and canals.
    Noti-For the years 1868 to 1900, see Canada Year Book 1911, pp. 248-252.

[^35]:    ${ }^{2}$ Transferred to Adulteration of food.

[^36]:    ${ }^{1}$ Total quantity manufactured. ${ }^{2}$ Nine months. ${ }^{3}$ Pounds.

[^37]:    ${ }^{1}$ Including Coal and Timber Lands.

[^38]:    IIncluded with general debentures. ${ }^{\text {I IIncludes }}$ \$836,024 Water Works Debentures. ${ }^{2}$ Exclusive of $\mathbf{\$ 2 0 0 0 , 9 0 0}$ deficiency loan. Expended out of General Debentore Account. Includes some local improvements paid by debenture. Not including some receipts and expenditures of Water Commission, Light Commission. Public and High Schools and Library Board. TAmount of Local Improvement Debentures,
     Eilectric System Debentures \$7,402,000; Araount of School Debentures \$3,500,000. ${ }^{\text {EAmount of Local Im- }}$ provement Debentures 8897,714 , Electric Light Debentures 8763.512 ; Amount of Water Works Debentures $\$ 1,339,610$, Includes Electric Light Debentures $\$ 457,274$ and Water Works Debentures \$499,945. 10Including Dtilities. "Property owners share only. ${ }^{12}$ Includes Electric Light and Power Debentures \$31,053; Natural Gas Debentures 8519,127 and Water Works Debentures $\$ 1,068,588$. MInclodes 830,000 Water Works Debebtures.

[^39]:    Includes Debentures Paid, Sinking Fund and Depreciation, Reserves and Surplus.

[^40]:    ${ }^{1}$ Of this deposit $\$ 11,960,000$ is in gold coin; the balance is in Dominion notes.
    ${ }^{2}$ Includes loans to Cities, Towns, Municipalities and School Districts.

[^41]:    ${ }^{1}$ Averages computed from montbly returns in each year.
    ${ }^{2}$ Includes loans to Cities, Towns, Municipalities and School Districts.

[^42]:    ${ }^{1}$ The statistics in this table are averages computed from monthly returne in each year.
    ${ }^{2}$ Includea Joans to Cities. Towns, Municipalities and School Distriets.

[^43]:    ${ }^{3}$ The statistics ind ${ }_{2}$ this table are averages computed from monthly returns in each year.

[^44]:    ${ }^{1}$ This amount includes $\$ 1,442,047$ at credit of depositors June 30,1867 . ${ }^{2}$ Includes $\$ 38,418$ at credit of New Brunswick account in 1871. ${ }^{3}$ Includes $\$ 249,941$ at credit of Prince Edward Island account in 1873. ${ }^{4}$ March 31.

[^45]:    ${ }^{1}$ Liabilities under life and other branches included.
    ${ }^{2}$ Canadian companies only.

[^46]:    ${ }^{1}$ Income and Expenditure in Canada.

[^47]:    ${ }^{1}$ Figures subject to revision. Including matured endowments. 'Incomplete, certain figures not received in time for insertion in Insurance Report.

[^48]:    ${ }^{1}$ Figures subject to revision.

[^49]:    ${ }^{2}$ Including fire risk. ${ }^{3}$ Excluding fire risk.

[^50]:    ${ }^{4}$ Period of general elections. Writs returnable. ${ }^{\text {b }}$ Dissolution of Parliament. ${ }^{6}$ Duration of Parliament in years, months and days. The life of a Parliament is counted from the date of return of election writs to the date of dissolution, both days inclusive. ${ }^{T}$ Not including days (59) of adjournment from May 19th to July 18th. ${ }^{8}$ Not including days (25) of adjournment from Dec. 19th, 1912, to Jan. 14th, 1913 . 'Not including days (39) of adjournment from Feby. 7th to April 19th, 1917

[^51]:    'Copies of the detailed Regulations for the granting of free homesteads are obtainable from the Commissioner of Dominion Lands, Department of the Interior, Ottawa.

[^52]:    ${ }^{1}$ For copies of the detailed regulations governing the disposal of provincial crown lands, application should be made as follows: Nova Seotia, to the Secretary for Industries and Immigration, Halifax; New Brunswick, to the Deputy Minister of Lands and Mines, Fredericton; Quebec, to the Deputy Minister of Lands and Forests, Quebeo ; Ontario, to the Deputy Minister of Lands, Foresta and Mines, Toronto.

[^53]:    ${ }^{2}$ Further particulars may be obtained on application to the Minister of Lands, Forests and Mines, Parliament Buildings, Toronto, Ont.

[^54]:    ${ }^{1}$ See also page 687.

[^55]:    ${ }^{1}$ A separate appropriation of $\$ 75,000$ was voted for purchase of lands for a Rifle
    Range, expenditure on which is inoluded in this amount.

[^56]:    ${ }^{2}$ Includes one age not given and one age unknown.
    ${ }^{2}$ Includes two age unknown. ${ }^{3}$ Includes one age unknown.

[^57]:    ${ }^{1}$ Includes one in Selkirk Asylum; no details given.
    ${ }^{2}$ Including Danish, Norwegian, and Swedish.
    ${ }^{3}$ Includes one not given (insane).

[^58]:    Includes $\$ 75,973$ taken over from the Canadian Patriotic Fund Association, $\$ 114,947$ contributed by the Public Service of Canada, $\$ 2,241$ collected in the United Kingdom, $\$ 12,884$ collected in the United States and interest $\$ 135,254$. ${ }^{2}$ Includes $\$ 2,800,000$ value of flour contributed by the Dominion Government. ${ }^{3}$ Includes contributions of $\$ 67,379$ from the United States, India and Cuba. ${ }^{4}$ Includes $\$ 5,000$ from the Dominion Government and $\$ 2,250$ received from the United States. ${ }^{5}$ Includes $\$ 50,000$ from the Dominion Goverament and $\$ 738,150$ from the Maritime Provinces.

[^59]:    ${ }^{1}$ See House of Commons Debates, February 7, April 20 and May 31, 1917

[^60]:    ${ }^{1}$ See Canada Year Book 1907, pp. xxxiv-xxxv. ${ }^{2}$ Including 6,016, the population of the new territory added to Manitoba by the Manitoba Boundaries Extension Act 1912.

[^61]:    

