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# IRRIGATION BRANCH DEPARTMENT OF THE INTERIOR.

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# IRRIGATION BRANCH DEPARTMENT OF THE INTERIOR.

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# ANNUAL REPORT

OF THE

# DEPARTMENT OF THE INTERIOR

FOR THE YEAR

1905-1906

PRINTED BY ORDER OF PARLIAMENT



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PRINTED BY S. E. DAWSON, PRINTER TO THE KING'S MOST
EXCELLENT MAJESTY
1906

[No. 25—1907]

To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, G.C.M.G., &c., &c., Governor General of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to lay before Your Excellency the Report of the transactions of the Department of the Interior for the fiscal year ending June 30, 1906.

Respectfully submitted,

FRANK OLIVER,

Minister of the Interior.

OTTAWA, October 29, 1906.

# TABLE OF CONTENTS.

PART I.—DOMINION LANDS.  No. 1 Report of the Commissioner			iii
No. 1 Report of the Commissioner			
No. 1 Report of the Commissioner			
2 "Inspector of Dominion Lands Agencies			
2 "Inspector of Dominion Lands Agencies			3
			4
3 " Agent at Alameda			11
4 " " Battleford			12
5 " " Brandon			13
6 " " Calgary			14
7 " " Dauphin			15
8 " " Edmonton			17
9 " " Kamloops			18
10 " Lethbridge			19
11 " " Minnedosa			20
12 " " New Westminster			21
13 " Prince Albert			22
14 " " Red Deer			24
15 " Regina			25
16 " Winnipeg			26
17 " Yorkton			36
18 "Timber, Mineral, Grazing and Irrigation Branch			37
19 "Inspector of Crown Timber Agencies			49
20 "Crown Timber Agent at New Westminster	'		53
21 " Edmonton			57
22 " Calgary			62
22 A. "Chief Forest Ranger Margach			63
23 "Crown Timber Agent at Prince Albert			68
24 "Commissioner of Irrigation on Canadian Irrigation Surveys			71
25 "Ordnance and Admiralty Lands Branch			73
26 " The Accountant			78
27 "The Registrar			85
28 " The Geographer			86
29 " Land Patents Branch			92
30 "School Lands Branch		٠.	98
PART II.—IMMIGRATION.			
Report of the Superintendent of Immigration			3
No. 1 Report of W. T. R. Preston, Commissioner of Emigration			59
2 " A. F. Jury			63
3 " J. Bruce Walker			65
4 " G. H. Mitchell			66
5 " John Webster			68
6 "Edward O'Kelly			69
7 " H. M. Murray			71
8 " Paul Wiallard			73
9 " D. Treau de Cœli			75

OPERATIONS IN THE UNITED STATES.	D.	GE.
Report of W. J. White, Inspector of Agencies and Press Agent		77
REPORTS OF IMMIGRATION OFFICIALS IN WESTERN CANADA.		04
Report of the Commissioner of Immigration		81
" C. W. Speers, General Colonization Agent	• ••	106
" P. M. Bredt, Inspector of Agencies and Foreign Colonies	•••	100
JUVENILE IMMIGRATION.		
Report of G. Bogue Smart, Chief Inspector of British Immigrant Children and Received	ing	
		107
Report of Chief Medical Officer	••	115
PART III.—SURVEYS.		
Report of the Surveyor General		3
Note.—The appendices, 44 in number, will appear in supplementary form.		
PART IV.—REGISTRARS.		
No. 1 Report of the Registrar at Battleford		3
2 " " Calgary		4
3 " " Dawson		6
4 " " Edmonton		7
5 " " Prince Albert		8
6 " Regina		10
PART V.—CHIEF ASTRONOMER.		
NOTE.—This part, comprising the Report of the Chief Astronomer and appendices, will as a separate report, in monograph form.	арр	ear
NOTE.—This part, comprising the Report of the Chief Astronomer and appendices, will as a separate report, in monograph form.	арр	ear
_* _	арр	ear
as a separate report, in monograph form.	арр	ear 3
as a separate report, in monograph form.  PART VI.—ROCKY MOUNTAINS PARK.	app	
as a separate report, in monograph form.  PART VI.—ROCKY MOUNTAINS PARK.  Report of the Superintendent	app	3
as a separate report, in monograph form.  PART VI.—ROCKY MOUNTAINS PARK.  Report of the Superintendent	app	3
as a separate report, in monograph form.  PART VI.—ROCKY MOUNTAINS PARK.  Report of the Superintendent		3
as a separate report, in monograph form.  PART VI.—ROCKY MOUNTAINS PARK.  Report of the Superintendent		3 23
PART VI.—ROCKY MOUNTAINS PARK.  Report of the Superintendent.  Meteorological Tables.  PART VII.—YUKON TERRITORY.  No. 1 Report of the Commissioner.  2 " Territorial Secretary. 3 " Gold Commissioner.		3 23
PART VI.—ROCKY MOUNTAINS PARK.  Report of the Superintendent.  Meteorological Tables.  PART VII.—YUKON TERRITORY.  No. 1 Report of the Commissioner.  2 "Territorial Secretary. 3 "Gold Commissioner. 4 "Assistant Gold Commissioner.		3 23 3 5
PART VI.—ROCKY MOUNTAINS PARK.  Report of the Superintendent.  Meteorological Tables.  PART VII.—YUKON TERRITORY.  No. 1 Report of the Commissioner.  2 "Territorial Secretary. 3 "Gold Commissioner. 4 "Assistant Gold Commissioner. 5 "Crown Timber and Land Agent.		3 23 5 5
PART VI.—ROCKY MOUNTAINS PARK.  Report of the Superintendent.  Meteorological Tables.  PART VII.—YUKON TERRITORY.  No. 1 Report of the Commissioner.  2 "Territorial Secretary. 3 "Gold Commissioner. 4 "Assistant Gold Commissioner. 5 "Crown Timber and Land Agent. 6 "Comptroller.		3 23 3 5 5 6
PART VI.—ROCKY MOUNTAINS PARK.  Report of the Superintendent.  Meteorological Tables.  PART VII.—YUKON TERRITORY.  No. 1 Report of the Commissioner.  2 "Territorial Secretary. 3 "Gold Commissioner. 4 "Assistant Gold Commissioner. 5 "Crown Timber and Land Agent.		3 23 5 5 6 8
PART VI.—ROCKY MOUNTAINS PARK.  Report of the Superintendent.  Meteorological Tables.  PART VII.—YUKON TERRITORY.  No. 1 Report of the Commissioner.  2 "Territorial Secretary. 3 "Gold Commissioner. 4 "Assistant Gold Commissioner. 5 "Crown Timber and Land Agent. 6 "Comptroller.		3 23 3 5 5 6 8 1 12
PART VI.—ROCKY MOUNTAINS PARK.  Report of the Superintendent.  Meteorological Tables.  PART VII.—YUKON TERRITORY.  No. 1 Report of the Commissioner.  2 " Territorial Secretary. 3 " Gold Commissioner. 4 " Assistant Gold Commissioner. 5 " Crown Timber and Land Agent. 6 " Comptroller 7 " Director of Surveys.		3 23 3 5 5 6 8 1 12
PART VI.—ROCKY MOUNTAINS PARK.  Report of the Superintendent.  Meteorological Tables.  PART VII.—YUKON TERRITORY.  No. 1 Report of the Commissioner.  2 "Territorial Secretary. 3 "Gold Commissioner. 4 "Assistant Gold Commissioner. 5 "Crown Timber and Land Agent. 6 "Comptroller. 7 "Director of Surveys.		3 23 5 5 6 8 1½ 13 ·
PART VI.—ROCKY MOUNTAINS PARK.  Report of the Superintendent.  Meteorological Tables.  PART VII.—YUKON TERRITORY.  No. 1 Report of the Commissioner.  2 "Territorial Secretary. 3 "Gold Commissioner. 4 "Assistant Gold Commissioner. 5 "Crown Timber and Land Agent. 6 "Comptroller. 7 "Director of Surveys.  PART VIII.—MINES.  Report of the Superintendent of Mines.		3 23 5 5 6 8 1½ 13 ·

# TABLE OF CONTENTS

# SESSIONAL PAPER No. 25

# PART IX .- FORESTRY.

			PAG	Œ.
Repor	t of the S	uperintendent	• • •	3
		• APPENDICES.		
No. 1	Report of	Norman M. Ross, Assistant Superintendent		6
2	"	Roland D. Craig, Inspector of Forest Reserves		12
3	**	Hugo Claughton-Wallin, Assistant in Forestry		22
4	**	A. P. Stevenson, Tree-planting Inspector		23
5		John Caldwell, Tree-planting Inspector		24
6	"	Angus MacKintosh, Tree-planting Inspector		26
7	14	A. H. D. Ross, Tree-planting Inspector		27
8	**	F. W. H. Jacombe, Tree-planting Inspector		28
9	**	James Leamy, Crown Timber Agent, British Columbia		29
10	"	Joseph E. Stauffer, Forest Ranger in Southern Alberta		30
11	. "	C. A. Walkinshaw, Forest Ranger in Turtle Mountain Forest		31
12	11	John Rutherford, Forest Ranger for Moose Mountain Timber Reserve		32

REPORT

OF THE

# DEPUTY MINISTER OF THE INTERIOR

1905-6

DEPARTMENT OF THE INTERIOR,
OTTAWA, October 27, 1906.

The Honourable Frank Oliver,

Minister of the Interior.

SIR,—I have the honour to submit the report of the Department of the Interior for the year ending June 30, 1906, being the thirty-third annual statement of the department since its inception in 1873.

The general result of the work, as evidenced by the returns submitted by the various branches, has, on the whole, been highly satisfactory. In fact, the year has been a record one in the history of the department, both as regards immigrant arrivals and the granting of free homestead entries. There has been further an increase of \$697,439.56 in the total gross revenue as compared with the previous twelve months, and the area of land disposed of by the various land companies holding grants from the Crown was nearly double the acreage sold during the year 1904-5.

From a public standpoint, these results are certainly very gratifying, for nothing, at the present stage of our national life, could contribute more largely to the extension of the trade and commerce of Canada, the devolopment of its varied resources, and the consequent general prosperity of the country, than the settlement, by a suitable class of agriculturists, of the vast areas of arable land composing the western provinces. Too optimistic an estimate can scarcely be made of the agricultural wealth of western Canada when its possibilities are gauged by the bountiful harvests resulting from the tillage of what after all is but an insignificant part of the whole, in so far as the extent of the wheat fields is concerned. That the opening to the plough of these western lands has been one of the most potent factors in the ever increasing prosperity of the country during the last decade, should be considered as the strongest possible ground for prosecuting with increased vigour the land and immigration policy to which the satisfactory results now reported are chiefly attributable.

It has been found advisable again this year, in order to expedite the printing of the general report, to publish the report of the Surveyor General separately, and it will,

therefore, except as to the Surveyor General's own portion thereof, appear as a supplementary report under Part III.

The same remark applies to the whole report of the Chief Astronomer, which will appear in monograph form under Part V

#### NEW APPOINTMENTS.

- Mr. G. U. Ryley, who had been employed in the department since 1882, and who for the last twenty-two years was in charge of the Timber and Mines Branch, resigned this office on November 1, 1905, to accept a responsible position with the Grand Trunk Pacific Railway Company. Mr. Ryley, during the many years that he was attached to the permanent staff of the department at headquarters, proved himself to be a highly competent officer, and contributed largely, by his professional knowledge as a Dominion land surveyor, and by the zeal which he displayed in the discharge of his duties, to the present efficient organization of the Timber and Mines Branch.
- Mr. R. H. Campbell, who has been a permanent officer of the department since 1887, was appointed on November 7, 1905, to succeed Mr. Ryley as chief of the Timber Branch. Mr. Campbell, who had previous to his promotion been charged more particularly with the administration of grazing lands, and who has a full knowledge of the regulations and of the timber resources and lumber industry of the west, is altogether well qualified to satisfactorily discharge the duties of his new office.

#### MINES BRANCH.

Reference should be made also to the establishment of a separate branch in connection with the administration of mines and mining lands in the western provinces, in the Yukon, and in the Northwest Territories, where the title to a considerable extent of land, both as regards the surface and under rights, is still vested in the Dominion. In view of the large increase of work affecting this particular service, and the distinctive character of the duties appertaining to the office under which matters of this class are dealt with, it has been deemed advisable, in the public interest, to establish a separate branch at headquarters through which all matters relating to mines and mining lands will in future be administered. The present arrangement, it is felt, will conduce to the more efficient and expeditious transaction of the work connected with this service. Mr. H. H. Rowatt, who has been a member of the department since 1887, and who for the last twelve years had been closely connected with the mining business of the department, was on July 1, last, appointed chief clerk in charge of the new branch. Mr. Rowatt being fully conversant with the laws and regulations respecting mines and mining lands, and thoroughly familiar with the work of the branch, there is no doubt that he is fully competent to render efficient service.

I desire to report also the appointment on May 31, 1906, of Mr. N. O. Coté as chief clerk in charge of the Patents branch, vice Mr. W. M. Goodeve deceased.

Mr. Coté has been in the employ of the department for twenty-eight years, nineteen of which he spent as assistant to the head of the Patents branch. He has on three different occasions held the responsible position of commissioner for the settlement of Northwest Half-breed claims, and his long connection with the department has enabled him to gain a thorough knowledge of the general business of the Patents branch, which specially fits him for the office of chief clerk of patents.

I beg to report also the promotion to chief clerkships of Mr. P. B. Symes and Mr. J. A. Coté. The former is to-day the oldest official of the department, having first been appointed on June 1, 1870. He has for a number of years past been acting as chief assistant to the surveyor general, and it was felt that the importance of his duties, coupled with his length of service, fully entitled him to a chief clerkship.

Mr. Coté has been in the service of the department for twenty-five years, the last fifteen of which he has been attached to the staff of the deputy minister. In view of the large increase in the correspondence and the general work of the deputy's office it was deemed necessary to appoint a responsible officer to be placed in charge of this particular work, and Mr. Coté being possessed of the necessary qualifications for the office was promoted to a chief clerkship on May 31, 1906.

#### DEATHS.

It is my painful duty to report the death of an old and respected officer of the department in the person of Mr. W. M. Goodeve. Mr. Goodeve first entered the Government of Canada before confederation, namely, on February 8, 1866, being then but seventeen years of age; he therefore had an uninterrupted service of forty years at the time of his death, which occurred on March 31 last. Throughout his long and useful career he proved himself to be at all times a model officer, indefatigable and conscientious in the discharge of his onerous duties as chief clerk of patents, which position he held for twenty-one years, and ever beyond reproach in all his official and public dealings. He was possessed to the full of the most sterling qualities, both of the heart and of the mind, which endeared him to all with whom he came in contact. His demise has been a serious loss to the department with which he was connected for so many years, and which he served so faithfully.

I regret to report also the death of two old and faithful officials, in the persons of Mr. John Satchell and Mr. Joseph Beaudoin. The former, who was first appointed on February 1, 1880, died on November 25, 1905, and Mr. Beaudoin, who was originally employed by the Department of Agriculture since 1885, and who was transferred to this department in 1892, died on April 8, 1906.

STATEMENT showing Gross Revenue (Cash and Scrip) received from all sources during the Fiscal Year 1905-1906, compared with the receipts of the previous year.

${f R}$ evenue.	Fiscal Ye 1905-6. Cash and S	Fiscal Year 1904 5. Cash and Scrip			Incre	ase.	Deerease.		Net Increase.		
Dominion lands. School lands. Ordnance lands. Registration fees. Fines and forfeitures, N.W.T. Casual revenue. Seed grain.	1,709,31, 608,966 10,893 180,316 3,30 8,49	79 3 17 0 73 4 77 6 09 7 29	1,339, 332, 10, 123, 10, 4, 16,	382 914 346 082 018 202 471	48 90 86 49 14 34	276,0 5 57,2 4,2	46 31 46 27 27 87 93 95	6,	713 72		

#### DOMINION LANDS REVENUE.

STATEMENT of Dominion Lands Revenue for the Fiscal Year 1906-1906, compared with the receipts for the previous fiscal year.

Agencies, &c.	Cash and Scrip 1905–1906	Cash and Scrip 1904-1905.	Decrease.	Increase.
Yukon Territory.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Sales of land		7,637 04	687 75	
Rentals of land		18,496 93	3,947 01	
Survey fees		100 00		
Map sales, office fees, &c		161 00	49 50	
Timber dues		25,503 97	4,866 28	
Coal lands		69 93	4	480 37
Hay lands		283 00	88 50	0.00
Frazing lands		9 92	6.011.05	0 08
Mining fees		92,854 00	6,011 25	
Export tax on gold		206,755 87	42,792 62	9 494 P
Hydraulic leases	9,391 89 881 70	6,957 05 385 78		2,434 84 495 92
Oredging leases		46,022 53	17,904 51	700 DE
Free certificates for export of gold		452 00	70 50	
Royalty on water sold		65 65	65 65	
Suspense account		953 50		1,342 2
•	334,978 06	406,708 17	76,483 57	<del></del>
Dominion Lands Agencies.				4,753 46
Alameda		30,225 25		18,340 12
Battleford		38,397 56		42,756 9
Brandon		11,946 33		3,559 3
Calgary		43,585 27		62,124 7
Dauphin		7,086 07		1,723 2
Edmonton		36,133 56 13.095 36		41,452 4
ethbridge		63,305 95		11,328 2
Innedosa		5,586 59	130 40	121,0 <b>3</b> 9 1
Vew Westminster		4,431 85	130 40	500 7
Prince Albert.		25,128 30		562 78 686 8
Red Deer		24,953 77		18,857 9
Regina		107,939 13		56.088 ö
Winnipeg		26,925 00		20,337 2
Yorkton		55,326 56		1,186 9
	893,980 82	494,066 55	130 40	400,044 6
Carried forward	1,228,958 88	900,774 72	76,613 97	404,798 1

Note.—Decrease in Yukon Revenue, \$71,730 11. Increase in Land Agencies, \$399,914.27.

# . DOMINION LANDS REVENUE.

STATEMENT of Dominion Lands Revenue for the Fiscal Year 1905-1906, compared with the receipts for the previous fiscal year.

Agencies, &c.	Cash and Scrip 1905-1906.	Cash and Scrip 1904–1905.	Decrease.	Increase,
Brought forward	\$ cts. 1,228,958 88	\$ cts.	\$ ets. 76,613 97	\$ cts.
ū	1,220,000 00	300,114 12	10,010 31	101,100 10
Crown Timber Agencies.	_		į	
Alameda Battleford Brandon Calgary	86 00 134 75 115 85 16,940 18	143 00 561 80 764 75 16,443 09	57 00 427 05 648 90	497 09 1,728 1
Dauphin	11,126 38 18,759 74 1,057 30	9,398 26 37,255 14 623 62	18,495 40	433 68
Minnedosa New Westminster Prince Albert	1,083 08 82,482 97 28,327 61	890 60 70,979 27 38,057 77	9,730 16	192 48 11,503 70
Red Deer Regina Winnipeg Yorkton.	337 66 500 25 110,154 02 941 05	1,017 68 292 55 64,689 16 330 80	680 02	207 70 45,464 86 610 28
Miscellaneous.	272,046 84	241,447 49	30,038 53	60,637 88
Rocky Mountains Park of Canada Irrigation fees. Map sales, office fees, &c. Survey fees Patent fees Examination fees, D. L. S.	18,883 83 528 25 5,032 94 115,995 80 426 25 474 00	14,059 55 303 00 3,908 48 122,668 22 560 00 906 50	6,672 42 133 75 432 50	4,824 28 225 28 1,124 40
Refunds of refunds	154 44 965 00 2,685 55 942 92	285 50 1,147 00 2,152 99 6,730 12	131 06 182 00 5,787 20	532 50
Dredging leases. Grazing leases. Coal lands. Rent of water power. Rentals of Jand.	51,653 89 1,735 88 115 93 191 24	41,372 76 698 90 49 77 115 74		$egin{array}{ccc} 10,281 & 13\\ 1,036 & 90\\ 66 & 10\\ 75 & 50 \end{array}$
Assay charges Suspense account Miscellaneous		1,480 67 720 94	369 50	6,652 1 39 3
•	208,309 56	197,160 14	13,708 43	24,857 8
Refunds	1,709,315 28 33,418 36	1,339,382 35 25,786 90	120,360 93	490,293 8 7,631 4
Total	1,675,896 92	1,313,595 45	120,360 93	482,662 4

Note.—Increase in Crown Timber Agencies, \$30,599.35.

"Miscellaneous, including refunds, \$3,517.96.
Net increase, \$362,301.47.

STATEMENT of Receipts of Dominion Lands Revenue for the Fiscal Year ended June 30, 1906, compared with the Receipts for the previous year.

(NET CASH REVENUE.)

Particulars.	1905-1906.	1904-1905.	Increase.	Decrease.	Net Increase.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Homestead fees. Improvements General sales of land Map sales, office fees, &c Timber dues Grazing lands. Coal lands. Hay permits Mining fees Hydraulic leases Dredging leases Export tax on gold Free miner's certificates Rent of water power Royalty on water sold. Free certificates for export of gold. Patent and interchange fees Survey fees Irrigation fees Extra assay charges Rocky Mountains Park of Canada. Yoho Park	87,807 75 9,391 89 1,824 62 163,963 25 28,118 02 115 93 331 50 976 25 116,095 80 528 25 1,111 17 18,883 83	304,806 25 21,571 25 154,128 04 4,879 13 266,951 46 36,145 32 768 83 2,435 99 94,001 00 6,957 05 7,115 90 206,755 87 46,022 53 49 77 65 65 452 00 1,205 00 122,763 22 303 00 1,480 67 14,044 55	66 16	65 65 70 50 228 75 6,672 42	
Rentals of lands Fees re examinations of D.L.S. Suspense account Miscellaneous.	474 00 8,947 89	18,694 48 906 50 1,976 94	8,947 89	432 50	
Refunds	1,701,580 71 33,418 36	1,314,485 40 22,184 26	472,522 27 11,234 10	85,426 96	
Totals	1,668,162 35	1,292,301 14	461,288 17	<b>85,426 ●</b> 6	375,861 21

REGISTRATION FEES, NORTHWEST TERRITORIES.

STATEMENT of Registration Fees from commencement to June 30, 1906.

Fiscal Year.	Assiniboia (Regina.)		North Alberta (Edmonton.)	South Alberta (Calgary.)	chewan	WestSaskat- chewan (Battleford.)	Total.
	· \$	cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1879-1880. 1880-1881. 1881-1882. 1882-1883. 1883-1884. 1884-1885. 1886-1887. 1887-1888. 1889-1890. 1890-1891. 1891-1892. 1892-1893. 1893-1894. 1894-1895. 1896-1897. 1897-1898. 1898-1899. 1890-1891. 1901-1902. 1900-1901. 1901-1902. 1902-1903. 1903-1904. 1904-1905. 1905-1906.	343 396 983 1,161 2,499 3,527 3,601 5,332 4,810 6,042 6,236 5,161 4,489 5,339 7,411 9,275 11,222 14,317 18,893 36,355 55,539 63,645 90,466	75 45 65 90 29 75 62 26 16 89 15 41 74 29 55 33 65 20 64 40 65	497 60 531 27 381 97 475 62 585 82 1,160 26 1,982 26 2,722 74 2,653 37 2,713 66 1,900 76 2,485 45 3,553 73 5,395 50 6,995 50 11,700 70 20,849 90 23,930 28 23,836 55 35,574 70	254 35 216 40 2,876 44 3,133 86 4,580 12 5,554 35 4,090 52 4,146 02 2,852 44 3,219 50 2,097 61 1,991 90 3,526 85 3,608 90 4,078 44 5,207 43 8,190 78 11,298 55 18,031 45 22,673 38 35,210 01	177 42 212 00 421 85 1,696 71 956 27 1,018 79 2,021 37 1,409 34 1,157 21 1,049 65 730 22 728 20 848 75 737 50 1,151 95 1,354 10 1,662 70 3,081 73 6,131 90 7,508 70 10,389 35 14,377 85	190 00 271 00 194 50 50 00 3 00 10 80 99 17 105 69 107 19 89 61 156 32 110 27 86 29 89 23 73 20 123 78 102 37 31 75 189 15 51 13 71 189 15 51 13 77 189 26 29 89 23 20 37 31 75 189 26 27 36 35 77 2 58 2,963 97	190 00 271 00 194 50 343 75 446 45 1,164 07 1,639 05 3,635 14 8,731 34 8,179 41 11,082 98 13,583 31 11,627 63 13,487 98 12,947 53 11,854 66 10,101 96 10,204 74 14,263 50 17,621 88 22,239 84 28,233 96 41,937 94 14,937 94 14,937 94 14,937 94 14,937 94 14,937 94 14,937 94 14,937 94 14,937 94 174,842 34 105,465 38 121,317 26 178,593 18
	361,954	79	149,928 61	146,839, 30	58,823 56	6,605 52	724,151 78

STATEMENT of the Rocky Mountains Park Revenue for the Fiscal Year ended June 30, 1906, as compared with the revenue for previous year.

2000, 20 00							<del></del>		
Particulars.	Fiscal 7 1905-19		Fiscal N 1904-19		Increas	se.	Decre	ase.	Net Increase.
	\$	cts.	*	cts.	\$	cts.	<b>\$</b>	cts.	\$ cts.
Rent. Timber dues Water rates Cave and basin (tickets) Hot springs (tickets) Dog licenses Livery licenses Billiard licenses Boat licenses Boat licenses Camping permits. Transfer fees Grazing lands Coal lands Rent of old office.	2,356 2,332 155 335 10 70  7 72 322 4,361	69 50 50 25 00 00 00 00 00 50 30	100 80 20 9 94 165 4,223	57 00 75 50 00 00 00 00 00 00 00 00	51	12 00 75 75 00 00  00	38	1 00 0 00 0 00 2 00 2 00	
Quarry permits Fines. Sale of vacant buildings. Miscellaneous	177	00	100 405 5	00 25 90	177	00 	10 40		
Totals	18,883	83	14,044	<b>5</b> 5	<b>5</b> ,533	43	69	4 15	4,839 28

Fiscal Year.	Dominion Lands (Cash).	School Lands.	Seed Grain.	Ordnance Lands.	Fines and Forfeitures.	Registration Fees.	Casual Revenue.	Total.
•	\$ cts.	\$ cts.	\$ cts.	\$ ets.	\$ cts.	\$ cts.	\$ ets.	\$ cts.
1886-1887	224,770 16	35,707 41 42,045 11 52,354 94 45,188 57	26,146 13 5,017 44	21,676 57 36,239 88 42,072 07 29,921 61	3,249 25 1,267 05 739 25 958 75	3,317 16 7,212 02 6,543 53 8,866 39	90 15 372 79 1,075 36 261 63	247,155 32 310,497 58 571,978 12 314,984 55
1890-1891 1891-1892 1892-1893 1893-1894 1894-1895	337,106 07 303,550 86 214,540 30	38,826 33 136,131 80 82,615 22 47,574 11 47,665 10	3,385 60 5,957 65 5,866 21 2,339 16 2,752 56	54,229 69 42,360 80 33,776 90 22,318 20 22,645 97	1,595 02 788 92 777 00 864 15 693 85	10,866 65 9,302 11 10,750 38 10,358 02 9,811 77	627 81 532 14 1,331 96 1,982 04 875 36	380,282 45 532,179 49 438,668 53 299,975 98 255,530 09
1895-1896	2,343,835 95	56,584 32 584,692 91	8,748 05 62,212 80	17,550 28 322,791 97	502 00 11,435 24	8,737 87 85,765 90	9,069 90	268,552 56 3,419,804 67
1896-1897 1897-1898 1898-1899 1899-1900 1900-1901	980,313 10 1,563,020 74 1,410,883 48 1,533,197 07	24,292 43 52,410 82 41,249 77 220,874 78 48,049 83	9,887 13 12,351 71 12,388 69 15,271 84 15,711 63	9,831 27 22,537 17 12,349 65 11,043 53 14,604 47	1,316 00 529 06 2,801 03 1,452 92 1,977 96	8,997 24 14,263 50 19,220 73 21,751 90 33,979 77	2,683 05 260 92 2,620 91 3,664 00 1,587 57	244,431 31 1,082,666 28 1,653,651 52 1,684,942 45 1,649,108 30
1901-1902 1902-1903 1903-1904 1904-1905 1905-1906	1,716,597 20 1,478,106 33	193,410 75 392,206 93 233,769 62 332,914 48 608,960 79	20,293 06 28,789 97 26,122 30 16,471 34 12,577 29	16,967 36 17,612 79 30,494 34 10,346 90 10,893 17	1,955 61 5,220 88 5,911 92 10,018 49 3,304 77	50,854 99 81,404 18 109,233 73 123,082 86 180,310 73	3,900 62 2,230 26 3,402 94 4,258 14 8,496 09	1,541,715 95 2,244,062 21 1,887,041 18 1,811,577 61 2,526,123 55
	13,139,941 78	2,148,140 20	169,864 96	156,680 65	34,488 64	643,099 63	33,104 50	16,325,320 36
	15,483,777 73	2,732,833 11	232,077 76	479,472 62	45,923 88	728,865 53	42,174 40	19,745,125 03

STATEMENT showing yearly the Gross Revenue (in cash only) received from all sources during the twenty years ending June 30, 1906.

Fiscal Year.		Preemption	Improve-	Sale	is.	Map Sales, Office and	Surveyor's	Miscella- neous,	Inspection, Cancellation	Timber Dues.
I ISSUE I COM	Fees.	Fees.	ments.	Cash.	Scrip.	Registration Fees, &c.	nation Fees.	including Trust.	and SundryFees.	
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ ets.
1872-73. 1873-74. 1874-75. 1875-76. 1876-77. 1877-78. 1878-79. 1879-80. 1880-81. 1881-82. 1882-83. 1883-84. 1884-85. 1885-86. 1886-87. 1887-88. 1888-90. 1890-91. 1891-92. 1892-93. 1893-94. 1894-95. 1895-96. 1896-97. 1897-98. 1899-99. 1899-1900. 1900-1901. 1901-1902. 1902-1903. 1903-1904. 1904-1905.	7,310 00 11,510 00 4,680 00 2,250 00 14,540 00 17,690 00 41,255 00 20,450 00 54,155 00 73,015 00 41,580 00 26,110 00 19,614 00 23,691 00 35,920 00 29,164 10 37,689 74 36,462 26 29,664 88 18,278 00 21,179 00 34,780 00 34,780 00 58,235 00 72,690 00 144,425 00 320,409 65 255,772 36 304,806 25		269 00 1,758 00 7,114 91 2,596 11 2,328 75 1,101 50 1,971 55 1,918 35 4,128 48 3,250 54 6,302 61 6,472 31 7,113 50 3,497 76 3,567 90 3,163 15 3,737 91 5,649 63 4,297 62 4,835 81 5,213 32 5,481 46 11,829 08 15,119 47 21,571 25 31,795 19	19,170 20 19,834 75 13,666 90 3,478 94 1,085 86 2,794 86 4,998 39 45,708 97 71,170 17 1,240,528 27 516,092 21 424,863 36 199,275 32 76,140 41 48,175 76 52,283 36 57,513 16 54,896 85 91,664 98 108,901 01 93,671 67 53,254 71 37,293 71 46,373 98 49,385 53 80,178 64 116,598 35 103,247 58 40,360 91 155,507 59 196,750 15 154,128 04 442,588 69	320 00 136,955 16 120,159 54 210,904 84 81,685 86 70,828 30 50,590 84 33,638 40 40,919 67 45,875 60 214,657 97 337,642 19 313,542 19 313,542 14 77,231 18 27,842 41 77,231 18 27,842 65 16,929 65 16,929 65 16,929 88 28,918 14 21,307 58 88,756 22 326,270 03 169,767 13 158,452 66 188,424 26 19,644 59 7,654 57	129 00  4 00  245 40  985 40  985 40  3,036 45  3,109 50  1,289 55  1,621 82  1,339 34  1,171 39  1,660 75  1,410 16  2,099 07  1,854 78  2,147 31  975 20  973 11  695 99  610 78  795 05  1,987 40  1,262 05  1,258 85  3,874 14  5,792 96  5,911 96  5,549 13  4,879 13  4,879 13  6,042 34		125 50 100 00 13 70 183 25 37 58 58 10 501 77 45,766 53 50,068 57 20,070 00 44,561 00 20,591 41 10,389 57 3,316 23 7,951 05 29,898 49 18,509 35 13,457 09 6,271 77 21,679 31 19,421 98 21,242 66 75,085 95 38,072 54 70,970 54 70,970 54 71,997 30 125,158 56 81,550 46 144,924 31 141,948 55	40 00 290 00 410 00 1,780 00 	109 25 2,710 55 2,335 25 387 00 320 00 1,620 00 325 00 25,121 46 32,028 34 58,753 14 90,066 46 147,983 1 65,111 74 94,964 55 90,290 00 84,642 95 102,902 71 106,461 35 105,865 24 81,290 51 105,865 24 81,290 51 105,865 63 126,345 82 209,393 32 207,790 90 470,916 93 397,344 33 266,951 46 292,684 53
	2,374,129 49	206,741 01	169,084 16	4,688,238 51	3,675,325 56	61,793 01	8,849 00	1,083,923 12	221,039 03	3,696,687 09

2-73 3-74 4-75 5-76 5-76 6-77 7-78 8-79 9-80 9-81 1-82 2-83 22,3 3-84 11,4 4-85 17,6 5-86 29,6 6-87 14,5 7-88 5,8 9-90 1,0 9-91 3,0 1-92 3,7 2-93 3,-94 5,7 4,95 5-96 5,7 5-96 5,7 5-96 5,7 5-96 5,7 5-98 5,8 5,9 5,9 5,9 5,9 5,9 5,9 5,9 5,9 5,9 5,9		3,13 39,48 23,02	cts.	40 913 640	ets. 0 00 3 91 0 90 3 91 0 90 4 83 0 40 8 73	8	cts.		cts.	354,0; 248,4; 253,7 1,2	ets		cts.	139,589 234,732 206,803 206,990 1,805,730 1,051,403	ets. 9 45 0 80 1 15 5 92 4 40 2 93 1 37 0 54 4 87 3 60 6 67 6 65	\$ cts. 4,636 08 5,038 22 10,687 55 8,746 05 9,220 50 12,070 85 63,389 12 19,543 16	
2-73 3-74 4-75 5-76 5-76 3-77 7-78 8-79 9-80 0-81 1-82 2-83 22,3 3-84 11,3 4-85 17,6 5-86 29,6 6-87 14,2 7-88 5,8 9-90 1,0 9-91 3	245 00 844 43 370 60 089 75 562 51 242 77 922 47 922 47 922 67 9305 57	3,14 39,44 23,00 16,80	31 08 87 67 23 28 02 63	40 913 640 815 1,284 1,570 2,273	0 00 3 91 0 90 5 63 4 83 0 40 3 73	8	30 00			354,0; 248,4; 253,7 1,2	36 17 92 01 13 40 14 22			26,235 29,986 27,641 8,866 140,755 139,58- 234,733 206,807 206,997 1,805,73- 1,051,400 1,001,770 451,56- 457,970	9 45 0 80 1 15 5 94 5 02 4 40 2 23 1 37 0 54 4 87 3 60 6 67 4 65 3 95	4,636 08 5,038 22 10,687 55 8,746 05 9,220 50 12,070 85 63,889 12	26,239 45 29,980 27,641 15 8,865 94 140,755 02 139,584 40 234,732 93 202,165 29 201,952 31 1,042,657 55 992,556 17 439,493 86 394,584 85
3-74 4-75 5-76 5-76 6-77 7-78 8-79 9-80 9-81 1-82 2-83 22,83 3-84 11,64 4-85 17,65-86 29,66-87 14,57 7-88 5,88 9-90 1,0-91 3,0 1-92 3,7 2-93 3-94 5,7 4-95 5-96 5-97 4,7 3-98 4,7 3-99	245 00 844 43 370 60 089 75 562 51 242 77 922 47 207 69 305 57	3,13 39,48 23,02 16,86	31 08 87 67 23 28 02 63	40 913 640 815 1,284 1,570 2,273	0 00 3 91 0 90 5 63 4 83 0 40 3 73	8	30 00			354,0; 248,4; 253,7 1,2;	36 17 92 01 13 40 14 22			27,641 8,866 140,756 139,588 234,733 206,800 206,990 1,805,73- 1,051,400 1,001,770 451,56- 457,973	1 15 5 94 5 02 4 40 2 93 1 37 0 54 4 87 3 60 6 67 4 65 3 95	4,636 08 5,038 22 10,687 55 8,746 05 9,220 50 12,070 85 63,389 12	27,641 15 8,865 94 140,755 02 139,584 46 234,732 93 202,165 29 201,952 32 1,795,047 32 1,042,657 55 992,556 17 439,493 86 394,584 85
7-78	245 00 844 43 370 60 089 75 562 51 242 77 922 47 207 69 305 57	3,18 39,48 23,02 16,80	31 08 87 67 23 28 02 63	40 913 640 815 1,284 1,570 2,273	0 00 3 91 0 90 5 63 4 83 0 40 3 73		30 00			354,0; 248,4; 253,7 1,2;	36 17 92 01 13 40 14 22			139,584 234,735 206,801 206,990 1,805,734 1,051,400 1,001,770 451,564 457,973	5 94 5 02 4 40 2 23 1 37 0 54 4 87 3 60 6 67 4 65 3 95	4,636 08 5,038 22 10,687 55 8,746 05 9,220 50 12,070 85 63,389 12	8,865 94 140,755 94 140,755 94 139,584 40 234,732 93 202,165 29 201,952 32 1,795,047 33 1,042,657 55 992,556 17 439,493 86 394,584 85
7-78	245 00 844 43 370 60 089 75 562 51 242 77 922 47 207 69 305 57	3,18 39,48 23,02 16,80	31 08 87 67 23 28 02 63	40 913 640 815 1,284 1,570 2,273	0 00 3 91 0 90 5 63 4 83 0 40 3 73		30 00			354,0; 248,4; 253,7 1,2;	36 17 92 01 13 40 14 22			139,584 234,735 206,801 206,990 1,805,734 1,051,400 1,001,770 451,564 457,973	5 02 4 40 2 53 1 37 0 54 4 87 3 60 6 67 4 65 3 95	4,636 08 5,038 22 10,687 55 8,746 05 9,220 50 12,070 85 63,389 12	140,755 02 139,584 40 234,732 93 202,165 29 201,952 32 1,795,047 32 1,042,657 55 992,556 17 439,493 86 394,584 85
7-78	245 00 844 43 370 60 089 75 562 51 242 77 922 47 207 69 305 57	3,18 39,48 23,02 16,80	31 08 87 67 23 28 02 63	40 913 640 815 1,284 1,570 2,273	0 00 3 91 0 90 5 63 4 83 0 40 3 73		30 00			354,0; 248,4; 253,7 1,2;	36 17 92 01 13 40 14 22			139,584 234,735 206,801 206,990 1,805,734 1,051,400 1,001,770 451,564 457,973	4 40 2 53 1 37 0 54 4 87 3 60 6 67 4 65 3 95	4,636 08 5,038 22 10,687 55 8,746 05 9,220 50 12,070 85 63,389 12	139,584 40 234,732 93 202,165 29 201,952 33 1,795,047 33 1,042,657 50 992,556 11 439,493 80 394,584 85
8-79 9-80 0-81 1-82 2-83 22,83 3-84 11,4-85 17,6-86 29,5-86 8-89 14,2-89 9-90 1,5-96 1-92 3,7 2-93 6,5-96 5-96 5-96 5-97 4,7 7-98 3-99 5,9-90 5,5-96 5,9-96 5,9-96 5,9-96 5,9-96 5,9-96 5,9-96 5,9-96 5,9-96 5,9-96 5,9-96 5,9-96 5,9-98 5,9-98 5,9-98 5,9-98 5,9-98 5,9-98 5,9-98 5,9-98 5,9-98 5,9-98 5,9-98 5,9-98 5,9-98 5,9-98 5,9-98 5,9-98	245 00 844 43 370 60 089 75 562 51 242 77 922 47 207 69 305 57	3,18 39,48 23,02 16,80	31 08 87 67 23 28 02 63	40 913 640 815 1,284 1,570 2,273	0 00 3 91 0 90 5 63 4 83 0 40 3 73		30 00			354,03 248,49 253,7 1,2	36 17 92 01 13 40 14 22			234,73; 206,80; 206,990 1,805,73; 1,051,40; 1,001,77; 451,56; 457,97;	2 93 1 37 0 54 4 87 3 60 6 67 4 65 3 95	4,636 08 5,038 22 10,687 55 8,746 05 9,220 50 12,070 85 63,389 12	234,732 95 202,165 29 201,952 35 1,795,047 35 1,042,657 55 992,556 17 439,493 86 394,584 85
9-80 0-81 1-82 2-83 3-84 11.6 4-85 17,6 5-86 29,6 6-87 14,6 8-89 2,9 90 1,0 0-91 3,0 1-92 3,7 2-93 6,3 3-94 5,7 4-95 5-96 7,6 3-97 4,7 7-98 3-99 5,5	245 00 844 43 370 60 089 75 562 51 242 77 922 47 207 69 305 57	3,18 39,48 23,02 16,80	31 08 87 67 23 28 02 63	40 913 640 815 1,284 1,570 2,273	0 00 3 91 0 90 5 63 4 83 0 40 3 73		30 00			354,03 248,49 253,7 1,23	36 17 92 01 13 40 14 22			206,80 206,999 1,805,73 1,051,40 1,001,770 451,56 457,973	1 37 0 54 4 87 3 60 6 67 4 65 3 95	4,636 08 5,038 22 10,687 55 8,746 05 9,220 50 12,070 85 63,389 12	202,165 29 201,952 32 1,795,047 33 1,042,657 55 992,556 17 439,493 86 394,584 85
0-81 1-82 2-83 2-83 3-84 11.3 4-85 17, 5-86 2-9, 6-87 14, 7-88 5, 8-99 1, 0-91 3, 1-92 3, 3-94 5, 3-94 5, 3-97 4, 3-98 4, 3-99	245 00 844 43 370 60 089 75 562 51 242 77 922 47 207 69 305 57	3,18 39,48 23,02 16,80	31 08 87 67 23 28 02 63	40 913 640 815 1,284 1,570 2,273	0 00 3 91 0 90 5 63 4 83 0 40 3 73		30 00			354,0; 248,49 253,7 1,2	36 17 92 01 13 40 14 22			1,805,73- 1,051,40- 1,001,770 451,56- 457,973	4 87 3 60 6 67 4 65 3 95	10,687 55 8,746 05 9,220 50 12,070 85 63,389 12	1,795,047 3: 1,042,657 5: 992,556 1: 439,493 8: 394,584 8:
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	245 00 844 43 370 60 089 75 562 51 242 77 922 47 207 69 305 57	3,18 39,48 23,02 16,80	31 08 87 67 23 28 02 63	40 913 640 815 1,284 1,570 2,273	0 00 3 91 0 90 5 63 4 83 0 40 3 73		30 00			354,03 248,49 253,7 1,23	36 17 92 01 13 40 14 22			1,051,403 1,001,770 451,564 457,973	3 60 6 67 4 65 3 95	8,746 05 9,220 50 12,070 85 63,389 12	1,042,657 5 992,556 1 439,493 8 394,584 8
2-83 22,8 3-84 11. 4-85 17,6 5-86 29,6 6-87 14,6 8-89 2,2 9-90 1,6 0-91 3,6 1-92 3,7 2-93 6,3 3-94 5,7 4-95 5,5 5-96 7,6 3-97 4,7 7-98 4,7 3-99 5,5	844 43 370 60 089 75 562 51 242 77 922 47 207 69 305 57	3,18 39,48 23,02 16,80	31 08 87 67 23 28 02 63	640 815 1,284 1,570 2,273	90 5 63 4 83 0 40 3 73		80 00			253,7 1,2	13 40 14 22			1,001,770 451,564 457,973	6 67 4 <b>65</b> 3 95	9,220 50 12,070 85 63,389 12	992,556 1 439,493 8 394,584 8
4-85 17,6 5-86 29,5 6-87 14,5 7-88 5,8 8-89 2,2 9-90 1,6 1-92 3,7 1-92 3,7 2-93 6,3 3-94 5,7 4-95 5,5 5-96 7,7 6-97 4,7 7-98 4,7 3-99 5,5	089 75 562 51 242 77 922 47 207 69 305 57	3,18 39,48 23,02 16,80	31 08 87 67 23 28 02 63	815 1,284 1,570 2,273	5 63 4 83 0 40 3 73		30 00			1,2	14 22			451,56 457,97	4 65 3 95	12,070 85 63,389 12	439,493 8 394,584 8
5-86 29, 5-86 29, 5-86 29, 5-87 14, 5-7, 88 5, 8-89 2, 2, 9-90 1, 0-91 3, 6-92 3, 7-298 5, 5-96 7, 7-98 4, 7-98 4, 7-99 5, 5-9	562 51 242 77 922 47 207 69 305 57	3,18 39,48 23,02 16,80	31 08 87 67 23 28 02 63	1,284 1,570 2,273	4 83 0 40 3 73	8	80 00							457,97	3 95	63,389 12	394,584 8
6-87 14,27-7-88 5,18 89 9.90 1,19-91 3,019-91 3,72-93 6,18 9.94 5,74 9.55 5,5-96 7,798 4,79-99 5,5	242 77 922 47 207 69 305 57	39,48 23,02 16,80	87 67 23 28 02 63	1,570 2,273	0 40 3 73	8	30 00									63,389 12	
7-88 5,8 5,8 8.89 2,5 9.90 1,5	922 47 207 69 305 57	23,02 16,80	23 28 02 63	2,273	3 73										2 80	19 543 16	1 568 989 6
8-89 2,9-90 1,5-91 3,0-91 3,0-91 3,0-91 5,2-93 6,3-94 5,7-95 4,7-98 4,7-98 5,9-90 5,5-99 5,5-	207 69 305 57	16,80	02 63			i 8											
9-90 1,30 1-91 3,01 1-92 3,7 2-93 6,3 3-94 5,7 4-95 5,5 5-96 7,0 6-97 4,7 7-98 4,7 3-99 5,5	305 57			0,940			00 00	2,90	N 28	1			00 00	569,986 594,08		6,277 66	563,709 0 588,861 8
0-91 3,6 1-92 3,7 2-93 6,3 3-94 5,7 4-95 5,6 5-96 7,6 6-97 4,7 7-98 4,7 3-99 5,2			01 69	9.242					8 73 4 37				00 00	462,53		5,226 23 8,209 74	454,326
1-92 3,7 2-93 6,5 3-94 5,7 4-95 5,6 5-96 7,6 5-97 4,7 7-98 4,7 3-99 5,2		16.19		8,628		1	60 00		7 35		5 28		30 50	460,996		7.195 27	453,795
2-93 6;3 3-94 5;7 4-95 5,5 5-96 7;6 3-97 4,7 7-98 4,7 3-99 5;	726 80		22 60	5,616		10			8 45			4,40		452,15		15,291 39	436,859
3-94 5,7 4-95 5,5 5-96 7,6 6-97 4,7 7-98 4,7 3-99 5,2	380 80		42 39	6.266										392,32		18,314 97	374,009
4-95 5,5 5-96 7,6 6-97 4,7 7-98 4,7 3-99 5,2	740 79		87 86	6,243					3 92					250.06		4.544 01	245,525
5-96. 7,6 6-97. 4,7 7-98. 4,7 3-99. 5,2	353 72		28 00	5,229					1 87					202,98		4,365 99	198,617
6–97 4,7 7–98 4,7 3–99 5,2	071 86		55 90	5,813					4 82	1	• • • •					8,368 79	219,326
7-98	715 01		00 00	8,518					2 11		<b></b>			206,85		15.010 54	191,843
3–99 5,2	728 58		10 39	699,334				3,04	5 65					1,009,74		4,678 55	1,005,063
	245 88	. <b></b>	. <b></b> .	1,130,371	1 60				4 16					1,584,32	8 32	32,296 39	1,552,031
9–1900   8,3	382 86		33 30	1,038,195	5 42		30 00	2,75	7 60					1,503,74		23,062 28	1,480,680
	726 28			1,101,808			00 00							1,874,15		18,368 85	1,855,790
	292 46		09 27	737,878				*2,80	31 13					1,432,67		27,165 55	1,405,513
	913 33		41 33	607,722												21,519 84	1,869,366
	790 27	15,20		495,579												36,721 75	1,645,102
	145 32		37 36	364,923				*14,0	9 55 3 83							<b>25,786</b> 90	1,313,595
5–1906 51,5			30 00	296,769	19									1,709,31	15 28	33,418 36	1,675,896

<sup>\*</sup> Including scrip.

#### REVENUE.

The gross revenue of the department from all sources, as will be seen from the above statement, amounted to \$2,533,858.12, which is a net increase of \$697,439.56 over the receipts of the previous twelve months.

It will be observed that the largest item of increase was on account of Dominion lands proper, the total revenue under this head for the last decade being \$13,139,941.78, as compared with \$2,343,835.95 for the preceding ten years. When it is considered that the bulk of this revenue is made up of homestead fees and mining, grazing, timber and hay dues, the enormous increase above mentioned must be accepted as the strongest possible indication of the substantial and rapid development which has been going on in the settlement of western lands during the past few years.

6-7 EDWARD VII., A. 1907 STATEMENT of Land Sales by Railway Companies having Government

YEAR.	Hudson Comi			n Pacific Company.	Manitoba South- Western Colo- nization Railway Company.		Qu'APPELLE, AND SAS- RAILROAD BOAT	
	Acres.	Amount.	Acres.	Amount.	Acres.	Amount.	Acres.	
						85		
1893			93,184	295,288	14,164	57,559	1,603	
1894	7,526	48,225	43,155	131,628	6,312	28,003	610	
1895	4,431	23,209	- 55,453	176,950	5,623	22,330	2,391	
1896	9,299	52,410	66,624	220,360	21,254	88,568	286	
1897	10,784	53,277	135,681	431,095	63,800	234,644	2,524	
1898	62,000	310,000	242,135	757,792	106,473	363,982	22,534	
1899	56,875	274,625	251,832	814,857	58,019	199,458	61,030	
(Fiscal Year)								
1900	70,196	352,631	379,091	1,152,836	133,507	437,449	18,932	
(Fiscal Year)								
1901	82,308	399,804	339,985	1,046,665	59,749	214,953	22,266	
(Fiscal Year)								
1902	269,577	1,412,332	1,362,478	4,440,500	206,411	713,365	39,835	
"(Fiscal Year)	į							
1903	330,046	1,939,804	2,260,722	8,472,250	250,372	699,210	843,900	
(Fiscal Year)								
1904	144,857	879,910	857,474	3,516,864	29,522	113,303		
(Fiscal Year)							-	
1905	139,721	865,905	411,451	2,045,800	80,342	296,936	 	
(Fiscal Year)							<b>'</b>	
1906	236,191	1,863,375	1,012,322	6,015,060	83,418	360,889		
Total	1,423,811	8,475,507	7,521,587	29,517,945	1,118,966	3,830,649	1,015,941	

SESSIONAL PAPER No. 25

Land Grants and by the Hudson's Bay Company.

Long Lake katchewan and Steam- Company.	Calgae Edmonton Come	RAILWAY	Cana Northern Comp	RAILWAY	GREAT NO. CENT RAILWAY	TRAL	Тота	es.	
Amount.	Acres.	Amount.	Acres.	Amount.	Acres.	Amount.	Acres.	Amount.	
		\$				\$		<del></del> -	
	11,260						120,211	352,847	
	11,035						68,668	207,856	
	46,815	· • • • • • • • • • • • • • • • • • • •					114,713	222,489	
	10,553	· ·					108,016	361,338	
.1	9,436						222,225	719,016	
	15,481	- · · · · · · · · · · · · · · · · · · ·					448,623	1,431,774	
178,517	24,738	53,335					462,494	1,520,792	
53,974	46,653	128,256	•		; 		648,379	2,125,146	
74,810	116,719	352,037		·		••••••	621,027	2,088,269	
147,365	323,494	1,033,396					2,201,795	7,746,958	
1,476,900	231,800	909,600	183,736	631,503	128,435	522,490	4,229,011	14,651,757	
	129,007	563,507	64,469	313,575	41,858	177,081	1,267,187	5,564,240	
	1.09,191	512,898	231,707	1,221,469	17,593	103,564	990,005	5,046,572	
	85,784	480,063	204,966	1,014,351	20,003	137,503	1,642,684	9,871,241	
1,931,566	1,171,966	4,033,092	684,878	3,180,898	207,889	940,638	13,145,038	51,910,295	

The following is a comparative statement of the homestead entries and sales which have been made at the several agencies of the department during the fiscal year ending June 30, 1905, and June 30, 1906, respectively:—

	Fiscal Year 190		Fiscal Year 190	
·	No. of Entries.	Acres.	No. of Entries.	Acres.
Homesteads		4,931,040 51,789	41,869	6,699,040 105,135

The following statement shows the number of homestead entries reported in each year since 1874:—

Department of Transport	•		
Departmental Year ended			of Entries.
	•••••		1,376
91, 1019			499
91, 1010			<b>347</b>
			845
			1,788
			4,068
			2,074
			2,753
" 31, 1882			7,483
" 31, 1883			6,063
" 31, 1884			3,753
" 31, 1885			1,858
			2,657
			2,036
			2,655
		-	4,416
			2,955
	***************************************		3,523
			4,840
" 31, 1893		• • • •	4.067
" 31, 1894		••••	3,209
December 31, 1895		• • • •	2,394
			1,857
	* * * * * * * * * * * * * * * * * * * *		2,384
			2,364 <b>4,</b> 848
			•
			6,689
	***************************************		7,426
			8,167
		_	4,673
		•	1,383
		_	6,073
		-	0,819
90, 1900		4	1,869

SESSIONAL PAPER No. 25

STATEMENT showing the Number of Homestead Entries by Month for the Fiscal Years ending June 30, 1902, 1903, 1904, 1905 and 1906.

Fiscal Year.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April.	May.	June.	Total.
1902	939 2,622 3,438 3,011 3,751	2,288 2,360	1,416 1,845 2,015	2,142 1,958 2,005	2,482 2,406	1,640 1,570	1,240 1,407	1,165 1,128 1,169	2,325 1,330 2,426	5,778 2,322 3,781	4,109 2,948 3,916	4,691 3,600 4,175	31,383 26,073 30,819

Statement showing the number of homestead entries made during the fiscal year ended June 30, 1906, and the nationality of the homesteaders, as reported by the several agencies of the department in Manitoba, Saskatchewan, Alberta and British Columbia:—

Nationalities.		No. of entries.
Canadians from	$Ontario. \dots \dots$	7,584
"	Quebec	792
"	Nova Scotia	348
"	New Brunswick	245
"	Prince Edward Island	176
66	Manitoba	1,531
"	Saskatchewan	<b>-470</b>
cc	Alberta	393
66	British Columbia	122
Persons who had	d previous entry	2,951
Newfoundlander	s	17
Canadians retur	ned from the United States	703
Americans		12,485
English		5,897
Scotch		1,657
Irish		543
French		317
Belgians		
Swiss		
Italians		
Roumanians		65
Syrians		29
Germans		1,024
Austro-Hungari	ans	2,193
Danes (other th	an Icelanders)	109
Icelanders		. 170
Norwegians		. 431
	r than Mennonites and Doukhobors)	
Mennonites		. 143

Nationalities. Noukhobors	o. of entries
Doukhopors	•
Chinese	
Japanese	
Persians	1
Australians	<b>14</b>
New Zealanders	12
Canadians from Yukon	6
Turks	2
South African	2
Trinidad	1
Jamaica, 1, Peru, 1	2
	41,869

Representing 105,420 souls.

Statement showing the number of homestead entries made during the fiscal year ended June 30, 1906, by persons coming from the various states and territories of the American Union:—

Arizona	7
Alabama	<b>2</b>
Alaska	4
Arkansas	28
California	101
Carolina, North	8
Carolina, South	<u>.</u>
Colorado	45
Columbia, District of	_
Connecticut	19
Dakota, North	3,366
Dakota, South	<b>46</b> 8
Delaware	1
Florida	3
Georgia	1
Idaho	201
Illinois	570
Indiana	222
Indian Territory	46
Iowa	830
Kansas	263
Kentucky	12
Louisiana	2
Maine	39
Maryland	2
Massachusetts	123
Michigan	635

Minnesota	2,990
Mississippi	7
Missouri	158
Montana	346
Nebraska	279
Nevada	8
New Hampshire	8
New Jersey	9
New Mexico	23
New York	135
Ohio	255
Oklahoma	171
Oregon	210
Pennsylvania	93
Rhode Island	18
Tennessee	5
Texas	47
Utah	60
Vermont	19
Virginia	32
Washington	653
Wisconsin	634
Wyoming	30
	<del></del> .
ı	13,188

STATEMENT showing the Number of Letters Patent issued by the Department of the Interior in each Year since 1874.

-	notion in each real since 10.1.
Period.	Number issued.
Year ended Octobe	r 31, 1874 536
ii .	31, 1875
"	<b>31,</b> 1876
"	31, 1877 2,156
"	31, 1878
"	<b>31,</b> 1879
"	<b>31,</b> 1880
"	31, 1881
"	31, 1882 2,766
u	31, 1883 3,591
"	31, 1884 3,837
"	31, 1885 3,257
"	31, 1886 4,570
"	31, 1887 4,599
"	31, 1888 3,275
u ,	31, 1889 3,282
"	31, 1890

Period.	•	Number Issued.
Year ended Octob	oer 31, 1891	. 2,449
"	31, 1892	. 2,955
u	31, 1893	. 2,936
• "	31, 1894	. 2,553
Year ended Dece	mber 31, 1894	. 2,682
"	31, 1895	. 2,118
"	31, 1896	. 2,665
"	31, 1897	. 2,972
"	31, 1898	. 3,037
"	31, 1899	. 3,904
Six months ende	d June 30, 1900	. 1,970
Year ended June	30, 1901	. 6,461
"	30, 1902	. 8,768
"	30, 1903	. 7,349
44	30, 1904	. 6,890
"	30, 1905	. 8,798
"	30, 1906	

# STATEMENT showing the number of Homestead Entries in the several Dominion Lands Agencies, since January 1, 1900.

Agency.	1900.	1901.	1902.	1903.	1904.	1905.	1906.
Alameda Battleford Brandon Dalgary Dauphin. Edmonton Kamloops Lethbridge Minnedosa. New Westminster Prince Albert Regina Red Deer Winnipeg Yorkton	792 3 553 679 535 1,309 65 347 290 24 359 985 785 610 514	658 18 441 936 299 1,699 52 605 375 24 601 1,318 890 722 470	3,384 487 1,288 1,707 407 2,733 110 1,268 445 33 1,637 4,158 1,341 846 2,371	2,123 1,590 685 2,383 484 3,244 109 1,543 417 2,869 8,134 1,489 1,158 6,430	1,366 2,259 396 2,609 490 2,597 192 1,945 203 35 1,837 6,482 1,460 746 3,946	2,031 5,183 232 2,113 499 3,094 113 1,786 200 29 1,960 9,883 2,629 4,264	2,344 7,365 162 2,067 4,584 7,751 257 2,1,885 11,944 3,861 7,61 4,145
	7,850	9,108	22,215	32,682	26,513	34,645	41,869

STATEMENT showing the Number of Homestead Entries for the Ten Years ending June 30, 1906, and total Number of Entries made during the same period by persons coming from the United States and British Isles.

Fiscal Year.	Total.	U. S. A.	British Isles.	U. S. A. and British Isles.
1897. 1898. 1899. 1900. 1901. 1902. 1903. 1904. 1905.	2,384 4,848 6,689 7,426 8,167 14,673 31,383 26,073 30,819 41,869	199 477 981 1,462 2,191 5,162 11,841 8,255 9,015 13,188	404 553 807 928 940 1,580 3,876 4,664 5,930 8,097	603 1,030 1,788 2,390 3,131 6,742 15,717 12,919 14,945 21,285
Total	174,331	52,771	27,779	80,550

#### HOMESTEAD ENTRIES AND SALES.

The foregoing statements, which are in fact a concise expression of the work done by the department during the year, are most satisfactory. Forty-one thousand eight hundred and sixty-nine entrants, representing a total population of 105,420 souls are positively known to have taken up homesteads in western Canada during the twelve months ending June 30, 1906. When it is considered that 27,251 of these entrants were persons coming from outside of Canada, or who had not received previous entry, it will be seen that approximately over 65,000 of the immigrants who came to Canada last year actually settled on the government free lands. This fact is of interest when considering the question of immigration generally, as it indicates very clearly that from official statistics, of the accuracy of which there cannot possibly be any question, over one-third of the immigrant arrivals for the year ending June 30, last, are known to be located on free homesteads as independent agriculturists.

The total number of entries recorded is the largest by over 10,000 of any year since the inception of the department, and represents a total revenue in fees alone of \$417,834.25. During the last five years there were 144,823 entries in all granted, from which a total revenue of \$1,443,247.51 has been derived. It will also be observed that out of the 41,869 entries granted last year, 20,582 were made by persons coming from the United States or the British Isles.

Reference should also be made here to the large increase in the number of letters patent issued during the past year. While there were but 2,665 letters patent issued in 1896, the number had risen to 12,370 for the past year. This increase was not unexpected in view of the fact that over 100,000 entries had been granted during the years 1902-3-4 and 1905, and it must follow that within the next few years, when the 144,823 settlers who entered for homesteads during the past five years earn title to their holdings, there will be a still further increase in the number of patents issued. The consideration at headquarters of the applications for patents and the subsequent issue of the title deeds involves a considerable amount of work, and provision should

be made in advance to meet the new requirements in the way of suitable office accommodation, in order to prevent congestion in the work and delay in the issue of the letters patent.

#### CORRESPONDENCE.

The following statement shows the number of letters received and sent by the department in each year since its establishment:—

Departmental Year ended October 31.	Letters Received.	Letters Sent.	Total.
74	3,482	4.120	7.68
75	1,974	2,189	4.16
76	2,256	3.097	5.3
77	3,137	3.677	6,8
78	4,642	6,009	10.6
79	5,586	6.179	11.7
80	8,222	9,910	18.1
81	13,605	15,829	29,4
82	25,500	30,300	55.8
83	27,180	33,500	60,6
84	27,525	33,386	60,9
85	33,970	43,997	77.9
86	60,964	67,973	128.9
87	47,845	60.890	108.7
88	43,407	52,298	95,7
89	48,316	50,500	98,8
90	36,200	36,008	72,5
91,	38,000	36,267	74.5
92	41,990	42,203	84.
93	50,794	48,145	98.9
94	48,619	50,840	99,4
95	49,991	45,898	95,
96	47,501	44,238	91,
97	65,714	64,147	129.
98	88,913	87,845	176,7
99	95,023	91,876	186,8
00	121,219	133,177	254,
01	144,978	136,348	281.
02	167,200	185,548	352.7
03 (From June 30, 1902 to July 1, 1903)	185,582	223,463	.409.0
04 (From June 30, 1903 to July 1, 1904)	222,316	274,675	496.9
05 (From June 30, 1904 to July 1, 1905)	245,470	302,723	548,1
06 (From June 30, 1905 to July 1, 1906)	107,794	529,465	937.2

The number of registered letters during the Departmental year 1906 was: Received, 6,993; Sent, 32,447.

# CORRESPONDENCE AND OFFICE ACCOMMODATION.

I desire to draw particular attention to this matter, as I consider it one of very grave importance in connection with the proper transaction of public business and the general administration of the department. The correspondence has assumed such proportions of late years, as shown from the foregoing statement, that it has become physically impossible with the limited space at the disposal of the department to handle the same with the efficiency and promptness which the importance of the subjects dealt with would demand in the public interest. When it is considered that nearly one million letters were handled through the registration branch during the past twelve months alone, over 400,000 of which were letters received from all parts of the world from persons making inquiry in a large proportion of cases about

matters which had already come up for consideration, one scarcely realizes the enormous amount of work required to attach each letter to the file to which it properly belongs. With the limited accommodation now provided in the Langevin Block, and owing chiefly to the fact that it has been found necessary to transfer some of the most important branches of the department to rented quarters in other parts of the city, the greatest difficulty is being experienced in having the official documents properly recorded. Steps are now being taken to rearrange the offices of the Patents and Registration branches, consequent upon the moving of the Timber and Mines offices to the Canadian building, but nevertheless it is felt that such arrangement can only be of a temporary character, for there is no doubt that with the rapid development of western lands the business of the department will continue to increase for many years to come. The question, therefore, of providing adequate quarters for the department is one of serious moment, and one which should receive careful and early consideration.

#### DOMINION LANDS.

Under Part I. will be found the report of the Commissioner of Dominion Lands upon the operation of his office during the past year.

Particular attention is called to the statements accompanying this report from the inspector of Crown timber agencies, and the chief clerk of the Timber and Mines branch, as they contain full details as to the general result of the work performed in this important division of the department, as well as in each agency and sub-agency.

#### SPECIAL INSPECTION WORK.

As will be observed from the report of Mr. Leech, Inspector of Dominion Lands Agencies, a special inspection of all unpatented homesteads entered for prior to September 1, 1905, was undertaken early in the spring of the year. This step was deemed advisable in view of the large demand for free homesteads from incoming settlers, and in order to ascertain whether lands held under entry were actually occupied by the holders thereof. This inspection, as stated by Mr. Leech, entailed considerable work, but the result was highly satisfactory. It relieved 885 homesteads to which the entrants had forfeited their rights through non-occupation, and it helped to demonstrate the fact that the bulk of the 15,834 homesteads inspected were duly occupied by the bona fide settlers who had made entry therefor.

It may be stated also in this relation that although the various offices in the outside service have been taxed to their utmost capacity, owing to the rush of land seekers desirous of securing information respecting suitable homesteads open for entry, and the largely increased number of applicants for entries or patents, the work on the whole has been performed in a highly satisfactory manner, no complaints of a serious character from the public having reached the department.

# IRRIGATION AND CANADIAN IRRIGATION SURVEYS, 1905.

The development of irrigation works continues steadily through Southern Alberta and Southwestern Saskatchewan. The larger schemes of the Alberta Railway and Irrigation Company and the Canadian Pacific Railway Company are being pushed on

steadily to completion, and these companies will be in a position in a short time to supply water for irrigation purposes to large areas of land.

The Commissioner of Irrigation has, since his appointment, been making an inspection of numerous small irrigation schemes, and these are now being put into proper order. The irrigation of lands for the production of fodder crops to be used in connection with stock-raising will be one of the most important objects that will be served by the smaller schemes which are projected.

In the province of Alberta the number of ditches constructed is 159, the length of canals and ditches is 832 36 miles, and the area of land to be irrigated by these canals and ditches 2,880,056 acres.

In the province of Saskatchewan the number of ditches constructed is 110, the length is 189 68 miles, and the area to be irrigated by these ditches as constructed 36,916 acres.

In connection with the diversion of water from the St. Mary's river, however, there is a danger of complications owing to the proposed diversion of the waters of that river by the government of the United States. It is desirable that some arrangement should be reached with the United States which would conserve the vested interests of the irrigation companies, and of those persons in Canada who are dependent on the St. Mary's river for a supply of water for irrigation purposes.

A contract was entered into during the present year with the Robins Irrigation Company, of London, England, for the irrigation of a tract of 380,573 acres lying to the west of Medicine Hat. The sources of water supply will be the Bow and Belly rivers, and the carrying out of the scheme will involve a large expenditure for the construction of the necessary diversion canals and other works, but it will greatly assist the progress in agriculture of a district which requires irrigation to develop its full possibilities.

#### IMMIGRATION.

Comparative statement of arrivals at inland and ocean ports during the ten years ending June 30, 1906.

#### ARRIVALS.

Year.	Great Britain and Ireland.	Other Countries.	United States.	Total.
1896-7 1897-8 1898-9 1899-00 1900-01 1901-02 1902-03 1903-04 1904-05 1905-06	11,173 10,660 * 5,141 11,810 17,259 41,792 50,374 65,359	7,921 11,608 21,938 * 10,211 19,352 23,732 37,099 34,785 37,255 44,349	2,412 9,119 11,945 * 8,543 17,987 26,388 49,473 45,171 43,652 57,919	21,716 31,900 44,545 23,895 49,145 67,375 128,364 130,330 146,266
_	311,747	248,250	272,609	832,600

<sup>\*</sup> Arrivals for six months on y

The report of the Superintendent of Immigration and of the various officers under his control, will be found under Part II. of the general report. Last year's immigration has been the largest in the history of Canada. One hundred and eighty-nine thousand and sixty-four arrivals in all were recorded during the twelve months ending June 30, last, being an increase of 42,798 over the previous year.

The detailed statements as to the nationality, occupation and destination of immigrant arrivals which accompany the superintendent's report, have been prepared with the greatest possible care, and the figures given may, therefore, be accepted as being strictly accurate. From these statements it will be seen that of the total arrivals 131,268 came via ocean ports, and that the remainder, namely 57,796 persons, came direct from the United States.

It will be seen from the tables that apart from the British Isles and the United States of America there were arrivals from fifty-four different countries of the world, representing the chief races of the five continents. It is interesting to note in this relation that 46 immigrants came from South Africa, 171 from the West Indies, 340 from Newfoundland, 89 from New Zealand, 7 from Persia and 18 from Egypt. These figures are given here simply to show that the opportunities offered by Canada to capital and labour have aroused the attention of persons in the most remote parts of the world who are desirous of improving their social and material condition by removing to a new country.

The one aim and well established policy of the department during the past few years has been to make Canada better known in the outside world, so as to attract capitalists and desirable settlers to develop her vast natural resources. That this policy has been productive of the desired results is amply demonstrated by the fact that during the past ten years 832,606 persons landed in Canada from every part of the world; of these 584,356 came from the British Isles and the United States. During the same period 174,331 free homesteads were taken up in the western provinces by actual settlers, 80,550 of which were made by persons coming from the British Isles and the United States. The record is certainly a very extraordinary one and should be accepted as most conclusive evidence that the methods adopted and followed by the department are based on sound principles, and are conducive to the best possible results.

#### BRITISH IMMIGRATION.

Attention is called in this relation to the reports of the High Commissioner for Canada and of the Commissioner of Emigration in London, and also to the reports of the various agents operating in the British Isles and in France and Belgium. As will be seen, the result of the work in the Old Country has been highly satisfactory. Reference has already been made to the large increase in the number of British arrivals during the past year. The time would appear to be most opportune for continuing with increased vigour the propaganda which has been conducted in Great Britain during the past few years. With the increase in the amount of bonus to the booking agents which was decided upon some time ago, and the renewed efforts that are being put forth on the part of our agents as a result of your recent visit to the Old Country, there is no doubt that Canada will continue to receive a still greater share of the emigration from Great Britain to North America. It is, therefore, proposed to follow

with increased energy the methods already employed in the way of advertising, and of properly educating prospective emigrants as to the advantages offered by Canada as a suitable field for settlement.

#### CONTINENTAL IMMIGRATION.

The total immigration from countries other than Great Britain and the United States numbered 44,349, as compared with 37,255 for the previous year. The termination of the arrangement with the North Atlantic Trading Syndicate and the withdrawal of the bonus system in connection with bookings from the continent will make it necessary to adopt some new plan for carrying on our work in European countries where restrictive laws regarding emigration are in force. So far as France and Belgium are concerned, the present methods followed by our agents there would appear to be quite satisfactory, and settlers who reach Canada from these two countries belong as a whole to a very desirable class. As for the other continental countries, however, where an open propaganda is not permissible under existing laws, it is recommended that such methods be devised to carry on the work as the circumstances in each different country may warrant.

# IMMIGRATION FROM THE UNITED STATES.

The work in the United States, which for a number of years past has been under the immediate direction of Mr. W. J. White, inspector of agencies, has been attended with highly satisfactory results. It will be observed by reference to the comparative statement of arrivals that the total number from the United States during the past decade was 272,609, of which 57,919, or nearly one-fifth, came during the twelve months ending June 30 last. The information contained in the inspector's report with regard to the methods employed in inducing members of the farming community in the Western States to move to Canada, as well as his observations with respect to the opposing influences with which our agents have to contend, will no doubt be read with interest.

# IMMIGRATION OFFICES IN WESTERN CANADA.

Special attention is also invited to the very exhaustive report submitted by the Commissioner of Immigration at Winnipeg upon the work of the service under his control. Winnipeg being the chief distributing point for incoming settlers, it necessarily follows that with the increased arrivals the work devolving upon the commissioner and his staff has been unusually heavy during the past season. It is gratifying to note in this relation that, as pointed out by the commissioner, the general business of his office would appear to have been performed to the entire satisfaction of the immigrants and of the public generally.

Much valuable information will be found in the commissioner's report as to the present standing of some of the chief colonies that have been established in the west by incoming foreigners within the last few years. These colonies, although founded within a comparatively recent date, are reported to be making substantial progress, the settlers composing them being on the whole prosperous and contented. The summary of the seventy-two district reports embodied in the commissioner's statement will also prove of much interest to persons seeking information in concise form with

regard to the various points at which new settlers start for their homesteads, as well as to the existing conditions and prospects of each locality reported upon, many of which are but the nuclei of what will no doubt in a few years become prosperous towns.

#### JUVENILE IMMIGRATION.

The report of Mr. G. Bogue Smart, chief inspector of British immigrant children and receiving homes, will, I am sure, be read with special interest. The work of inspection in connection with juvenile immigration has, since the organization of this particular branch of the department, been so systematized that accurate and reliable information is readily obtainable as to the actual condition of every child sent out to Canada under the auspices of the Home Government Board at London, and placed in homes throughout the country. This system of inspection, under the control of the government, has done more to remove the prejudice which at one time existed against this class of immigration than any other means that could have been devised. There is to-day, as pointed out by the chief inspector, an ever increasing demand for this class of immigrant, and such of them as have been placed in private homes are reported on the whole to be giving very good satisfaction.

# REPORT OF THE CHIEF MEDICAL OFFICER.

The report of Dr. H. P. Bryce, the chief medical officer, will be found to contain very interesting statistics with regard to the inspection of immigrants at the various ports of landing. There were in all 480 deportations effected, which is not a large percentage when compared with the total number of arrivals. Special attention is called to the striking statements contained in the following paragraph which appears in Dr. Bryce's report, from which it will be seen that not only should the country be thankful for the large increase in the number of desirable immigrants who landed at our ports during the past season, but that from a physical and mental standpoint these additions to our population were of the most desirable character:—

'Looking over the whole field of operations for the year, however, whether on the one hand as regards the number and quality of immigrants admitted to Canada and their freedom, whether from contagious disease or from more serious, deep-seated maladies, and on the other hand to their reception in all the provinces, shown by their ready distribution and abundant employment amongst our people, and the mutually satisfactory results measured whether by statistical results or common report, it may fairly be said, comparing the present with the past history of large immigration whether to Canada in the early years of the last century, or of the large immigration in more recent years to the United States, that never have so many persons of a good class relatively come to any country in a single year, and nowhere have so many immigrants been so cordially received or more generously treated.'

# SURVEYS.

During the calendar year of 1905, forty-nine parties were engaged on the survey of Dominion lands. Of these, six were located in Manitoba, eight in Saskatchewan, twenty-six in Alberta, three in British Columbia, one in the Yukon Territory, and five were engaged partly in one province and partly in another. Two of the parties were in charge of inspectors, examining surveys made under contract.

During the first six months of the present year fifty-three parties were at work. Of these, twelve were working in Manitoba, ten in Saskatchewan, twenty-four in Alberta, four in British Columbia and three partly in one province and partly in another.

The following table shows the distribution of parties paid by the day, and of those working under contract:—

Parties.	In Manitoba.	In Saskat- chewan.	In Alberta.	In British Columbia.	In the Territories.	Partly in one Province and partly in another.	Total.
1905—Paid by the day Under contract 1906—Paid by the day Under contract	1	4 4 7 3	12 14 11 13	3	1	5 3	29 20 29 24

The total mileage of the forty-six parties engaged on surveys in 1905 was 16,523 miles, an average of 359 miles for each party. Owing to the nature of their work the parties of Messrs. Wheeler, Belleau and Laurie are not included in the statement of mileage.

Survey operations this year, 1906, are on about the same scale as in 1905. It is expected that about 200 townships will be subdivided.

In view of the probable construction at an early date of railways through the country lying to the north and west of Edmonton, it has been deemed advisable to establish base lines and principal meridians so as to be prepared to subdivide townships anywhere when wanted for settlement. The lines run through a country which is wooded, generally very rough and at a considerable distance from settlements. Pack horses are used for transport and trails have to be opened for them. Surveying such a country is a difficult and expensive undertaking. A number of parties have been kept at this work for several years; although the surveyors in charge are among the most competent in the service, and have displayed great energy, the progress has been slow. The fifth meridian has still to be produced northward to the Peace river and base lines extended from it westerly.

Apart from the subdivision of new territory, the department is frequently called upon to retrace and restore old surveys. When twenty or thirty years have elapsed since the original subdivision of a township was made, it is often found that the posts have disappeared or the mounds have become obliterated. In wooded country, where no mounds or pits were formerly made, the corners being marked by wooden posts and bearing trees, all marks of the survey disappeared after the first forest fire. When

the lands are taken up, the new settlers naturally ask that the section lines be properly marked so that they may know the limits of their lands. Every effort is made to meet their wishes, and several of the survey parties are constantly engaged upon this work.

Errors in old surveys are a great source of trouble. Formerly the surveys of Dominion lands were not made with the degree of care and precision now prevailing. Townships were subdivided under contract as at present, but a rigid system of inspec tion on the ground and of examination of the plans and field notes had not yet been Without proper inspection it was unavoidable that bad surveys should now and then escape detection and be accepted. The most frequent error is one of ten chains in the position of a quarter-section corner. It is suspected that the surveyor measured only half of the section line and that his chainman made an error of one tally. The whole mile not being measured, the error passed unnoticed. result is that the quarter-sections, instead of being 160 acres each, are 130, 150, 170 and 190 acres respectively. When the settler who is complaining of an error in his lines has no neighbours there is nothing to prevent the correction of the survey, and this is done by one of our surveyors at the first opportunity. Generally, however, several settlers are interested; some wanting the error corrected while others object to any change being made. Such cases are very troublesome; notwithstanding the efforts of our surveyors to bring the parties to agree to a fair adjustment of their boundary lines, a satisfactory arrangement is seldom reached.

A few surveys were made last year at remote places. Lots were laid out to accommodate settlers at Cumberland House and Le Pas, on the Saskatchewan. Parts of several townships were subdivided west of Lesser Slave lake, beyond the limits of the old settlement. Lots were also laid out at Vermilion, on the Peace river: it will, no doubt, surprise many people to learn that a large and flourishing settlement exists there, 350 miles north of Edmonton.

The triangulation of the railway belt in British Columbia, undertaken for establishing reference marks for the subdivision of the belt, was continued by Mr. P. A. Carson. The work is being taken up where it was left by Mr. W. S. Drewry, and will be extended westward. The main object of the season's operations was to establish permanent marks at the stations to be occupied, to erect signals for observing angles next season and to select a place for measuring a base line.

- Mr. J. A. Macdonell, with his assistant, Mr. J. A. Belleau, has continued the exploration of the lands in the Peace river district of British Columbia lying immediately to the west of the province of Alberta, and out of which are to be selected the three and one-half millions of acres granted by the province to the Dominion as compensation for the lands in the railway belt alienated prior to the transfer of the belt to the Dominion. The land has not yet been finally selected.
- Mr. W. Thibaudeau, C.E., has completed under contract a survey of the Klondike region of the Yukon Territory, the object being to locate canals for conveying to the gold district the waters of the Klondike and its tributaries. No great progress can be made by the district without sufficient water for hydraulic mining and sluicing. Several projects are submitted by Mr. Thibaudeau, whose report, with estimates of cost, is appended to the report of the surveyor general.

Mr. A. O. Wheeler, topographer of the department, made a topographical survey of the Cougar valley in the Selkirk range. Remarkable natural caves, to which the name of Caves of Cheops has been given, have been discovered in this valley; a plan and an interesting description of the caves have been prepared by him, and are appended to the report of the surveyor general. Mr. Wheeler has also made good progress with the survey of the Rocky Mountains Park, upon which he has been engaged for the last two years.

Surveys in the Yukon Territory are being continued under the supervision of the director of surveys at Dawson. The surveys of thirty-six group lots were confirmed during the year ending June 30, 1906. In addition to these, returns have been received of the Frooks hydraulic concession on Flat creek, and of the surveys of base lines on Caribou creek and Lion gulch, on Eureka creek, right and left forks, on Flat creek and Isaac's gulch and on Bullion creek.

In November, 1905, Mr. John Stocks, late Deputy Commissioner of Public Works, was reappointed Chief Engineer of Irrigation and the irrigation office was removed from Regina to Calgary. Mr. John Stewart, D.L.S., was subsequently appointed Commissioner of Irrigation in succession to Mr. John Stocks. During the first six months of 1906, three parties in charge of Messrs. R. J. Burley, P. M. Saunders and J. F. Hamilton were engaged on irrigation surveys. Gauge readings on a number of streams were continued as in former years.

The office work at headquarters has unfortunately not kept pace with the progress of the surveys in the field. From the beginning of 1905 to date, no less than forty-four men left the office staff or were transferred to other offices. These changes and the substitution of untrained men in the place of those who left, have seriously interfered with the business of the office. Some 500 plans of townships in which surveys have been made remain unissued, and other work is equally in arrears.

Hereunder is the usual table of subdivision or settlement surveys work completed each year since the commencement of the surveys, with the result of last season's operations added:—

Previous to June, 1873. 4,792,292 874 4,237,864 1875 665,000 8876 420,507 1877 231,691 878 306,936 1879 1,130,482 1880 4,472,000 1881 8,147,000 1882 10,186,000 1883 27,234,000 1884 6,435,000 1885 391,680 1885 391,680 1886 1,379,010 1887 643,710 1888 1,131,840 1888 1,131,840 1889 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968 1899 516,968	29,952 26,487 4,156 2,628 1,448 1,918 7,066 27,950 50,919
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4,156 2,628 1,448 1,918 7,066 27,950 50,919
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,448 1,918 7,066 27,950 50,919
879     1,180,482       880     4,472,000       881     8,147,000       882     10,186,000       883     27,234,000       884     6,435,000       885     391,680       886     1,379,010       888     1,131,840       889     516,968       890     817,075       891     76,560       892     1,395,200       893     2,928,640       894     300,240	7,066 27,950 50,919
881     8,147,000       882     10,186,000       883     27,234,000       884     6,435,000       885     391,680       886     1,379,010       887     643,710       888     1,131,840       889     516,968       890     817,075       891     76,560       892     1,395,200       893     2,928,640       894     300,240	50,919
883     27,234,000       884     6,435,000       885     391,680       886     1,379,010       887     643,710       888     1,131,840       889     516,968       890     817,075       891     76,560       892     1,395,200       893     2,928,640       894     300,240	
885     391,680       886     1,379,010       887     643,710       888     1,131,840       889     516,968       890     817,075       76,560     76,560       892     1,395,200       893     2,928,640       894     300,240	63,662 170,212
887     643,710       888     1,131,840       889     516,968       890     817,075       891     76,560       892     1,395,200       893     2,928,640       894     300,240	40,218 2,448 8,620
889     516,968       890     817,075       891     76,560       892     1,395,200       893     2,928,640       894     300,240	4,023 7,074
891 76,560 892 1,395,200 893 2,928,640 894 300,240	3,231 5,106
993 2,928,640 994 300,240	476 8,720
100,040 (	18,304 1,876
895	2,539 3,166
897 428,640 898 859,840	2,679 5,374
899. 1,022,720 900 (first six months) 785,480	6,392 4,596
00-1901. 1,603,680   001-1902 2,553,120   002-1903 • 6,173,440	10,023 15,957 38,58
903-1904. 12,709,600 904-1905. 10,671,520	79,436 66,697
905-1906	00,00

# INTERNATIONAL BOUNDARIES AND OPERATIONS OF THE ASTRONOMICAL BRANCH OF THE DEPARTMENT.

The re-survey and re-demarcation of the international boundary along the 49th parallel has been continued this year by the commissioners, Dr. W. F. King for Great Britain, and Mr. O. H. Tittmann and Dr. C. D. Walcott for the United States. The Canadian part of the field work is under the direction, as heretofore, of Mr. J. J. McArthur, D.L.S.

This season's work has been in the Cascade mountains and the Fraser River valley. Good progress was made, but, owing to delays due to smoke, the hopes, which were expressed in my last annual report that this section would be completed this season, have not been fully realized. A small portion remains to be completed next year.

Dr. R. A. Daly, geologist to the survey, has completed the field work of his investigations along the 49th parallel between the summit of the Rocky mountains and the sea. Collection of the fauna of the region has been continued under the direction of Mr. J. M. Macoun, of the Geological Survey Department.

The demarcation of the Alaska boundary under the award of 1903 and the supplementary agreement of March 25, 1905, has been continued by Commissioners King

and Tittmann. There have been four Canadian parties at work, one under Mr. J. D. Craig, D.L.S., at Port Snattisham and Whiting river, one under Mr. W. F. Ratz, D.L.S., at Taku river, one under Mr. A. J. Brabazon, D.L.S, in the neighbourhood of Alsek river, and one under Mr Geo. White-Fraser, D.T.S., who was working in conjunction with the United States parties in the region of the passes from Lynn canal to the Yukon river. On behalf of the United States, one party has been at work between Alsek river and Yakutat bay, three about the Chilkat river, the Dyea and White passes and the mountains south therefrom, besides two representatives of the United States Commissioner accompanying Messrs. Craig and Ratz.

An agreement has been entered into with the government of the United States for the re-survey and re-marking of the international boundary line between Richelieu river and St. Croix river.

The course of this portion of the boundary was defined by the first article of the treaty of 1842, and was surveyed by a joint commission in 1843 to 1845. The necessity of renewal arises from the fact that the line has been in many places overgrown by timber, many of the monuments have been broken or have disappeared, and the placing of marks additional to those of the original survey has become necessary at many points, including railway and highway crossings, and places where the original monuments are not intervisible.

Dr. King was appointed commissioner for the performance of this work by order in council of July 7, last. Mr. Tittmann, Superintendent of the United States Coast and Geodetic Survey, has been appointed commissioner on behalf of the United States.

The field operations are in charge of Mr. G. C. Rainboth, D.L.S., of Aylmer, Que., and Mr. J. B. Baylor, of the United States Coast and Geodetic Survey.

Operations were begun about the end of July at Hall's Stream, on the boundary of the state of New Hampshire, and carried westward along the northern boundary of the state of Vermont, and the southern boundary of the province of Quebec. It has been determined to reset the old cast-iron monuments, where they are in good condition, in solid cement bases, and to use granite or concrete for the new monuments.

The boundary between Alaska and Canada rests upon the treaty of 1825 between Great Britain and Russia. In this treaty the line of demarcation between the territories of the two contracting powers upon the continent of North America and adjacent islands was defined as commencing at the southernmost point of Prince of Wales island, passing along Portland channel and thence following the mountains within a certain distance of the coast as far as the 141st meridian of longitude west from Greenwich, and thence following this meridian northward to the Arctic ocean. By the treaty of 1867 between the United States and Russia, the Russian territories were transferred to the United States, retaining the same definition of the boundary line with the British possessions.

This definition may be divided into two parts: the first part of the line follows natural features, while the second, the 141st meridian, is a line independent of such, and to be determined by the processes of astronomy and geodesy merely.

The line from the southern point of Prince of Wales island to the 141st meridian presented difficulties both in the identification of the natural features by which the

line was defined, and in the legal interpretation of the descriptive clauses of the treaty. As a consequence of diverging views on these points a wide strip of territory was claimed by both countries. To determine the natural features a joint topographical survey was made in 1893 to 1895 under the convention of July, 1892. The questions of interpretation of the description and of final identification of the natural features intended by the treaty were determined by the London tribunal of 1903. A small portion of the boundary line as regards which the tribunal failed to identify the mountains intended by the treaty of 1825 was settled by the supplementary agreement of 1905.

All this had reference only to the line east and south from the initial point of the 141st meridian. As regards the latter there was no dispute; it was recognized by all that it was a fixed geographical line only needing accurate survey to mark it on the ground.

In 1887 Mr. Wm. Ogilvie, D.L.S., took a series of lunar observations at a point on the Yukon river near the 141st meridian, and determined therefrom the position of the meridian.

Lunar observations, however, cannot give determinations of longitude at all comparable in accuracy with latitude observations. These last may give results with a probable error of but a few feet. The relative want of precision of longitude determinations by lunar observations (the only method available in the circumstances in which Mr. Ogilvie was placed) is shown by the fact that some two years later another determination, by the same method, at the same place, was made by an officer of the United States Coast and Geodetic Survey, with a result differing from Mr. Ogilvie's by nearly 1,000 feet. In 1895-96 Mr. Ogilvie took a second series of observations at this point, and surveyed the meridian north and south for several miles.

This survey, though not made under international agreement, has been in practice accepted for customs and local purposes, pending a final determination of the boundary.

In January, 1897, a treaty between Great Britain and the United States, providing for the appointment of commissioners to survey and mark the line, was agreed to and signed, but failed of ratification by the United States Senate.

A few years afterwards the Canadian government built their telegraph line through British Columbia and along the course of the Yukon river to, or near, the 141st meridian, thus rendering possible a determination of longitude by the accurate method of telegraphic exchange of time.

Negotiations for the treaty to provide for the demarcation of the meridian were not, however, resumed until after the London tribunal had, by their award, terminated the controversy over the boundary line of the Alaska coast strip.

As a result of the resumed negotiations a convention was signed on April 21 last, duly ratified, and ratifications exchanged on August 16.

The convention provides that each government shall appoint one commissioner, and that these commissioners shall determine by the telegraphic method a convenient point on the 141st meridian, and shall trace and mark a north and south line passing through said point. The line is to be marked by intervisible objects, natural or

artificial, and the line, when or where thus marked, in whole or in part, shall be deemed to define the 141st meridian permanently for all international purposes.

Dr. W. F. King has been nominated as H. M. Commissioner under this convention. Mr. O. H. Tittmann represents the United States.

The commissioners at once proceeded to have the necessary telegraphic determination made, in order that survey operations may be begun next spring. A short account of how the longitude determination was carried out will be found in Dr. King's report, which forms appendix No. V. to this report.

In Dr. King's report, with its appendices, will also be found a statement of the work done by the Astronomical Branch of the department including the astrophysical and other work at the observatory, the determination of geographical positions of points in Canada, and the service for the distribution of time in the government buildings, together with an account of the progress of the trigonometrical survey of Canada.

The purpose of this survey is, as was stated in my last annual report, to afford an accurate basis for the control of existing surveys, and of the detail surveys which are in progress under various departments of the public service. A conference of representatives of the departments interested will be advisable in order to ensure proper co-ordination by means of the trigonometrically determined points, and to avoid duplication of work.

#### THE ROCKY MOUNTAINS PARK OF CANADA.

The report of the Superintendent of the Park forms Part VI. of the general report. According to the statements submitted by the superintendent, 30,136 persons visited the park during the past season, which is an increase of 10,298 over the previous year. From this it will be seen that this national resort is steadily growing in popular favour, not only in Canada, but amongst health-seekers and tourists from other countries. In connection with this increased attendance it is gratifying to note that the revenue derived from the park is now more than double the amount required for current expenditure and maintenance. The total receipts under this head during the past fiscal year amounted to \$18,883.83, being an increase of \$4,824.28 over the previous twelve months.

The superintendent's recommendation that the northern limit of the park reserve should be extended to the Saskatchewan river, is one worthy of careful consideration. As pointed out by Mr. Superintendent Douglas, the present northern boundary is altogether theoretical, and the adoption of a natural boundary, such as the Saskatchewan river, would afford much better facilities for the protection of game, and would add to the park a district the marvellous beauty of which is reported to be unsurpassed.

The suggestion of the superintendent with reference to the establishment of permanent quarters within the park for caged animals, would also appear to be a very timely one. The specimens of birds and wild animals now in captivity are proving to be a source of great attraction to visitors, and there is no doubt that the establishment, on a permanent basis, of a zoological garden in which would be shown specimens representative of the bird and other animal life within the park reservation, would add a most attractive feature to our great national resort, and prove of much interest to the tourist and student of natural history.

As will be observed from the superintendent's report, the construction of a system of waterworks and sewerage at Banff, reference to which was made in the last annual report, has now been almost completed. This will supply a long-felt want, as the residents of Banff have had to contend with serious difficulties in this relation in the past, and the abundant water-supply which will thus be afforded will be conducive to the further beautifying of the town.

The superintendent's report on the whole is most satisfactory, and the information which it contains with regard to the park generally will be read, no doubt, with much interest.

I wish to call particular attention also to the superintendent's statement with regard to the herd of buffalo now kept within the animal paddock in the park. The herd now numbers 61 head in all, there having been a natural increase of ten head during the year. All the animals are reported to be in a healthy and thriving condition. When it is considered that this herd of buffalo is the only one of any extent in Canada, and that it will, no doubt, before many years be the largest herd in the world, it is fortunate that steps were taken some years ago to preserve the few specimens that remained of the noble animals that roamed in countless numbers over the western prairies in the early seventies. A small remnant of these is known to be still in existence in one of the far northwestern districts, and it has been suggested that an effort should be made to capture a few of these animals for the purpose of improving the breed of the buffalo now in captivity in the park. The suggestion is one which in my opinion should be acted upon. The cost of capturing a few of these wild animals would be small when compared with the benefit to be derived to the herd, which must be considered to-day as forming a very valuable asset of the Dominion.

#### SCHOOL LANDS.

The report of Mr. Checkley, the chief clerk in charge of the School Lands Branch, will be found under subdivision 30, of Part I. of the general report. As will be observed there were important sales of school lands held in both the provinces of Alberta and Saskatchewan during the past season, the average price obtained for lands sold in the former province being \$11.55 per acre, and in the latter \$14.32. In Alberta there was in all an area of 120,692.32 acres of land sold, the amount realized therefrom being \$1,394,316.16, and in Saskatchewan the total acreage disposed of was 26,662.93 acres, for the sum of \$381,714.40.

Statements will be found accompanying the chief clerk's report giving full particulars with regard to the present position of the various school lands funds.

#### THE YUKON TERRITORY.

The report of the Commissioner of the Yukon Territory will be found under Part VII. of the general report.

The gold yield for the past year amounted to \$6,539,402.85, as compared with \$8,227,200 for the previous year. The commissioner attributes this decrease to the exceptionally dry summer and to the fact that operations on many mining properties have been suspended pending the installation of dredges and hydraulic plants. The affairs of the territory on the whole would appear to be in a very satisfactory con-

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dition, but as to this you have been able to fully inform yourself as a result of the visit which you made to Dawson in the month of August last. It is gratifying to note that, owing to the economy which has been exercised in the administration of the territory, the commissioner is in a position to report a surplus of \$62,627.02, as compared with a deficit of \$24,530.37 for the fiscal year 1904-5.

# REPORT OF THE SUPERINTENDENT OF MINES.

The report of Dr. Eugene Haanel, superintendent of Mines, which forms Part VIII. of the general report, contains much interesting and valuable information upon the operations of his office during the past season. As will be observed, special attention has been given to the investigation of the iron industry of Canada. The matter, from a commercial point of view, is one of more than ordinary importance, and the result of the systematic investigation which has been commenced under the direction of the superintendent of mines in Nova Scotia, western Ontario, and the country along the Ottawa valley, will be awaited with interest.

It is satisfactory to note also that the results obtained from the electric smelting experiments that were conducted at Sault Ste. Marie last winter would appear to have demonstrated the practicability of the process for the successful smelting of Canadian iron ore, of which there are such inexhaustible deposits in various sections of the country.

Reference is also made by the superintendent to the appointment of the commission for the investigation of the zinc resources of British Columbia. The commission, which was composed of Mr. Walter Renton Ingalls, editor of the Engineering and Mining Journal, New York city, as chief of staff, Mr. Philip Argall, M.E., of Denver, Colorado, and Mr. A. C. Carde, of Nelson, B.C., completed its work during the past season, and the report upon the result of its investigation has been issued separately.

I wish to call attention also to the appendix to the superintendent's report in which is reproduced a description of the Heskett-Moore process for treating ferruginous ore for the manufacture of iron and steel. It is a most interesting paper, in which is explained the process for the direct conversion of iron ore into malleable iron or steel, and thus rendering unnecessary the intermediate process of pig iron.

#### FORESTRY.

The reports of the superintendent of forestry and of the officers working under his direction, will be found under Part IX. of the general report.

The result of the past year's operations would appear to have been most gratifying. The various branches of this service have now been established on a satisfactory basis.

The Act that was passed at the last session of parliament establishing permanent forest reserves, will somewhat enlarge the scope of the forestry branch, inasmuch as it provides that the fish and game within these reserves shall be looked after by that branch. While it may be necessary to frame some new regulations with regard to

these particular subjects, it is not proposed to make any change in the general mode of operation of this service, as at present organized.

Detailed statements and full particulars with regard to tree-planting, forest protection, and the fire-guarding service, will be found in the reports of the various officers who are charged with these particular duties.

I have the honour to be, sir,
Your obedient servant,

W. W. CORY,
Deputy Minister of the Interior.

# PART I

# DOMINION LANDS

#### No. 1.

#### REPORT OF THE COMMISSIONER.

DEPARTMENT OF THE INTERIOR,
OTTAWA, September 29, 1905.

W. W. Cory, Esq.,

Deputy Minister of the Interior,

Ottawa.

SR,—I beg to submit my report for the year ending June 30, 1906, on the Dominion Lands Branch of this department, together with the reports of the Inspector of Dominion Lands Agencies and the agents of Dominion lands for the several districts.

#### STATEMENT OF WORK.

	1899. 1900.		1899. 1900. 1901. 1902.		1903.	1904.	1905.	1906.	
Files dealt with	24,611	26,527	31,153	35,877	54,784	76,426	90,474	116,338	
	16,284	18,897	21,620	25,954	37,169	52,458	66,411	91,408	
	8,884	10,585	16,978	18,887	28,271	35,865	44,573	60,311	
Total	25,128	29,482	38,598	44,841	65,440	88,323	110,984	268,057	
Applications for Patent— Number examined New applications Certificates issued	4,418	5,464	5,456	6,929	8,051	8,961	9,482	14,363	
	2,500	2,373	2,202	3,116	4,062	5,039	6,443	9,279	
	2,740	2,895	2,131	3,686	4,071	4,854	5,849	8,452	

It will be observed that the volume of work has increased in a remarkable manner, and there is every prospect of it continuing to do so for some years to come. Some additions have been made to my staff in consequence, but in order to keep pace with the work more assistance will be required.

I have the honour to be, sir,
Your obedient servant,

J. W. GREENWAY, Commissioner of Dominion Lands.

#### No. 2.

# REPORT OF INSPECTOR OF DOMINION LANDS AGENCIES.

DEPARTMENT OF THE INTERIOR,
OFFICE OF INSPECTOR OF DOMINION LANDS AGENCIES,
BRANDON. August 21, 1906.

J. W. GREENWAY, Esq., Commissioner of Dominion Lands, Ottawa, Ont.

Sir,—I beg to submit my report for the departmental year ending June 30, 1906. I am pleased to be able to report that the past year has, in respect to progress, development and general prosperity, been the banner year for the Canadian west. In the matter of homesteading and settling upon the lands, this also applies. The new settlers, too, are of the enterprising, industrious class, and are fast converting the bald prairies into waving grain fields and thrifty well-stocked farms. Land values have advanced materially, especially in newly settled districts and along the lines of railway. Work in most all the lands offices has increased rapidly; some offices showing an increase of over 50 per cent upon the business transacted the previous year. Regina office made a new record, when 1,796 homestead entries were granted in June. Battleford office had granted 1,615 entries in April. When it is remembered that for the year ending June 30, 1896, just ten years ago, the total homestead entries for the year granted in Manitoba, the Northwest Territories and British Columbia only amounted to 1,857, some idea can be gained of the rate of business increase.

The increase in homestead entries over 1904-5 amounts to	11,015
The increase in applications for patent over 1904-5 amounts	
to	$3,\!476$
The increase in cancellations of land entries over 1904-5	
amounts to	$3,\!428$
The increase in letters received at local offices over 1904-5	00 000
amounts to	99,836
amounts to	70.400
The increase in homestead inspections made over 1904-5	19,469
amounts to	99 900
	44,000

#### SPECIAL INSPECTION WORK.

Special inspection of all unpatented homesteads entered for prior to September 1, 1905, was undertaken in April last, in the Alameda, Battleford, Regina and Yorkton land districts, with a view to cancelling summarily all entries which had stood for one year and over, where no improvements had been made upon the homestead, and no residence performed, in order that the land should be made available for re-entry. This entailed an enormous amount of work for the homestead inspectors, and much additional work for the land offices affected. It has, however, made available for re-entry many desirable quarter sections, and cleared up most effectually any homestead blanketing which had been attempted. This work was not completed at the close of the fiscal year, but at that time the following work had been accomplished:—

	Inspections	Summary
	Reported.	Cancellations made.
Alameda district	1,516	42
Battleford district		60
Regina district	8,469	397
Yorkton district	<b>4,</b> 590	386
$\mathbf{Total} \ \ldots \ \ldots \ \ldots \ \ldots \ \ldots \ \ldots$	<b>15</b> ,834	885

#### SALE OF STOCK WATERING RESERVES.

In June last I held six sales by public auction of stock watering reserve lands. Those sales were well attended, and the prices ranged from \$3 to \$16.50 per acre. The following is a list of the places at which sales were held, with dates, numbers of parcels sold, number of acres sold and the price realized:—

		Parcels sold.	Acres sold.	Prices realized.
Calgary, High River, Pincher Creek, Macleod, Lethbridge, Medicine Hat,	June 1	11 57 38 36 18	1,539 7,524.17 4,661.64 4,010.85 1,774.25	\$ cts. 9,768 00 44,186 58 18,511 85 19,293 35 5,384 40 1,508 00
To	al	163	19,985.91	98,652 18

#### ROCKY MOUNTAINS PARKS.

The tourists and visitors to the parks are coming in increasing numbers, so much so that the present hotel accommodation is quite inadequate. Increased accommodation is required at the government baths, The government roads out from Banff, Laggan and Field are very popular. The completion of the waterworks system now under construction at Banff will be a great boon. The buffalo herd is doing well, and increasing rapidly. The completion of the bridle trail to the 'Caves' in Cougar mountain will make that an interesting point for mountain tourists.

My duties being spread over the four western provinces, and very close and constant supervision being required, have entailed a great amount of travel, a statement of which is as follows:—

		Miles by rail.	Miles driven.	Total.
July, August, September, October, November, December, January, February, March, April, May,	1905	2,745 1,889 2,509 3,210 2,871 2,599 4,990 120 6,408 3,057 4,651	100 60 80 75 90 65 20 20 22 55	2,845 1,949 2,589 3,285 2,961 2,664 5,010 120 6,429 3,079 4,706
une,	Total	37,878	75 662	38,540

Statement 'A' attached hereto shows the principal transactions for the year by the Dominion lands agents.

Statement 'B,' a list of sub-agents and a statement of the principal work performed by them.

Statement 'C,' a list of the homestead inspectors, and a statement of the principal work performed by them.

Your obedient servant,

R. E. A. LEÈCH, Inspector of Dominion Lands Agencies.

	Entries		s for ceived.	es can-	ermits	s issued.	Lety	TERS.	Reve	enue.		Expen	DITURE.
Agencies.		Land Sales.	Applications for Patent received	Land Entries celled.	Timber Per issued.	Hay Permits	Received.	Sent.	Scrip.	Total Scrip and Cash.	No. of Staff.	Salary.	Con- tingencies.
Alameda	 								\$ cts.	\$ cts.		\$ ets.	\$ cts.
Alameda. Battleford Brandon Calgary Dauphin Edmonton Kamloops Lethbridge. Minnedosa. New Westminster Prince Albert Red Deer Regina. Winnipeg Yorkton	1,751 259 29 1,888	25 15 47 141 13 105 90 245 14 13 28 26 225 66 114	1,072 113 637 895 268 1,384 47 598 204 5 627 616 1,948 404 975	1,657 119 971 222 1,302 42 900 94 5 749 924	201 149 233 922 1,386 1,393  599 224  1,352 481 1,316 960 569	119 62 17 104 131 84 13 101 155  69 290 223 30	19,010 35,393 11,514 40,087 7,725 26,978 5,800 23,290 5,073 2,068 12,474 16,180 74,938 18,423 46,340	17,304 29,576 10,357 39,749 5,248 24,664 4,007 19,370 3,595 1,890 11,548 13,775 64,950 15,064 29,157	620 40 385 00 30 00 766 65 40 00 457 60 1,826 71 1,041 21	30,520 27 80,263 66 21,301 27 101,133 54 21,101 16 70,984 81 17,818 05 49,565 52 7,157 07 2,707 42 45,815 77 44,386 08 148,937 06 87,585 77 61,652 47	4 9 2 11 2 5 2 1 6 6	3,640 69 4,480 91 4,096 96 8,119 73 2,299 92 7,688 40 1,710 01 3,891 58 2,200 00 1,400 00 4,689 63 3,190 00 15,550 60 15,655 00 6,831 29	562 32 475 99 2,654 65 3,258 29
G 1 11 200	41,939	1,167		14,012			345,293	290,254	5,327 57	790,929 92	105	85,444 80	13,638 00
	30,924	759	6,317	10,584	10,024	1,213	245,457	210,785	12,600 42	566,251 69	88	73,992 53	12,516 84
Compared with year 1901	8,167	954	2,269	2,328	5,344	5,291	96,391	77,288	197,416 44	422,373 50	47	Sal'ies & Co \$51,0	onti'gncies.

R. E. A. LEECH,
Inspector of Dominion Lands Agencies.

Name.	Place.	Applications for Homestead En- try taken.	Applications for Patent taken.	Applications for Timber Permits taken.	Applications for H a y Permits taken.	Amount remitted to Land Office.	Salary.	Expenses, Postage, Exchange, and Commission.	Remarks.
Baetz, Geo. O. ) Walker, F. A. ) Bender, J. M. Bunn, J. R. Bobier, Joshua. Carroll, J. W. Cox, A. E. Cochran, L. B Cook, Robt. H.	Estevan, Sask.  Ft. Saskatchewan.  Nanton, Alta  Milestone, Sask  Dubuc, Sask  Saddle Lake, Alta  Pincher Creek, Alta  Medicine Hat. Alta.	321 344 214 358 165 35 82 162 375 143	71 247 42 66 81 107 	104 20 112 85 1 40 53 242 288	6 16 20  15 3 6 10 17 23	\$ cts. 3,379 65 3,948 70 3,464 04 4,325 63 1,498 35 363 60 919 45 3,846 22 5,372 20 2,185 00	\$ cts. 275 00 300 00 300 00 300 00 300 00 300 00 180 00 300 00 300 00	\$ cts. 25 28 35 55 23 93 32 13 17 07 7 40 5 20 28 51 63 43 19 46	11 months, Aug., 1905, to June 30, 1906.  (8 months, Nov. 1, 1905, to June 30, 1906.  (4 " July 1, 1905, to Oct. 31.  Appointed April 26, 1906. No business transacted.
Elton, D. H. English, J. J. Edgson, John A. Flamank, Geo. Gregory, J. A. Goodwin, A. H. Gwynn, J. Gray, W. B. Gunn, Peter Harley, H. Holmes, W. E. G. Hauser, F. I. La Pointe, Jos	Maple Creek, Sask. Edison, Alta. Lloydminster, Sask. North Battleford, Sas Vegreville, Alta. Kutawa, Sask. Stettler, Alta. Lac Ste. Anne, Alta. Swan River, Man High River, Alta. Humboldt, Sask Willow Bunch, Sask	233 134 275  184 271 1,209 53	70 34 37  50 14 65 7 35  55 102 45	374 137 94	25 	1,463 30 621 75 3,868 75 10,995 85 1,544 48 2,267 25 1,385 85 2,822 50 3,334 92 3,678 78 12,662 70 565 25	300 00 300 00 350 00 12 50 375 00 120 00 300 00 50 00 12 50 300 00 300 00 12 50 300 00 300 00	13 69 9 67 16 05 24 56 32 01 69 44 1 99	Appointed June 15, 1906.  From April 4 to June 30, 1906.  2 months, May and June, 1906.  Appointed June 15, 1906.
Malcolm, H. A  Moore, O. S  Milburn, Wm  McKay, O  McGregor, D. S. Langley, Geo  McGregor, A. B	Innisfail, Alta Olds, Alta Swift Current, Sask. Leduc, Alta Rosthern, Sask Davidson, Sask Kamloops, B.C	221 426 793 93 412 813 1 1,980	87 190 5 46 211 30 216	105 94 40 16 173 44 70 69	17 17 30 6 16 6	2,718 86 4,584 05 8,249 20 997 00 5,026 40 8,248 60 634 91 20,494 40	600 00 600 00 420 00 275 00 655 00 330 00	17 21 37 26 48 19 9 82 29 41 47 38 8 83 118 06	{From Sept. 9, 1905, to June 30, 1906. {From July 1 to Sept. 8, 1905.

Oxiey, R. W. Palmason, P Page, Spencer. Paul, S. B. Plaxton, G. P Fysh, O. B. Reed, C. C. Ross, Paul Stephen, A. M. Stewart, Robt. Shenfield, H. E. Small, S. L. Taylor, R. B. Thom, A. K. Thomson, W. M. Twomey, D. Vickerson, F. Wilson, H. G. W. Wakefield, A. G. Ward, D. A. Waddell, A. Moffet, Frank Wild, A. E. Wilson, D. R.	Lipton, Sask. Hanley, Sask. Pine Valley, Man. Wapella, Sask Moosejaw Ponoka, Alta. Belvedere P.O., Alta. Redvers, Sask Whitford, Alta. Bowden, Alta. Strassburg, Sask Grenfell, Sask Guill Lake, Sask. Ft. Qu'Appelle, Sask. Lacombe, Alta. Lacombe, Alta. Lachada, Sask Ranchvale, Man. Wetaskiwin, Alta.	470 791 18 79 102 736 299  17 175 113	97 11 6 37 83 108 128 345 50 14 	10 91 56 7 1 19 38 1 29 22 22 11 78 246	16 1 4 122 3 24 24 24 	4,925 95 8,541 55 318 05 1,781 63 1,325 35 7,415 50 5,457 43 270 05 1,847 95 1,251 75 1,729 60 730 00 1,345 70 8,764 71 1,47 50 389 25 12,563 25 13,106 00 6,084 75 3,398 15 717 70	360 00 300 00 180 00 300 00 300 00 600 00 350 00 12 50 390 00 300 00 360 00 360 00 480 00 300 00 600 00 600 00 300 00 575 00	44 11 51 39 8 21 18 41 55 46 37 43 7 96 34 84 12 59 21 80 1 05 21 60 46 51 17 67 5 11 67 49 67 96 43 99 25 31 3 98	Appointed June 8, 1906.  {From Nov. 5, 1905, to June 30, 1906. From July 1 to Nov. 5, 1905.  Appointed June 15, 1906,  Appointed June 16, 1906.  Returns for March and April only.  Appointed April 27, 1906. No returns.  {From Oct. 1, 1905, to June 30, 1906. From July 1 to Sept. 30, 1905.
Compared with year 1905		18,262	4,322	3,254	657	208,779 66	18,077 50 14,673 95	1,443 72	
		/		-,200		200,000 10	22,0,0	2,301 00	

R. E. A. LEECH,
Inspector of Dominion Lands Agencies.

					<u>*</u> ,			
Name.	Headquarters.	Land Inspections made.	Applications for Patent taken.	Miles travelled by Wagon.	Miles travelled by Rail.	Travelling and Living Expenses, self and team.	Expenses for new and on old travelling Equipment.	Remarks.
Bell, Geo. A	Calgary, Alta Minnedosa, Man Battleford, Sask	1,187 1,017 1,258 1,490 523 2,202 617 262	197 160 152 91 192 127 74 145	5,193 3,761 3,494 4,253 3,989 5,807 3,838 3,031	3,853 687 3,449 1,500 1,806 1,522	\$ cts. 841 36 654 14 799 20 901 37 849 24 764 70 351 18 526 01	\$ ots. 43 45 156 95 92 60 47 80 403 15 160 75 41 50 520 10	11 mos. Resigned May 31, 1906.
Duggan, L Hibson, Jas. S Hadstone, W. E Holden, J. B Jonasson, S Kennedy, F	Selkirk, Man Brandon, Man Prince Albert	447 551 1,030 1,894 130 1,285 1,252	91 32 359 97 634 111	5,559 2,381 3,352 5,797 2,019 6,402 4,381	429 4,222 1,395 1,313 1,557 1,265 2,093	63 90 715 42 772 61 1,224 37 414 10 903 67 830 93	18 45 223 25 460 45 19 25 115 50 68 20	Appointed June 1, 1906.  Statement for 11 mos. only.  Resigned May 1, 1906. Statement for April not received.
ink, Adam	Lethbridge, Alta Lamerton, Alta Marcelin, Sask Regina, Sask Yorkton, Sask Edmonton, Alta	346 357 618 1,640 344	167 122 	5,760 5,528 698 4,936 6,725	960 754 166 416 364	772 95 870 05 162 09 499 12 773 55	452 00 523 85  248 85 48 70	Appointed June 1, 1906. Appointed June 1, 1906. No return.
IcGregor, R. E IcLeod, D IcMillan Wm	Kamloops, B.C Regina, Sask Gilbert Plains Yorkton, Sask Treherne, Man Brandon, Man	98 425 177 514 1,027 1,193	20 139 91 44 74 76	1,687 3,408 3,658 1,814 4,382 2,483	1,433 933 298 2,363 3,077	703 30 492 75 532 23 230 12 813 24 637 20	32 75 152 85 294 50 5 60	(For 10 mos. only; figures for May and June not received.) Sept. 2, 1905, to June 15, 1906. Resigned From January 1 to June 30, 1906.
Collock, J. R. Centland, R. P. Corter, S. P. Gidington, W. R. Leale, John. White, W. H. Stuart, W. W.	Hanley, Sask Regina, Sask Lloydminster Dauphin, Man	76 583 176 810 2,138 1,841	64 45 9 7 67 145	902 3,105 2,519 2,977 6,727 7,497	156 1,558 2,480 1,609 951 1,239	83 70 740 07 761 40 1,024 70 593 22 1,093 02	236 40 490 05 74 70 109 95	Transferred to Regina Land Office, Sept ember 2, 1905.
reiner, Albert	year 1905	1,766 29,376	4,215	766 3,406 127,185 77,340	2,150 5,453 56,895 38,862	276 83 1,141 45 22,813 19 13,284 01	5,039 60	Ranche Inspector. Acting Agent Dominio Lands, Calgary, for six months.

i

#### No. 3.

#### REPORT OF THE AGENT AT ALAMEDA.

DEPARTMENT OF THE INTERIOR.

DOMINION LANDS AND CROWN TIMBER OFFICE, ALAMEDA, SASK., July 19, 1906.

The Commissioner of Dominion Lands. Ottawa, Ont.

SIR,—I have the honour to submit the annual report of this office for the year ending June 30, 1906.

The crop of last year was even better than anticipated, as wheat averaged 25 bushels per acre and graded No. 1 Northern. The crop outlook so far this year is excellent. No damage of any kind has been reported.

The majority of the settlers taking up homesteads in this district this year are Canadian and American. There has been a noticeable increase of settlers from Great Britain.

So great has been the demand for homesteads that it was found necessary, last year, to survey a number of townships west of the Soo line, and homesteads are now being taken up as far west as Willow Bunch, where there is an old half-breed settle-

Owing to the instructions asking for a general inspection of all the homesteads in the district, lists were prepared of all entries granted up to September 1, 1905, except lands patented or lands on which the file showed the duties were being performed. Three homestead inspectors have been employed on this work for the last three months, and up to the present time 1,771 reports have been received, and I am pleased to say that out of this number only 46 have been summarily cancelled, and not one case of a 'blanketed' homestead has been reported. These special inspections, together with the large increase in the general routine work, made it impossible to cope with the work during the regular office hours, so that much overtime has been put in by each member of the staff.

Mr. H. P. Gibson, who for some years has been senior assistant in this office, found it necessary to resign, owing to ill health. This gentleman was a most efficient and painstaking officer. Mr. R. G. Evans has been added to the staff as temporary clerk.

The number of homestead entries granted during the fiscal year was 2.371, an increase of 715 over the previous year.

Appended is a statement of work performed during the fiscal year.

Letters received	19,010
Letters written	17,304
Patents recommended	1,072
Entries cancelled	783
Homestead entries	2,371
Land sales	25
Land scrip locatedacres	240
Timber permits issued	201
Timber seizures	2
Hay permits issued	119
Grazing rents	2
Mining fees	17
Seed grain collections	11
Total revenue	\$30,520.27
_	

Your obedient servant,

R. CLAUD KISBEY. Agent of Dominion Lands.

# No. 4.

# REPORT OF THE AGENT AT BATTLEFORD.

Department of the Interior,

Dominion Lands and Crown Timber Office,

Battleford, August 2, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

Sir,—I have the honour to submit my report for this agency for the year ended June 30, 1906.

The year just ended shows a very material increase in the number of homestead entries made, as seen below:—

1904-5.	1905-6.
Homestead entries. 3,618	Homestead entries. 7,873
Total revenue \$38,752	Total revenue \$80,263

Ever since the opening of spring large numbers of settlers have been daily passing through this place on the way to their homesteads, most of them being largely composed of Canadians and Americans, and many having their complete outfits of horses and agricultural implements. The German colony to the south is also being added to steadily.

The prosperity reported last year still continues. This season so far has been most favourable for the crops, rain having been abundant throughout the district with the exception of the Tramping Lake region, where a deficiency is reported, but not sufficient to cause serious injury. No damage has been done by hail so far.

Last year's grain crop was disposed of at high prices by the farmers. On the other hand the price of beef stock for export was low, and not many were shipped, but the local demand caused by railway construction and incoming settlers made up for this.

The following is a statement of the work performed during the past year:-

Homestead entries	873
Land scrips located	243
	15
Townsite sales	30
	149
	62
	113
Homestead entries cancelled	657
Letters received	
Letters written	

Your obedient servant,

L. P. O. NOEL,

Agent of Dominion Lands.

#### No. 5.

#### REPORT OF THE AGENT AT BRANDON.

DEPARTMENT OF THE INTERIOR,
DOMINION LANDS OFFICE,
BRANDON, MAN., August 15, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

SIR,—In forwarding the annual report for the year ending June 30, 1906, I beg to say the prosperity of the country is steadily increasing, and this will be one of the best years the country has experienced. The acreage in crop is much larger than last. The farmers are going into the different grains and roots, instead of wheat raising exclusively as in former years. Everything has been most favourable; the early spring allowed the getting in of the grain in the proper time; then the rains of May and June made the growth strong and rapid, and there is every prospect of a bountiful and early harvest.

Great attention is being paid to stock raising, many of the farmers importing the best breeds of horses, cattle, sheep and swine. In horses the Clyde seems to have the preference; among the cattle, you will find the Polled Angus, Herefords, Galloways, Shorthorns, Holsteins, Ayrshires and Jerseys; in the sheep, the Shropshires, Cotswolds and Leicesters, with the Tamworths and Berkshires in the swine.

The demand for land increases rapidly. Purchasers come from all parts. The lands held for homesteading are being rapidly taken up by a class of men who make good settlers and intend making Manitoba and the Northwest their homes.

The number of homestead entries granted in this agency keeps decreasing yearly, as with the exception of a few scattered quarters, there is nothing to be obtained, and it is only through the cancellation of an existing entry that a homestead of any value can be secured. The cancellations grow less, the homesteader, being anxious to hold his land, makes every effort to fulfil the required duties, so the number of entries cancelled each year keeps decreasing, showing the advancement of the country.

Each year brings a large immigration apparently of a better class than the previous one; fewer complaints are received, and there is no lack of work for all farm hands and mechanics. The immigration hall here is a great convenience to the newcomers, and gives them comfortable quarters until they obtain work. So far the demand from the farmer is larger than the supply.

The following is a statement of the work performed during the year ending June 30. last:—

Homestead entries granted	162
Applications for patents received	637
Cancellation of entries	119
Letters received	11,504
Letters sent	10,357

I am, sir,

Your obedient servant,

L. J. CLEMENT,

Agent of Dominion Lands.

#### No. 6.

# REPORT OF THE AGENT AT CALGARY.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

CALGARY, July 10, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

SR,—I have the honour to submit my report of the work performed in this office during the year ended June 30, 1906.

The number of homestead entries, 2,082, is a decrease from the previous year of 99. This I attribute to the fact that during the present year settlers have had to go 45 to 50 miles from the railway to obtain entries.

The revenue from lands amounts to \$83,395.21, exclusive of a very large amount paid at head office on account of sales of lands, coal lands, grazing leases, &c., being an increase of \$43,603.82 over the revenue of the previous year.

As the business for the timber and mines branch for this district is also conducted at this office, I may mention that the revenue from this branch amounts to \$17,738.33, which exceeds the amount for the previous year by \$5,940.36. A separate report in connection with the timber and mines branch is being prepared.

The crops never looked better in the history of this country.

The winter was a very good one and stock wintered well on the ranges.

The price of cattle is very low at present, principally on account of the large ranchers being forced to sell owing to lack of range where they have been located for years.

Horses have never been a better price for many years.

The settlers throughout Alberta appear to be doing well and are perfectly satisfied and contented. The city of Calgary is forging ahead at a very rapid pace, and has now a population of about 18,000 people.

The number of people accommodated at the immigration hall here during the year is, according to the report furnished by Mr. James Winn, caretaker, 1,203, but this does not give any adequate idea of the number of people who came into the country. Settlement this season has directed itself northeasterly from Calgary in the Knee Hill country, and directly north of same to township 34, as far east as the Red Deer river, also west of the fifth meridian, townships 30-34, ranges 5 and 6. The immigration into the whole of Alberta has been very large, and the settlers of an excellent class.

I append hereto a detailed statement of receipts on account of Dominion lands.

Attached hereto also find statement of work performed at this office.

Although there has been a slight decrease in the number of entries there has been a very large increase in the number of letters received and written; also applications for patent, timber permits issued, &c.

I have the honour to be, sir,

Your obedient servant,

J. R. SUTHERLAND,
Agent of Dominion Lands.

#### CALGARY DOMINION LANDS AGENCY.

Statement of receipts on account of Dominion lands, for the year ending June 30, 1906.

Homestead entries	\$20,565	00
Payments on account of improvements	3,283	83
Land sales	<b>5</b> 9,217	53
Sundry payments		
Seed grain collections	305	50
	\$83,395	<u></u>

#### CALGARY DOMINION LANDS OFFICE.

Statement of work performed during the year ending June 30, 1906.

Letters written	39,749
Letters received	40,087
Applications for patent received	895
Entries cancelled	$\boldsymbol{971}$
Entries granted (homestead)	2,082
Land sales	183
Half-breed scrip locations	5
Payments on account of improvements	97
Ground rent collections	12
Payments, royalty on sales (timber)	40
Timber permits	922
Timber seizures	37
Hay permits	104
Grazing rent collections	<b>64</b>
Mining application fees	39
Coal land fees	30
Seed grain collections	10
Sundry payments	24

#### No. 7.

#### REPORT OF THE AGENT AT DAUPHIN.

Dominion Lands Office, Dauphin, Man., June 30, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

Sir,—I have the honour to submit the annual report for the Dauphin land district, for the year ending this day.

General prosperity has been enjoyed throughout the district during the year, marked improvement is noticeable in the towns and villages, as well as in the farming districts, business in all lines has been brisk and many new establishments have opened up.

The crops last year were good, and prices fair, not less than 1,200,000 bushels of wheat having been shipped out, and a very considerable quantity manufactured in the local mills; the grades were Nos. 2 and 3 Northern.

i

Coarse grains were grown to a considerable extent more than in the past, and found a ready market for local consumption, being in strong demand for the railway construction and lumbering camps throughout the district.

Considerable attention was paid to mixed farming, though more sheep and hogs could well be carried; and some creameries were established, all of which are doing good business. Industries under this heading could be profitably increased, and will, no doubt, as more lands are cleared.

A number of well-bred stud animals were brought in, and the improvement of stock is marked.

All farm produce has commanded fair prices, the demand being in excess of the supply.

Great improvement has been made in the roads, grading and new bridges having been built, each municipality doing what its means would warrant on these lines, and as all the settled parts of the district are now organized, these works are spread over a large area. Taxes, though somewhat high, were well met.

Settlers have come to us in large numbers, as homesteaders, as well as buyers of wild and improved lands, many transactions in sales having been carried through, some at high values, \$19,000 having been paid for a half-section some 3 miles from Dauphin.

The district to the east of Lake Dauphin has been settled to a considerable extent, owing no doubt to the fact that a branch of the Canadian Northern Railway is shortly looked for, and there is still much good land in that locality for settlement.

Lumbering operations during the past winter were carried on with the usual vigour, though the early break of the roads somewhat curtailed the output, still the regular dealers were successful in taking out average stocks; a very large amount of lumber was taken out on settlers' permits, and close supervision was kept on all operations by the officers of the department, so far as possible. I would suggest that more attention should be paid to such matters, with a view to protecting the timber, which is being cut off at a very rapid rate, and enforcing rigid economy in the manufacture of trees cut, this among irresponsible operators of portable mills evidently not being considered necessary.

The demand for farm labour has been met locally, and owing to the presence of a large number of Galicians, these conditions will most likely obtain for some time; so far there has not been any necessity of bringing in help, though many young men, principally from Great Britain, have secured places with farmers, where they can learn the methods in vogue, preparatory to making a start for themselves.

Railway service has improved to a marked extent, though no new branches have been built, and as a consequence postal facilities have increased.

The general health of the district has been good, no epidemic having visited us, and the various hospitals have been well able to cope with all demands made on them.

I attach a statement of some of the principal items of work, transacted in this office, which compares favourably with former ones.

I am, sir, Your obedient servant.

F. K. HERCHMER,

Agent of Dominion Lands.

Statement of work in the Dauphin office during year ending June	30, 1906.
Homestead entries granted	621
Homestead entries cancelled	<b>222</b>
Improvement collections	24
Timber permits issued	1,386
Hay permits issued	131
Timber seizures	32
Mining locations granted	4
Seed grain collections	27
	7,725
Letters written	5,248
Applications for patent received	268
Number of staff	2
Cash received for Dominion lands account \$8,6	<b>31</b> 20
Cash received for timber and mines \$11,7	02 38
Cash received for miscellaneous \$ 7	<b>67</b> 58
Total cash received	01 16

# No. 8.

#### REPORT OF THE AGENT AT EDMONTON.

DEPARTMENT OF THE INTERIOR,
DOMINION LANDS OFFICE,
EDMONTON, ALBERTA, July 2, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

SR,—I have the honour to submit the annual report of this office for the year ending June 30, 1906.

The city of Edmonton and the whole district are most prosperous. The crop outlook is excellent. The changing of the homestead and timber regulations from time to time to meet the changed conditions is proving very beneficial to the country and the bona fide settlers. The statement given below (taken at random from the weekly returns of homestead entries of this office), shows that the west is getting the very cream of the world's immigration.

Number and nationality of homesteaders making entry during the week ending April 15, 1906:—

Canadians	42
English	37
Americans	35
Norwegians	15
Scotch	14
Austrians	10
	8
Irish	_
Swedes	7
Germans	• 5
Welsh	1
Russian	1
Total	175

i

One hundred and four of these are actual farmers.

The country to the north and west of Edmonton, which can easily absorb 2,000,000 people and has not as yet 2,000 people in it, stands waiting for settlers.

The active and successful immigration work of the past few years should be continued for years to come. More surveys are required. The great Peace River country and the McKenzie River basin will prove to be the '2nd last west.'

The necessity for, and establishment of, new sub-agencies at Daysland, Vegreville, Whitford, Saddle Lake, Lac Ste. Anne, Pembina River, Edison and Athabaska Landing show the great expansion of settlement.

The returns given below speak for the rapid progress and prosperity of the district:—

#### HOMESTEAD ENTRIES AND REVENUE.

	Entries.	Revenue.
1903-4	2,584	<b>\$41,</b> 816 38
1904-5	2,903	43,682 36
1905-6	4,601	70,984 81
SUMMARY OF ACTUAL BUSIN	VESS DONE.	
Letters received		26,978
Letters sent		
Applications for patent		1,384
Homestead entries cancelled		1,302
Hay permits issued		84
Timber permits issued	•	1,393
Homestead entries granted		4,601
Land scrips located		97
Revenue		\$70.094.91

#### Your obedient servant,

A. G. HARRISON,

Agent of Dominion Lands.

#### No. 9.

# REPORT OF THE AGENT AT KAMLOOPS.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS OFFICE,

KAMLOOPS, B.C., July 2, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

Sir,—I have the honour to submit the annual report of this office for the year ending June 30, 1906.

The revenue collected at the office is practically the same as during the previous year, but if the collections at the head office be taken into consideration there is an increase of fully 50 per cent.

A number of settlers have squatted upon unsurveyed lands in townships 17, 18 and 19, range 17, west sixth meridian. The prompt action of the department in having the land surveyed will enable their claims to be adjusted in the near future. The prospects for an abundant harvest are bright. The snowfall during the past winter

was light, and many feared a light crop in consequence. Rain, however, in abundance came to the rescue and a good crop is now assured.

The following is a summary of the work done during the year:-

Letters received	5,800
Letters sent	4,007
Homestead entries granted	79
Homestead entries cancelled	42
Applications for patent received	47
Number of acres sold	3,287
Revenue collected	\$17,818.05

All of which is respectfully submitted.

Your obedient servant,

JAMES BANNERMAN,
Agent of Dominion Lands.

#### No. 10.

#### REPORT OF THE AGENT AT LETHBRIDGE.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

LETHBRIDGE, ALTA., July 10, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

SIR,—I have the honour to submit for your consideration this office annual report for the year ending June 30, 1906.

I have much pleasure in stating that the prosperity of Southern Alberta is continuing and settlers in this part of the province have great faith in its future possibilities. Crops are at present looking well, due to the splendid rains during May and June, and the yield this year should be large. There is a much larger area of land under cultivation this season than ever before. This year's hay crop seems to be plentiful.

Settlement is reaching out in every direction, and one of the requirements to complete the settlement in the west is more railways.

Large tracts of lands have been purchased throughout this district from the railway and irrigation companies, and the purchasers seem to have little difficulty in disposing of same to intending settlers. A large percentage of the settlers locating in Southern Alberta are actual farmers from the United States, and should make a success of farming in this country.

Fruit growing should develop into one of the industries of this part of Alberta and at present small fruits are grown with success.

While the homestead entries for the Lethbridge agency are not quite as numerous as last year, the work of the office has increased materially and has been disposed of satisfactorily, although additional office accommodation is very necessary.

The entries of homesteaders who are not performing their duties are being cancelled in large numbers, after the entrant has been given plenty of time to defend himself, if he desires. These lands are rapidly taken up by people on the ground who desire homesteads in suitable localities.

The revenue of the timber and mines branch, as well as the land branch has increased. As a great deal of the timber business for this district is transacted through 25—i—2½

the Calgary office, the revenue of the branch here is much smaller than it would be were the business pertaining to same done here. A very large percentage of the grazing rental is paid direct to the department, and therefore the amounts do not appear in my returns.

The staff of this office has worked faithfully, and is deserving of favourable mention.

Below is submitted a partial list of work performed during the past year:—

Letters received	23,290
Letters written	19,370
Homestead entries granted	1,751
Homestead entries cancelled	900
Applications for patent received	598
Payments account sales	245
Townsite sales	9
Timber permits	<b>5</b> 99
Timber seizures	33
Hay permits	101
Grazing rents	112
Mining fees	83
Coal fees	23

Your obedient servant,

J. W. MARTIN,

Agent of Dominion Lands.

#### No. 11.

#### REPORT OF THE AGENT AT MINNEDOSA.

DEPARTMENT OF THE INTERIOR,
DOMINION LANDS OFFICE.

MINNEDOSA, July 3, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

SIR,—I have the honour to submit my report of the work performed in this office during the year ending June 30, last.

Homestead entries granted	259
Letters received	5,073
Letters sent	3,595
	204 -
Hay permits issued	155
Timber permits issued	224

From the above it will be seen that the homestead entries granted in this district during the past year are in excess of those granted during the previous year, and that the ordinary work of the office is much the same as in previous years. This being one of the smallest and oldest settled districts, the number of homesteads available for entry is small as compared with the newer and larger districts further west, and although we have had numerous inquiries for homesteads the greater number of those making such inquiries have gone to those districts where larger areas of homestead lands are available and open for settlement.

The crops last year were good and the prospects for similar or better and larger crops this year most promising. The pasturage too is excellent, and those who raise cattle will benefit largely thereby. Indeed a wave of prosperity is sweeping over the country and many of the older settlers who bravely faced the trials and privations incident to the early settlement of the country are now reaping a rich and well-deserved reward.

One of the strongest evidences of this prosperity is the rapid increase in the value of land. A few years ago purchasers were scarce, but now investors are anxious to obtain lands at prices which a few years ago would have been considered as fabulous.

Your obedient servant.

JOHN FLESHER,

Agent of Dominion Lands.

#### No. 12.

# REPORT OF THE AGENT AT NEW WESTMINSTER.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS OFFICE,

NEW WESTMINSTER, B.C., July 3, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

SIR,—In accordance with the departmental instructions, I have the honour to submit the report of the transactions of this office for the year ended June 30, 1906.

As a preliminary statement, permit me to recall the fact that the Dominion lands office in British Columbia was opened very soon after the passing by the British Columbia legislature, on December 19, 1883, of the 'Settlement Act' so called; and that although surveys in the Dominion belt have been vigorously prosecuted ever since, yet, owing to the rugged character of much of the belt, many gaps were continuously calling for delayed work.

Smaller settlements could not be overtaken in isolated localities until after the chief governing lines were first laid down. Contact with provincial surveys of the early days required careful handling. As a consequence, the granting of entries, and the closing up of transactions needed patience on the part of the people on the lands, as well as the officials administering.

In the spring of 1890, the office at Kamloops was opened, and relieved the pressure of correspondence as to the eastern part of the belt, and operations followed surveys. Now, however, several cases of long waiting can be adjusted, as other business permits, and some progress was made in this respect during the year that has closed. Many others are ripening for disposal at an early date.

To go into details on my part would be lengthy, but I may express what is generally recognized, that I am the only one left in British Columbia in connection with these offices from the opening, in 1883. I have been familiar with nearly all of the old field notes of lands dealt with before the transfer of the belt to the Dominion and with the history of the belt since that time. It is, therefore, impossible that I can escape numerous inquiries as to matters of surveys and transactions, and equally impossible for me to evade response. I am satisfied, however, that this part of my work has been good service, averting many disputes and causes of dissatisfaction. The actual numbers of book entries of finished transactions form no criterion of the extent of the duties overtaken here. I may venture to say that much of this is true of the office at Kamloops as well. I have good reason to feel that the district is developing in a healthful manner in the increase of settled areas, and the comfort of the people.

There is one great desideratum—the dyking of the Sumas valley. As it is, the New Westminster district is badly cut in two portions. The dyking of that land would mean accelerated progress for the whole district.

A summary of the monthly schedules sent to your office shows:-

Letters received	2,068
Letters sent, besides circulars	1,890
Homestead entries	29
Applications for patent—	
(a) Recommended	5
(b) Waiting for inspections	13
Entries cancelled	5
Total receipts	\$2,707.42
Total contingent expenditure	\$196.20

Respectfully submitted,

#### JOHN McKENZIE,

Agent of Dominion Lands.

#### No. 13.

#### REPORT OF THE AGENT AT PRINCE ALBERT.

DOMINION LANDS OFFICE,

PRINCE ALBERT, July 4, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

SIR,—I beg to submit the report of this agency for the fiscal year ending June 30, 1906. The revenue from all sources was \$45,819.77, being an increase over last year of \$1.591.21.

The number of homestead entries for the year shows a decrease of 250 as compared with the previous year, but this is owing to the fact that the bulk of the surveyed land of this agency is now taken up. The year just closed has been a very prosperous one, and the development of all branches of industry in this district has been phenomenal. The bountiful harvest of last year, together with the high prices ruling for wheat has had its effect, and this, together with the large influx of desirable settlers, and with the vast sums expended by the different railway systems in pushing lines through the country, have given an impetus to all branches of trade beyond the hopes of the most sanguine, and I see no reason why this prosperity should not continue, as the reports from all sections of this district of the present crop prospects are the most favourable in the history of the country, and capital is steadily coming in from outside countries for the purpose of developing all natural resources, which are varied and many. I am pleased to report an increased demand for scrub land, as the settlers are beginning to realize that this land when once cleared is practically inexhaustible, and as we have a very large extent of this class of country to the north and northeast of this city a portion of which is now being surveyed, I look for a very considerable influx of settlers this coming season to fill up these lands. It was thought until just recently that the north Saskatchewan river formed the northern boundary of the arable land, but the settlements of Sturgeon Lake and Shellbrooke have proven this estimate of the capacity of this northern country to be entirely wrong, and I am of opinion that at least 5,000 settlers can be placed to the north and east of this point. The completion of the Canadian Northern Railway has marked a new era in the history of this

city and district, and has filled a long-felt want of the settlements of the famous Carrot River valley to the south and east of us, and as we now have two great railway systems competing for trade, the settlers are bound to reap the benefit. The following figures represent the work done at this office during the year, and in closing I beg to express my appreciation of the efficient work done by the staff under my charge.

Total revenue, including the timber and mines branch	\$45,819.77
Applications for patent	627
Hay permits	69
Timber permits	1,352
Homestead entries granted	1,888
Homestead entries cancelled	747
Letters received	11,474
Letters sent	11.548

#### Your obedient servant,

R. S. COOK,

Agent of Dominson Lands.

STATEMENT of Receipts on Account of Dominion Lands at the Dominion Lands Office, Prince Albert, Sask., for 12 months ending June 30, 1906.

Dominion	a 10 :	
Lands.	Seed Grain Advance.	Total.
\$ ets.	\$ cts.	\$ cts.
2,794 40 2,167 85 1,717 90 1,241 00 1,688 45 1,757 25	108 65 60 08 56 72 81 20	2,903 05 2,227 93 1,774 62 1,241 00 1,769 65 1,757 25
	THE STATE OF THE S	
625 50 682 50 2,860 92 3,396 30 2,797 72 2,938 50	188 35 65 05 78 10 168 75	625 50 682 50 3,049 27 3,461 35 2,875 82 3,107 25
	2,794 40 2,167 85 1,717 90 1,241 00 1,688 45 1,757 25 625 50 682 50 2,860 92 3,396 30 2,797 72	2,794 40 108 65 2,167 85 60 08 1,717 90 56 72 1,241 00

Dominion Lands Office, Prince Albert, July 4, 1906.

R. S. COOK,
Agent of Dominion Lands.

# No. 14.

#### REPORT OF THE AGENT AT RED DEER.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

RED DEER, July 14, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

Sir.—I have the honour to submit my annual report for the year ending the 30th ulto. Since my last report this district has made prodigious progress in every respect. The influx of settlers has been largely in excess of any previous year, and the standard of excellence of the immigrant, for which this district is justly noted, has been maintained. The large majority of settlers coming to this district during the past, as in previous years, are from the United States, who bring with them not only valuable experience, but ample means to commence farming operations on a scale superior even to those employed in older communities.

The yield from all cereals was very satisfactory, and especially that of winter wheat, which in many cases went as high as 55 bushels to the acre, of excellent quality. This wheat found a ready sale in the home market at prices ranging from \$1 to \$1.30 per bushel, and was used for seeding purposes. About 50 per cent more ground was sown to winter wheat last season than the previous one, and a fair average yield is confidently anticipated, although much of it was winter-killed, especially on high ground, owing to lack of covering, there being very little snow last winter.

The cut-worm has done considerable damage through this district this year, more especially in gardens. In some cases, however, I have been told that it has laid waste whole fields of early grain, especially barley. There is, however, an antidote for this pest, as where a mixture of bran, Paris green and molasses has been judiciously applied, comparatively little or no damage has been done by them.

Owing to extremely dry weather in the early spring, forest fires were very prevalent, and did much damage; many farm-houses, barns, much fencing, and a large quantity of hay, which had been kept over, being destroyed; much valuable timber was also consumed, and the pity of it is that many of these fires, from all I can learn, were started through pure carelessness. The cattle industry throughout this district during the past season has been very satisfactory, and although much of the range lands were burnt over in the spring, there will be no scarcity of feed, and an ample crop of hay is assured, owing to frequent and copious rains during the summer. Large numbers of fruit trees have been set out during the past two years, and last year Mr. Guissinger, living about 12 miles east of Red Deer, had five apple trees, out of eight planted, bearing fruit, and he informs me that the eight trees are covered with fruit this year. I may say that these are standard apple trees.

A flour mill, with a capacity of 150 barrels a day, has been luilt in Red Deer since my last report. It has been running steadily every day since early spring, and as the company buy all good wheat offered for sale, paying the highest market price, the farmers are encouraged to raise more wheat, and find the mill a great convenience in other respects. The creameries throughout the district are well patronized, and are kept running to their full capacity, several new ones being built since my last report.

The following statement shows the business transacted in the office during the year:—

	Number.	Revenue.
Homestead entries	3,859	<b>\$38,525</b> 00
Cancellations	815	
Improvements	112	3,033 75
Land sales	26	1,746 09
Sundries		90 00
Timber permits	481	229 26
Timber seizures	3	<b>105 40</b>
Hay permits	33	258 80
Grazing	13	148 58
Coal lands		249 20
Revenue from sale of Indian lands		3,265 57
Total revenue		\$47,651 65
Letters received		
Letters written		
Applications for patent		616
Entries cancelled		924

I am, sir,

Your obedient servant,

W. H. COTTINGHAM,

Agent of Dominion Lands.

#### No. 15.

## REPORT OF THE AGENT AT REGINA.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

REGINA, SASK., August 21, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

SIR,—I have the honour to submit my report for the year ending June 30, 1906. Statement of work performed as follows:—

nii or work porzormou do ro	Number.	Revenue.	
Homestead entries	11,942	\$118,800 (	00
Improvements		7,761	77
Land sales		16,777	47
Sundries		265	20
Timber permits	1,316	493 ′	70
Timber seizures	4	14 \$	55
Hay permits	290	771 9	20
Grazing rents	21	215	36
Mining fees	1	5 '	70
School lands sales		972	68
Seed grain collections	76	2,859	43
Total		\$148,937	60

Letters received	74,938
Letters written	64,950
Applications for patent	1,948
Entries cancelled	4,191

The work done in this office during the past year shows an increase of nearly 50 per cent, and the staff have been kept busy night and day trying to cope with it.

The special work which has been performed by the homestead inspectors since April last, increased the work and kept three clerks busy attending to it alone.

The new regulations issued regarding inspections and homesteading in person,

have proved very satisfactory and for the best interest of the country.

The crop prospects for this year were never better, and the season is about one month earlier than any other year.

Your obedient servant.

L. RANKIN,
Acting Agent of Dominion Lands.

#### No. 16.

#### REPORT OF THE AGENT AT WINNIPEG.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

WINNIPEG, September 1, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

SIR,—I have the honour to submit the annual report upon the business of the Dominion lands and Crown timber and mines offices of the department at Winnipeg for the twelve months ended June 30, 1906.

The total revenue from all sources amounted to \$170,675.99, of which sum \$55,330.50 was received from lands and \$115,345.43 on account of timber, hay and mines.

#### LANDS BRANCH.

In no previous year has such demand been made on the office for general information from intending settlers seeking homestead land, and knowledge of the country in its different parts. Special attention was given to this work which proved of great advantage to these people, which was gratefully acknowledged by not a few. The three-sheet map issued by the department showing marked thereon the lands disposed of, and which indicates the trend settlement is taking was found a useful guide in connection with this work.

The number of homestead entries granted during the year was 761, a gain in number over the preceding year of nearly one hundred.

The lands remaining for disposal as homesteads in the Winnipeg district are almost wholly wooded and not of a class inviting to Canadians and settlers coming from Great Britain and the United States who prefer the open prairie land of the west.

The entrants for homesteads were, for the most part, natives of Austria (Galicians) and Scandinavia (Icelanders and Swedes). The Galicians and Swedes have proved themselves to be good pioneers, and where they possessed sufficient capital at the start to enable them to live upon their homesteads and employ their full time in making improvements thereon, excellent showing has been made.

For the most part, however, they are without the necessary capital to do this, and are obliged to find outside employment to support themselves and their families. While the homesteader is so engaged the family upon the homestead do more or less in making improvements thereon, which seldom goes beyond a garden patch and some fencing.

The work these men follow is chiefly at railway construction, and in the cities and towns as common labourers.

The life led in their wanderings has a tendency to unfit them for settling down upon their farms and making them a chief means of support.

The trend of settlement continues northward between Lakes Winnipeg and Manitoba, which district is being opened up in that direction by the extension of two branch lines of the Canadian Pacific Railway from Teulon and Winnipeg Beach, and the Canadian Northern Railway from Oak Point to Lily Bay. In the interests of settlement the surveys in this district should be extended northward between the two lakes to the Little Saskatchewan river. The tract also lying between Whitemouth station and the eastern boundary of the province traversed by the Canadian Pacific Railway, and that by the Grand Trunk Pacific should be subdivided and made available for settlement.

#### SQUATTING.

For some years past considerable difficulty has been met with over persons squatting upon lands in advance of survey, and upon those surveyed which are vested in the province and in the University of Manitoba. During the year steps were taken to secure to these persons their holdings. By an arrangement reached with the provincial government and the university council this has, to some extent, been accomplished, other land being accepted in exchange for those squatted upon. Squatting upon Dominion lands is not authorized by the department, and it should not be permitted to take place. When a squatter is allowed to remain upon lands not available for home-steading, and to get himself firmly established by improvements made thereon, action cannot be taken to dispossess him without inflicting a hardship. If the department was advised by its officers immediately squatting took place, and the case promptly investigated and action, when necessary, taken to force a removal, other means failing, it would be to the public interests and not bear heavily upon the squatter. At the present time there are a large number of cases to be dealt with of squatters upon valuable timber lands who have made substantial improvements thereon.

#### AGRICULTURAL ADVANCEMENT.

While it is too early to give accurate figures representing the grain crop for the present year, it is a known fact that it will bulk largely in excess of any previous year. From statistics published by the provincial government of Manitoba the area planted in grain was 4,803,630 acres, and under other crops 108,805 acres. The acreage exceeded that for 1905 by 655,856 acres. It is confidently expected by the best authorities that wheat will average nineteen bushels to the acre, which is a little under earlier expectation, the depreciation being caused by the occurrence of hot winds during the early part of August. Other cereals were also likewise affected, to what extent will not be known until threshing returns are received.

The following estimate for 1906 of the acreage in crop of under-mentioned cereals was prepared from information obtained from the Provincial Department of Agriculture, viz.:—

	Acres.
Wheat	3,141,537
Oats	1,155,961
Barley	474,242
Other areas under cultivation are:—	
Flax	
Rye	4,195 2,5 <b>5</b> 9
Peas	2,559
Corn	$6,\!246$
Brome	23,864
Rye grass	13,251
Timothy	33,646

The dairy products of Manitoba for the year ending December, 1905, were:-

Butter, 4,160,956 lbs	
Making a total value of	\$896,937 64

No statistics are available since December, 1905.

The year's yield of potatoes up to that date was 4,759,646 bushels, the average yield per acre being 187 bushels.

For the same period the poultry disposed of by Manitoba farmers was: turkeys, 40,099 lbs.; geese, 60,759 lbs.; chickens, 521,325 lbs.

The average yield of the three principal cereals last year was: wheat, 21.07 bushels; oats, 42.6 bushels, and barley, 34.2 bushels.

The estimated amount expended in new farm buildings was \$3,944,101, and the number of threshing outfits in operation in the province was 2,465.

No case of failure on the part of a homesteader in making a comfortable living in Manitoba has come to my notice. A general contentment prevails and property is gained very much in degree as it is worked for.

For a radius of 40 miles about Winnipeg the settlers find an active market in the city for the sale of dairy products, poultry, eggs, &c., and many take advantage of selling direct, avoiding the commission man, thereby obtaining a higher price for their goods.

# MANITOBA AGRICULTURAL COLLEGE.

The Manitoba legislature passed an Act in the year 1903 for the establishment within the province of an agricultural college. A site was secured comprising 117 acres fronting on the south side of the Assiniboine river in the parish of St. James, acquired at a cost of \$115,000.

The college buildings are handsome structures, built of brick and stone at a cost, with equipment, of about \$300,000. The opening for practical use took place in the month of February last.

The course of study comes under the following heads:-

#### Agriculture.

Soil physics, soil cultivation, summer fallowing, soil fertility, plant growth, plant disease, crops, weeds, plant breeding and improvement and farm management.

### Animal Husbandry.

Breeds, judging, breeding, feed and feeding, care and management.

# Veterinary Science.

Anatomy, materia medica, pathology.

### Farm Dairying.

Milk testing, care of milk and manufacture of butter and cheese.

The other subjects for study in all their phases are: Horticulture, farm forestry, entomology, poultry, farm machinery, farm mechanics, English and mathematics, economics of agriculture and parliamentary practice.

The college opened for a course of eight weeks in February last, with an attendance of twenty-six students. The formal opening is advertised to take place on November 6 next, when it is expected that seventy students will be enrolled. It is considered by the leading agriculturists that the government was wise in its choice of a principal for the college in the appointment of Mr. W. J. Black, late Provincial Deputy Minister of Agriculture.

### TIMBER, GRAZING AND MINES.

It will be seen from statements 'A' and 'B,' appended, that the revenue for the year derived from timber, grazing, hay and mines, from this agency was \$115,345.43, that from the same sources for the previous year was only \$69,835.53. The increase came about through a greater number of timber berths being sold by tender, from which the department received \$50,318.36 as against \$8,817.31 for year ended June 30, 1905.

Statement 'B' gives the names of the holders of timber berths within the agency that are being operated upon, and the extent thereof based on the production at the mills.

## LUMBER SALES.

Following the customary practice, I give herewith a statement of the lumber sales for the year within this agency, which includes all of Manitoba, and part of Saskatchewan. The figures were compiled from data furnished by the Department of Customs at Ottawa, as to importation of products from the United States, and from lumbermen, representing the different interests, and from the railway companies. Care was taken to insure correctness, and while the figures cannot be vouched for as an accurate showing, they are as close as it is possible to get them.

For the purpose of comparison is given also the amount of lumber sold during the

preceding year.

From mills located in Ontario west of Lake Superior—

	1904-5. Ft. B.M.	1905-6. Ft. B.M.
Canadian logs	82,000,000	86,000,000
American logs		93,000,000
British Columbia—		
Manufactured	116,000,000	130,000,000
Dominion lands—		
License	40,385,368	50,755,905
Permit		18,000,000
Sawn lumber imported from the United	342,885,368	395,755,905
States	37,015,821	16,800,849
	379,901,189	412,556,754

# 6-7 EDWARD VII., A. 1907

It will be noted while a large increase in the sales is shown, that the importation of American lumber has fallen off upwards of 50 per cent.

Lumber prices to dealers were considerably higher this year, as indicated by the statement hereunder:—

<b>TO:</b>	7	^
Pine	ดทส	11r

	1905.	1906.
Dimension lumber	<b>\$16</b> to <b>\$23</b>	\$20 to \$26
Fir for interior finishing	\$30 to \$40	\$30 to \$40
Flooring, siding and ceiling		\$25 to \$33
Ship lap and common boards		<b>\$18</b> to <b>\$23</b>
Spruce—		
Dimension	\$16 to \$18	\$18 to \$20
Siding, flooring, ceiling	\$17 to \$18	\$20 to \$22
Ship lap and common boards	<b>\$16</b> to <b>\$18</b>	<b>\$17</b> to <b>\$20</b>
Lath	\$2.75 to \$3.75	\$3.25 to \$4.25
Shingles	\$2.00 to \$2.50	\$2.00 to \$2.85

The rise in price was due to various causes, mainly to the large demand for rail-way construction material. Another influence was the marketing of a proportion of the cut of the coast mills at San Francisco, which point was made temporarily a free port of entry, by the federal government at Washington, on account of the destruction caused to the city by earthquake. It may be pointed out also that the cost of production has increased. Labour is higher and also equipment.

### FUEL.

The figures given hereunder give approximately the sales of coal to consumers in the provinces of Manitoba and Saskatchewan for the year ended June 30, 1905, and those of the year 1905-6.

-		1904-5. Tons.	1905-6. Tons.
	anthracite		58,000
"	bituminous	11,000	60,000
Canadian	anthracite	2,000	8,000
"	bituminous (Galt)		66,000
"	" (Tabor)		27,000
"	lignite	96,000	96,126
		233,000	315.126

The price at which sold was about the same through the two years, namely, \$10.50 to \$11 for anthracite, \$7 to \$8.50 for bituminous and \$4 to \$5 for lignite.

### CORDWOOD.

The sales of cordwood fell short of last year by about 25,000 cords, the amount being estimated at 115,000 cords. This is accounted for by the fact that a number of the large consumers of fuel in Winnipeg during the year substituted coal for cordwood for steam purposes.

The price for cordwood fluctuates with the seasons, the average, however, has kept much the same in the last three years, \$4.50 to \$5 for poplar; \$5.75 to \$6.50, tamarac; \$4.75 to \$6, spruce, and \$5 to \$5.50 for jack pine.

During the year 19,815 cords of wood were brought in from the United States for the Winnipeg market. This amount is included in the total, 115,000 cords, approximated to have been sold during the year.

There is an increasing demand to acquire rights to cut timber upon the public domain. The revenue paid in bonuses accepted with tenders by the department for

timber berths during the year in the Winnipeg district amounted to \$50,318.36. It is not known to what extent that sum represents the true value of the standing timber acquired in their grants, a government estimate of the amount of timber in each case not having been obtained.

### FOREST FIRES.

Fires during the year did much damage to the timber in different parts of the district, notably in the Turtle Mountain timber reserve, on the east shore of Lake Winnipeg, between Bad Throat river and Rice river, and north of the Saskatchewan river, in the neighbourhood of Nawew (Beaver) lake, and also Moose lake.

### HAY.

The number of permits to cut hay upon Dominion lands and school lands exceeds that of the previous year. For season 1905 there were issued 646, and for the present year 664.

The amount of hay secured this year will approximate 16,000 tons.

Care is taken to see that hay cut under settlers' permits is all used in feeding their own stock, and that none of it is bartered or sold, the policy of the department in the distribution of the hay crop upon the lands of the Crown being to only authorize cutting to take place in each instance in extent to meet the actual requirements of the permittee.

The ruling trade price during the year for wild hay was \$6.50 per ton and for timothy and cultivated grasses \$10 to \$11.

#### MINING.

During the year fourteen mining claims were recorded, of which six were iron, six gold and silver, one mica and one plumbago.

Free miners' certificates to the number of eighty-one were issued.

Considerable speculation exists as to the value of the country to be traversed by the extension of the Canadian Northern Railway from the Saskatchewan river to Fort Churchill. Several prospecting parties have been in the field, some of whom have returned, reporting having found nothing of sufficient value to warrant staking.

Those mines that are being held under certificate are only being developed to the extent required under the regulations to retain them in good standing.

#### GYPSUM.

The Manitoba Gypsum Company (Limited), owning extensive gypsum deposits at Lake St. Martin, secured from the government, have experienced a most successful year. They had the misfortune to lose their mill on Lake Manitoba by fire in the month of July. Notwithstanding, the output of plaster, finishing plaster and plaster of paris, exceeded that of the previous year by 6,000 tons.

In erecting new mills it was decided to place them in Winnipeg. Construction is being proceeded with, and by October will have been completed and the mill in operation. The mills will have a capacity of 200 to 250 tons of finished product in twenty-four hours. The selling price of hard wall plaster manufactured by this company marketed during the year was from \$10 to \$15 per ton, f.o.b. Winnipeg.

## WATER-POWERS.

The various water-powers on the Winnipeg river, both developed and undeveloped, have attracted an unusual amount of attention recently. The practical completion of the magnificent works of the Winnipeg General Power Company, and the completion of their system of transmission to Winnipeg, have marked a notable era in power

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development. The entire street railway and electric light systems of the city are now being supplied from that source. The cost of construction and completion of this work is given as over \$3,000,000. The citizens of Winnipeg, however, recently by an overwhelming vote declared in favour of a by-law authorizing the expenditure of some \$3,000,000 in securing a city-owned power, either by construction or by purchase. After elaborate surveys and investigations the engineers engaged by the city recommended the Point du Bois falls as the one most suitable and available. Other power proposals which have kept themselves prominently before the public during the past year are the Silver Falls and Great Falls Power Companies, while others of more or less importance are talked of or projected. With cheap power and ample supply to meet all demands brought to Winnipeg it would quickly take a place among the cities of Canada as a manufacturing centre.

### RAILWAYS.

Possibly in no province in the Dominion has railway construction been so extensively carried on as in the province of Manitoba during the past few years.

The Grand Trunk Pacific Railway has under construction from Winnipeg to the western boundary of the province, 215 miles which it is expected will be completed early in next year. Mr. J. D. McArthur, under contract with the federal government, is pushing the construction of the line from Winnipeg eastward to the boundary of Ontario, a distance of about 75 miles. A full force is at present engaged on the work, and it is confidently expected that the line will be finished during the coming year.

The Midland Railway is building from the international boundary line to Morden, a distance of 15 miles; from Gretna to Portage la Prairie, 85 miles, and from the international boundary to Brandon, a distance of 100 miles. These lines, it is stated, will be completed also in the year 1907.

The Canadian Pacific Railway Company report that their work of construction during the year is composed of the Lauder extension, 20 miles; the Reston extension towards Wolseley, 18 miles; the Winnipeg Beach extension to Gimli, 9.1 miles; the extension of the Teulon branch north, about 20 miles; the cut-off from Winnipeg to Molson, 36 miles; and the double tracking of the main line east from Molson to the Ontario boundary, 56 miles, a total of 159.1 miles.

The Canadian Northern Railway has also had a busy year in railway construction, as is shown from the following list furnished by the resident engineer:—

Ridgeville branch	47.49
Dundee branch	18.37
Lines connecting Oak Point branch with Winnipeg.	7
Carman branch	78.59
De Lourdes spur	2.64
Carberry-Brandon branch	25 - 57
Brandon-Regina	10
Virden	37 -46
Rossburn	51 10
Oakland	40
	40

From this showing it will be seen that no less than 969:13 miles of railway will have been constructed in the province during the years 1905 and 1906.

# Respectfully submitted,

E. F. STEPHENSON,

Agent of Dominion Lands.

# SCHEDULE A.

				enc	ded June	30, 1906.						
Month			Тімвек	Durs.			GRAZING	LANDS.	Hay I	ANDS.	Mining	Total.
Month. Bor	Bonus.	Ground Rent.	Royalty.	Timber Permits.	Seizures.	School Lands.	Dominion Lands.	School Lands.	Dominion Lands.	School Lands.	Fees.	Total.
1905.	\$ cts.	\$ cts.	\$ cts.	\$ ets.	\$ cts.	\$ cts.	\$ ets.	\$ cts.	\$ cts.	\$ ets.	\$ ets.	\$ cts.
y yust		444 90 543 88 35 52 994 40 162 72	1,254 60 2,295 56 287 13 2,134 02 1,672 67 1,460 65	1,428 64 740 19 2,994 19 179 87 1,894 44 4,743 16	330 61 2,019 70 181 51 98 25 1,595 53 565 22	312 89 25 75 96 49 256 43 29 50 195 75	1 00	134 30  28 60 9 20	82 65 41 10 4 00 4 50  5 00	204 20 56 95 5 20 2 70 5 10 3 50	197 50 105 00 57 50 521 00 3 50 17 00	4,396 24 5,828 13 3,662 54 4,191 17 5,392 06 6,999 48
1906.  uary		5 20 340 44 1,849 30 2,672 20 455 21	2,264 11 515 61 2,218 35 1,404 83 86 48 399 25	3,824 01 3,050 76 2,264 68 284 53 1,978 69	374 04 1,686 20 767 75 25 00 47 50	139 75 247 75 43 25 25 25 168 42	4 45 0 60	57 60 19 20 48 00	0 05 219 80 104 00	2 50 3 20 403 80 255 50	12 00 13 00 5 25 17 25 84 25	6,681 16 5,535 02 5,691 57 4,229 76 5,434 99
е				1,975 21	517 09	393 93		86 00	96 25	140 90	149 25	4,213 09

E. F. STEPHENSON, Crown Timber Agent.

6-7 EDWARD VII., A. 1907 SCHE

Showing Quantity of Lumber, &c., Manufactured (and sold) at Saw Mills Oper

Name.	Location of Mill.	Location of Limit.	Lumber manufac- tured.	Lumber sold.	Lumber on hand.
Theo. A. Burrows. Bank of Ottawa. Halli Bjornson Jefferson Caverly. Dauphin Lumber Co. Frank L. Engman Thos. Fulton. Gregg & Perrin John Hanbury. J fferson & Miller J. D. McArthur Peter McArthur Jessie Mackie. Mackenzie, Mann & Co J. H. McClure. William Peden. C. G. Pennock. William Robinson. Ritchie Bros Red Deer Lumber Co.	Grandview & Garland Mafeking Loclandic River Bowsman Scandinavia Tp. 38—R. 5 W. 2.  Brandon Tp. 20R. 1 E. Lac du Bonnet. Winnipegosis. Greenbush River. Mistatein Tp. 19 R. 2 E 1. Rossburn Selkirk. Ochre River Red Deer Lake	Mafeking Icelandic River Tp. 38 R. 29 W. 1. Riding Mountain Tp. 19 R. 18 W. 1 Tp. 38 R. 5. W. 2 Tp. 40 & 41 R. 2 & 3 W 2 Duck Mountain West of Lake W'peg. Winnipeg River Lake Winnipegosis Greenbush River Etoimami River Tp. 19, R. 2, E. 1. Riding Mtn. Lake of the Woods Lake Winnipeg. Ochre River E. Saskatchewan	Ft.  320,859 12,051,959 3,183,223 115,000 1,771,000 19,300 100,000  6,863,146 507,714 3,284,637 2,658,655 184,795 252,837 417,840 270,259 1,740,247 24,265 10,079,333	Ft. 63,048 16,768,109 2,301,308 118,000 118,000 202,490 21,900 6,210,963 500,576 2,912,851 1,962,002 184,795 931,594 302,000 330,768	257,811 1,921,408 2,111,501 115,000 803,000 2,980,307 190,536 868,554 1,350,000 1,008,497 265,340 39,491 697,111 70,496 5,754,023
Josia Rutley	Riding Mtn	Riding Mtn W. side Lake W'peg. Riding Mtn Rosseau River Lake Winnipeg Tp. 36 R. 24 W. 1	493,461 230,120 1,667,111 2,000,000 1,729,283 1,227,652 259,889 105,000 51,557,585	492,395 303,975 1,183,245 707,493 355,274 2,368,652 310,441 35,000 50,755,905	1,066 111,145 2,044,598 3,081,198 1,484,009 280,494 49,448 70,000

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SESSIONAL PAPER No. 25 DULE B.

ating under Government License in the Winnipeg Crown Timber Agency.

Shingles manufactured.	Shingles sold.	Shingles on hand.	Lath manu- factured.	Lath sold.	Lath on hand.	Railway ties manufactured.	Railway ties sold.	Remarks.
Cds.	Cds.	Cds.	М.	М.	М.	Pes.	Pcs.	
475,250 100,000 575,250		100,000	4,039,550 101,250 543,100	2,219,800 84,950 493,450	2,907,000 52,650		525 43,349	Berth cancelled.

E. F. STEPHENSON,

Crown Timber Agent.

6-7 FDWARD VII., A. 1907

### REPORT OF THE AGENT AT YORKTON.

### No. 17.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

YORKTON, July 17, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

SR,—I beg to submit for your consideration the annual report of this office for the year ending the 30th ultimo.

The number of homestead entries granted for the year was 4,161, a decrease of

310. The nationality of the homesteaders was largely English-speaking.

During the year four homestead inspectors were engaged on special work, inspecting each quarter-section for which entry had been granted previous to September 1, 1905, and not patented. This inspection has failed to disclose 'blanketing' of homesteads. So far 260 entries have been summarily cancelled. Against 50 per cent of these entries, ordinary cancellation proceedings had already been instituted.

A special inspection of the Doukhobor colonies and enumeration of these settlers were also inaugurated during the winter months, the findings of which are now subjects of action. These special inspections seriously impeded the ordinary business of the office, involving a vast amount of clerical work and necessitating the full staff working after office hours during the winter and spring months.

A sale of school lands by public auction was held last November at Yorkton and Saltcoats, and farmers generally availed themselves of this opportunity to acquire more land.

The past year has witnessed the complete evolution of the district from stock raising to grain growing. The country for miles around Yorkton is occupied by farmers who counted crop acres by hundreds. One million and a half bushels of grain were exported last year from Yorkton alone. Threshermen show thirty, thirty-five and thirty-seven bushels of wheat per acre to be common. Prices were good, and thus throughout the district, farmers are accumulating bank credits. The coming of strong healthy young men from Great Britain has kept in the background to some extent the under supply of farm labour. More of these men are wanted, otherwise, seedtime and harvest must inevitably become a serious problem to the large farmer.

Nearly one thousand applications for patent were recommended, and of these a large percentage was made by Galicians, who in most instances, had brought considerable more land under cultivation and done other improvements than is required by law, which demonstrates that these people must be recognized as a potent factor in the agricultural progress and prosperity of western Canada.

The prospects for the present year are unrivalled. Unless untoward events happen, such as hail or prolonged rain storms during harvest, a fair estimate of the grain sent from this district may be set at five million bushels.

The following is a summary of the work transacted:

Homestead entries	4.161
Sales	115
Scrip located	1,920
Timber permits	569
Hay permits (Dominion lands)	30

Hay permits (school lands)	84
Letters received	46,340
Letters written	29,157
Applications for patent	975
Entries cancelled	1,794
Revenue	\$61,652.47

# Your obedient servant,

### JAS. E. PEAKER,

Agent of Dominion Lands.

### No. 18.

# REPORT ON TIMBER, MINERAL, GRAZING AND IRRIGATION.

DEPARTMENT OF THE INTERIOR,
OTTAWA, August 31, 1906.

The Deputy Minister of the Interior, Ottawa, Ont.

SR,—I have the honour to submit the twenty-sixth annual report of the Timber and Mines Branch of the Department of the Interior.

The revenue derived from timber, grazing, hay, irrigation and minerals on Dominion lands for the fiscal year which ended June 30 last, amounted to \$649,802.35.

Statement lettered 'A,' showing how this amount was made up, will be found at the end of this report.

The total revenue received from July 1, 1872, to July 1, 1906, was \$10,785,785.93. Reports received from the Crown timber agents at Winnipeg, Edmonton, Calgary, Prince Albert and New Westminster, showing the revenues collected on Dominion lands within their respective agencies and other information are appended hereto. The report of the Commissioner of Irrigation is also appended.

The total revenue of the Winnipeg agency for the fiscal year 1905-6 was \$111,905.87. The price of lumber within the Winnipeg agency was from \$10 to \$19.75 per thousand feet B.M. There are 39 mills in operation within the agency cutting timber under government license.

The revenue received from the British Columbia agency during the fiscal year 1905-6 was \$82,482.97.

Lumber sold at the average price of \$10 to \$14.95 per thousand feet B.M.

There are 24 mills within the agency operating under license from the Dominion government.

The total amount of dues collected within the Calgary agency during the year 1905-6 amounted to \$20,272.17.

The price of lumber at Calgary was \$16 to \$21 per thousand feet B.M.

Fifteen saw-mills were operating within the agency last year under government license.

The total amount of dues collected within the Edmonton agency during the fiscal year amounted to \$19,388.57.

The average price of lumber during the year was \$15 per thousand feet B.M.

There are twelve saw-mills in operation within this agency.

The total amount of dues collected within the Prince Albert agency during the year amounted to \$28,477.31.

6-7 EDWARD VII., A. 1907

Lumber sold at Prince Albert at the average price of \$17.80 per thousand feet B.M.

There are seven saw-mills in this agency cutting timber under license.

The total amount of dues collected within the Yukon Territory on account of timber dues during the fiscal year was \$20,637.69.

There are ten saw-mills in this agency cutting timber under license.

Saw-mill returns received at this department give the following quantities of building materials as having been manufactured and sold during the year within the above-mentioned agencies:—

	Manufactured. Ft. B.M.	Sold. Ft. B.M.
Sawn lumber	123,523,205	121,781,792
Shingles		443,104
Laths	8,667,067	6,675,350

The quantity of lumber manufactured and sold within each agency will be found

in the agents' reports appended hereto.

Seven hundred and seventy-one licenses were prepared. The areas in the provinces of Manitoba, Saskatchewan and Alberta, in the Northwest Territory, on Dominion lands in the province of British Columbia, and in the Yukon Territory in force on July 1, 1906, are as follows:—

	Sq	luare Miles.
Manitoba		<b>1,151 ·36</b>
Alberta		<b>2,505</b> ·23
Saskatchewan		$2,209 \cdot 23$
Northwest Territory		
British Columbia		
Yukon Territory		$275 \cdot 11$

The number of applications received during the year to cut timber was 263; the number of berths granted was 93.

Within the past year 18 berths were cancelled or relinquished by the owners thereof.

The number of berths under license or authorized to be licensed in the provinces of Manitoba, Saskatchewan, Alberta and the Northwest Territory is 320, and on Dominion lands in the province of British Columbia 345. In the Yukon Territory 117 berths have been granted, covering a total area of 275 11 square miles.

The number of berths covered by permits on July 1, 1906, was 118.

### MINING LANDS OTHER THAN COAL.

During the fiscal year 29 entries for quartz claims were granted by the agents of Dominion lands in Manitoba and the Northwest Territories.

In the Yukon Territory 34,760 placer claims, 6,009 quartz claims, 49,442 renewals and re-locations were recorded up to July 1, 1906. The returns for the fiscal year ending June 30, 1906, show that 787 entries for placer claims, 496 entries for quartz claims, 5,455 renewals and re-locations were recorded. The revenue collected from this source and from fees for registering other documents in connection with mining operations was \$86,842.75.

Up to July 1, 1906, 93,657 free miners' certificates have been issued, producing a revenue of \$933,436.01. During the fiscal year 4,569 free miners' certificates were issued, and the revenue derived therefrom was \$28,118.02.

The following is a list of the government agencies whereat free miners' certificates were issued during the year, and the number issued at each within the year:—

Dominion lands agency at-	
Calgary, Alta	22
Edmonton, Alta	38
Lethbridge, Alta	54
Winnipeg, Man	81
Regina, Sask	1
Agencies within the Yukon Territory—	
Clear Creek	24
	3,492
Duncan	121
Kluahne	97
Whitehorse	531
Walsh Creek	28
Other agencies and agents—	
Ottawa, Ont., Department of the Interior	<b>49</b>
London, Eng., the High Commissioner's office	10
Vancouver, B.C., the Dominion assay office	10
Victoria, B.C., the Collector of Customs	11
Total 4	L.569

The total revenue received for dredging leases in the Yukon Territory up to July, 1906, was \$149,564.60, and for the fiscal year, \$881.70.

The total revenue received for the rent of the leaseholds in the Northwest Terri-

tory up to July 1, 1906, was \$34,658.61, and for the past fiscal year \$942.92.

The total sum collected up to July 1, 1906, for royalty on the gross output of placer

The total sum collected up to July 1, 1906, for royalty on the gross output of placer mining claims in the Yukon Territory, after deducting the exemption allowed by the regulations, was \$3,470,013.11. Of this amount the sum of \$163,963.25 was collected during the last fiscal year.

The royalty was collected at the following places:—

Dawson	. \$161,359 56
Whitehorse	. 2,595 06
Fortymile	. 8 63
•	
Total	. \$163,963 25

### DREDGING.

Fifty-two leases to dredge for minerals other than coal in the submerged beds of rivers in the Yukon Territory are in force, covering a total mileage of 251 miles.

Sixty-four leases to dredge for minerals in the beds of rivers in the provinces of Alberta and Saskatchewan are in force, covering a total mileage of 342.75 miles.

### HYDRAULIC MINING.

Sixteen leases are in force. The total frontage of the leaseholds is 41.90 miles. The leaseholds are all situated in the Yukon Territory, within a radius of 100 miles of Dawson.

### COAL MINING LANDS.

The number of applications received during the year was 1,051. The revenue for the year derived from the sale of coal mining lands was \$125,754.12. The area sold was 46,259 acres. The total area of coal lands sold up to July 1, 1906, was 148,440.43 acres, and the total amount received therefor was \$544,567.57.

Twenty-five coal mining licenses, embracing an area of 9,076 acres in the Rocky Mountains Park of Canada, have been issued.

6-7 EDWARD VII., A. 1907

The revenue derived therefrom during the year ending on July 1, 1906, is as follows, viz.: \$4,361.30, made up as follows: Rental, \$1,488; royalty collected on coal mined thereunder, \$2,873.

Total amount of rental collected to July 1, 1906, \$5,882.97. Total amount of royalty collected to July 1, 1906, \$5,278.50.

#### GRAZING LANDS.

The total number of leases in force is 748, including a total area of 2,773,453.99 acres, distributed as follows:—

	Acres.
Province of Manitoba	11,950 .00
Province of Saskatchewan	
Province of Alberta	1,551,372 .50
Railway Belt, B.C	425,145 .20

### IRRIGATION.

During the year 55 applications for authority to divert water for irrigation and other purposes were received, and 44 authorizations to construct works in accordance with the provisions of the Northwest Irrigation Act were issued. One hundred and ninety-five licenses have been issued up to date to divert water.

The following is a statement of the office work performed from July 1, 1905, to June 30, 1906:—

Tottom massimal and massaded	28,708
Letters received and recorded	
Letters sent	28,107
Pages of memoranda and schedule	12,802
Plans and sketches prepared	661
Timber—	
Berths applied for	263
Berths granted	93
Berths cancelled	18
Licenses for timber berths prepared in duplicate	771
Instructions issued for survey of timber berths	66
Returns of surveys of timber berths examined	32
Returns of saw-mills received and verified	1,489
Permits to cut timber issued by agents, also entered and	
checked	9,620
Accounts kept posted	85 <b>5</b>
Timber seizures entered and checked	• 393
Grazing—	
Applications for grazing lands received	1,048
Leases of grazing lands issued	87
Number of leases cancelled and relinquished	103
Applications for hay lands	22
Accounts kept posted—grazing	751
Accounts kept posted—hay	6
Hay permit forms used by the Dominion lands agents, also	·
entered and checked over at this office	797
Mining—	101
Accounts kept posted—dredging, 180, and hydraulic, 27	207
Applications for coal locations received	1,051
Applications for mining locations other than coal	•
New entries and renewals for mining locations granted in	50
Manitoba and Northwest	20
maintona and morthwest	29

New entries and renewals for mining locations granted in	
Yukon Territory	6,738
Applications for petroleum	88
Water-power.,	19
Applications for reservoir sites	1
Applications for gold dredging	78
Irrigation—	
Applications re irrigation recorded	55
Memorials examined	76
Plans examined	131
Authorizations for construction of ditches issued	44
Assignments of irrigation applications examined and re-	
corded	4
Certificates issued by inspector, examined and recorded	29
Cancellation of irrigation applications issued and recorded	9
Irrigation licenses issued (in triplicate)	21
Miscellaneous—	
Applications to purchase or lease land in the Yukon Terri-	
tory received and dealt with during the course of the	
year	37
Applications for water frontage	6
Leases for agricultural lands cancelled	1
Leases for water frontage issued	1

Your obedient servant,

R. H. CAMPBELL, Chief Clerk.

# 6-7 EDWARD VII., A. 1907 REVENUE OF DOMINION LANDS

# A .- STATEMENT of Receipts on account of Timber, Grazing,

Month.	Timber.	o.	Grazin	g.	Haj	y.	Coa	1.	Irrigat	tion.	Mir Fe		Hydra	ulic
1905.	\$ ct	s.		cts.	\$	cts.	<b>\$</b>	cts.	*	cts.	\$	cts.	. \$	cts.
July	15,776 2 17,721 8 18,566 3 49,580 7 14,311 5 17,290 1	8 7 4	2,558 3,549 3,111 2,745 8,417 2,337	36 12 37 15	247 29 15	50	456 520 254 864 222 60	81 87 50	98 41	50  00 00 00 06	10,78 10,98 10,30 5,88	.8 50 17 00 18 00 18 50 18 50 13 50	507 1,008 1,546	00 00
1906. January February March April May June	18,862 0 21,162 1 21,636 2 20,704 1 49,404 8 30,962 9	7 4 2	2,114 3,566 7,781 5,966 3,612 6,145	61 32 09 80	60 7 545 506	60 30 05 10 95 15	1,737 122 426 267 1,595 118	25 05 25 95	49  159	50 25	5,4' 4,9 4,9	6 50 3 00 60 00 9 00 2 00 8 25	481 1,456 453	00 10 50 70
Scrip (Sept., 1905)	295,979 2	_	51,906 80 51,986	00	2,880		6,647	·-	524 524	••••		7 75  7 75	9,391	

# SESSIONAL PAPER No. 25 (YUKON INCLUDED).

Hay, Mineral and Irrigation, for the Fiscal Year, 1905-1906.

Dredging.	Free Miners' Certificates.	Royalty on Gold.	Free Certificates.	Rent from Water Power.	Fish and Game.	Stone Quarry.	Totals.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ ets.	\$ ets.
64 28 500 00	4,545 00 4,352 50 4,525 50 2,881 50 1,377 00 1,439 00	28,947 40 27,197 46 37,319 61 17,496 80 84 80 1,219 17	82 00 64 00 126 50 38 00 2 50 4 00	33 73	1	17 00 160 00	63,512 19 64,804 59 75,494 97 85,531 91 32,046 96 28,304 43
350 00 230 00 515 80 164 54	894 00 831 18 1,003 75 963 00 1,425 00 3,880 59	1,399 87 4,370 03 19 13 294 29 24,022 77 21,591 92	4 50 2 50 6 50 4 50 6 50 40 00	32 00 32 00 12 90	5 00		29,503 57 36,384 64 37,836 59 34,291 59 86,709 44 75,381 47
1,824 62	28,118 02	163,963 25	381 50	115 93	5 00	177 00	649,722 35 80 00
1,824 62	28,118 02	163,963 25	381 50	115 93	5 00	177 00	649,802 35

# 6-7 EDWARD VII., A. 1907 REVENUE ON ACCOUNT OF

# C.—STATEMENT of Receipts from Timber, Grazing, Hay, Hydraulic Mining, Gold

Revenue from	1894	-95		189	5-9	6.	18	396-9	7.	1897	-98.	1898-	-99.
		} ,	ets.		\$	cts.		\$	cts.	\$	cts.	*	cts.
Timber Dues				<i></i> .			ļ			43,	11 71	54,0	97 64
Grazing Lands Hay Lands Coal Lands	• • • • •	• • •	<sup>.</sup>		• • •				••••		29 50	1,7	33 50
Hydraulic Leases			:								500 00 505 50	8,5	25 00 00 00
Gold			أ	İ <b>.</b>			1		!	287.	123 55	575.8	12 79
Free Certificates for Export of Gold Royalty on Water Sold. Mining Fees. Free Miners' Certificates	· · · · ·	5	·ii	• • • • •	22	2 00		1,22	ο öö	145,8	386 94 243 89	303,6 227,3	65 65
rice miners Ocimicates												l	
Less Mining Fees misappropriated \$3,-784, also \$58 transferred to Patent Branch, 1901-02		·				2 00			0 00			1,174,6	88 71
		 5	00		22	2 00		1.22	0 00	726.3	601 09	1,174,6	88 71

# THE YUKON TERRITORY.

and Mining Fees for each Fiscal Year from July 1, 1894, to June 30, 1906.

1899-1900.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	Tctals.
\$ cts.	\$ cts.	\$ ets.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
35,468 46	74,893 80		61,197 39	38,807 90	25,503 97	20,637 69	
100 00	51 20	91 95		*********	9 92	10 00	263 07
7,596 75	4,057 42	1,978 50	277 67	467 55	283 00	194 50	
0.000.15		10.500.40	10.407.00	5 50	69 93	550 30	
6,868 15			12,467 39	10,383 11	6,957 05	9,391 89	86,087 31
1,000 00					385 78	881 70	
733,041 04	596,368 03	331,532 04	302,893 48	272,217 96 27 00	206,760 87 452 00	163,963 25	
		· · · · · · · · · · · · · · · · · · ·		139 75	65 65	381 50	
154,386 70	348,658 30	259,598 10	200,208 49	145,391 14	92,854 00	86,842 75	205 40
126,709 80			82,624 52	62,190 10	46,022 53	28,118 02	1,738,739 07 933,436 01
120,709 00	120,001 00	110,512 02	02,024 02	02,190 10	40,022 00	20,110 02	999,490 01
1,065,170 90	1,163,952 07	777,902 30	663,315 40	530,270 17	379,364 70	310,971 60	6,793,383 94
• • • • • • • • • • • • • • • • • • • •		<b>3,34</b> 2 00				•	3,342 00
1,065,170 90	1,163,952 07	774,560 30	663,315 40	530,270 17	379,364 70	310,971 60	6,790,041 94

B.—Statement of Receipts from Timber, Hay, Coal, Hydraulic Mining, Royalty on Gold and Mining Fees for the Fiscal Year 1905-1906.

Month.	Timber Dues.	Grazing	Нау.	Coal.	Hydraulic.	Dredging Leases.	Free Miners' Certificates.	Gold.	Free Certificates for Export of Gold.	Mining Fees.	Totals.
1905.	\$ cts.	\$ ets.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
July August September October November December	3,416 33 2,194 22 1,236 48 3,450 74 719 49 1,003 71			231 20	2,220 22 300 00 507 00 1,008 00 1,546 05 769 32	500 00	4,545 00 4,352 50 4,525 50 2,881 50 1,377 00 1,439 00	28,947 40 27,197 46 37,319 61 17,496 80 84 80 1,219 17	82 00 64 00 126 50 38 00 2 50 4 00	8,108 50 10,629 50 10,933 00 9,778 50 5,856 00 5,101 00	47,560 92 44,801 68 54,648 09 35,384 74 9,614 44 9,536 20
1906. January February March April May June.	378 58 648 83 2,286 21 2,576 68 1,615 50 1,110 92	5 03		127 50	481 10	230 00 1 70 150 00	894 00 831 18 1,003 75 963 00 1,425 00 3,880 59	1,399 87 4,370 03 19 13 294 29 24,022 77 21,591 92	4 50 2 50 6 50 4 50 6 50 40 00	3,591 50 5,470 50 4,925 00 4,931 00 5,907 00 11,613 25	6,768 45 12,034 14 9,698 79 9,378 20 33,144 27 38,403 68
Less \$2 short in return for March, 1906			194 50	550 30	9,391 89	881 70	28,118 02	163,963 25	381 50	86,844 75	310,97ã 60 2 00
Total cash deposits	20,637 69	10 00	194 50	550 30	9,391 89	881 70	28,118 02	163,963 25	381 50	86,842 75	310,971 60

# YUKON REVENUE.

D.—Statement showing the total Gold Production, the total Exemption, the total subject to Royalty, and the total Royalty collected for each Fiscal Year from May 1, 1898, to June 30, 1906.

Fiscal Year.	Gold Product		Exem	ption.	Subjec Royal		Roya Collec		Infring ments	
	\$	cts.	98	cts.	\$	cts.	\$	cts.	\$ c	ts. \$ cts.
1897-1898 1898-1899 1899-1900 1900-1901 1901-1902 1902-1903 1903-1904 1904-1905 1905-1906	12,113,01 10,790,66 8,222,05	3 02 4 64 2 79 0 52 5 34 3 12 3 91	1,699, 2,501, 1,927, 1,199,	845 00 657 02 744 64 666 62 114 64	10,790,66 8,222,05	26 00 20 00 16 17 25 88 15 34 33 12 53 91	588,2 730,7 592,6 331,4 302,8 272,2 206,7	92 82 62 37 71 99 60 98 36 79 93 48 17 96 60 87 63 25	1,681 1 2,269 0 3,707 0 95 2	589,943 52 733,041 04 596,368 03 331,532 04 302,893 48 272,217 96 206,760 87
Summary for 1905–1906.	76,858,68	<b>3</b> 63	7,668,	027 92	69,190,68	55 71	3,462,2	60 51	7,752	3,462,260 51
Dawson	85,31									2,595 06
	6,540,00	7 09								163,963 25

# YUKON REVENUE.

E.—Statement showing the Revenue collected for Free Miner's Certificates issued during the Fiscal Years 1898 to June 30, 1906.

	\$ ct
397–1898	116,243 8
398–1899	227,354 1
399–1900	126,709 8
000-1901	125,861 0
001-1902	118,312 0
002-1903	82,624 5
003-1904	62,190 1
004–1905	46,022 5
005–1906	28,118 0

6-7 EDWARD VII., A. 1907

# Agencies where Free Miner's Certificates were issued during the Fiscal Year 1905-6.

	Amount	
Dominion Lands Ayencies.	<b>\$</b> .	cts
Calgary, Alberta Edmonton Lethbridge Regina, Sask Winnipeg, Man	138 277 201 5 465	50 00
Yukon Agencies.		
Clear Creek Dawson Duncan Kluane Whitehorse Walsh	168 20,678 687 738 3,319 49	75 25 00
Other Agencies.		
Ottawa, Ont., Interior Dept. London, England, High Commissioner. Vancouver, B.C., Assay Office. Victoria, B.C., Collector of Customs.	55	68 50 00 00
	28,118	02

### No. 19.

# REPORT OF THE INSPECTOR OF CROWN TIMBER AGENCIES.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

WINNIPEG, September 12, 1906.

W. W. Cory, Esq.,

Deputy Minister of the Interior, Ottawa.

Sir,—I beg to submit my annual report in connection with my work as inspector of Crown timber agencies for the departmental year ended June 30, 1906.

Along the line of my duties I gave direction to the agents and forest rangers in the conduct of their work.

I visited during the year a number of the Crown timber offices, and made a thorough inspection of the books and accounts and the method of dealing with the business, a report upon which was forwarded to you in each instance at the time.

I spent the month of November and part of October and December making inspection of the operations of millmen in the New Westminster district. Assisted by the agent, Mr. Leamy, the books and accounts of a large number of operators were examined. My findings were given to you in an exhaustive report forwarded from Winnipeg.

From my inspection reports and those which I have had occasion to make during the year, dealing with administration, it was shown there was much need in some quarters for improvement. The action that should be taken in this regard, according to my views, has been given to you, and while deemed unnecessary to reiterate them, I would like to point out that as conditions at present exist at many of the offices the agents have not the necessary time at their disposal for exercising proper supervision over the work in the office or of the forest rangers in the field.

I am kept in close touch with the work of these offices by my inspections, and through the checking of the agents' weekly returns prepared for the department, which pass through my hands in transit.

The saw-mill returns also pass through my hands, and receive careful checking. Where errors are discovered, the agent and the department are advised, and it is seen that the necessary corrections are made.

The disbursement accounts of the forest rangers also pass through my hands for the purpose of being checked, payment thereof being made on my approval. The correspondence arising over the checking of these returns and accounts and the answering of letters of general inquiry from the agents is large, and calls in a large measure for my personal attention.

The demands for timber upon the lands of the Crown, and the value thereof are steadily increasing, as is evidenced by the large number of timber berths awarded during the year, and the bonuses paid. Permits to cut timber upon Dominion lands for individual use for buildings, fencing and fuel were granted to upwards of ten thousand settlers, and those for hay to upwards of two thousand.

### LUMBERING INDUSTRY.

In my annual report as agent upon the work of the Crown timber office at Winnipeg, on another page, I give a statement which purports to show the amount of timber sold within the Winnipeg district during the year, and also for comparison the sales 25-i-4

6-7 EDWARD VII., A. 1907

for the previous year. As indicated by these figures, the demand for lumber has increased enormously during this year, which increase it is expected will continue to grow with succeeding years at greater ratio.

The following statistics giving the number of saw-mills, stationary and portable, and the amount of lumber manufactured at same during the year in the provinces of Saskatchewan and Alberta, were prepared by the agents at Calgary, Edmonton and Prince Albert:—

Calgary district-

	Lumber Manufactured. Ft. B.M.
Number stationary mills	18,670,956
" portable mills	2,163,154
Edmonton district—	
Number stationary mills 7	12,981,834
" portable mills	11,000,000
Prince Albert—	
Number stationary mills 6	19,282,345
" portable mills	1,225,000
$\overline{\text{Total.}}$	65,323,289
Winnipeg district, including Manitoba and Eastern Sas	katchewan—
Number stationary mills 39	50,755,905
" portable mills 48	18,000,000
Total	134,079,194

This lumber was practically all disposed of as manufactured, the demand in all parts of the country being very active. In addition to quantities given above there was imported and sold, approximately: 179,000,000 ft. B.M. from province of Ontario; 360,000,000 ft. B.M. from province of British Columbia; 24,000,000 ft. B.M. from United States, bringing the total sales of lumber during the year in the provinces of Manitoba, Saskatchewan and Alberta to almost 700,000,000 feet.

Your obedient servant,

E. F. STEPHENSON,
Inspector of Crown Timber Agencies.

# CROWN TIMBER AGENCIES.

88A.	-Summary of Work Performed	d during	g the Y	CROW eær end Amo	ing Jun		906, sho	NCIES. owing Nected.		of Trai	nsaction	s undei	r variou	s heads and	SESSIONA
	Agencies.	Bonus.	Ground Rent.	Royalty on Sales.	Timber permits.	Timber seizures.	Hay permits.	Grazing Rents.	Mining Rents.	Coal Lands Royalty, etc.	Stone quarries.	Sundries.	School Lands, Hay, Timber and Grazing.	Revenues.	L PAPER No. 25

Agencies.	Bonus.	Ground Rent.		Timber permits.	Timber seizures.	Hay permits.	Grazing Rents.	Mining Rents.	Coal Lands Roy alty, etc.	Stone quarries.	Sundries.	School Lands, Hay, Timber and Grazing.	Revenues.	PAPER No. 25
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	\$ cts.	
Alameda Battleford Brandon Banff Calgary Dauphin Edmonton Lethbridge Minnedosa New Westminster Prince Albert Red Deer Regina		12 30 241 36	37 51 16	149 233 1,386 1,393 599 224 44 1,352 481 1,316	37 32 10 33 4 57 3	17 104 151 84 101 155 	64 5 112	39 4 56 83	30 8 23 23 1			90 263 1 1 159	708 88 595 56 783 09 17,756 99 17,738 33 11,721 58 12,067 75 5,639 33 2,165 33 35,699 05 20,344 58 861 09 2,473 19 933 95	
Yorkton Winnipeg			88	569 960	64	223	3 6	109				488	62,255 31 \$ 181,743 89	
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E. F. STEPHENSON, Inspector of Crown Timber Agencies.

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	В	-Sum	MARY	of W	ork P	erforn	ned b	y Fore	est Ran	gers for	the Ye	ar ende	d June 30, 1906.
N		tions for permits	Applications for hay per mits taken.	of ss made.	Land inspections made.	pplications for patent taken.	of days I work.  of days I work.  of days adquars adquars Rybenses I horse. a for new s of ling g		*				
Name.	Headquarters.	Applications fimber perm	Application hay per taken.	Number of seizures m	Land ins made.	Applicat patent	Number of at field w	Number of days at headquar- ters.	By Wagon.	By Rail.	Travelling living ext self and	Expenses fand on travel travel equipmen	Řemarks.
											\$ cts.	\$ cts.	
Coxe, Joseph	Douglas	, [	} [	[ [			245	120	5,565		360 00	) 	Paid by Forestry Branch.
Cameron J A C	Edmonton		ľ	3	85		245 256 301 243 98	88 63	7.424	_200	755 80	25 25	21 days vacation.
Lusted, John Margach, W. I McDonald, D. J. Rutherford, John	Selkirk	6		8	163		301	63	3,665	4,623	708 78	18 90	1 day off duty. 5 days off duty.
Margach, W. I.	Calgary			9			243	117	3,928		1,050 34	310 05	5 days off duty.
McDonald, D. J.	Kamloops	1		4	97	19	98	117 206 89	1,667	5,188	693 30		Diary and account received to May 4, 1906.
Rutherford, John	Carlyle	916	4	, i	;		276	89	4,702		523 02		8 3 6 3
Robertson, A. L. Stauffer, Jos. E.	Prince Albert.	58 185		35 24	29		240 235	123	3,645 3,077	652 2,815			2 days off duty. 19 days off duty.
Walkinshaw, C. A	Boiggovein	194			49		200 911	123 111 24 51	3,709	2,010	667 64		is days on duty.
White, J. B	Winning	16		38	70	25	341 314	24 51	3,709 4,535	6 809	1,185 16		
Young, Thos	Dauphin	12		. 15	96	14	224	15	3,019	5,430			Acc't. received to March 7, '06, died June 4, '06.
		988	10	137	557	58	2,773	1,007	44,936	35,011	7,655 70	464 64	
	J	l	<u> </u>	J	<u> </u>			}	1			<u> </u>	1

E. F. STEPHENSON, Inspector of Crown Timber Agencies.

### No. 20.

# REPORT OF THE CROWN TIMBER AGENT AT NEW WESTMINSTER.

DEPARTMENT OF THE INTERIOR,

Dominion Lands and Crown Timber Office, New Westminster, B.C., October 8, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

SR,—I have the honour to submit herewith my annual report for the twelve months ending June 30, 1906.

The receipts of this office for the fiscal year ending June 30, 1906, amounted to \$33,627.27, which together with \$48,855.70 collected at head office on account of this agency, make a total of \$82,482.97.

I also inclose schedule of mills situated in the Dominion Railway Belt in the province of British Columbia, which gives the usual statistics respecting the timber trade.

I am pleased to be able to say that the lumber business in this province has increased very materially since my last annual report.

While the volume of business in Dominion timber is not much greater than that of last year, considerable more business has been done in timber cut on provincial lands than usual.

This is largely owing to the fact that the lumbermen find it more advantageous to hold, instead of working their Dominion leases, as they consider that greater security is afforded them under the Dominion regulations, instancing the question of fire-guarding; for this and other reasons they prefer holding their Dominion leases in abeyance.

I may say that we have been very successful in coping with forest fires during the past season, there not having been \$5,000 worth of merchantable timber destroyed by fire within the Dominion Railway Belt.

The season was an extremely hot and dry one, little, if any, rain having fallen during the months of July and August.

All of which is respectfully submitted.

I have the honour to be, sir, Your obedient servant,

> JAMES LEAMY, Crown Timber Agent.

6-7 EDWARD VII., A. 1907

STATEMENT of Receipts of New Westminster Crown Timber Agency for the Fiscal Year ending June 30, 1906.

Year.	Month.	Ground Rent.	Royalty.	Permit Dues.	Seizure Dues.	Total.
		\$ cts.	.\$ cts.	\$ cts.	\$ cts.	\$ cts.
1905	JulyAugust	207 28 188 25	632 54 1,575 43	25 25 25 50	23 50	865 07 1,812 68
	SeptemberOctober	183 86	2,843 71 2,287 97	653 85	240 20	3,027 57 3,182 02
	November	380 18 4 13	525 24 3,166 82	68 00		1,177 19 3,238 95
1906	January	59 00 4 00	275 65 198 22	53 25 286 52		387 90 488 74
	March	231 87 2,571 44	33 53 319 87			500 79 2,927 75
	June	5,631 48 518 92	4,519 29 2,104 56	3,144 61 20 50	79 25	13,374 63 2,643 98
	Amount collected at head office	9,980 41	18,482 83	4,821 08	342 95	33,627 27 48,855 70
	Total	,,,,,,				82,482 97

# List of Mills operating in Dominion Railway Belt in British Columbia and Statement showing Quantity of Timber Manufactured during Fiscal Year ended June 30, 1906.

Name of Owner.	Where Situated.	Capacity of Mill.	Po wer.	Operating on Limit No.	Locality of Limit.	Quantity of lumber manu- factured.	Quantity of lumber sold from quantity manufactured and quantity on hand from previous years.	Quantity of lumber on hand.
Columbia River Lumber Co	Vancouver Barnet Sapperton New Westminster Vancouver Ladner Vancouver  " " Arrowhead Port Moody Revelstoke	40,000 100,000 40,000 15,000 30,000 *30,000 *30,000 125,000 125,000 125,000 125,000 125,000 125,000 No mill  """	Steam.	258, 257, 278 and 231 129, 15 and 16 250, 71, 72, 78, 45, 242 239 88, 114 112, 113, 123, 207, 249 Not operating 185, 96, 33 Not operating 33 blk. 2, and 138 86 Not operating 52 433 436 209 316 333 and 335 Not operating 64	Beaver Foot and Kicking Horse Columbia River Shuswap Columbia River Harrison River Stave River and Lake Mud Bay Mud Bay and Stave Lake Coquinalla River Port Moody North Arm Burrard Inlet North Arm Burrard Inlet Arrowhead	205,957 2,844,185 2,329,025 5,361,557 196,387 242,444 1,278,630 5,494,892	7,372,905 736,982 242,444 1,278,630 3,507,898	Ft. 892,076 837,932 634,782 3,269,485
Eagle River Lumber Co Shingles.	Three Valley	50,000	Steam	343	Revelstoke	21,639,549	21,165,912	5,634,275

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A. 190

Name of Owner.	Quantity of shingle bolts manufactured.	Quantity of shingle bolts sold out of quantity manufactured, and quantity on hand from previous year.	Quantity of shingle bolts on hand.	Quantity of lath manufac-	Quantity of lath sold.	Quantity of lath on hand.	Quantity of railway ties manufactured.	Quantity of railway ties sold.	Quantity of railway ties on hand.	No. of mill returns received.	Date of last return.
	Cords.	Cords.	Cords.	М.	М.	M.	Pieces.	Pieces.	Pieces.		1906.
Palliser Lumber Co									• • • • • • • • • • • • • • • • • • • •	9 9 9	March 31   31   31   31
Yale-Columbia Lumber Co Bowman Lumber Co					• • • • • • • • • • • • •			· · · · · · · · · · · · · · · · · · ·		9 9 9	31 . 31 . 31 .
Harrison River M. T. & T. Co. E. H. Heaps & Co. North Pacific Lumber Co. Brunette Saw Mill Co. B. C. Mills T. & T. Co.										9 9 9	31 31 31 31 31
Grant & Kerr Pacific Coast Lumber Co					••••••				***********	12 12 12	June 30 March 31 31 31
Hastings Shingle Mfg. Co. G. E. Farrer K. Mikuni Vancouver Power Co.	550	550								9	June 30 March 30
West Coast Timber Co Big Bend Lumber Co. Arrowhead Lumber Co. T. W. Paterson Wm. H. Pratt Kamloops Lumber Co.	795	795		···· ·· <b>•</b>						12 9 9 9 9	June 30 March 30 30 30 30
Eagle River Lumber Co	4,354	4,354		413,267			37,116			9	3 <sub>0</sub>

### No. 21.

### REPORT OF THE CROWN TIMBER AGENT AT EDMONTON.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS OFFICE,

EDMONTON, July 7, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

Sir,—I have the honour to inclose herewith schedules 'A' and 'B' relative to the work of the timber and mines branch of this agency for the year ending June 30, 1906.

The total amount cut in B.M. by berth owners was 9,819,262 feet B.M., and for the settlers by portable mills the estimated cut in round figures was 10,000,000 feet B.M.

The returns of John Walter, the largest operator of berths, for the three months ending June 30 have not yet been received.

The average price per thousand feet B.M. was \$15.

I have the honour to be, sir, Your obedient servant,

> A. G. HARRISON, Crown Timber Agent.

# 6-7 EDWARD VII., A. 1907

# SCHEDULE A.

STATEMENT of Receipts from Timber, Grazing and Hay Lands at the Crown Timber Office, Edmonton, Sask., for the 12 months ending June 30, 1906.

Month.	Dominion Lands.	School Lands.	Total,
1905.	\$ cts.	\$ cts.(	\$ cts.
July August. September October. November. December.  1906.	680 72 74 76 58 10 1,028 04 299 02 1,239 30	161 55 5 00 0 75 10 40 12 00 226 55	
January February March April May June.	3,147 98 481 30 446 40 209 13 2,505 57 1,015 33	117 75 23 15 55 50 33 25 140 90 95 30	
Collected at Head Office	11,185 65 8,202 92 18,388 57	882 10	12,067 75 8,202 92 20,270 67

Certified correct,

A. G. HARRISON,

Crown Timber Agent.

SCHEDULE B.

RETURN of Saw-mills Operating in Edmonton Crown Timber Agency under Government License, during the Year ending June 30, 1906.

Name of Owner.	Where Situated.	Kind of Power.	No. of Horse Power.	Operations began.	Berth No.	Lumber Manufactured.	Lumber, Sold.	Date of Last Return.	Description of Timber.
					·	В. М.	В. М.		
D. R. Fraser & Co.  John Walter  D. R. Fraser & Co. and John Walter	Strathcona.	Steam	150 150 150 150 150 150 150 150 150 150	1899 1905  1900 1900 1906 1906  1900	788 812 1,008 1,141 1,150 881 864 1,140 1,163 S. L., 33 1,196 496	691,494 106,816 Nil. 1,363,986 Nil.	468,833 106,816 Nil. 2,057,993 Nil.	June 30, '06. " 30, '06. " 30, '06. " 30, '06. " 30, '06. May 31, '05. Mar. 31, '06. " 31, '06. " 31, '06. " 31, '06. A pril 30, '06.	
20 10 1 and a co. and a con water water	isomonion & Staticona.		150	1900	9 bl. 5 & 6	,	6 949 796		Spruce.
	•		150		302	Nil.	Nil.	Mar. 31, '06 ) 31, '06.	oprace.
WE			150		1,691	1111.	1111	31, '06.	
***********	. u .	"	150		1,161	11	tt.	ıı 31, '06.	
M	+ u	U	150		1,160	11	u u	31, '06.	
Deering Implement Co"	Stony Plain	,,	150	1900	1,211 887		1	31, '06. 31, '06.	1
Foulger & Rowley	Ponoka	11	100	1901	949	1,500,000	1,010,579	Dec. 31, '05.	
Hugh McPhee	Spruce Grove			1903	1,042	Nil.	Nil.	June 30, '05.	opruce.
J. A. Powell	Half Moon Lake			1903	849			Dec. 31. '05.	
Edmonton Lumber Co	Edmonton	11			955			Mar. 31, '06.	
1	• • • • • • • • • • • • • • • • • • • •	1			962		11	31, '06.	
*****		2		• •	963 968	"	11	31, '06. 31, '06.	
T				• • • • • • • • • • • • • • • • • • • •	970			31, '06.	
	,		· · · · · · · · · · ·		1 010	10	1	U U UU .	

Return of Saw-mills Operating in Edmonton Crown Timber Agency under Government License, during the Year ending June 30th, 1906—Concluded.

Name of Owner.	Where Situated.	Kind of Power.	No. of Horse Power.	Operations began.	Berth No.	Lumber Manufactured.	Lumber Sold.	Date of Last Return.	Description of Timber.
						В. М.	В. М.		
Edmonton Lumber Co.	Edmonton	Steam			972 1,007 1,009 1,202 1,204 1,104 1,082 1,188 1,125 1,156 1,231 1,104 1,262	Nil.	Nil.	31, 31, 31, 31, 31, 31, 31, 31, 31,	706
W. S. Dwinnell F. Fetherstonhaugh Blain & McKelvey  "Imperial Pulp Co	Ponoka		100	1905 1901 1901 1903 1905	1,020 956 1,019 1,022 1,190	974,784 245,649 Nil. 174,648 Nil.	245,649 Nil. 174.648	Dec. 31, Mar. 31, 10, 31, Dec. 31, Mar. 31, June 30,	'06 Spruce.
McDonald & Frith T. A. Burrows			,		1,052 1,058 1,097 1,098 1,040 1,046 1,099	- "	45	30, 30, 30, 0, Dec. 31, June 30,	'04' '04' '04'
T				• • • • • • • • • • • • • • • • • • • •	1,099 1,093 1,094 1,068 1,191 1,192	<b>1</b> ".	"	30, 30, 30, 30,	706

Mutchenbacker Bros  R. T. Telford	 			1,065 1,076 1,077 1,087 1,084	344,800 Nil.	Nil.	Dec. 3 June 30	l, '05 ), '06 ), '06 l, '05	
John Gentles  John Fraser D. E. Noyes & Sons: A. W. Fraser	 		1904	1,096 1,092 1,095 1,043 1,109 1,122	t 17		" 31 " 31 31 31	, '05 , '05 , '04 , '05	
A. W. Fraser. Edward Lyons Thomas Swift Arthur Mowatt H. McDonald Huff & Carter	 Steam		1905 1906	1,131 1,185 1,199 1,208 1,213	8,000 92,000 Nil.	106,000	,, 31 June 30	í, '05 ), '06	Spruce.
J. A. Bradley D. N. McDonald Wm. Humbertstone R. Blackburn				1,214 1,216 1,232 1,235 1,238			· 30	), '06 ), '06 ), '06	
Ritchie & Walter T. O. Davis J. W. Stewart				1,234 1,231 1,221 1,222 1,223 1,224			u 30	, '05	
Total		······································		1,225 1,226 1,220	9,819,262	19.357 183	30 30	), '05 ), '05	

A. G. HARRISON, Crown Timber Agent.

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### No. 22.

# REPORT OF THE CROWN TIMBER AGENT AT CALGARY.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

CALGARY, July 31, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

SIR,—I have the honour to inclose herewith the following statements for the twelve months ending June 30, 1906.

Schedule 'A,' statement of receipts on account of Crown timber, covering the period referred to, amounting to \$20,272.17.

Schedule 'B,' showing the saw-mills within the Crown timber agency in operation under government license to June 30, 1906.

Schedule 'C,' general office work.

You will observe that the quantity manufactured from licensed berths during the year amounts to 19,397,856 ft. B.M., quantity sold, 17,960,248 ft. B.M., manufactured by portable mills under permits, approximately, 2,052,198 ft. B.M., and from lands other than Crown lands, 440,000 ft. B.M., making a total of 21,890,054 ft. manufactured and 17,960,248 ft. sold.

Hereto annexed please find Chief Forest Ranger Margach's report. Lumber is considerably higher than it was last year, and manufacturers find difficulty in supplying the demand.

I have the honour to be, sir, Your obedient servant,

> J. R. SUTHERLAND, Crown Timber Agent.

### No. 22A.

### REPORT OF CHIEF FOREST RANGER MARGACH.

(Appended to report of Calgary Crown Timber Agent.)

CALGARY, ALTA., July 30, 1906.

The Agent of Dominion Lands, Calgary, Alta.

SIR,—In reference to lumber cut at portable mills during the year ending June 30, 1906, I beg to say that the total amount cut by such mills was 2,492,198 ft. B.M., 2,052,198 ft. B.M. was cut under authority of permits issued for use on the lands of the permittee, and 440,000 was taken from lands other than Crown lands, making the total of 2,492,148 ft. B.M. The present prices of lumber will average from \$3 to \$4 per M. more at the local yards than a year ago, it is also very difficult for yardmen to get their orders filled by the British Columbia millmen, owing to the demand of taking the material from the saw, hence the mill stocks are very light.

There have been very bad fires on and in the vicinity of timber berths No. 252 and 253 during the months of April and May of this year, and I do not think that there is any doubt but what those fires are caused from people who are clearing land, and squatters as well as those who have homestead entries, and I think that it is impossible to work with fire in clearing lands where it is grass and spruce. One man can start such fires, while a ranger with an army of men cannot stop it in timber that has such a growth of grass in and about the timber, as in this country the spruce cones will ignite the grass half a mile away, making fire-breaking an impossibility.

In my opinion settlers should not be allowed to go on to lands that have a timber value, or in the vicinity of timber that has a merchantable value. In the above-mentioned fire I believe at least 100,000,000 ft. were destroyed.

There have been no new coal mines opened in this district, although large investments have been made for the purpose of procuring a supply of building material at the stone quarries, brick yards and in the two plants for the manufacturing of Portland cement at Kananaskis and Calgary, both of which plants are modern.

Your obedient servant,

J. W. MARGACH, Chief Forest Ranger.

# 6-7 EDWARD VII., A. 1907

# SCHEDULE A.

STATEMENT of Receipts from Timber, Grazing and Hay Lands at the Crown Timber Office, Calgary, Alta., for the 12 months ending 30th June, 1906.

Month.		Dominion Lands.		School Lands.		Total.	
1905.	\$	cts.	\$	cts.	\$	cts	
July August September October November. December.	603 67	65 43 33 91	9 25 4	10 30 00 60 00 60			
January February March April May June	1,717 869 425 1,879 2,170 862	31 20 86 39	77 124	60 70			
Collected at Head office	15,206 5,065 20,272	84	1,594 1,594	••••	16,800 5,065 21,866	84	

# SCHEDULE B.

STATEMENT showing	Saw-mills v	vithin	Calga	ary (	Crown Timbe	er Agency in	operation under Gove	rnment	Licens	se to June 3	0,	1906.
Name of Owner or Assignee.	Where Situated.	Kind of Power.	No. of Horse Power.	Commenced Operations.	Description of Timber.	Logs Cut at	Logs Manufactured an	d Sold.	Quantity of Shingles Manufactured and Sold.		No. of Return.	Berth No.
G. H. Bawtenheimer	L'tle Red Deer						00 1 1 7/5 91 100*	Feet.	( 357.1	M 91 1000		' aza
	River	Steam	]·····	1900	Fir and Spruce	Tp. 32 R's. 5 and 6 W. 5 M.	On hand Mar. 31, 1905 Manufactured	344,804 1,067,666	N11.	Mar. 31, 1906	3	252
							Sold	1,412,470 929,154				
		.					On hand Mar. 31, 1906	483,316		•		
Eau Claire and Bow River Lumber Co.	Calgary	Steam		1887	Cypress and	Spray River	On hand Mar. 31, 1905 Manufactured	2,237,586 5,690,000	u ·	June 30, 1906	5	E. & F.
					Pine.		Sold	7,927,586 4,964,446				
							On hand June 30, 1906	2,903,140				
James & Otterbine	Didsbury	Steam		1902			On hand Mar. 31, 1905 Manufactured Sold	26,590 Nil. 26,590	11	Mar. 31 1906	4	1,143
							On hand Mar. 31, 1906	Nil.	-			
Hon. P. McLaren	Blairmore	Steam	40	1882	Spruce and Fir		On hand Mar. 31, 1905 Manufactured	935,001 8,144,675		June 30, 1006	5	36 "A"
							Sold	9,079,676 8,594,199				
							On hand June 30, 1906	485,497				

		-							
Name of Owner or Assignee.	Where Situated.	Kind of Power.	No. of Horse Power.	Commenced Operations.	Description of Timber.	Logs Cut at	Quantity of Shingles Manufactured and Sold.	Date of Beturn.	Berth No.
Hon. Peter McLaren		73					On hand June 30, 1905 Nil.  Manufactured 192,662  Sold 192,662	June 30, 1906 3	179
Okotoks & High River Lum- bering and Development Syndicate. Assigned to Union Bank.		Steam	50	1890	Fir and Spruce	Sheep Creek	Manufactured 739,025 Sold 519,258	Mar. 31, 1906 4	569
Okotoks & High River Lum- bering and Development Company. Assigned to Union Bank.	_	. Steam	-	1903	Fir and Spruce	Highwood River	On hand Mar. 31, 1906 219,767 On hand Mar. 31, 1905 15,853 Manufactured 1,172,569  1,188,422 Sold 921,136	Mar. 31, 1906 4	579
Okotoks & High River Lum- bering and Development Syndicate. Assigned to Union Bank.		Steam		1903		High River	On hand Mar. 31, 1906 267,286  On hand Mar. 31, 1905 Nil.  Manufactured	Fune 30, 1906 5	1,124
Thos. Quigley		Steam		1904			Manufactured	Mar. 31, 1906 4	
							Sold		

-	IONAL PAPER No. 25	
		DOMINION LANDS

	os. Quigley	••••••	Steam		1904			On hand Mar. 31, 1905 Manufactured	30,000 341,853	Mar. 31, 1906	4	1,165
2    -								Sold	371,853 194,382			
) }:	_							On hand Mar. 31, 1906	174,471	-		
V	Vm. Rutherford	Cypress Hills.	Steam			Spruce	<b>2-</b> 8-3-4	On hand Mar. 31, 1905 Manufactured Sold	Nil. 5,500 5,500	Mar. 31, 1906	4	784
								  On hand Mar. 31, 1906	Nil.	j		
V	Vm. Rutherford	10-8-3-4	Steam		1903	Fir and Spruce	10-8-3-4	On hand Mar. 31, 1905 Manufactured	25,000 96,000	Mar. 31, 1906	4	1,027
								Sold	121,000 92,000			
								On hand Mar. 31, 1906	29,000			
J	. H. Wray	Mount'n View	Steam		1904			On hand Mar. 31, 1905 Manufactured	37,000 43,000	Mar. 31, 1906	4	583
				1				Sold	80,000 77,000			
		-		:				On hand Mar. 31, 1906.	3,000			
C	J. B. Anderson	2-13-30-4	Steam		1904			On hand Mar. 31, 1905 . Manufactured	62,155 475,022	Mar. 31, 1906	4	1,200
			<u> </u>			!		Sold	537,177 401,171			
								On hand Mar. 31, 1906	136,006			
0	le A. Finstad	   ••••••••••••••			1904			On hand Mar. 31, 1905 Manufactured	12,364 145,400	Mar. 31, 1906	4 <sup> </sup> :	1,184
				-				Sold	157,764 12,364			
_								On hand Mar. 31, 1906	145,400	]	Į	

#### SCHEDULE C.

General office return of the Calgary Crown Timber Office for the year ending June 30, 1906.

Description of work.	Number.	Increase.	Decrease.	Remarks.
Letters written	39,749 40,087 33 889 61	19,105 6,907	3 27	Incl. Dominion lands.

J. R. SUTHERLAND, Crown Timber Agent.

#### No. 23.

## REPORT OF THE CROWN TIMBER AGENT AT PRINCE ALBERT.

Dominion Lands Office,

PRINCE ALBERT, July 6, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

SR,—I have the honour to inclose herewith my report for the year ending June 20, 1906.

Schedule 'A,' statement of receipts on account of Crown timber, grazing, mining and hay.

Schedule 'B,' statement showing saw-mills operating under government license. Schedule 'C,' statement showing general work during the year.

The increase in the revenue received at this office over the previous year is \$1,526.50. Owing to the fact that the Saskatchewan Lumber Company's mill at Crooked river and the large mill of the Telford Lumber Company at this point were both destroyed by fire last summer, the output of lumber was not as large as it otherwise would have been. The former company have now a first-class mill in operation at Crooked river, and the Prince Albert Lumber Company have taken over the business of the Telford Lumber Company at this point and their new mill is the largest and most complete mill between Rat Portage and British Columbia, with a daily output, with one double cutting band saw and one gate, of 100,000 feet, which will be increased to 160,000 feet in the course of a few days, as they are adding another band saw.

The five large saw-mills operating under government license in this district have all increased their capacity and the cut this coming season will be more than double that of last. There are also thirteen portable mills scattered throughout the district and an approximate estimate of the cut is 2,000,000 feet.

The average selling price of lumber for the year is \$17.80 per thousand feet.

The demand for lumber from the prairie districts to the west of us is largely in excess of the supply and as there are over 850 square miles of good spruce timber under

license tributary to this point and a very considerable extent along the Prince Albert branch of the Canadian Northern Railway, the future of the lumber industry looks bright.

Your obedient servant,

R. S. COOK, Crown Timber Agent.

## SCHEDULE A.

STATEMENT of Receipts from Timber, Grazing and Hay Lands at the Crown Timber Office, Prince Albert, Sask., for the 12 months ending June 30, 1906.

Month.	Dominion School Lands.				Total.		
1905.	\$	cts.	 \$	cts.	\$	cts.	
July August September October November December	1,435 2,265 603 1,520 731 720	81 19 35 00	86	40 00 20 80			
1906.							
January February March April May June	2,200	75 72 46 06	35	60 70 00			
Collected at head office	19,885 8,591		459	00	20,344 8,591		
Totals	28,477	31	459	00	28,936	31	

Certified Correct,
R. S. COOK,
Crown Timber Agent.

SCHEDULE B.

STATEMENT showing Saw Mills in the Prince Albert district operating under Government License, during the Year ending June 30, 1906.

Name of Owner.	Horse-power and kind.	Capacity per 10 hours.	Commenced operations.	Description of timber.	Where cut.	Lumber manufactured.	Lumber sold.	Number of shingles manufactured.	Number of shingles sold.	Number of laths manufactured.	Number of laths sold.	Date of last return.
			1890 1905 1906	tamarac	Limits north of Sturgeon	2,945,490 4,634,373 4,160,464 113,000 595,563 2,806,352	3,954,045 5,002,528 1,822,866 113,000 595,563			757.90 748.30	573.65 273.50 98.10 53.35	

<sup>\*</sup> Mill burned down.

R. S. COOK
Crown Timber Agent.

<sup>†</sup> The capacity of the Prince Albert Lumber Co., Ltd., will be increased within a month to 160,000 feet per 10 hours.

## SCHEDULE C.

GENERAL Return of the Crown Timber Office, Prince Albert, Sask., for the year ending June 30, 1906.

	1905-6.
Timber permits issued Timber seizures Free miners' certificates. Mill returns received in connection with berths not operated.	1,352 73 1
Mill returns received in connection with berths not operated	169

R. S. COOK, Crown Timber Office.

CROWN TIMBER OFFICE,
PRINCE ALBERT, SASK., July, 1906.

#### No. 24.

CANADIAN IRRIGATION SURVEYS.
REPORT OF JOHN STEWART, D.L.S., C.E., COMMISSIONER AND CHIEF ENGINEER OF

IRRIGATION.

DEPARTMENT OF THE INTERIOR,

IRRIGATION OFFICE,

CALGARY, ALTA., July 8, 1906.

The Commissioner of Dominion Lands, Ottawa, Ont.

Sir,—During the year 1905-6 the contour surveys in connection with this branch were continued by a survey party in charge of Mr. J. F. Hamilton, C.E., in townships 21 and 22, in ranges 24, 25 and 26 west of the fourth meridian, contouring that township, and worked east to the east boundary of range 21 in same township, returning worked west in township 18, to east boundary of range 24, and this work was afterwards carried on in township 17, ranges 28 to 21, inclusive, special attention being given to all topographical features in any way affecting the different watersheds of the country, and all streams, watercourses and ridges of any extent, all heights of land located and elevations of same obtained wherever possible. The surveys showed the country north of Bow river to be a clay loam, free from stones, and that the general slope of the townships was toward the southeast, draining into Bow river. After moving south of that river a traverse was made of the height of land through township 19, range 23, west of the fourth meridian, commencing at the quarter-section south of section 6, along the highest ridge of Buffalo hill into section 35; and it was found that the west and north portion of the township drained into the Little Arrowwood creek and Bow river, and the south and east portion drained into the Snake Creek valley. This township 19, range 23 west of the fourth meridian is very rough, and quite unsuited to grain growing, the soil is light clay loam and sandy loam, with gravel and stones in the ridges and hills; there are numerous fresh water sloughs in the northeastern part of the township, but the southern and western portions are dry. The soil in township 19. ranges 21 to 22 west of fourth meridian drains eastward into Rattlesnake lake.

whilst township 19, range 21 drains, generally, into the same lake, with a considerable quantity of alkali in the soil around the lake.

A sub-party, in charge of Mr. Ralph J. Burley, was organized in Calgary, and commenced work in township 21, range 26, west of the fourth meridian running levels, and continued same in township 21, range 26, west of the fourth meridian, but as there was no water in this township, camp was moved down to township 20, range 25, west of the fourth meridian, and both townships worked from there. Levels were also run over township 20, ranges 26, 27 and 28; township 19, ranges 28, 27, 26, 25 and 24; and township 18, range 24, township 21, ranges 28, 27, 26, 25, and township 22, range 25, all west of fourth meridian, and a record obtained of all leading topographical features.

Towards the middle of November, 1905, a very heavy snowstorm prevented further field work, and both parties were, therefore, called into headquarters.

Owing to the old Northwest Territories being absorbed in the new provinces of Saskatchewan and Alberta, the minister decided to remove the irrigation office from Regina to Calgary, and continue the work of the office under the temporary supervision of John Stocks, C.E., who had formerly had charge, under the arrangements made in 1896, between the Department of the Interior and the government of the Northwest Territories. This removal interrupted to some extent the work of the office, entailing a large amount of extra work on the staff in preparing the records for shipment to Calgary, and arranging for the satisfactory conduct of the business after arrival at that city.

In January, 1906, by direction of the minister a special party was organized under the charge of Mr. J. F. Hamilton, C.E., to make an examination of the Bow river, at Kananaskis Falls, to obtain data as to the flow of the river, the depth of fall, and such other information as would be necessary to demonstrate the value of these falls for power purposes. A very thorough contour survey was made of the country in that vicinity, and numerous gaugings made of the Bow river, the Kananaskis river, and Old Bow Fort creek, and a full report was made thereon and submitted to the department on March 12, last.

The work of the irrigation office was carried on under Mr. Stocks' supervision up to the end of April, 1906, when I assumed charge on appointment as Commissioner and Chief Engineer of Irrigation.

In the spring of this year (1906) I arranged to discontinue the contour surveys, and have one party devote its whole time to gauging rivers and large streams to determine the flow of water therein, and also to obtain information for the hydrographic branch of these surveys; and two other parties were organized to gauge the smaller creeks and also to inspect and report upon the various irrigation schemes which had been authorized but not completed, with a view to having the intending irrigators continue their schemes to completion, or to cancel same if it is found the schemes are not feasible.

During the past year the Alberta Railway and Irrigation Company's canal for the diversion of water from St. Mary's river has been considerably enlarged and extended, and the company have now in operation 150 miles of main and lateral canals. This undertaking has been the means of large numbers of persons settling within the tract of land served by this system, and quite a number of small towns and villages have come into existence in the southwestern portion of the province of Alberta.

The Canadian Pacific Railway Company's canal to divert water from Bow river, near Calgary, has been partly constructed, and a considerable amount of work done in connection therewith, and about the middle of May, 1906, water was turned on into the canal for a distance of 46 miles. I made an inspection of the head works and first portion of the canal prior to the water being turned in, and found them to be of a very complete and substantial nature. The company has not, as yet, entered into any agreements for the sale of water, but it is expected that this will be done in the near future.

As regards the inside work of the irrigation office, I find its volume is much greater

than I anticipated, and during the past year some 6,200 communications have been dealt with, as well as 90 applications for water rights (in duplicate); 350 agreements for supply and use of water, granting of right of way, &c. (in quadruplicate), also some 250 records in connection with gauge rods established on several rivers and creeks throughout the provinces of Saskatchewan and Alberta.

Your obedient servant,

JOHN STEWART,

Commissioner of Irrigation.

#### No. 25.

# REPORT OF THE ORDNANCE AND ADMIRALTY LANDS BRANCH.

DEPARTMENT OF THE INTERIOR,
ORDNANCE AND ADMIRALTY LANDS BRANCH,
OTTAWA, August 15, 1906.

W. W. Cory, Esq.,

Deputy Minister, Department of the Interior.

Sir,—I have the honour to submit the following report on the work of this branch of the department for the fiscal year ending June 30, 1906.

In this connection permit me to remark that in accordance with your instructions, I assumed charge of this branch on June 22, last, almost at the close of the fiscal year, in addition to the work with which I was previously entrusted, namely: copying and comparing, printing, indexing and arranging in book form, the orders in council passed from time to time relating to this department.

The annexed statements are somewhat similar to those which accompanied previous reports of the yearly transactions of this branch, and comprise statements 'A,' 'B,' 'C' and 'D,' respectively, and in connection with statement 'B,' I may draw your attention to the fact that there is a substantial increase in the revenue for the year.

- A.—Statement showing the amount received since the date of the last annual report, on account of the sale of land and the redemption of lots in the several localities where ordnance lands are situated, totalling \$4,221.38.
- (1) Chambly.—In the autumn of 1905 preliminary arrangements were made to offer for sale at public competition all the lots remaining at the disposal of the department in this locality, but prior to the date fixed for the sale if was decided, upon representations made by the residents of this locality, to withdraw from sale that portion of the reserve known as 'the Common,' embracing twenty lots. The remaining thirteen lots were put up at auction and sold to the highest bidder. The amount realized from this sale was \$2,500, of which \$532.50 was paid at the time of the sale, being the first instalment of the purchase money. Four of the lots sold have been since the date of sale, paid for in full and letters patent issued. The sale of lot No. 8 has since been cancelled, and the amount received on account refunded.
- (2) Grand Falls.—The lots comprised within this reserve are gradually passing from government into private ownership. During the past year fifteen lots have been redeemed and letters patent issued; the amount for which these lots were sold being \$696.20, and the balance of the purchase money received during the year \$158.65.
- (3) Nepean.—Nine lots forming part of the subdivision of the ordnance reserve in lot K, concession C, of this township which had been previously sold were fully redeemed and patents issued; the amount of consideration money being \$743, of which \$594.40 was paid during the past year.

- (4) Rideau Navigation.—Two small islands situated in the line of the Rideau navigation between the townships of Pittsburg and Storrington, containing an area of about two and one-half acres, and which formed the subject of 'paragraph 7' of the report of this branch for 1904-5, were not sold for the sum of \$20, as therein stated; it having been decided before the above offer was finally accepted, that tenders should be publicly advertised for. An offer of \$135 having been received, the islands in question were disposed of in October last, for that sum.
- (5) Ottawa.—A triangular piece of ordnance property situated between the west side of Nicholas street and the canal reserve, and being composed of part of lot D, concession D, Rideau front, township of Nepean (now within the limits of the city of Ottawa), was offered for sale, public competition being invited. The land in question was sold to the highest tenderer for \$1,400 cash.

In accordance with the provisions contained in the original leases granted by the Imperial authorities to tenants of ordnance lots in this locality, three lots and three half lots were redeemed and letters patent issued therefor, the total amount received for these lots being \$996.33.

- (6) Quebec.—Two part lots fronting on First street, containing together an area of 4,950 square feet, and forming part of the subdivision of the tract of land known as the 'Cove Field' were paid for in full and letters patent were issued therefor. The amount received for these two pieces of property was \$330, of which \$132 was paid during the fiscal year.
- B.—Statement showing the several localities where ordnance lands are situated, on account of which moneys have been received. The total net revenue derived from these lands since the date of the last report, amounts to \$10,840.67, an increase of \$532.01 over last year.
- C.—Statement showing the amount received each month of the fiscal year and classified as fees, rents or interest, and principal.
- D.—Statement showing the amounts due and unpaid at the end of the fiscal year, in the several localities where ordnance lands are situated, classified as principal money and rent or interest. The total amount shown to be due and remaining unpaid is \$61,014.35.

During the year twenty draft letters patent were prepared and thirteen assignments registered. In other respects the work of the branch was about the same as that of the preceding year.

Respectfully sumbitted.

JOS. P. DUNNE,
Clerk in Charge of Ordnance and Admiralty Lands Branch.

STAMEMENT showing amount received on account of sales made and lots redeemed during the year ending June 30, 1906 (including sales made in previous years on which balance was paid during the last fiscal year).

Locality.	Number of Lots Sold or Redeemed.	Amount of Purchase money or consideration.	Amount received on account during the year.	Rematks.
Grand Falls Nepean.	13 lots sold	696 20 743 00	300 00 158 65 594 40	First instalment. Balance purchase money, """" Highest tender. "" Balance purchase money.
Chambly	Sale of lot 8 cancelled	6,800 53 110 00 	4,248 88 27 50 4,221 38	First instalment.

JOS. P. DUNNE,

Clerk in Charge.

DEPARTMENT OF THE INTERIOR,
ORDNANCE AND ADMIRALTY LANDS BRANCH,
OTTAWA, AUGUST 15, 1906.

STATEMENT showing the several localities on account of which moneys have been received during the fiscal year ending June 30, 1906.

Locality.	Amount.	Locality.	Amount.
/	\$ cts.		\$ cts
Burlington	100 00	Brought forward	6,929 0
Chambly.	928 58	Point Pelee	1 00
Charlotteville	18 67	Presque Isle	0 50
Edmunston	94 88   17 80	Quebec	1,975 9
Elmsley Fort Cumberland.	115 00	Queenston	1 00
Fort Erie	21 00	Rideau Navigation	135 0
	120 00	SarniaShelbourne	40 0 1 0
Gloucester Grand Falls	229 44	Sorel	59 30
Grenville	2 40	St. Croix	1 0
Kingston	222 25	St. Joseph's Island	56 8
Longueuil	285 00	Toronto	1,560 0
Nepean	1,153 68	Wolford	105 8
Oromocto	0 50	Registration Fees	26 7
Ottawa	3,596 82		
Owen Sound	7 00	[	10,893 1
Oxford	16 00	Less refund	52 50
Carried forward	6,929 02	Total	10,840 6

JOS. P. DUNNE, Clerk in Charge.

DEPARTMENT OF THE INTERIOR,
ORDNANCE AND ADMIRALTY LANDS BRANCH,
OTTAWA, August 15, 1906.

6-7 EDWARD VII., A. 1907

STATEMENT of receipts on account of Ordnance and Admiralty Lands for each month of the fiscal year ending June 30, 1906.

Month.	Fees.	Rent or Interest.	Principal.	Total
July	5 25	\$ cts. 312 55 108 65 329 23	\$ cts. 123 60 138 30 1,130 40	\$ cts.  438 65 252 20 1,459 63
September. October. November December. 1906.	2 50	19 08 422 27 107 60	92 50 12 25 510 00	114 08 434 52 627 60
January February March April May June	16 92 2 00 23 90 2 00	464 16 285 33 1,748 16 276 44 132 06 989 48	1,707 18 347 50 417 55 972 81 156 60	2,196 34 649 75 2,167 71 1,273 15 290 06 989 48
Less refund	90 07	5,195 01	5,608 09	10,893 17 52 50
				10,840 67

JOS. P. DUNNE, Clerk in Charge.

DEPARTMENT OF THE INTERIOR,
ORDNANCE AND ADMIRALTY LANDS BRANCH,
OTTAWA, August 15, 1906.

STATEMENT showing amounts due and unpaid on account of Instalments of Purchase Money and Rent or Interest to the end of the fiscal year June 30, 1906.

Locality.	Amount of Instalments Due and Unpa	Rent or Interest id. Due and Unpaid.	Total.
	\$ cts.	\$ cts.	\$ cts.
Amherstburg.		2 00	2 0
Surlington	<b></b>	120 00	120 0
Beaver Harbour		4 00	4 0
Zarillon		4 60	4 6
hambly	. 152 00		390 0
Palhousie	23 00		29 9
Idmunston	98 49		133 5
Ilmsley		1 60	1 60
Fort Cumberland		136 00 395 15	136 00
Frand Falls	1,838 46		2,233 6 0 2
	50 96		301 9
Kingston			2 0
Aarlborough.		58 00	58 0
Intreal.		1 00	1 0
Vepean	1.620 90		1.782 1
liagara			10 0
Promocto		0 25	0 2
ttawa		3,476 68	3,476 6
wen Sound		73 00	73 0
xford,	<b>,</b>	19 60	19 6
omeroy Bridge	. <b></b> . <b></b>	6 25	6 2
oint Pelee		2 00	2 0
rescott		1 00	1 0
resque Isle		0 50	0 5
uebec		30 00	30 0
helbourne		1 00	1 00
orel			114 8
t. Croix			1 0
oronto	52,000 00		52,000 00
Urkey Point.		18 67	18 6' 59 0
TOHOLULA,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		. 50 00	
	53,783 81	5,230 54	61,014 3

JOS. P. DUNNE, Clerk in Charge.

DEPARTMENT OF THE INTERIOR,
ORDNANCE AND ADMIRALTY LANDS BRANCH,
OTTAWA, August 15, 1906.

## No. 26.

## REPORT OF THE ACCOUNTANT.

DEPARTMENT OF THE INTERIOR,

ACCOUNTS BRANCH,

OTTAWA, September 17, 1906.

W. W. Corv, Esq.,

Deputy Minister of the Interior,

Ottawa.

Sir,—I have the honour to submit statements of revenue collected from various sources during the fiscal year 1905-6, as follows:—

A. Dominion lands, including Yukon Territory	\$1,709,315	28
B. Ordnance lands		
C. School lands	608,960	79
D. Registration fees		73
E. Fines and forfeitures, N.W.T	3,304	77
F. Casual revenue	8,496	09
G. Seed grain repayments	12,577	29
	<b>\$9,533,858</b>	19

**\$2,533,858**, **12** 

A statement of the revenue on account of Dominion lands (marked 'H') shows the receipts monthly, classified under sub-heads.

Statement (marked 'I') shows a comparison between the receipts on account of Dominion lands for 1905-6, as compared with the revenue of the previous fiscal year.

Your obedient servant,

CHAS. H. BEDDOE,
Accountant.

# A.—Dominion Lands Revenue (Cash and Scrip) for the fiscal year ended June 30, 1906.

Agencies.	Cash.		Scrip.		Total.		
Yukon Territory.	\$ 0	ets.	. \$	cts.	\$	cts.	
Sales of Land	6,949				) 		
Rentals of Land	14,549						
Map sales, office fees, &c	111						
Survey FeesTimber Dues	100 ( 20,637 (						
Hay Permits.	194		• • • • • • • • • • • • • • • • • • • •				
Mining Fees	86,842		• • • • • • • • • • • • • • • • • • • •				
Export Tax on Gold	163,963						
Free Certificates for Export of gold	381						
Hydraulic Leases	9,391	89			l .		
Dredging Leases	881 '						
Free Miners' Certificates	28,118.				<b></b>		
Frazing Lands	10						
Coal Lands	550					,	
Suspense Account	2,295	75	· · · · · · <i>~ ·</i> · · ·	····			
	334,978	06			334.9	78 06	

# A.—Dominion Lands Revenue (Cash and Scrip)—Concluded.

Agencies.	Cash.	Scrip.	Total.
Dominion Lands Agencies.	\$ cts.	\$ cts.	\$ cts
Alameda Battleford Brandon Calgary Dauphin Edmonton Kamloops Lethbridge Minnedosa New Westminster Prince Albert Red Deer Regina Winnipeg Yorkton	48,565 37 81,154 52 14,885 30 105,470 90: 8,779 35 76,819 32 22,999 57 184,105 08 5,456 19 4,994 60 25,069 57 43,811 74 161,641 08 46,221 01 56,353 55	620 40 240 00 30 00 766 65 1,424 00 240 00 745 60 2,386 71 1,041 21 160 00	48,565 37 81,154 52 15,505 70 105,710 00 8,809 35 77,585 97 24,423 57 134,345 08 5,456 19 4,994 60 25,815 17 43,811 74 164,027 79 47,262 22 56,513 55
Crown Timber Agencies.	886,326 25	7,654 57	893,980 82
Alameda Battleford Brandon Calgary Dauphin Edmonton Lethbridge Minnedosa New Westminster Prince Albert Red Deer Regina Winnipeg Yorkton	86 00 134 75 115 85 16,940 18 11,126 38 18,759 74 1,057 30 1,083 08 82,482 97 28,327 61 500 25 110,154 02 941 05	7	86 00 134 75 115 85 16,940 18 11,126 38 18,759 74 1,057 30 1,083 08 82,482 97 28,327 61 337 66 500 25 110,154 02 941 05
Rocky Mountains Park of Canada.  Irrigation Fees. Survey Fees Patent Fees and Interchange Map sales, office fees, &c. Examination Fees, D.L.S Refunds of Refunds. Mining Fees. Hay Lands. Dredging Leases. Grazing Lands. Coal Lands. Rent of Water Power Extra Assay Charges Rental of Lands. Suspense Account Miscellaneous.	18,883 83 528 25 115,595 80 426 25 5,032 94 474 00 154 44 965 00 2,685 55 942 92 51,573 88 115 93 1,111 17 191 24 6,652 14 760 33	80 00	18,883 83 528 25 115,995 80 426 25 5,032 94 474 00 154 44 965 00 2,685 55 942 92 51,653 89 1,735 88 115 93 1,111 17 191 24 6,652 14 760 33
Refunds	1,701,580 71 33,643 49	7,734 57	1,709,315 28 33,643 49
	1,667,937 22	7,734 57	1,675,671 79

CHAS. H. BEDDOE,
Accountant.

6-7 EDWARD VII., A. 1907 B.—Statement of Ordnance Lands Revenue for the Fiscal Year ended June 30, 1906.

Month.	Amount.	Month.	Amount.
July	\$ cts.  438 65 252 20 1,459 63	1906.  January. February. March	\$ cts. 2,196 34 649 75 2,167 71
October November	114 08 434 52 627 60	April	1,278 15 290 06 989 48 10,893 17

CHAS. H. BEDDOE,

Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTS BRANCH,
OTTAWA, September 17, 1906.

# C.—Statement of Receipts on Account of School Lands for the Fiscal Year ended June 30, 1906.

Month.	Manitoba.	Saskatchewan.	Alberta.	Assiniboia.	Total.
1905.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
July	5,316 47	116 80	2,292 49	7,508 91	15,234 67
August	3,355 73	33 45	981 44	1,186 50	5,557 12
September	2,690 81	4,963 83	379 49		8,034 13
October.	18,022 84	11,935 94	230 02.		30,188 80
November., December	68,393 83 31,109 47	52,039 12   30,230 34	12,429 05 10,932 23		132,862 00 72,272 04
1906.					,,,,,,
January	14,645 17	15,003 04	106.784-92	]	136,433 13
February	8,178 27	19,564 40	24,776 12		52,518 79
March	23,956 35	25,392 54	983 05		50,331 94
April	9,377 41	7,573 79	11,415 90		28,367 10
May	10,268 36	3,280 48	2,851 04		16,399 88
June	17,586 42	33,748 45	9,426 32		60,761 19
	212,901 13	203,882 18	183,482 07	8,695 41	608,960 79

CHAS. H. BEDDOE,

Accountant.

# D.—Statement of Registration Fees for the Fiscal Year ended June 30, 1906.

District.	Registrar.	Total.
North Alberta South Alberta East Saskatchewan. West Saskatchewan	F. F. Forbes Geo. Roy. W. R. Winter S. Brewster J. W. Hannon G. E. Girouard	\$ cts. 90,466 65 35,574 70 35,210 01 14,377 85 2,963 97 1,717 55

C. H. BEDDOE, Accountant.

DEPARTMENT OF THE INTERIOR, ACCOUNTS BRANCH, OTTAWA, September 17, 1906.

E.—Statement of Fines and Forfeitures, North-west Territories, Collected under Dominion Statutes (except 'The Indian Act' and 'The Fisheries Act') for the Fiscal Year ended June 30, 1906.

Month.										a. From Whom Received.		Total.
1905.	Provinces.	\$ cts.	\$ cts.									
AugustOctoberDecember	Alberta and Saskatchewan	2,762 11 548 25 54 25										
January February. March		49 81 15 00 37 50	3,466 92 162 15 3,304 77									

CHAS. H. BEDDOE Accountant.

6-7 EDWARD VII., A. 1907 F.—Statement of Casual Revenue for the Fiscal Year ended June 30, 1906.

Name.	Particulars.	Amount
		\$ ct
Commissioner of Immigration	Refund of overpayment to Wyndatt & Co	30 5
Miss E. Haskett	commissioner	2 0 50 0
A. McGregor	account advance from High Commissioner	6 5
A. D. L. Calgary	of overpayment to J. E. Kellly in May, 1905. of overpayment on freight in March, 1905.	0 <del>6</del>
Canadian Pacific Railway Company.	account liability of consignees, re wreck of S.S.	700 (
London & North Western Railway	Lake Michigan account glass jar damaged in transit	.789 ( 6 8
Commissioner of Immigration	account advance to C. Mair	30 (
H H	of amounts advanced to immigrants	10 ( 6 (
Great North West Tel. Co	of overpayment made by Com'r. of Immigration	40 (
Commissioner of Immigration	account provisions supplied Jos. Keller of double payment of cheque No. 537 (1902-3)	5 ( 6 (
H II	of overcharge on livery, J. Watson	5 (
W. S. Earle	account shovels supplied to immigrants of amount paid as commissioner on timber dues	2 2 6 3
J. M. Macoun	account travelling expenses	151 8
Commissioner of Immigration	account old lumber and old furniture	34 1 18 (
H H H	account overpayment made to J. T. Blowey	1,076
tt II	account overpayment to R. Comber	18 4
W. W. B. McInnes	proceeds of sale of tents account travelling expenses	53 ( 713 3
Commissioner of Immigration	proceeds of sale of tents	20
Quebec Furniture Company	account overpayment	45 ( 25 (
Commissioner of Immigration	proceeds of sale of tents	50 (
H	proceeds of sale of old furniture	39 5 70 0
r. J. Saunders	proceeds of sale of old desks and tables	11 (
R. M. Douglas H. W. Newlands.	salary cheques, April to Dec., 1904. Not used. Yukon cheque No. 232 of Aug. 31, 1904. Not	135 (
1. W. Newlands	used 1904. Not	184 (
The Casca Tradg. & Transp. Co	Cheque No. 266, of Aug. 31, 1903. Not used	576 (
no. S. McDonald	Cheque No. 611, of June 30, 1905. Not used. Cheque No. 1,007, of June 13, 1904. Not used.	· 1 ·
Or. J. A. L. Alpine	Immigration cheque No. 4.092, of Aug. 15.	
T. Lithgow	1905. Not used	175 (
	administrator	1,372
A. D. L. Winnipeg	account registration fees re Galician titles (bal, unexpended re cost of litigation. Cheque	
Northwest Territories.	730 of May 11, 1905)	120 (
Commissioner of N. W. T	Marriage licenses	
Vm. Isbester	1 1 2 00	
Iudson's Bay Co		183 3
Relief advances	2,418 34	100 (
	Less refunds	0.411.6
}		2,411 (
Relief Montreege	1976	8,488 8
Relief Mortgages.		
u	1896	
11 11	1900	
	1905	
		7,245 4
İ		15,734 2

DEPARTMENT OF THE INTERIOR,
ACCOUNTS BRANC

CHAS. H. BEDDOE,
Accountant.

Accounts Branch, Ottawa, September 17, 1906.

G.—Statement showing Seed Grain and Relief Mortgages for the Fiscal Year ended June 30, 1906.

_	Seed Grain Advances 1905.	Seed Grain Advances 1901.	Seed Grain Advances 1900,	Seed Grain Advances 1896.	Seed Grain Advances 1895,	Seed Grain Advances 1894.	Seed Grain to Set- tlers' Account, 1890.	Territorial Account 1886-87-88.	Relief Mortgages of 1876.	Total.
Refunds	\$ cts. 589 37  589 37	\$ cts.  1,969 75 93 50  1,876 25	327 98	661 39 4 85	\$ cts. 2,480 37 38 35 2,392 02		781 46 13 40	\$ cts.  1,818 40 51 72  1,766 68	\$ cts.  1,387 16 148 98  1,238 18	\$ cts.  12,577 29 405 10  12,172 19

CHAS. H. BEDDOE,

Accountant.

H.—Statement of Gross Receipts on account of Dominion Lands for the Fiscal Year ended June 30, 1906.

Month.	Homestead Fees.	Improvements.	General Sale of Lands.	Timber Dues.	Rents from Grazing Lands.	Export Tax, Mining Fees, Hay and Coal Lands, &c.	Rocky Mountains Park of Canada.	Map Sales, Office Fees, Sundry Fees.	Survey Fees.	Rentals of Lands and Miscellaneous.	Total.
1905.  July August September October November December	\$ cts.  37,285 00 30,355 00 23,850 00 27,715 00 34,550 00 23,200 00	1,967 40 2,310 73 1,851 45	\$ cts. 19,448 35 10,718 90 18,162 21 20,608 74 26,482 57 17,083 58	\$ ets. 15,737 27 17,721 88 18,388 87 49,467 74 14,296 26 17,258 91	\$ cts. 2,333 72 3,541 86 3,111 12 2,730 37 8,417 15 2,337 68	53,504 48 32,685 60 9,014 10	2,533 33 1,018 49 1,492 97 861 75	313 32 387 95 436 15	10,310 38 5,000 00	\$ cts. 530 59 221 71 1,187 75 126 79 172 30 365 06	\$ cts. 125,594 95 110,652 08 132,157 35 142,066 61 97,809 22 72,176 17
1905.  January February March April May June	62,252 00 45,765 00 53,577 00	2,819 48 2,910 98 2,584 20 2,957 25 5,916 42	45,990 93 14,808 14 41,861 39 90,591 97 53,486 69 83,345 22	18,859 26 21,080 92 20,028 69 19,733 11 49,315 87 30,795 75	5,941 09 3,612 80 6,095 63	8,275 03 7,453 38 32,442 62 38,256 91	528 42 2,285 05 1,963 76 2,740 88 1,091 18	757 08 801 68 632 15 745 69 1,327 48	1,000 00 23,031 25	1,641 13 11,251 38 7,661 19	158,553 56 192,792 79 203,318 18 251,098 03
Scrip	417,834 25		442,588 69 7,654 57 550,243 26	292,684 53 292,684 53	80 00	<u> </u>					1,701,580 71 7,734 57 1,709,315 28

DEPARTMENT OF THE INTERIOR,
ACCOUNTS BRANCH,
OTTAWA, Sept. 17, 1906.

CHAS. H. BEDDOE,
Accountant.

i

#### SESSIONAL PAPER No. 25

#### DOMINION LANDS REVENUE.

I.—STATEMENT of Gross Receipts (Cash and Scrip) on account of Dominion Lands Revenue for the fiscal year 1905-1906, compared with previous fiscal year.

	1904–1905.	Increase.	Decrease.	Net Increase.
893,980 8 272,046 8 18,883 8 58,099 1	494,066 55 241,447 49 14,059 55 7 52,151 54	399,914 27 30,599 35 4,824 28 5,947 63		\$ cts.
			71,730 11	
	893,980 8 272,046 84 18,883 85 58,099 11 131,326 56 1,374,337 22 334,978 0	893,980 82 272,046 84 18,883 83 58,099 17 131,326 56 1,374,337 22 334,978 06 494,066 55 241,447 49 14,059 55 52,151 54 130,949 05 932,674 18 406,708 17	893,980 82 494,066 55 399,914 27 272,046 84 14,047 49 30,599 35 18,883 83 14,059 55 4,824 28 58,099 17 52,151 54 131,326 56 130,949 05 377 51 1,374,337 22 932,674 18 334,978 06 406,708 17	893,980 82 494,066 55 399,914 27 272,046 84 241,447 49 30,569 35 18,883 83 14,059 55 4,824 28 58,099 17 52,151 54 5,947 63 131,326 56 130,949 05 377 51 1,374,337 22 932,674 18 441,663 04 334,978 06 406,708 17 71,730 11

CHAS. H. BEDDOE,

DEPARTMENT OF THE INTERIOR, ACCOUNTS BRANCH. Accountant.

OTTAWA, September 17, 1906.

#### No. 27.

## REPORT OF THE REGISTRAR.

DEPARTMENT OF THE INTERIOR.

CORRESPONDENCE REGISTRATION BRANCH. OTTAWA, August 31, 1906.

W. W. Cory, Esq.,

Deputy Minister of the Interior.

SIR,—I have the honour to place before you a statement showing in part the work done by this branch during the fiscal year 1905-6.

From the nature of the work it is impossible to give, in tabulated form, a report which would show adequately the duties involved in properly recording the many letters received.

Since January of this year it has been found necessary to add another indexer, and at the present rate of increase a fifth will be needed before the year is closed.

The quantity of mail matter received shows an increase of more than 41 per cent over the preceding year, and with such rapid growth it was impossible to get the correspondence through as expeditiously as it should have been.

The sum of \$875,933.54, in cash or its equivalent, was received, recorded and sent to the accountant; 110,085 pages of letter book were indexed and 2,735 pages of documents compared.

Your obedient servant.

J. M. ROBERTS. Clerk in Charge.

STATEMENT showing the number of Letters Received and Recorded in the Correspondence Registration Branch during the fiscal year 1905-1906.

			,			
			REGISTERE	Registered Letters.		
_	Letters Received.	Letters Sent.	Received.	Sent.	Telegrams	Total for 1905–1906.
1905.						
July	12,636 12,717 12,105 12,646 13,532 14,020	15,308 16,366 16,150 15,471 16,004 15,247	484 462 489	2,314 2,468 2,168 2,597 2,879 2,366	90 96 82 110	30,797 32,125 30,981 31,285 33,053 32,335
Total	77,656	94,546	3,069	14,792	513	190,576
1906.						
January February March April May June	14,710 12,016 15,017 14,757 21,468 21,105	18,506 17,235 21,143 19,223 23,131 23,824	587 620 561 735	2,736 2,767 3,454 2,537 3,338 2,823	51 82 100 56	36,652 32,656 40,316 37,178 48,728 48,673
Total	99,073	123,062	3,924	17,655	489	244,203
Aggregate for the year 1905-1906 Aggregate for the year 1904-1905	176,729 135,908	217,608 179,772	6,993 6,014	32,447 24,436	1,002 .634	434,779 346,764
Net increase	40,821	37,836	979	8,011	368	88,015

J. M. ROBERTS,

Clerk in Charge.

INTERIOR DEPARTMENT.

Correspondence Registration Branch, Ottawa, August 31, 1906.

#### No. 28.

# REPORT OF THE GEOGRAPHER.

DEPARTMENT OF THE INTERIOR.

GEOGRAPHER,

OTTAWA, June 30, 1906.

W. W. Cory, Esq.,

Deputy Minister of the Interior, Ottawa.

Sir,-I have the honour to report as follows on the work of my office for the past year.

The staff at present is as follows:-

- J. E. Chalifour, chief draughtsman.
- H. E. Baine, draughtsman.
- A. Akerlindh, draughtsman.

M. W. Sharon, draughtsman.

W. Anderson, draughtsman.

H. M. Blatchly, draughtsman.

G. E. Dumouchel, draughtsman.

Jas. K. Bennie, draughtsman.

R. W. Craig, draughtsman.

C. G. Wood, draughtsman.

M. Darrach, draughtsman.

H. W. Wilson, draughtsman.

A. Groulx, draughtsman.

J. P. McElligott, draughtsman.

S. Chandler, draughtsman.

J. S. Gagnon, clerk.

S. B. R. Roach, messenger.

Mrs. D. E. Waine, stenographer.

Mr. W. Anderson was appointed December 5, for special work, contouring, hachuring, &c.

Mr. A. Akerlindh was transferred from the Immigration Branch, January 28, and has taken charge of the registration, &c., of all plans and maps.

Mr. A. Groulx was transferred from the Surveyor General's office, November 1.

Mr. S. B. R. Roach was appointed as messenger, May 18.

For some time past the work of my office has been seriously hampered by lack of room. On April 1, we moved to new and commodious quarters in the fourth floor of the Woods building, Slater street. The new offices are airy, well lighted and in every way superior to those that we vacated.

The large 'Mineral' map—25 feet by 15—for the Exhibition Branch of the Department of Agriculture, was commenced June, 1905, and completed early in April last. The scale 1 1,000,000 or 16 miles (nearly) to 1 inch, permitted the delineation of the topography, &c., on a scale that will easily be read at a distance of even 25 or 30 feet. The mineral signs were also drawn large enough to be read by a spectator at a considerable distance. After completion it was shipped to London, England, for exhibition in the Imperial Institute.

Owing partly to strikes in the lithographic establishments and partly to the enormous amount of work involved in the compilation of the maps—concurrently with the other work of the office—the Economic Atlas is not yet completed, though the end is in sight, and I hope that it will be ready for distribution next winter.

During the past year 18,648 letters and circulars were sent out, and 16,168 received,

also 14,938 maps and books were sent out and 41,673 received.

Below is a list of maps published, and in progress:

#### MAPS PUBLISHED.

Dominion of Canada and Newfoundland, eight sheets, each 25 inches by 26 inches; extends from the Atlantic to the Pacific and from Maryland and Oregon on the south, to Cumberland Sound and Herschell island on the north. Scale 35 miles to 1 inch.

Dominion of Canada and Newfoundland, 16 inches by 36 inches. Scale 100 miles to 1 inch.

Dominion of Canada (with map of world on reverse). Scale 58 miles to 1 inch. Relief map of Canada. Scale 100 miles to 1 inch.

Resource map of Canada. Scale 1.12,500,000 or 197.3 miles to 1 inch.

Water-power map—average rainfall at principal points in Canada. Scale 100 miles to 1 inch.

National Transcontinental Railway map—shows approximate route of the National Transcontinental Railway, Moncton to Pacific. Scale 100 miles to 1 inch.

Explorations in northern Canada and adjacent portions of Greenland and Alaska. Scale 75 miles to 1 inch.

Rocky mountains—Banff sheet—contoured map of mountains in the vicinity of Banff. Scale 2 miles to 1 inch.

Rocky mountains—Lake Louise sheet—contoured map of mountains in the vicinity of Lagran and Field. Scale 2 miles to 1 inch.

Manitoba and Northwest Territories, includes Manitoba, Assiniboia, Saskatchewan, Alberta and southwestern portion of Keewatin; three sheets, each 25 inches by 36 inches. Scale 12½ miles to 1 inch.

Index map showing townships in Manitoba and Northwest Territories, plans of which have been printed. Scale 35 miles to 1 inch.

General map of the northwestern part of the Dominion of Canada. Edition of 1898. In 2 sheets. Scale 35 miles to 1 inch.

Map showing railways in Manitoba, Alberta, Assiniboia and Saskatchewan. Scale 35 miles to 1 inch.

Manitoba. Scale 12½ miles to 1 inch.

Assiniboia. Edition of 1904. Scale 12½ miles to 1 inch.

Saskatchewan. Edition of 1904. Scale 12½ miles to 1 inch.

Alberta. Edition of 1904. Scale 12½ miles to 1 inch.

Regina land district. Scale 12½ miles to 1 inch.

Red Deer land district. Scale 12½ miles to 1 inch.

Calgary land district. Scale 12½ miles to 1 inch.

Winnipeg land district. Scale 12½ miles to 1 inch.

Alameda land district. Scale 12½ miles to 1 inch.

Lethbridge land district. Scale 12½ miles to 1 inch.

Edmonton land district. Scale 12½ miles to 1 inch.

Dauphin land district. Scale 12½ miles to 1 inch.

Yorkton land district. Scale 12½ miles to 1 inch.

Prince Albert land district. Scale 122 miles to 1 inch.

Battleford land district. Scale 12½ miles to 1 inch.

Brandon land district. Scale 12½ miles to 1 inch.

Minnedosa land district. Scale 12½ miles to 1 inch.

Peace and Athabaska district—Alberta and Athabaska—includes the country between Wetaskiwin and Lake Athabaska and between Athabaska river and the eastern boundary of British Columbia. Scale 1/2000000, or 12:63 miles to 1 inch.

Map showing new provinces of Alberta and Saskatchewan. Scale 100 miles to 1 inch.

Map showing electoral divisions (for provincial legislature) in Alberta and Saskatchewan. Scale 35 miles to 1 inch.

Map showing electoral divisions (for provincial legislature) in Southern Sas-katchewan. Scale 12½ miles to 1 inch.

Map showing all the even-numbered sections patented to May 1, 1906, and all even-numbered sections homesteaded and unpatented or finally allotted to railway companies to that date, in Manitoba, Saskatchewan and Alberta; 3 sheets. Scale 12½ miles to 1 inch.

British Columbia 'Railway Belt' map, showing the 'Railway Belt' in British Columbia. Scale 1600000, or 7.89 miles to 1 inch.

Topographical map of British Columbia and Yukon-Alaska boundary. In 28 sheets. Scale 1600000.

Southeastern Alaska and portion of British Columbia. Edition of 1897. Scale 1600000.

Southeastern Alaska and portion of British Columbia, showing award of Alaska Boundary Tribunal, October 20, 1903. Scale 160000.

Yukon—Extends from Lynn canal on the south, to Eagle on the north, and from the Pacific to the Frances river. Scale 1/150000, or 11.82 miles to 1 inch.

White, Alsek and Kluane rivers district, southwestern Yukon. Scale 400000, or 6:31 miles to 1 inch.

Timiskaming sheet, Pontiac county, Quebec, and Nipissing district, Ontario. Scale 1/150000, or 11 83 miles to 1 inch.

Sheet 1, S.W. Ontario. Windsor sheet. Essex, Kent and Lambton and portions of Elgin, Middlesex and Huron counties. Scale ½50000, or 3 95 miles to 1 inch.

Sheet 1, S.E. Ontario. London sheet. Norfolk, Oxford, Brant and portions of Elgin, Middlesex, Huron, Perth, Waterloo and Wentworth counties. Scale ½50000, or 3.95 miles to 1 inch.

Sheets 1, N.W. and 1, N.E. Ontario. Guelph sheet. Wellington, Grey, Bruce and portions of Huron, Perth, Waterloo, Halton, Dufferin and Simcoe counties. Scale ½20000, or 3.95 miles to 1 inch.

Sheet 2, S.W. Ontario. Hamilton sheet. Lincoln, Welland, Haldimand and portions of Wentworth and Halton counties. Scale ½50000, or 3.95 miles to 1 inch.

Sheet 13, includes whole of New Brunswick, with exception of Madawaska and portions of Westmoreland and Alberta counties. Scale 1600000, or 7 89 miles to 1 inch.

Sheet 27, Ontario. Lake of the Woods sheet. Rainy River district and portions of Thunder Bay district and Keewatin. Scale 1600000, or 7.89 miles to 1 inch.

#### REPORTS.

Altitudes in the Dominion of Canada. With a relief map of North America. 8vo., pp. 226.

Dictionary of Altitudes in the Dominion of Canada. With a relief map of Canada. 8vo., pp. 143.

#### MAPS IN PROGRESS.

Toronto and Muskoka sheet includes York and Ontario counties, Muskoka district and portion of Simcoe county. Scale ½50000, or 3.95 miles to 1 inch.

Sheet 2, N.W. Ontario. Toronto sheet. Peel, York, Ontario and Victoria and portions of Halton, Simcoe, Dufferin, Muskoka, Durham and Peterborough counties. Scale ½50000, or 3.95 miles to 1 inch.

Sheet 2, N.E. Ontario. Belleville sheet. Northumberland and Prince Edward and portions of Durham, Peterborough, Hastings, Lennox and Addington counties. Scale ½50000, or 3.95 miles to 1 inch.

Sheet 9, S.W. Parry Sound sheet. Includes portions of Muskoka, Parry Sound, Nipissing and Haliburton districts.

Sheet 9, N.W. Temagami sheet. Includes the country between Lake Nipissing and the Height-of-land. Scale ½50000, or 3 95 miles to 1 inch.

Sheet 10, S.E. Cornwall sheet. Includes Dundas, Prescott and Russell counties, Ontario, and Vaudreuil, Soulanges, Argenteuil and Ottawa counties, Quebec. Scale ½50000, or 3.95 miles to 1 inch.

Sheet 11. Montreal sheet. Includes the country between Quebec and Vaudreuil, and between the international boundary and latitude 48° N. Scale 1600000, or 7.89 miles to 1 inch.

Sheet 14, S.E. Truro sheet. Includes Pictou, N.S., King's and Queen's, P.E.I., and portions of Halifax, Guysborough and Colchester, N.S. Scale ½50000, or 3.95 miles to 1 inch.

Sheets 15, N.W., 15, S.W. and 15, S.E. Cape Breton island and portions of Antigonish and Guysborough counties. Scale ½50000, or 3.95 miles to 1 inch.

Rocky mountains between the Canadian Pacific Railway and the North Sas-katchewan. Scale 4 miles to 1 inch.

#### ATLAS OF CANADA-MAPS.

- 1. Territorial divisions.
- 2. Relief map, west sheet.
- Relief map, east sheet.
- 4. Geology, west sheet.

- 5. Geology, east sheet.
- 6. Minerals, west sheet.
- 7. Minerals, east sheet.
- 8. Forests.
- 9. Limits of forest trees.
- 10. Telegraphs—Quebec and maritime provinces.
- 11. Telegraphs—Ontario and Quebec.
- 12. Telegraphs-Manitoba, Saskatchewan and Alberta.
- 13. Telegraphs-British Columbia, Yukon and Alberta.
- 14. Telephones-Maritime provinces and Quebec.
- 15. Telephones—Ontario and Quebec.
- 16. Telephones-Manitoba, Saskatchewan, Alberta, British Columbia and Yukon.
- 17. Railways—Quebec and maritime provinces.
- 18. Railways-Ontario and Quebec.
- 19. Railways-Manitoba, Saskatchewan and Alberta.
- 20. Railways-British Columbia, Alberta and Yukon.
- 21. Transcontinental Railways.
- 22. Canals, lighthouses and sailing routes—St. Lawrence and Great Lakes.
- 23. Lighthouses and sailing routes—Pacific coast.
- 24. Lighthouses and sailing routes—Atlantic coast.
- 25. Isotherms for months of year.
- 26. Isotherms for summer and year; precipitation, snowfall and Isobars.
- 26a. Average possible hours for sunshine in summer months and temperature maps.
- 27. Density of population—Maritime provinces and Quebec.
- 27a. Density of population-Ontario and Quebec.
- 28. Density of population-Manitoba and Saskatchewan.
- 28a. Density of population—British Columbia and Alberta.
- 29. Aborigines of Canada, Alaska and Greenland.
- 29a. Origins of the people—Maritime provinces and Quebec.
- 29b. Origins of the people—Ontario and Quebec.
- 29c. Origins of the people-Manitoba and Saskatchewan.
- 29d. Origins of the people—British Columbia and Alberta.
- 30. International and interprovincial boundaries—(a) eastern Canada-United States; (b) New Brunswick-Quebec; (c) Quebec-Labrador.
  - 31. Interprovincial boundary—Ontario-Manitoba.
  - 31a. International boundary—British Columbia and Yukon-Alaska.
  - 32. Routes of explorers.
  - 33. Drainage basins.
  - 34. Montreal.
  - 35. Toronto.
  - 36. Quebec, St. John.
  - 37. Winnipeg.
  - 38. Vancouver, Ottawa.
  - 39. Hamilton, London, Halifax.

### DIAGRAMS.

- 40. Trade and Commerce—Exports.
- 41. Trade and Commerce—Imports.
- 42. Trade and Commerce—Exports, principal items.
- 43. Trade and Commerce—Imports, principal items.
- 44. Trade and Commerce—Imports per head, duty and increase of trade.
- 45. Minerals, telegraphs.
- 46. Population according to (a) age and sex, (b) sex and conjugal condition.
- 47. Population according to age, sex and conjugal condition.
- 48. Population (a) proportion of British and foreign-born, (b) birthplaces of native population, (c) areas of provinces and territories.

- 49. Population (a) origins, (b) religion, (c) birthplaces.
- 50. Population (a) interprovincial immigration, (b) proportion of population, (c) density of population, (d) rural and urban.
- 51. Population, earliest records to 1901, in Ontario, Manitoba, British Columbia, Alberta, Saskatchewan, other territories.
- 52. Population, earliest records to 1901, in Quebec, Nova Scotia, New Brunswick, Prince Edward Island.
  - 53. Population—Cities and towns with a population of upwards of 7,000.
  - 54. Population—Cities and towns with a population of upwards of 7,000.
  - 55. Population—Cities and towns with a population of upwards of 7,000.
- 56. Agriculture—Value of land, &c.; of farm products; number of farmers and classification of farm area.
  - 57. Agriculture—Improved and unimproved area; value of farm propertý.
- 58. Agriculture—Size of farms; number of farms; value of agricultural products.
  - 59. Agriculture—Number of (a) sheep, (b) horses, (c) cattle.
  - 60. Agriculture—Value of crops, live stock, dairy produce, &c.
  - 61. Agriculture—Production of grains, &c.
  - 62. Agriculture—Principal crops of Ontario.
  - 63. Agriculture—Principal crops of Manitoba.
  - 64. Manufactures—Capital invested; number of wage-earners; value of products.
  - 65. Manufactures—Proportion of population; value of product, by provinces.
  - 66. Vital statistics—(a) blind, (b) deaths.
  - 67. Vital statistics—(a) insane, (b) deaf and dumb.
  - 68. Finance—Revenue.
  - 69. Finance—Expenditure.
  - 70. Finance—Debt; expenditure for public works; assets.
  - 71. Currency and banking—Savings banks, deposits and withdrawals.
- 72. Currency and banking—Chartered banks, liabilities, assets, deposits, loans and reserve fund.
- 73. Currency and banking—Chartered banks, capital, deposits, liabilities and assets.
  - 74. Marine—Light stations, &c.; vessels entered, 1903.
  - 75. Marine—Vessels arrived and departed; coasting vessels.
  - 76. Marine—Sea-going shipping; vessels on inland waters.
  - 77. Marine—Vessels in coasting trade, by provinces.
  - 78. Fisheries—Yield; fishermen; value of vessels, &c.; fish exports.
  - 79. Railways—Capital; passengers; freight; mileage.
  - 80. Railways—Earnings; working expenses; receipts; expenditure.
  - 81. Railways—Train mileage; rolling stock; passengers, freight.
- 82. Government railways—Expenditure and revenue; earnings and operating expenses; receipts.
- 83. Education and immigration—Literate and illiterate; schools, teachers; pupils; expenditure; number of immigrants.

I have the honour to be, sir,

Your obedient servant,

JAMES WHITE, Geographer.

i

6-7 EDWARD VII., A. 1907

#### No. 29.

### REPORT OF THE LAND PATENTS BRANCH.

DEPARTMENT OF THE INTERIOR,

LAND PATENTS BRANCH,

OTTAWA, August 20, 1906.

W. W. Cory, Esq.,

Deputy Minister of the Interior,

Ottawa.

Sir,—I have the honour to submit for your information the statements hereinafter enumerated for the fiscal year ended June 30, 1906:—

A.—Statement showing the number of homestead entries made during the fiscal year ended June 30, 1906, compared with the corresponding period of the previous year.

B.—Abstract of letters patent covering Dominion lands situate in Manitoba. Saskatchewan, Alberta, British Columbia and the Yukon Territory issued from the Department of the Interior during the fiscal year ending June 30, 1906, as compared with the fiscal year ending June 30, 1905.

C.—Statement showing the number of acres of swamp lands in Manitoba trans-

ferred by order in council to the province of Manitoba up to June 30, 1906.

D.—Statement showing the number of patents forwarded to the several registrars of the land registration districts of the Northwest Territories, and the number of notifications mailed to patentees during the year ending June 30, 1906.

E.—Statement showing the number of entries cancelled during the year ended

June 30, 1906; also the year in which such entries were made.

F.—Statement showing the number of assignments recorded at head office during the year ended June 30, 1906.

G.—Statement of entries affecting Dominion lands which were made at head office during the fiscal year ending June 30, 1906.

Your obedient servant.

N. O. COTÉ.

Chief Clerk.

A.—Statement showing the number of Homestead Entries made during the Fiscal Year ended June 30, 1906, compared with the corresponding period of the previous year.

	YE	LAR.		Decrease.	Net Increase.
Agency.	Fiscal Year 1906.	Fiscal Year 1905.	Increase.		
Alameda Battleford Brandon Dalgary Dauphin Edmonton Kamloops Lethbridge Minnedosa New Westminster Prince Albert Regina Red Deer Winnipeg Yorkton	7,365 162 2,067 626 4,584 779 1,751 257 29 1,888 11,944 3,861 761	1,627 3,610 306 2,155 514 2,899 149 1,969 216 38 2,136 7,946 2,115 671 4,468	719 3,755 112 1,685 41 3,998 1,746 90	70 218 9 248	

Representing in 1905 in 1906		77,550 Souls 105,420 "
Increase of	· · · · · · · · · · · · · · · · · · ·	27,870 Souls.

N. O. COTÉ, Chief Clerk.

DEPARTMENT OF THE INTERIOR,
LAND PATENTS BRANCH,
OTTAWA, August 20, 1906.

i

B.—Abstract of Letters Patent covering Dominion Lands situate in Manitoba, Saskatchewan, Alberta, British Columbia and the Yukon Territory, issued from the Department of the Interior, during the Fiscal Year ended June 30, 1906, as compared with the Fiscal Year ended June 30, 1905.

о.	Nature of Grant.	of Grant. From July 1, 1905, To June 30, 1906.			From July 1, 1904, to June 30, 1905.		
		Patents.	Acres.	Patents.	Acres.		
		•		,	 		
	British Columbia homesteads	57	8,397	61	9,225		
<b>2</b>	" " sales	42	5,505	43	4,740		
3	Coal lands sales	4	740	6	1,087		
4	Commutation grants	10	341	~ 6	302		
5	Homesteads	8,604	1,366,453	5,869	928,376		
6	Hudson's Bay Co	11	24,105	6	14,352		
7	Leases			1	230		
8	Manitoba Act grants	7	134	4	236		
9	Military Bounty grants	1	160	1	160		
10	homesteads	5	1,597	8	2,572		
11	Mineral rights (943 acres)	7		27	6,151		
12	Mining lands sales	10	1,318	2	51		
13	Northwest half-breed grants	347	62,031	265	55,329		
14	Parish sales	19	1,653	18	2,104		
15	Quit claim Special grants (1,760 acres)	11		28			
	Railways:						
16	Alberta Railway and Coal Co	<i></i>		7	5,601		
17	Calgary and Edmonton Railway Co	8	2,215	188	194,343		
18	Calgary and Edmonton Railway Co., (Under		1				
	rights, 1,088,334 acres)	829			1		
19	Canadian Northern Railway Co	101	21,248	109	26,580		
20	Canadian Pacific Railway grants	700	1,432,578	829	3,723,470		
21	Canadian Pacific Railway grants (Souris	,			-,,		
	Branch)	i <b>62</b>	243,448	319	902,280		
22	Canadian Pacific Railway grants (Souris		1,		,		
	Branch, Under rights, 215,102 acres)	155	1				
23	Canadian Pacific Railway nominees	l		1	129		
24	Canadian Pacific Railway roadbed and station			_			
	grounds	12	895	15	296		
25	Manitoba and Nortwestern Railway Co	3	20,182	14	23,959		
26	Manitoba Southwestern Colonization Rail-		,		,		
	way Co	304	244,445	286	167,285		
27	Qu'Appelle, Long Lake and Saskatchewan				7,		
•	Railroad and Steamboat Co	496	676,621	121	71,685		
28	Sales	324	45,583	326	39,590		
29	School lands sales.	115	17,651	96	12,160		
30	Special grants	78	1.957	107	4.009		
31	Yukon Territory sales	46	1,928	34	1,054		
32	Yukon Territory specials	2	160	î			
		<del></del>					
	Totals	12,370	4,181,345	8,798	6,197,354		

N. O. COTÉ, Chief Clerk.

DEPARTMENT OF THE INTERIOR,
LAND PATENTS BRANCH,
OTTAWA, August 20, 1906.

C.—Statement showing the number of acres of swamp lands in Manitoba transferred by order in council to the province of Manitoba, up to June 30, 1906.

	A cres.
April 16, 1888	52,600.00
June 7, 1888	60,335 · 60
August 25, 1891	105,635 • 41
December 7, 1891	36,479.00
April 22, 1893	69,680 00
October 21, 1893	13,040 00
" /4, 1895	$50.602 \cdot 72$
" 31, 1896	$53,520 \cdot 19$
" 31, 1896	6,960.00
November 10, 1896	137.016 .75
December 1, 1896	117,250.09
June 18, 1897	151,985 39
June 27, 1898	3,120.00
December 1, 1899	148,811 .39
February 17, 1899	,
August 18, 1899	48,470 .00
May 26, 1900	,
January 6, 1900	160.00
April 26, 1902	$20.744 \cdot 01$
February 3, 1903	$27.764 \cdot 85$
" 3, 1903	84,659 .48
August 17, 1904	5.127.00
" 17, 1904	5,584.00
" 18, 1904	13,098 · 01
September 28, 1904	$43.192 \cdot 27$
December 29, 1904	10.719 · 73
April 20, 1905	160.00
July 20, 1905	16,285 .00
-	1,283,000 -89
•	-,,

N. O. COTÉ.

Chief Clerk.

DEPARTMENT OF THE INTERIOR,

LAND PATENTS BRANCH,

OTTAWA, August 20, 1906.

D.—Statement showing the number of patents forwarded to the several Registrars of the Land Registration Districts of the Northwest Territories, and the number of notifications mailed to patentees during the year ending June 30, 1906.

Registration District.	Number of Patents sent to Registrars.	Number of Notifications Mailed to Patentees.
Assiniboia. East Saskatchewan. West Saskatchewan. North Alberta. South Alberta. Yukon	1,125 418 2,506 2,232	4,770 1,037 144 2,063 1,275 70
Totals	11,304	9,359

N. O. COTÉ Chief Clerk.

DEPARTMENT OF THE INTERIOR,
LAND PATENTS BRANCH,
OTTAWA, August 20, 1906.

E.—Statement showing the number of entries cancelled during the year ended June 30, 1906, also the year in which such entries were made.

Year.	Homesteads.	Pre-emptions.	Time Sales.	Sales.
879	1	1	1	
82. 83	3 9 3 1 4	6 5 9 3 4		
87. 88. 89. 90.	1 1 5 5 4	1 3 5 1	· · · · · · · · · · · · · · · · · · ·	
92. 93. 94. 95.	9 3 4 2 1		2 1	
97. •	1 12 25 37 84		***************************************	
)2. 33. 44. 55.	610 2,116 4,002 4,150 544		1 1	
`	11,637	38	6	

N. O. COTÉ, Chief Clerk.

DEPARTMENT OF THE INTERIOR,
LANDS PATENTS BRANCH,
OTTAWA, August 20, 1906.

F.—Statement showing the number of assignments recorded at head office during the year ended June 30, 1906.

N. O. COTÉ.

Chief Clerk.

DEPARTMENT OF THE INTERIOR,

LAND PATENTS BRANCH,

OTTAWA, August 20, 1906.

G.—Statement of Entries affecting Dominion Lands which were made at Head Office during the fiscal year ending June 30, 1906.

Name of Grant.	No. of Grant.	Acres.	Mines and Minerals Only.
Special grants.  Calgary & Edmonton Railway Company  " Mines and minerals.  Canadian Northern Railway Company  Canadian Pacific Railway Company main line.  " Souris branch.  " Mines and minerals.  " Pipestone extension.  Manitoba & Northwestern Railway Company  Manitoba Southwestern Colonization Railway Company  Qu'Appelle, Long Lake and Saskatchewan Railroad and Steam-  Mali boat Company  Railway right of way.  Hudson's Bay Company	87 668 44 155 22	4,487 00 133 50 22,565 39 1,318,487 67 144,722 41 119,049 90 42,377 50 213,415 27 678,619 28 235 00 575,625 00 3,119,917 92	359,587 88 245,550 83 605,138 71

N. O. COTÉ, Chief Clerk.

DEPARTMENT OF THE INTERIOR,

LAND PATENTS BRANCH,

OTTAWA, August 20 1906.

#### No. 30.

## REPORT OF THE SCHOOL LANDS BRANCH.

DEPARTMENT OF THE INTERIOR,
SCHOOL LANDS BRANCH,
OTTAWA, October 4, 1906.

W. W. Cory, Esq.,

Deputy Minister of the Interior,

Ottawa.

SIR,—I have the honour to submit the following report in connection with the School Lands Branch of the Department of the Interior for the fiscal year ending June 30, 1906.

#### AUCTION SALES OF SCHOOL LANDS.

#### Manitoba.

While no general auction sales of school lands were held in Manitoba during the fiscal year, it was considered advisable to offer for sale the lots in the townsite of Tyndall, comprising the south half of the northeast quarter of section 11, township 13, range 6, east of the first meridian, as a number of these lots were found to be occupied by squatters who had erected buildings and made other improvements.

These lands, with the northwest quarter and the north half of the northeast quarter of the same section, were accordingly offered for sale by public auction at Tyndall, on October 10, 1905, subject in each case to an upset price which had been determined after inspection by an officer of the department. All the lots, some 120 in number, were disposed of for \$2,445, while the farming lands of the section brought the average of \$14.34 per acre.

As the improvements had been made for the most part before the townsite was laid out, and in ignorance of the law respecting school lands, it was thought proper to protect the makers of the improvements, and for this purpose it was made a condition of the sale that the purchaser of a lot, if other than the maker of the improvements, should pay to the clerk of the sale, for the benefit of the maker, the value of the improvements on the lot as previously determined by actual inspection. This was done in all cases.

A small sale comprising section 11, township 19, range 15, west of the first meridian, which is intersected by the Canadian Northern Railway, was also held at Glensmith on April 18, 1906.

The land was offered in quarter-sections of which the following were disposed of as follows:—

Southwest quarter for \$16 per acre; northeast quarter for \$10 per acre; northwest quarter for \$8.

#### Alberta

The auction sales of school lands in the vicinity of the Calgary and Edmonton Railway and of the Crow's Nest Pass branch of the Canadian Pacific Railway, which were to have taken place in the autumn of 1904, but which were postponed, were held during the months of October and November, 1905, with the following results:—

Date of Sale. Place of Sale.	No. of Acres Sold.	Amount Realized.	Average Price per Acre.
Edmonton	8,874 1,756 4,679 29 4,081 04 7,530 59 23,202 94 23,009 24,117 04 7,434 23 16,008 19	\$ cts. 106,842 70 15,834 50 46,820 92 35,952 52 62,561 29 241,473 08 231,117 17 355,046 05 102,951 56 195,716 37	\$ cts.  12 04 9 02 10 00 8 81 8 32 10 41 10 01 14 72 13 85 12 23

In view of the constantly increasing demand for land in the Edmonton district, and of the numerous applications made to the department, it was decided to put up again for sale the lands which were offered at the previous sale at Edmonton in October, 1905, but were not sold, and they were accordingly offered at Edmonton on March 21, 1906, subject to the same upset prices as at the previous sale. It was also considered advisable to offer about the same time, namely, on March 27, 1906, at Lloydminster, a few sections for which applications had been received. The result of the two sales was as follows:—

Place of Sale.	Number of Acres Sold.	Amount Realized.	Average Price per Acre.
Edmonton	5,958 84 1,054 50	\$ cts. 81,870 84 15,633 50	\$ cts. 13 74 14 82
Total	7,013.34	97,504 34	13 90

The average price of all the sales in Alberta during the fiscal year was \$11.68 per acre.

Mr. T. C. Norris, of Brandon, acted as auctioneer for the sales held in October and November, but as the second sale at Edmonton, and also that at Lloydminster, were comparatively small, the services of a special auctioneer were not considered necessary, and Mr. Ingram, the inspector of school lands, who was in charge of the sele, acted in that capacity himself.

## Saskatchewan.

Auction sales of school lands were held in Saskatchewan as follows:-

α.	7 61	<b> </b>	חם	1/11	Λ.	1907

Date of Sale.	Place of Sale.	Number of Acres Sold.	Amount Realized.	Average Price per acre.
1905.			\$ cts.	\$ cts.
November $27$	Killaley Yorkton Saltcoats	3,200 8,096 · 83 10,689 · 20	46,600 00 81,917 96 82,872 44	14 56 10 12 7 75
June 7 " 12	Saskatoon Radisson Alameda Yorkton Wadena	965 · 50 812 · 40 10 · 00 4 · 00 2,885	112,918 50 12,905 00 70 00 28 00 44,402 50	116 95 15 88½ 7 00 7 00 15 39
		26,662 93	381,714 40	14 32

The lands offered at Yorkton and Saltcoats were those included in the sales which were to have been held at those points in November, 1904, but which were postponed. Only a few parcels were offered at the other points mentioned, the sales being held in response to urgent applications for these lands. While, however, the sales were small, it will be seen that very good prices were realized, care having been taken to place such upset prices on the land as would prevent their being disposed of for less than their full value.

The land offered at Saskatoon comprised the west half of section 29, township 36, range 5, west of the third meridian. It was offered in legal subdivisions as it adjoins the town, which accounts for the very high prices realized, one parcel selling for \$515 per acre.

The total area disposed of at the various sales in the three provinces, exclusive of the Tyndall lots, was 155,060 71 acres, representing the sum of \$1,882,105.14, or an average of \$12.14 per acre.

Mr. William M. Ingram was in charge of all the sales referred to, and his management was not only most satisfactory in the interest of the school lands funds, but also gave general satisfaction to the public attending the sales.

#### GRAZING LEASES.

There continues to be a steady demand for leases of school lands for grazing purposes. The total number issued during the fiscal year was 351. The total number of grazing ranches in force on July 1, 1906, was 1,787. The revenue from this source was \$14,741.38.

#### COAL LEASES.

Ten leases for coal mining purposes were issued during the fiscal year, and the total number in force on July 1, 1906, was 21. The revenue for these leases during the fiscal year was \$2,541.01.

The selection of the lands necessary to replace the school sections included in the tract allotted to the Canadian Pacific Railway Company in connection with their irrigation scheme, and also in certain townships allotted as part of the land grant of the Manitoba South Western Colonization Railway Company, was completed by Mr. F. C. Potts during the past year. The area required to recoup the school land endowment for the sections surrendered was, in round numbers, 200,000 acres. This is, however, only approximate, as some of the townships are unsurveyed and the exact area cannot be determined until the surveys are complete.

As the provisional districts of Assiniboia, Alberta and Saskatchewan became merged on September 1, 1905, in the provinces of Alberta and Saskatchewan, it became necessary to pay over to the government of the Northwest Territories the revenue from school lands within the territories, less the principal moneys of sales, for the period between July 1, 1905, and September 1, 1905, to which it was entitled under authority of the order in council of November 19, 1902, in that behalf, and the issue of cheques against the school lands fund of the several provisional districts in favour of the liquidator of the territories was accordingly authorized by the Auditor General, the total amount paid over being \$4,670.97.

The authority of the Governor in Council was also obtained (order in council, January 6, 1906), to close the accounts in connection with the school lands funds of the several provisional districts, and to transfer the balances to the credit of the school lands funds of the provinces of Alberta and Saskatchewan.

In view of the provisions of the order in council referred to, and of those of the order in council of November 19, 1902, the authority of the Auditor General was given for the issue of a cheque in favour of the government of Saskatchewan for \$54,224.85, being the revenue from the school lands within that province, less the principal moneys of sales and less also the cost of management, from September 1, 1905, when the province was established, to July 1, 1906.

A cheque was also issued in the usual course in favour of the Provincial Treasurer of Manitoba against Manitoba school lands fund for \$58,447.71, being the revenue from school lands for the fiscal year, less the principal moneys of sales and less also the cost of management.

No cheque was issued in favour of the province of Alberta, the expenditure for the period between September 1, 1905, and July 1, 1906, being in excess of the revenue other than the principal moneys of sales for the period.

Hereto attached is a statement, marked 'A,' showing the net revenue derived from the school lands during the past fiscal year, from which it will be seen that the total net sum collected was \$607,070.13.

The business of this branch has increased greatly during the past year, owing partly to the number of auction sales and the numerous transfers of lands, and partly to the constantly growing demand for school lands and the consequent increase in the volume of correspondence. It may also be pointed out that nearly all the work in connection with the collection of the revenue, sending out statements of accounts, &c., is done at this office, and as evidence of this, I may say that of the total gross sum of \$608,936.01 collected during the fiscal year, \$587,571.50 was paid into this office, and \$21,364.51 collected through the various agencies.

The following is a summary of the work of the branch for the year:—

Letters written	
Reports, memoranda to council, &c	
Receipts issued	
Accounts kept posted and statements of same issued	
Grazing leases issued	351
Coal leases issued	
Cultivation permits issued	52

The above only gives an approximate idea of the amount of work done, as there is a great deal of which it is impossible to keep a record, such as the preparing and checking of lists of lands for auction sales, reading and correcting proofs of lists, advertising and making arrangements for the sales, &c.

Herewith attached are statements prepared in the accounts branch, showing the balances of the several school lands funds on July 1, 1906.

I have the honour to be, sir, Your obedient servant,

> FRANK S. CHECKLEY, Chief Clerk.

STATEMENT A.

Showing Net Revenue from School Lands for Fiscal Year ending June 30, 1906.

	SALES.		SALES.		SAL		Grazing.	Hay.	Timber.	Coal.	Cultivation Permits.	Mis- cellaneous.	Total.
	Principal.	Interest.		*			Termits.	·					
	\$ cts.	\$ ets.	\$ cts.	\$ cts.	* \$ cts.	\$ ets.	\$ ets.	\$ cts.	\$ cts.				
Manitoba— From July, 1905, to 1906	149,490 49	54,868 91	2,624 19	1,677 14	2,867 21		<b>1,117</b> 10		212,645 04				
Assiniboia— July 1, 1905, to September 1, 1905	5,578 08	2,346 04	442 04	302 75	<b>2</b> 50	24 00			8,695 41				
Alberta— July 1, 1905, to September 1, 1905			<b>1,846</b> 88	158 80	<b>5</b> 0 00	682 00			2,737 68				
Saskatchewan— July 1, 1905, to September 1, 1905			40 85	105 40					146 25				
Alberta— September 1, 1905, to July 1, 1906	170,948 16	249 29	6,066 90	507 60	448 75	1,186 93	27 00		179,434 63				
Saskatchewan— September 1, 1905, to July 1, 1906	143,501 88	54,329 57	3,720 52	1,004 65	40 55	648 08	150 12	15 75	203,411 12				
	469,518 61	111,793 81	14,741 38	3,756 34	3,409 01	2,541 01	1,294 22	15 75	607,070 13				

DEPARTMENT OF THE INTERIOR, SCHOOL LANDS BRANCH, · OTTAWA, October 4, 1906.

STATEMENT of Revenue and Expenditure on Account of School Lands for the Fiscal year ended June 30, 1906.

#### MANITOBA SCHOOL LANDS.

Particulars.								Cr.	
					s		cts.	**************************************	cts
By balance on July 1, 1905								1,203,129 $204,359$	
Rental for cultivation	.2 11101101	11						1,11	
Timber, hay and grazing	11							7.16	
	11		u					38,76	
To cost of management at Ottawa	U.	**					i	•	
Expenses, being salaries, printing, ad-						<b>74</b> 0			
vertising, &c	11	11	11			966			
Interest paid to Manitoba Government	11	a			38,	764	65		
Interest and revenue paid to the Mani-									
toba Government to June 30, 1906 To balance on June 30, 1906		• • • • • •	· · · · · ·		58,	447			
To balance on June 30, 1906				• • • • •	1,352,	617	07		
					1,454,	536	27	1,454,53	6 27

STATEMENT of Revenue and Expenditure on Account of School Lands for the Two Months ended August 31, 1905.

## PROVISIONAL DISTRICT OF ASSINIBOIA.

Particular	rs.				Di	r.		$\operatorname{Cr}$	
					s		ets.	\$	ets.
By balance on July 1, 1905								219,1	92 12
Sales									24 12
Timber, hay, grazing and coal	11		**	• • •					71 29
Interest	11	**	*1			, . o=	46	1,1	45 56
Expenses, being salaries, printing and	"	н	и		ĺ	ου	42		
advertising &c	11		"		,	568	60		
advertising, &c	***	.,	.,	• • • •	,	300	00		
ment	11	**	ţi.		1.1	L45	56		
Interest and revenue paid to Northwest					. "	-			
Government	11	11	11		2,4	<b>488</b>	91		
Fo balance on August 31, 1905					224,	744	60		
					229,6	033	09	229,0	33 09
					ļ	_			
By balance on September 1, 1905	G 1 1 T 1					• • •		224,7	<b>'44 6</b> 0
To transfer to Province of Saskatchewan	School Land	s runa, į	per Or	aer in	904	e=0	=0		
Council of January 6, 1906	abool Tanda	Fund n	 Dr. Ore	lon in	224,0	019	28		
Council of January 6, 1906	JIOOI LAHUS	տաոս, թա	er Of	161 III		65	02		
Council of balldary o, 1000		• • • • • • • • •				00	02		

STATEMENT of Revenue and Expenditure on Account of School Lands for the Two Months ended August 31, 1905—Concluded.

## PROVISIONAL DISTRICT OF ALBERTA.

Particulars.	·		·		Dr.	·	Cr.
				Ì	\$	cts.	\$ eta
By balance July 1, 1905 Timber, hay, grazing and coal	2 months	to Augus	t 31, 19	006	· · · · · · · · · · · · · · · · · · ·		44,698 3 2,737 6 232 5
Interest To cost of mangement at Ottawa Expenses, being salaries, printing, ad-	11	11	11			85 41	202 0
vertising, &c Interest paid to Northwest Government	, 11 H	11				49 99 32 52	
Interest and revenue paid to Northwest Government						07 08 93 56	
•					47,6	68 56	47,668 5
By balance on September 1, 1905							44,693
To transfer to Province of Alberta Scho Council of January 6, 1906	ool Lands	Fund,	per Or	rder in		93 56	11,000
To transfer to Province of Alberta Scho	ool Lands	Fund,	per Or	rder in	44,6		23,000
To transfer to Province of Alberta Scho- Council of January 6, 1906	DISTRI	Fund, CT OF S	ASKA	ATCHE	44,6 CWAN.	93 56	17.547 ( 146 5
To transfer to Province of Alberta Scho- Council of January 6, 1906	DISTRI	Fund,	SASKA	ATCHE	44,6	93 56	17,547 (
To transfer to Province of Alberta Scho Council of January 6, 1906	DISTRI	Tund,  CT OF S  to Augus	ASKA	ATCHE	44,6	93 56	17.547 ( 146 5
To transfer to Province of Alberta Scho Council of January 6, 1906	DISTRI	Tund,  CT OF S  to Augus	ASKA	ATCHE	44,6 CWAN.	93 56 	17.547 ( 146 5
To transfer to Province of Alberta Scho- Council of January 6, 1906	DISTRI-	to Augus	ASKA	ATCHE	44,6 EWAN. 	93 56	17.547 ( 146 <u>2</u> 89 (

# STATEMENT of Revenue and Expenditure on Account of School Lands for the Ten Months ended June 30, 1906.

## ALBERTA SCHOOL LANDS.

Particulars.				. ]	Dr.		Cr.	
Post transfer was Order in Council of January	£ 100£	from Du		1 D:-	\$	cts.	\$	cts
By transfer, per Order in Council of Januar trict of Alberta	ry 6, 1906,	from Pro	visions	I Dis-	• • • • • • • • • • • • • • • • • • • •		44,693	56
trict of Assiniboia.							65 171,197	02
Rental for cultivation	11	11			••••		27	00
Timber, hay, grazing and coal	11	tt U	19 11				0,000	
To cost of management at Ottawa Expenses, being salaries, printing, adver-	11	11	11		569			
tising, etc	11	11	**					
Interest paid to Government of Alberta.  To balance on June 30, 1906					3,008 214,09 <b>3</b>			
/					227,201	65	227,201	65

STATEMENT of Revenue and Expenditure on Account of School Lands for the Ten Months ended June 30, 1906—Concluded.

## SASKATCHEWAN SCHOOL LANDS.

Particular		Dr.		Cr.			
By transfer, per Order in Council of Janua trict of Assiniboia					\$	cts.	\$ cts. 224,679 58
By transfer, per Order in Council of Janua	ry 6, 1906,	from Pr	ovisiona	ıl Dis-			, ,
trict of Saskatchewan							17,543 80
Sales	10 months	to June	30, 19	06∤			197,831 45
Rental for cultivation	11	11					150 12
Fimber, hay, grazing, coal, &c	**	11	11			:	5,429 55
Interest	11	u .	11				8,300 16
To cost of management at Ottawa	Lt	11	11		569	45	<i></i>
Expenses, being salaries, printing, adver-							
tising, &c	11	11	**		5,114	94	
Interest paid to Government of Saskat-					,		
chewan	17	11			8,300	16	
Interest and revenue paid to Govern-					•		•
ment of Saskatchewan	**	77	11	l	54,224	85	1
To balance on June 30, 1906	. <b>.</b>				385,725		
•					<u>·</u>		
					453,934	66	453,934 66

# PART II

# IMMIGRATION

## IMMIGRATION.

## REPORT OF THE SUPERINTENDENT OF IMMIGRATION.

DEPARTMENT OF THE INTERIOR, OTTAWA, July 7, 1906.

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W. W. Corv, Esq.,

Deputy Minister of the Interior,

Ottawa.

SIR,—I beg leave to place before you herewith the annual reports of the principal officers engaged in the immigration service of Canada, together with a report from the High Commissioner for Canada, in London, with reports of our British and continental agents appended thereto.

The growth of the work of this branch of the department is shown by the steady increase in the correspondence which we have to deal with at headquarters. Last year 77,610 attachments were made to our files; during the year now referred to (which ended on the 30th ultimo), 118,187 attachments were made to our files and duly attended to, and we responded to 220,335 requests for information, direct and indirect, and sent out 4,455,310 pamphlets, maps, &c.

The following is a statement showing the orders or immigration literature during the year:—

Geography of Canada (French)	100,000
Twentieth Century Canada	155,000
Twentieth Century Canada	100,000
Out-door Canada	600
Classes Wanted in Canada	200,000
Canada, Cost of Living	100,000
Canada in a Nutshell	650,000
Prosperity Follows Settlement	50,000
Canada, Learning Farming, Land Regulations	159,150
Home Building in Canada	200,000
English Emigrant's Experience in Western Canada	100,000
New Brunswick Leaflets	40,000
Canadian Year-Book	3,675
Farm and Ranch Review	5,000
Story of Manitoba Farmer	5,000
Dominion Medical Monthly	500
The Biggest Crop	253,500
Trade Reports (Pepper's)	259,000
Letters from Successful Settlers (Grieve's)	20,000
Wheat Pamphlet (Winter)	125,000
Book of Lectures	103
Domestic Service and other Employment for Women	100,000
25—ii—1½	17,30

## Folder Maps.

L'Ouest Canadien (French)		50,000 25,000 00,000
${\it Maps}.$		
School Map of CanadaSmall Map of the Dominion of CanadaSmall Coloured Map of the Dominion of Canada		20,000 10,000 9,000
Newspapers (Special Editions).		
'Canadian Farmer' (Galician) 'The Leader,' Regina, Inaugural Number. 'Le Courrier de l'Ouest,' Edmonton 'Christmas Globe' 'Strathcona Plaindealer' (Christmas Number) Hungarian Paper (Winnipeg) 'The Alberta German Herald' 'Der Nordwesten,' Winnipeg 'L'Ouest Canadien,' Winnipeg  I submit the following statistical tables compiled in my offi		15,000 2,000 14,000 200 1,200 1,500 36,000 26,000 5,000
IMMIGRANT ARRIVALS.		
Summary for the Fiscal Year 1905-6.		
Per ocean travel—         Halifax         St. John         Quebec         Vancouver         Victoria         New York       13,645         Portland       2,535         Boston       1,221         Philadelphia       543         Baltimore       165    From the United States, not including 123 United States citizens by	23,525 15,336 71,440 2,041 817	131,268
ports—  Montreal Winnipeg, &c Lake St. John District Rainy River District Montreal Colonization Society Timiskaming District Customs entries	1,053 47,761 1,088 342 225 134	
		57,796
		189,064

5

## SESSIONAL PAPER No. 25

## COMPARATIVE STATEMENT.

# Immigrants arriving for Canada, by Ports, during the Fiscal Years 1904-5 and 1905-6.

		Fiscal Ye	ar, 1904-5.			Fiscal Ye	AR, 1905-6.	
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
Halifax St. John Quebec United States Ocean Ports (New York, Port-	13,435 9,984 34,972	3,606 1,909 13,566	1,703	13,596	10,660	4,210 2,452 17,363	2,224	23,525 15,336 71,440
land, Boston, Philadel- phia and Baltimore) Montreal, from the	4,845	. 1,151	1,570	7,566	12,492	2,826	2,791	18,109
United States	1,187	277	358	1,822	761	118	174	1,053
Winnipeg and Outports, from the United States Vancouver Victoria	17,951 478 9	5,983 120 4		32,056 661 14	$\substack{26,548 \\ 1,629 \\ 691}$	$10,071 \\ 272 \\ 100$	11,142 140 26	47,761 2,041 817
Totals for principal ports	82,861		í	7,781				180,082 7,193 1,789
Grand totals				146,266				189,064

## COMPARATIVE STATEMENT.

IMMIGRANTS arriving for Canada, by months, during the Fiscal Years of 1904-5 and 1905-6.

Month.		FISCAL Y	ZEAR; 1904-	5.		EISCAL YI	EAR, 1905-6.	
MOHOII.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
July August August October November December January February March April May June	5,913 4,947 4,124 3,929 2,514 2,360 2,862 8,240 15,380 17,032	2,329 2,450 2,500 1,893 1,535 878 607 642 1,991 3,441 4,721 3,629	2,688 2,234 2,308 1,981 1,593 811 575 581 2,200 3,909 4,608 3,636	11,587 10,597 9,755 7,998 7,057 4,203 3,542 4,085 12,431 22,730 26,361 16,255	5,978 4,968 5,038 4,398 3,377 2,635 2,041 3,807 14,875 22,539 22,236 13,523	2,803 2,278 2,846 2,278 1,678 1,081 702 1,057 3,824 5,811 7,254 5,800	2,896 2,331 2,489 2,117 1,461 998 690 928 4,508 5,943 6,913 5,981	11,677 9,577 10,373 8,793 6,516 4,714 3,433 5,792 23,207 34,293 36,403 25,304
Totals/ Customs entries Repatriation societies		26,616	27,124	136,601 7,781 1,884		37,412		180,082 7,193 1,789
Grand totals	<del></del>			T46,266				189,064

Comparative Statement showing the number of Immigrants arriving in Canada, by Countries, for the Fiscal Years ending June 30, 1905, and 1906, giving increase and decrease.

Country.	Fiscal Year 1904-1905.	Fiscal Year 1905-1906.	Increase.	Decrease.
English. Welsh. Scotch. Irish	48,847 770 11,744 3,998	, 65,135 797 15,846 5,018	16,288 27 4,102 1,020	
Total British	65,359	86,796	21,437	
African, South. Austrian, N.E.S. Bohemian Buckowinian. Croatian and Slovenian. Dalmatian Galician. Hungarian, N.E.S. Magyar Ruthenian Slovak Belgian. Brazilian Chinese. Dutch French German, N.E.S Alsace-Lorraine Bavarian Prussian Saxon. Würtemburg. West Indian. Bermudian Jamaican Greek. Hebrew, N.E.S  "Russian" Polish Austrian" "German Italian Japanese Newfoundland New Zealand Portuguese Poles, N.E.S  "Austrian" "German "German "Russian "Pussian "German  Russian "Poless "Russian "Russian "Russian	35 204 887 107 1,123 27 4 6,926 981 5 3 47 796 2 1 1,743 2,704 5 6 28 10 6 43 8 8 26 98 1,000 6,206 151 240 118 3,473 354 190 57 70 29 399 8 270 1,916	46 322 1,324 110 1,355 226 16 5,656 739 324 266 154 1,106 71 2 18 389 1,648 1,745 4 222 23 27 171 11 12 254 47 731 6,056 44 260 36 7,959 1,922 340 89 6 155 156 29 385 77 396 3,152	21,437  11 118 487 3 232 199 12  319 263 107 310 69 1 18 108  16  20 4,486 1,568	1,270 242 95 959 1 1 5 8 6 14 269 150 107 82
Finns Doukhobors Spanish Swiss Servian Danish Icelandic Swedish Norwegian. Turks. Armenians Egyptians Syrians	7 461 413 1,847 1,397 30 78 2	1,108 204 12 172 19 474 168 1,802 1,415 357 82 18 336	180 2 22 12 13 13 18 327 4 16	220 245 45 294

6-7 EDWARD VII., A. 1907

COMPARATIVE STATEMENT showing the number of Immigrants arriving in Canada, by Countries—Continued.

Country.	Fiscal Year 1904-1905.	Fiscal Year 1905-1906.	Increase.	Decrease.
Arabians	48 5 45	19 42 387	37 342	29
Total Continental, &c	37,255	44,349	7,094	
United States	43,652	57,919	14,267	
Total Immigration	146,266	189,064	42,798	

#### ARRIVALS AT OCEAN PORTS.

For the fiscal year ending June 30, 1906, there arrived via Canadian and United States ocean ports, 181,193 passengers, of whom 14,053 travelled saloon and 167,140 steerage. Of the saloon passengers 13,296 were destined to Canada and 757 to the United States. Of the steerage passengers 145,305 were for Canada and 21,835 for the United States. Included in the steerage passengers for Canada were 10,913 returned Canadians and 3,124 tourists, leaving the immigration proper via ocean ports at 131,268 souls, which together with the 57,796 settlers direct from the United States, brings the total immigration to 189,064, an increase over the previous fiscal year of 42,798 persons.

The following further statistical information will be of interest: Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrivals of steerage passengers, Table III. with the monthly arrivals of immigrants for Canada, and Tables IV. and V. give summaries of the information obtained from immigrants for Canada upon arrival.

TABLE I.

Nationality and Sex of Saloon Passengers arriving at Ocean Ports for the Fiscal Year ending June 30, 1906.

		Ca	NADA.		τ	NITED	STATES	S.	Canar	DA AND	United	STATES
Nationality.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.
African, South Australian Austrian Bohémian Hungarian Belgian Brazilian Chinese Dutch French German Bavarian English Welsh Scotch Irish West Indian Bermudian Jamaican Greek Hebrew Italian Japanese Newfoundland New Zealand Portuguese Polish Russian Spanish Swiss Danish Swedish Norwegian Armenian Syrian U. S. A. Citizens Negroes India Canadians Tourists	11 44 44 11 12 21 14 600 50 11 2,178 11 45 45 49 22 21 17 7 12 46 46 33 55 11 11 11 11 11 45 46 11 11 11 11 11 11 11 11 11 11 11 11 11	15 1 1 3 3  85  2,283 1,205	2 21 2  2  8  213 134	14 844 22 21 31 31 37 79 68 13 35 143 46 35 143 42 2 2 11 11 3 8 8 8 2 2 2 2 2 2 3 1 1 3 1 3 1 3 3 1 3 3 1 3 3 1 3 3 1 3 3 1 3 3 3 3 1 3	10 3 1 1 2 2 8 8 50 2 12 12 17 4 4 1 1 216	12 12 1 4 4 4 26 6 3 2 2 1 1 1 166	1 4 4 1 1 32 2 2	23 4  1 12 66 13 80 2 18 8 8 1 24 28 4 1 1 1 1 21 111 111	1 2 2 2 6 6 62 62 62 13 466 1001 22 2 50 26 6 10 1 1 3 6 6 2 10 1 1 3 6 6 380 1 1 4 4 2 7 7 2 4 4 1 1 4 4 0 1 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6	2 249 1,284 17 1,284 17 15 11 76 17 11 14 3 3 251 1 2,284 1,241	213 136	1 107 6 1 2 2 32 1 4 4 9 85 85 753 151 466 35 5 21 1 10 42 2 1 1 10 166 671 1 5 5 221 2 2,817
Totals	7,351	5,311	634	13,296	420	291	46	757	7,771	5,602	680	14,053

TABLE II.

Nationality and Sex of Steerage Passengers arriving at Ocean Ports for the Fiscal Year ending June 30, 1906.

						,, 10				<del> </del>		
1		CAN	ADA.		τ	NITED	STATES	S.	Can		ND UNI	TED
Nationality.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.
African, South Australian Austrian, N.E.S Bohemian. Buckowinian Croatian and Sloven-	26 168 796 38 1,004	9' 72 261 29 142	82 267 43	46 322 1,324 110 1,355	29 70 197 5 1	1 66 91 10	3 65 67 10	6 201 355 25 1	28 238 993 43 1,005	10 138 352 39 142	14 147 334 53 209	52 523 1,679 135 1,356
ian Dalmatian Galician Hungarian, N.E.S Magyar Ruthenjan Slovak	202 16 3,565 429 237 193 123	1,041 151 39 31 15	11 1,050 159 48 42 16	226 16 5,656 739 324 266 154	172 247 3	53 94 1	43 42	268 383 4	203 16 3,737 676 240 193 123	13 1,094 245 40 31 15	11 1,093 201 48 42 16	227 16 5,924 1,122 328 266 154
Belgian Bulgarian Brazilian Chinese Dutch French German, N.E.S. Alsace-Lorraine	663 69 2 3 236 917 856	242 2 7 83 441 404	201 8 70 290 485	1,106 71 2 18 389 1,648 1,745	193 6  41 34 358	30 24 264	73 33 18 267	333 6  104 76 889	856 75 2 3 277 951 1,214 2	309 2 7 113 465 668	274 8 103 308 752	1,439 77 2 18 493 1,724 2,634
Bavarian Prussian Saxon English Welsh	21 13 2 36,333 539	1 5	5  14,667 99	22 23 2 65,135 797	4 1 811 28	5 479 12	7 321 3	16 1 1,611 43	21 17 3 37,144 567	10 10 14,614 171	12 14,988 102	4 22 39 3 66,746 840
Scotch Irish West Indian Bermudian Jamaican Greek	9,607 3,160 109 8 10 216	3,507 1,255 49 2	2,732 603 13 1	15,846 5,018 171 11 12	244 168 4	132 132	81 47	457 347 4	9,851 3,328 113 8 10	3,639 1,387 49 2	2,813 650 13 • 1	16,303 5,365 175 11 12
Hebrew, N. E. S  Russian  Polish  Austrian  German	336 2,364 27 108	13 218 1,728 7 74 8	25 177 1,964 10 78	254 731 6,056 44 260 36	18 120 1	132 132 1 3	1 23 186 1 4	45 63 438 2 8	259 354 2,484 27 109 18	14 240 1,860 8 77	26 200 2,150 11 82 11	299 794 6,494 46 268 37
Italian Japanese Newfoundland New Zealand Portuguese Poles N.E.S	7,218 1,614 205 53 3 ·126	417 264 119 19 2 20	324 44 16 17 1	7,959 1,922 340 89	283 883 106 20 1	28 162 81 11	27 24 31 5	338 1,069 218 36	7,501 2,497 311 73 4	445 426 200 30 2	351 68 47 22	8,297 2,991 558 125 7
" Austrian " German " Russian Persian Roumanian	98 22 • 273 6 244	29 4 64 1 73	29 3 48 	155 156 29 385 7 396	56 2 22 2	18 1 6	20 2 3	94 3 2 31	182 98 24 295 6	38 30 4 70 1	29 31 3 51	159 31 416 7
Russian, N. E. S. Finns Doukhobors Spanish Swiss	1,407 767 77 9 114	778 237 53 3	967 99 74	3,152 1,103 204 12 172	1,954 1,624	11 1,086 676 	1,218 320 	43 4,258 2,620 3 21	267 3,361 2,391 77 11 127	84 1,864 913 53 4 36	88 2,185 419 74	439 7,410 3,723 204 15 193
Servian Danish Icelandic Swedish Norwegian	12 317 55 1,100 874	97 51 383 270	3 60 62 319 271	19 474 168 1,802 1,415	366 2 899 1,651	156 2 493 841	107 4 334 514	1 629 8 1,726 3,006	13 683 57 1,999 2,525	253 53 876 1,111	3 167 66 653 785	20 1,103 176 3,528 4,421
TurksArmenians	318 70	24	15 5	357 82	29 7	1 1	3	33 11	347 77	25 8	18 8	390 93

TABLE II.

Nationality and Sex of Steerage Passengers arriving at Ocean Ports for the Fiscal Year ending June 30, 1906—Continued.

		Can	JADA.		τ	<sup>T</sup> NITED	STATES	3.	Can	ADA AN STAT	nd Uni res.	TED
Nationality.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.
Egyptians Syrians Arabians U. S. A. Citizens Negroes India	18 198 17 63 36 377		30	18 336 19 123 42 387	555 1	1 428 1	141	1,124 1 1 14	18 204 17 618 37 390		 171	18 344 19 1,247 43 401
Total Immigration Returned Canadians. Tourists		2,275	836	10,913			, ,	20,986 849	7,802	2,275	836	
Totals	88,047	30,297	26,961	145,305	12,030	5,698	4,107	21,835	100,077	35,995	31,068	167,140

TABLE III.

Monthly arrivals of Immigrants, by Nationalities, at Ocean Ports, for the Fiscal Year ending June 30, 1906.

												-3	
Nationality.	July	Aug.	Sept	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May.	June.	Totals.
	¦					-		-		 			-
African, South	10			1		1		8	11	2	1	í 6	46
Australian	37	48	24		6			8		19			322
Austrian, N.E.S	110		39					14	55	158			1,324
Bohemian	11	$  \  \   \frac{12}{11}$	6	9	$\frac{1}{23}$			1 1		13		5	110
Proatian and Slovenian	2	12				18		22	33 39	295 66			1,35 22
Dalmatian	4		U	10		. 4		22	1	7		10	1
Falician	315	80	61	71	124			52	203	1,458	2,443	760	5,65
łungarian, N.E.S	116		7	14					100	57	200		
Ingyar	1		13						42	56		32	32
Ruthenian	14	$\frac{12}{2}$						27	9	175		10	
lovak Belgian	79		68 68			$\frac{12}{20}$			$\begin{array}{c} 27 \\ 114 \end{array}$	52 257	198	18	$15 \ 1,10$
Sulgarian	8		2					6		37	5		7
Brazilian	١					ī <b>.</b>		l			l	2	•
hinese		1					10		3		3	2	1
Outch	25							13	32				38
rench	163								132				1,64
Ferman, N.E.S	103		$92 \\ 1$		89	58	17	63	140	243	410	259	1,74
Bavarian	, ,		1					18	1	9		i	2
russian	2	4	1						$\frac{1}{4}$	. 3	8		
axon						ļ	1		1				1
Inglish		3,944						1,560	9,175	10,832	13,877		65,13
Velsh.	72		44					8	145				79
cotchrish	353	$^{1,071}_{358}$	755 438										15,84
Vest Indian	25			249				110 1	562		$1,183 \\ 33$		5,01
Bermudian	3		i				1	1	1 1	i	1		1
amaican	7	1		٠		1				· î		i	î
reek	15							3	12	64	34	59	25
Hebrew, N.E.S	117	66	83							5 <b>7</b>			73
Russian Polish	500	$\frac{450}{3}$			238			362	671	629			
Polish	39		$\frac{1}{16}$		14			3 14	$\begin{array}{c} 2 \\ 3 \end{array}$	4	24		26
German	6				1		12	1.7	4	•	8	4	3
talian	254				145	119		613	687	2,451			
apanese	67					82		179	106	226			1,92
Newfoundland	16				- 39			14	37	25			34
New Zealand	12		5 1	6	8	4	4	1	8	6			8
Poles, N.E.S	5				30	7	2	4	14	53	$\frac{3}{24}$		15
Austrian	9			13			1	8	9	58			
ıı German	4		. 3			4		် ဂို		1	Ιű		1 2
Russian	34		40	20	. 17	10	12	13	50	41	73	46	38
ersian	2				2		] <u></u>		<u></u>		2		
RoumanianRussian, N.E.S	11 402		$\frac{25}{115}$	$\begin{array}{c} 8 \\ 122 \end{array}$		53		104	36	128			39
inns	102		-87	74				104 78		619 86			3,15 $1,10$
Ooukhobors							00	10	91	00	133	171	20
panish	; 3							1			3	2	ı
wiss.	11	9	9	10	8	4	2	9	19	21			17
ervian		1	. 1	1		1				2	2		1
Danish	39							17	90	54	78		47
wedish	$\frac{98}{214}$							90	101	1 1 1	7	40	
Torwegian	139		113		71 <b>54</b>				121 122	171			1,80
urks.	13		5					14	9				
rmenians	15		, š				2		6				
gyptians	3				6	8		i	<i>.</i>		,		ĭ
yrians	15		42		47			10				40	33
Arabians	1			2				3		2		3	1
J.S.A. citizens	30	6	11	6	9	1	2	4	ļ   •	10	12		12
ndia	22	2	$\frac{1}{16}$		19	15	10		10			41	4 20
			10	14	43	15	10	50	10	80	89	36	38
	9,111	7,276	7.934	5.529	3,783	2.960	2.333	4.088	14.823	22,957	29.837	20,637	131.26
	,	' ' '	, , , , , ,	,,,,,,,	_,,,,,,,	_,000	2,500	1,000	11,020	,001	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	20,001	-0-,00
						-	· - ·	فأستد درد	ANALYS .				

## TABLE IV.

Monthly arrivals of Immigrants, for Canada, by Occupations and Destination, at Ocean Ports, for the Fiscal Year ending June 30, 1906.

	July	Aug.	Sept	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May.	June.	Total.
					<del></del>	-							
Agriculturists	1 5071	1 045	1.278	1 016	726	676 696 847	480	$934 \\ 1,247 \\ 1,105$	2,997	7,203	7,607	5,308	31,110
Mechanics Clerks Miners Female servants	535 208 567	276	. 228	215	156	185 63 176	167 54	288 85	512 289	1,060 434	1,527 670	1,327 464	7,360 3,142 6,343
Not classed	1,041	1,025	814	604	354	317	219	261	466	726	1,440	1,367	8,634
Totals Maritime Provinces	568	286	463	262	290	302	280	192	638	1,513	887	672	6,353
Quebec Ontario Manitoba	3,110	3,046	3,237	$1,420 \ 2,270 \ 774$	1,399			1,841	6,212	9,312	10,724	7,878	
Saskatchewan	445	310	386 261	264 244	194	135 52 258		130	974 807 460	1,005	1,315	938	
Yukon	<u>.</u>		3		1		1	1	2	1	1	1	131,268
Totals	2,111	1,210	1,934	0,029 	0,100	4,500	2,000	4,000	17,020	22,907	40,001	20,001	101,200

TABLE

NATIONALITY,	Sex,	Occupation	and	Destination	$\mathbf{of}$	Immigrant	Arrivals
•							

				:								TRAI	E OR
Nationality.		S	ex.		Farm Labo	ers, or ourers C	Farm lass.		eneral bourer		Me	ehanio	es.
	Male.	Female.	Children.	Totals.	Male.	Female.	Children.	Male.	Female.	Children.	Male.	Female.	Children.
African, South Australian Austrian, N.E.S. Bohemian Buckowinian Croatian and Slo	26 168 796 38 1,004	9 72 261 29 142	11 82 267 43 209	$\begin{array}{c} 46\\322\\1,324\\110\\1,355\end{array}$	318 8		5 8 150 4 151	38 368 368 9 618	6 41 4 27	5 48 8 47	8 47 74 11 27	11 32	-4 18 28 10 9
venian  Dalmatian  Galician  Hungarian, N.E.	202 16 3,565		1,050	226 16 5,656		1 458	686	125 11 1,712	9 215	289	159		44
S. Magyar Ruthenian Slovak Belgian Bulgarian Brazilian.	429 237 193 123 663 69	15 242 2	16 201	739 324 266 154 1,106 71	31 7 10 302 34	65 2 72	90 4 81	185 194 186 104 125 35	23 26 20 6, 24	31 37 34 7 27	35 4 3 166	66	1 44
Chinese	3 236 917 856 2 21	83 441 404	8 70 290 485 1	18 389 1,648 1,745 4 22	131 443	30 154 170 1,	42 167 282 1	55 113 181	6 20 28	2 30 43	38 132 242 1 1	13 67 68	20 33 97
Bavarian Prussian Saxon English Welsh	36,333 539	5 	5 14,667 99	23 2 65,135 797	5 1 13,123 196	3,176 38	3,697 24	6,438 67	1,717 15	2,780 16	1	4,089	39
Scotch Irish West Indian Bermudian Jamaican	9,607 3,160 109 8	49 2	2,732 603 13	15,846 5,018 171 11 12	1,281 8	689 201 1	843 186 1	1,144 674 41	250 111	321 120	3,553 698 37 5	949 254 7 1	932 184 3
Greek	216 336 2,364 27	13 218 1,728 7	10	254 731 6,056 44	$\begin{array}{c c} 24 \\ \cdot 26 \\ 222 \\ 2 \end{array}$	$124 \\ 1$	218 1	167 35 433 2	3 22 206	9 25 297	$\begin{array}{c} 8 \\ 227 \\ 1,540 \\ 21 \end{array}$	148 957 4	111 1,088 9
Austrian German. Italian	108 17 7,218 1,614 205	8 417 264	78 11 324 44 16	260 36 7,959 1,922 340	5 844 368	5 1 45 45 1	6 1 44 7 1	18 1 5,946 238 173	217 32 2	220	10 264	6 29 2	46 10 18 1
New Zealand Portuguese Poles, N.E.S  "Austrian German	53 3 126 98 22	19 2 20 29	17 1 9 29	89 6 155 156 29	20 2 13 15	$\begin{array}{c} 3 \\ 1 \\ 3 \end{array}$	9 1 3 8	74 73 14	7 9 1	4 9	20 26	5 2 4	
Russian Roumanian Russian, N.E.S. Finns	273 6 244 1,407 767	64 1 73	48	385 7 396 3,152 1,103	71 2 37 384	15 12 196	17 	128 3 161 615	13 1 13 125 55	18 17 241	64 1 38 344	24 200	27 219 8
Doukhobors Spanish Swiss Servian Danish	77 9 114 12 317	53 3 30 4	74 28 3 60.	204 12 172 19 474	$\begin{array}{c} 75 \\ \dots \\ 49 \\ 2 \end{array}$	50 1 . 8 1	73 14	1 2 21 9	$egin{bmatrix} \dots & 1 \ 2 \end{matrix}$	2 2	1 2 35	7	10
Icelandic				168						5			1.0

SESSIONAL PAPER No. 25

V.

for Canada at Ocean Ports, for the Fiscal Year ending June 30, 1906.

Occupa	- ATION.	-									-	 D	ESTINA	rion.			
	llerks, ders, d	tc.	М	iners	s.	rvants.	Not	Classi	fied.	ices.				van.		lumbia.	
Male.	Female.	Children.	Male.	Female.	Children.	Female Servants.	Male.	emale.	Children.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
2 17 14	5 2	83	18 15 10 9	4 2 6	1 4 14	2 5 70 5 38	4 8 7	32 25 5 3	2 42 34 7 2	1 6 28 6 93	9 18 262 5 376	8 68 232 2 91	23 40 485 38 426	2 3 205 	3 26 62 10 67	160 50 49	1
<b>2</b>	1 5	9	 1 <b>3</b> 5	<u>2</u>		318	3	2 10	3 22	133	3 752	176 10 444	32 6 3,452	 568	277	5 30	· · · ·
2 1  29	9	 5	44 6  5 26	3  13	27	44 5 6 5 38 2	1 1 1 15	7 7 3 4 20	8	83 62 9 2 53	73 14 72 2 311	144 137 73 56 54 69	162 33: 95: 3: 453; 2	218 34 3 14 83	40 28 11 43 127	19 16 3. 34 24	ii
3 9 80 60	23	8 2 11 11	11 12	10 7	12	21 61 73	3 138 21	8 106 47	4 37 48	1 2 34 37	$\begin{array}{c} 2\\ 1\\ 40\\ 681\\ 305\\ 1\end{array}$	34 111 299 1	235 498 725 2	35 162 252	39 125 90	16 4 35 37	2
2.201	856	610	1  899	273	454	2,955	$egin{bmatrix} 1 & 1 \ 1 & 1 \ 1,375 \end{bmatrix}$	1 1,069	2,474	1 1 2,898	$\frac{1}{2}$ $\frac{1}{9,598}$	4	12,915	9 3.327	2,744	7 1,999	· · · · · · · · · · · · · · · · · · ·
2,201 35 785 347 15	265 94 1	184 46	45 534 55	5 88 11	11	46 968 498 28	7 175 105 8 1	13 298 86 12	7 312 58 4	802 172 104	99 2,186 838 14	267 6,417 2,339 33 1	$egin{array}{c} 220 \ 3,959 \ 1,158 \ 3 \ \end{array}$	64 923 168 11	51 914	55 643 111 2	7 1 2 
$egin{smallmatrix} 8 \\ 12 \\ 39 \\ 136 \\ 2 \end{bmatrix}$	17 128	5 20 213	2 1 4	 1 2		5 18 208 1	1 3 8 29	1 7 103 1	9 15 148	$\begin{array}{c} 6\\184\\2\end{array}$	1 147 459 2,942 13	93 136 1,658 28	6 109 1,153	18 88	, 1 9		
5 1 29 450 9	7 1 8 67	 6 8	$\frac{1}{2}$	8	2	12 51	4	34 106 61	6 34 26 11	1 604 332	151 24 3,183 3	76 4 3,436 6 5	22 7 132	6	180	418 1,913	
6 1 7 2	······ ····· 1		4	 1	1 3	1	2  2   1	6 1 1 3	6  5	3 10 7	7 41 35 4	19 1 20 36 14	10	1 3	1 12 21 1	55 2 29 1	
5 34 3	3 16 1	30 1	9 1 25 26	2 8	 8 12	18 16 161 148 3	2 5	4 5 78 5	6 132 7	24 113 24	177 3 175 881 76	109 2 63 445 835	2 40 1,190 43	89 343 21	115 32	5 65 72	
7 16	1 2 2 1	2	 5 1	4	3	2 43 26	1 2 1 4	9 2 6	2 1 8 1	42	62 136 4	2 41 8 84 3	195   3   28   1   132   157	9 9 2 9	34  44 3	3 3 8 27 1	

TABLE
NATIONALITY, Sex, Occupation and Destination of Immigrant Arrivals

											TRAI	DE OR
	s	ex.		Farm Labo	ers, or ourers (	Farm Class.				Ме	chanic	cs.
Male.	Female.	Children.	Totals.	Male.	Female.	Children.	Male.	Female.	Ćhildren.	Male.	Female.	Children.
1,100 874 318 70 18 198 17 63 36 377	383 270 24 7  83 2 30 5 8	319 271 15 5  55  30 1 2	1,415 357 82 18 336 19	254 97 9 3 31 31	55 6 1		419 188 39 10	3 1	6	16 10 1	32 39 2 2 1( 7	36 47 1 2 9
	1,100 874 318 70 18 198 17 63 36 377	1,100 383 874 270 318 24 70 7 18 198 83 17 2 63 30 36 5 3777 8	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	The state of the	Farm Labo    Farm Labo   Farm	Farmers, or Labourers (Cabourers  Farmers, or Farm Labourers Class.    Column   Co	Farmers, or Farm Labourers Class.   Labourers Cla	Farmers, or Farm Labourer Class.   General	Farmers, or Farm Labourers.   General Labourers.     Cabourers.   Ca	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	

SESSIONAL PAPER No. 25

V.—Concluded.

for Canada at Ocean Ports, for the Fiscal Year ending June 30, 1906—Concluded.

CCUPA	ATION.											D	estina	TION.	i		
	lerks, ders, d		М	iners	s.	Servants.	Not	Class	ified.	es.	ļ.		,	an.		Columbia.	
Male.	Female.	Children.	Male.	Female.	Children.	Female Serv	Male.	Female.	Children.	Maritime Provinces	Quebec.	Ontario.	Manitoba.	Saskatchewan	Alberta.	British Colu	Yukon.
7 11 8 9 3 22 29 29 99	6 8 1 1 12	3 5 14 5	24 7 4	5 2	9	176 112 7 23 2 5	8 3 9 3 1 22  12	16 16 5 2 7	15 45 3 2 13	157 63 1 2 12 113 4 22 33	119 118 85 26 6 173 14 16 1	437 415 255 53  45 1 33 8	387 8 3	160 138  1	164 154	140	
	1,579	1,226	1,962	459	721				3,633	6,353		51,111	29,413	7,313	5,671		<b> </b>

#### PORT OF HALIFAX.

For the fiscal year ending June 30, 1906, there arrived at the port of Halifax 34,154 passengers, of whom 5,545 travelled saloon and 28,609 steerage. Of the saloon passengers 5,476 were destined to Canada and 69 to the United States. Of the steerage passengers 25,988 were for Canada and 2,621 for the United States. Included in the steerage passengers for Canada were 2,125 returned Canadians and 338 tourists, leaving the immigration proper at 23,525 souls, an increase at this port over the previous fiscal year of 3,482 persons.

Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrivals of steerage passengers, Table III. with the monthly arrivals of immigrants for Canada, and Tables IV. and V. give summaries of the information obtained from immigrants for Canada upon arrival.

TABLE I.

Nationality and Sex of Saloon Passengers arriving at the Port of Halifax for the Fiscal Year ending June 30, 1906.

Hungarian         2         2         2         2         1         2         1         2         1         2         1			Can	ADA.		τ	NITED	STATES	s.	Can	ADA A Sta	nd Un	ITED
Hungarian         2         2         2         2         1         2         1         2         1         2         1	Nationality.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.
	Brazilian Dutch French German English Welsh Scotch Irish West Indian Bermudian Italian Newtoundland New Zealand Swedish Syrian U. S. Citizens	1 13 4 361 1 56 12 8 11  40  126 126 1,694	7 4 6 10  51 1 1  35 1,336	4 3 7 13	5 516 1 67 16 17 28  104 1 2 6 163 3,109	21 42	20	4	2 1 28 2	1 13 4 364 58 12 8 11 1 44 44 143;	1 1300 74 66 10  71 1 1 1 48 1,336	25 4 3 7 17	151 66 11 12 2 13 19 3,11 1,42

TABLE II.

NATIONALITY and Sex of Steerage Passengers arriving at the Port of Halifax for the Fiscal Year ending June 30, 1906.

		Cana	ADA.		τ	Jnited	STATE	s.	Can	ADA AI Star	nd Uni res.	TED
Nationality.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.
African, South	8	4	6	18					8	4	6	
Australian	8 8	6 3	4 9	18 20	13	····i0	12	35	8 21	6 13	4 21	1 5
Bohemian	4	4	4	12		1		1	4	5	4	1
Buckowinian	10 21	····io	16	10 47	• • • • • •	· · · · i		····· <sub>1</sub>	10.21	i1	16	1 4
Hungarian, N.E.S	5			5	5	ī	6	12	10	1	6	1
Belgian	88 1	30	25	143 1	18	8	8	34	106	38	33	17
Belgian Bulgarian Dutch	44	23	13	80	3	5	6	14	1 47	28	19	9
French	127	59	38	224	3	4	3	10	130	63	41	23
Bavarian	61 18	32	33	126 18	26	18	19	63	87 18	50	52	18 1
Prussian	1			1	1			1	2			
SaxonEnglish	9,321	2,506	2,672	14,499	ii3	36	41	190	9,434	2,542	2,713	14.68
Welsh	118	29	18	165	3			3	121	29	2,713	14,00
Scotch	2,782 768	562 199	479 121	3,823 1.088	22 26	4 15		26 41	2,804 794	566 214	479	3,84
West Indian	67	18	9	94	20			2	794 69	18	121 9	1,12
Bermudian	6			6					6			·
Jamaican	7 13	2 3	2	9 18	· · · · · 2			·····2	7 15	2 3	<u>2</u>	2
Hebrew, N.E.S	35	13	21	69	2	2	2	6	37	15	23	7
Russian Polish	385	356 4	452 9	1,193 30	14	10	7	31	399	366	459	1,22
Austrian	17 10	6	7	23					17 10	4 6	9	3
German	3	2	1	6					3	2	1	
Italian. Newfoundland	227 204	3 118	6 16		21 106	12 81	14 31	47 218	248 310	15 199	20 47	28 55
New Zealand	5	2	<i></i> .	7					510	2		ออ
Portuguese	1 7	1 5	1 3	3 15			i	10	1 16	1	1	
Austrian	3	1	2	6					3	5 1	4 2	2
Russian	12	4	3		3	1	1	5	15	$\tilde{\mathfrak{z}}$	4	2
Persian	3	3	····i	2 7	1			····· <sub>i</sub>	• 2	3	i	
Russian, N.E.S	69	46	60	175	162	110	141	413	231	156	201	58
Finns	166 18	51 5	20 6	237 29	397 2	135	61	593 2	563 20	186 5	81 6	83
Danish	47	9	8	64	57	30	21	108	104	39	29	$\frac{3}{17}$
[celandic Swedish	4 241	36	1 24	7 301	93	1 39	3 29	4 161	334	3	4	1
Norwegian	127	28	27	182	375	101	48	524		75 129	53 75	46 70
Curks	4			4					4			10
Armenians Ecyptians	11 15			11 15			• • • • • •	• • • • •	11 15			1
Egyptians Syrians	27	9	11	47	3			3	30	9	ii	1 5
Arabians	3 10	10	4	3 24	·· · · · · · · · · · · · · · · · · · ·	10	 5	····.56	3			
Negroes	35	5	1	41	1			1	51 36	20 5	9 1	8
ndia	1	1	2	4	• • • • • •			• • • • • •	1	ĭ	2	-
otal immigration	15,180	4,210	4,135	23,525	1,524	635	459	2,618	16,704	4,845	4,594	26.14
Total immigration Returned Canadians	1,662	314	149	2,125					1,662	314	149	20,14 $2,12$
Courists	240	60	38	338	1	1	1	3	241	61	39	34
Totals	17.082	4.584	1 200	25,988	1.525	636	460	0.001	18,607	5,220	4,782	

TABLE III.

Monthly arrivals of Immigrants for Canada by Nationalities at the Port of Halifax for the Fiscal Year ending June 30, 1906.

Nationality.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Totals.
African, South		/  		] ]••••	 	1		8	8	. 1       . 1			18
Australian					1		1	2	6		2		18
Austrian, N.E.S		1		1	12	1		2	1	1	1		20
Bohemian					2	1	2			2	5		12
Buckowinian			ا					<u>.</u>		7	3	[	10
Galician					' 4	15	5	2	3	10	8		47
Hungarian, N.E.S				۰۰٪		3		1	1				5
Belgian			2	8	12	9	18	7	44	30	11		143
Bulgarian								3	4	1 42	10		1
Dutch			• • •		7 9	8		12	86		13 8	• • •	80
FrenchGerman, N.E.S		· · ;		1	11	28	7	4	32			·····i	224 126
German, N.E.S Bavarian		-		1		20	. '	17	1	12	40	1	126
Prussian							•••••		i				10
Saxon							i		ī				2
English	262	78	118	64	190	644	417	697	5,473	4,541	1,743	272	14,499
Welsh			1	2	11	9	6	4	56	53	14		165
Scotch	33	21	31	35	74	71	33	183	1,073	2,049	. 130	90	3,823
Irish	3	4		3	45	44	28	51	380	452	55	17	1,088
West Indian	19		4	8		1		1	3	4	18	36	94
Bermudian	3			2			1						6
Jamaican	7	1			·	1	. :			;			9
Greek.					7	3	2	1	4	1	<u>.</u>		18
Hebrew, N.E.S		'			3	11		10	7	_5	7	1	69
" Russian	3				57	246 9	243 9	238 3	255		90	4	1,193
" Polish Austrian		• • • •	• • • •		1 5	9 2	12	4	2	1	5		30 23
German					ا ا		1	4	4	• • • • • •	;		23 6
talian		4	128		· · · · · · · · · · · · · · · · · · ·	4	6	4	23	62	2	····· <sub>1</sub>	236
Newfoundland	16		39	37	39	11	12	14	37	25	39	27	338
New Zealand			2			ī			ĭ	3	00		7
Portuguese											3		3
Poles, N.E.S					2	. 2	2	2		6	ĺ		15
" Austrian					2			1	3				6
_ " Russian				j		3	5	õ	1	2	3		19
Persian		;			2								
Roumanian					<u>.</u>	4	· · · · <u>- · ·</u>		_2	1			7
Russian, N.E.S		I		• • • •	1	31	17	28	72	12	12		175
Finns Swiss	1				14	83	29	52	45	6	7		237
Danish	. 2	i		••••	····2	4 9	1 1	4 6	14 12	6 18		•••••	29 64
Icelandic	. 2		• • • • •	1	ĺí	4	1	U	12	10	12		7
Swedish.		1			14	90	61	· · · i2	36	58	29		301
Norwegian				· · · · i	4	9	8	9	42	71	37	1	182
Furks			i		3		Ĭ	ĭ	12	1.1	31	1	4
Armenians							2	$\hat{2}$	5	2			11
Egyptians					6	8		ī					15
Syrians		9	10		13	9		1	5				47
Arabians								1		2			3
U.S.A. Citizens	2		'		2		2	2		6	2	8	24
Negroes.	• • • •											41	41
India					· · · <i>•</i>	• • • • •						4	4
Totals	254	164	341	164	558	1,409	977	1,395		7,617	2,291	512	23,525
					ארים	i Anu	ur/7	1 3U51	7,743				24 020

TABLE IV.

Monthly arrivals of Immigrants for Canada by Occupations and Destination at the Port of Halifax for the Fiscal Year ending June 30, 1906.

	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Totals.
Agriculturists General labourers. Mechanics Clerks Miners Female servants Not classed Totals	22 16 48 14 57 22 175	10 40 17 13 59 14 11 —	5 142 33 7 51 31 72 341	4 33 24 5 51 33 14 164	72 151 139 32 54 56 54 558	321 305 434 53 49 110 137	183 169 419 51 36 53 66 977	397 202 532 100 42 83 39 1,395	3,950 859 2,179 226 154 223 152 7,743	3,466 791 2,318 272 290 283 197 7,617	758 439 709 83 226 52 24 2,291	44 72 66 17 100 29 184 512	9,232 3,219 6,918 873 1,169 989 1,125
Maritime Provinces Quebec Ontario Manitoba Saskatchewan Alberta British Columbia Yukon. Totals		1 6	1 5 	3  1 1	205 64 203 46 13 8 19 	208 317 572 202 63 19 28  1,409	141 252 420 111 17 20 16 	99 301 589 255 60 34 57 	441 127 1	1,820 463 357 79	533 238 949 417 72 47 35  2,291	448 3 44 15  2  512	3,648 2,392 9,913 5,032 1,246 928 365 1

6-7 EDWARD VII., A. 1907

TABLE

NATIONALITY, Sex, Occupation and Destination of Immigrant arrivals for

=										_			===
		Sh	, v									Tr	ADE OR
Nationality.		HC1				armers n Labo Class.			enera oure		M	echani	cs.
	Male.	Female.	Children.	Totals.	Male.	Female.	Children.	Male.	Female.	Children.	Male.	Fémale.	Children.
African, South. Australian. Australian. Austrian, N.E.S. Bohemian Buckowinian Galician Hungarian, N.E.S. Belgian Bulgarian Dutch French. German, N. E. S. Bavarian. Prussian. Saxon. English Welsh. Scotch Irish. West Indian. Bermudian. Jamaican Greek Hebrew, N.E.S. Russian. German. Italian Newfoundland New Zealand. Portuguese. Poles, N.E.S. Hussian Russian, N.E.S. Hussian Russian, N.E.S. The Austrian Russian Russian, N.E.S Thins Swiss Danish Icelandic Swedish Norwegian Turks. Armenians Egyptians Syrians Arabians U. S. A. Citizens. Negroes India	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 9	6 3 4	2,672 133 333 333 2,672 121 479 121 4522 9 7 7 11 66 16 33 2 20 60 20 68 8 11 27	18 18 20 20 12 10 47 75 143 115 15 15 15 15 15 15 15 15 15 15 15 15	3 7 7 46	2 1 1 1 1 2 3 0 6 8 1 1 1 2 2 6 6 1 1 1 2 2 6 6 1 1 1 1 2 1 1 2 1 1 1 1	3 8 8 11 7 30 17 984 6 205 65 1 1 1 3 3 4 8 12 3 4 8 12 4 8 12 13 14 15 15 16 16 16 16 16 16 16 16 16 16			14 43 23 3388 143 23 558 66 	1 22 22 15	1 2 2 3 10 12 2 3 3 3 3 2 2 1 1 1 1 2 2 1 1 1 4 4 2 2 1 1 1 1 1	684 10 88 18 15 271
100013	10,100	2,210	4,150	<b>⊿</b> ∂,020	0,049	1,219	1,464	2,354	050	บอบ	4,048	1,103	1,107

SESSIONAL PAPER No. 25

ν.

Canada at the Port of Halifax for the Fiscal Year ending June 30, 1906.

Clerks, Traders, &c.   Miners.	Occupation.	-		•							Dr	STINAT	ION.			
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Clerks, Traders, &c.	]	Mine	rs.	vants.	Not	Classi	fied.	á				'an.			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Male. Female. Children.	Male.	Female.	Children.	Female Ser	Male.	Female.	Children.	Maritime Province	Quebec.	Ontario.	Manitoba.	Saskatchew	Alberta.	British Columbia	Yukon.
	333 82 6 131 22 1 131 1 2 1 1 1 2 1 1 1 1 1 2 1 1 1 1 1 1 1	2 2 2 11 11 12 12 12 12 12 12 12 12 12 1	5 105 2 1 1 36 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1788 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 7 7 3 6 6 7 7 6 7 7 6 7 7 1 1 2 1 1 2 2 1 1 1 2 2 1 1 1 2 2 1 1 1 5 5 1 1 1 1	9 4 1 1 176 23 18 2 1 7 1 3	116 116 119 140 61 110 61 110 110 110 110 110 110 110	428 428 74 13 3 31 11 11 11 3 4	1 12 12 12 12 12 13 14 15 12 12 11 12 12 12 12 12 12 12 13 13 13 13 13 13 13 13 13 13 13 13 13	35 5 40 889 23 1,026 7272 83 3 839 574 71 10 66 72 2 31 144 100 61 122 11 24 240 11 38 88 11	11	6 1 1 1 1 2 2 8 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	7 9 37 25 829 17 193 44 8 20 21 11 10 16	88 86 617 112 167 46 4 4 	227 3 67 15	

#### PORT OF ST. JOHN.

For the fiscal year ending June 30, 1906, there arrived at the port of St. John 20,398 passengers, of whom 782 travelled saloon and 19,616 steerage. Of the saloon passengers 765 were destined to Canada and 17 to the United States. Of the steerage passengers 16,410 were for Canada and 3,206 for the United States. Included in the steerage passengers for Canada were 805 returned Canadians and 269 tourists, leaving the immigration proper at 15,336 souls, an increase at this port over the previous fiscal year of 1,740 persons.

Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrivals of steerage passengers, Table III. with the monthly arrivals of immigrants for Canada, and Tables IV. and V. give summaries of the information obtained from immigrants for Canada upon arrival.

TABLE I.

Nationality and Sex of Saloon Passengers arriving at the Port of St. John for the Fiscal Year ending June 30, 1906.

		Can	ADA.		τ	JNITRD	STATES	s	AND	Can Unit	ada Ed Sta	TES.
Nationality.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.
Austrian. Austrian Bohemian Belgian. French. German English. Welsh Scotch. Irish. West Indian. Bermudian Newfoundland. Swiss. U. S. Citizens India Canadians. Tourists.	2 17 2 3 1866 3 69 7 10 2  1 22 47	79 14 22 100 5 1 6	22 	2 3 287 3 88 9 222 7 7 1 1 8 2 210	1 1 1 7	1		1 2 1 1 1 12	22 1 1 7 2 4 187 3 69 7 10 .2  1 9 9 2 115	11 79 15 22 100 5 1 11 76 45	22 5 2 2	2 1 1 1 8 2 288 3 9 9 9 22 7 1 1 1 20 2 210
Totals	459	239	67	765	10	7		17	469	246	67	782

TABLE II.

NATIONALITY and Sex of Steerage Passengers arriving at the Port of St. John for the Fiscal Year ending June 30, 1906.

		Caņ.	ADA.		τ	Inited	STATE	s.	ANI	Can Unit	ADA ED STA	TES.
Nationality.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.
African, South	1 7	···· j	2	3 8				 	$\begin{bmatrix} 1 \\ 7 \end{bmatrix}$	i	2	3 8
Australian	115	40	30	185	73	22	16	111	188	62	46	296
Bohemian	8	2	õ	15	ĭ	2	3	6	9	4	8	21
Buckowinian	279	32	41	352 9	l <sub>i</sub>			1	280	32	41	353
Croatian	9			6					6			9
Galician	1,309	276	192	1,777	129	30	15	174	1,438	306	207	1,951
Hungarian, N.E.S	132	23	20	175	128	38	15	181	260	61	35	356
Magyar. Slovak	6 8	• • • • •	i	6 9	3	1		4	8	1	····i	10 9
belgian	151	50	40	241	61	12	17	90	212	62	57	331
Bulgarian		2		2 41	2			$egin{pmatrix} 2 \ 2 \end{bmatrix}$	$\frac{2}{23}$	2 9		4
Dutch French	22 19	8 11	11 6	36	$\frac{1}{2}$	$\begin{array}{c c} 1 \\ 3 \end{array}$	7	12	$\frac{23}{21}$	14	11 13	43 49
German, N.E.S	129	$\tilde{52}$	75	. 256	89	56	77	222	218	108	152	478
Bavarian	$\frac{2}{2}$	1		3		<i>.</i>	\ <b></b>		2	1		3 6
Prussian	5	1		6	1			····i	$\begin{array}{c} 5 \\ 1 \end{array}$	. 1		1
English.	4,443	1,143	1,101	6,687	51	15	13	79	4,494	1,158	1,114	6,766
Welsh	85	17	23	125					85	17	23	125
Scotch	831 260	165 71	118 28	1,114 359	17 3	4 3	5	26 6	848 263	169 74	123 28	1,140
West Indian	29	24	3	56	2			$\tilde{\mathbf{z}}$	31	24	3	58
Bermudian	2	1	1	4 2					. 2	1	1	4 2
Jamaican	2 4	• • • • •	• • • • • •	4	35			35				39
Hebrew, N.E.S.	81	52	37	170					81	52	37	170
" Russian	$\begin{array}{c} 341 \\ 2 \end{array}$	163	163	667 2	_ 6	9	12	27	347	172	175	694
Polish Austrian				$\frac{2}{2}$					$\begin{vmatrix} & \frac{2}{2} \\ & 2 \end{vmatrix}$			$egin{pmatrix} 2 \\ 2 \end{pmatrix}$
German		1		1						. 1		. 1
Italian	1,330	22 1	12	1,364 2	191	3	1	195	1,521	25 1	13	1,559 <b>2</b>
Poles, N.E.S	52			59					52			59
и Austrian	1	2	2						1	2	2	5
German	1 73	7	   3	$\begin{vmatrix} 1\\83 \end{vmatrix}$			••••	7	1 80	7	3	, 90
Roumanian, N.E.S	57	37	41	135	7	4	3	14	64		44	149
Russian, N.E.S	419	144	181	744	666	238	272		1,085		453	1,920
Finns Spanish	95. 1	7	4	106	111	26	8	145	206	33	12	251 1
Swiss.	12	i		13	1			i	13	·····i		14
Danish	65	16	5	86	121	36	40	197	186	52	45	283
Norwegian	101 116	28 19	33 24	162 159	118 202	33 52	18 24	169 278	219 318	61 71	51 48	331 437
Turks	7			7	9			9	16			16
Armenians	3	2	1	6					3	2	1	6
Syrians	30 2	23	21	74					30 2	23	21	74 2
U. S. citizens	4			4	16	4	4	24	20	4	4	28
Matal Immi	10.000	9.450	2,224	15,336	0 VE 4	592	==-	9 104	10.71	9.04		
Total Immigration Returned Canadians	10,660 633	2,452 113	2,224	15,336	2,054	592	550	3,196	12,714 633	3,044 113	2,774 59	18,532 805
Tourists	220	27	22	269	5	2	3	10	225	29	25	279
Totals	11,513	2,592	9 305	16,410	2,059	594	553	2 000	19 570	9 100		
LOUMIS	TF 019	4,002	_∠,ಎ∪೨	10,410	4,009	094	003	<b>3,206</b>	13,572	3,186	2.808	19,616

TABLE III.

Monthly arrivals of Immigrants for Canada by Nationalities at the Port of St. John for the Fiscal year ending June 30, 1906.

Nationality.	July.	August.	September,	October.	November.	December,	January.	February.	March.	Avril.	May.	June.	Totals.
African, South				ı	,	ļ		,	3				
Australian					!			1	5 5	2			:
ustrian, N.E.S			· · ·		6		7	$\bar{7}$	47	$11\tilde{5}$			18
Bohemian.,					l	)	5	i i	·	9			ĩ
Buckowinian					7	16	7	1	33	288			355
roatian						1			7	1			
Dalmatian									1	5			
alician					25	43	26	46	199	1,438	<b></b>		1,77
lungarian, N.E.S					15	25	18,	16	62	39			17
Iagyar										6			1
lovak			'			ا ا	2		.,	7		[ <u>.</u> . ]	
Belgian	· · · ·				9	. 8	14	13	41	156			24
Bulgarian		}				2	!	!					
Outch rench				• • • •	4	1 5	1	4	22	13			4
erman, N.E.S		::::		• • • •	4	19	$\frac{1}{2}$	$\frac{7}{13}$	5 72	14	· · · · · ·		3
avarian				- • • •	0	19		13	12	142 2			25
russian	• • • •				j		• • • • • •	1.	3	3	• • • • • •		
Inglish					37	358	409	672	2,856	2,338	·····i		6,68
Velsh		'			1	14	13	3	75	2,336		3	. 12
cotch			3		5	126	82	140	307	451			1.11
rish					11	27	22	33	142	122		2	35
Vest Indian	5				4	·	3		3	2	3	36	5
ermudian	. "				1 1				1	í	1	1	J
							1			î			
reek					2	i				î			
lebrew, N.E.S					42	27	37	23	17	$2\hat{4}$			17
" Russian					23	38	120	87	227	172			66
" Polish					'	١ ١	2						-
Austrian	١.				'			1	1				
German							1		l				
talian		]			7	21	15	42	162	1,117		. <i>.</i>	1,36
lew Zealand	'							1	اينت حت	1			
oles, N.E.S					1	5		2	7	44			5
Austrian	'		• • • •			• • • • • • • • • • • • • • • • • • • •		• • • • • •	1	4			
German					4	••••		• • • • • • • • • • • • • • • • • • • •	1				
oumanian		• • • •			25	41	1	8  3	40	20	· · · · · ·		. 8
Russian, N.E.S					18.	95	$1\overline{2}$	16	22 146	43			13
inns			••••		10	12	19	13	36	$\frac{457}{26}$			74 10
panish						12	10	1	30	20		• • • • • • • •	10
	: : : <i>:</i>					• • • • • •		î	4	11	[	• • • • • • •	1
Danish.					6	6	4	5	47	18			8
wedish					2		11	11	64	50	••••		16
forwegian					$1 - \tilde{1}$		11	12	71	57			15
urks					ا ً أ		1		' -	SI Ri			10
rmenians								1	1	1	• • • • •		
yrians					20	8	28	8	10	1	• • • •		7
rabians								2	1''	• • • • • •			•
. S. Citizens					1	1		2					
Totals	—	—-  7		_	284	938	882	1,200	4,738	7,226	j	48	15,336

27

## SESSIONAL PAPER No. 25

TABLE IV.

Monthly arrivals of Immigrants for Canada, by Occupations and Destination, at the Port of St. John for the Fiscal Year ending June 30, 1906.

<u> </u>	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Totals.
Agriculturists General labourers Mechanics Clerks Miners Female servants Not classed Totals	3				82 42 79 21 6 26 28 ———————————————————————————————	272 155 317 63 9 54 68 938	251 119 322 58 15 39 78 882	330 304 401 60 25 50 30 1,200	2,190 1,063 1,087 140 82 139 37 4,738		1	31 31 1 3 4 48	5,641 4,602 3,566 515 197 535 280
Maritime provinces. Quebec Ontario Manitoba Saskatchewan Alberta British Columbia Yukon Totals.	3	1			45 70 55 81 17 15 1 	77 208 355 159 71 22 46	127 207 290 173 27 15 43 	59 207 552 227 67 45 43	513 1,595 1,626 352 261 85	711 1,250 1,824 2,430 538 367 106		39 3 4 2 4	1,378 2,462 4,677 4,696 1,074 725 324

6-7 EDWARD VII., A. 1907

TABLE

NATIONALITY, Sex, Occupations and Destination of Immigrant arrivals

Nationality.   Sex.   Farmers or Class.   Caeneral Labourers.				, 	• =====				· · · · · ·					
Nationality.   Farmers or Farr Labourers.   General Labourers.   Class.   Mechanics.   Class.   Clas			(1									7	l'rad	E OR
African, South	Nationality.		SE	ex.		Farm	Labou	or irers			S.	Mec	hani	cs.
Australian		Male.	Female.	Children.	Totals.	Male.	Female.	Children.	Male.	Female.	Children.	Male.	Female.	Children.
U. S. Citizens	Australian Australian, N. E. S Bohemian Buckowinian. Croatian Dalmatian Galician Hungarian, N. E. S Magyar Slovak Belgian Bulgarian Dutch French German, N. E. S Bavarian Prussian English Welsh Scotch Irish West Indian Bermudian Jamaican Greek Hebrew, N. E. S  "Russian "Polish "Austrian. "German Italian New Zealand Poles, N. E. S "Austrian. "German Russian "Russian "Berman Romanian Russian, N. E. S Finns. Spanish Swiss Danish Swedish Norwegian Turks Armenian Syrian.	7 115   8 279   9 6   1,309   132   6 8   151     22   19   129   24   4,443   85   831   260   29   2   4,443   1,330   1   1   1   52   1   1   1   1   1   1   1   1   1	1 40 40 232 276 233 500 511 11,143 17 165,7 71 11 124 11 124 11 124 11 124 11 124 11 124 11 124 11 124 11 124 11 125 126 127 128 128 128 129 129 129 129 129 129 129 129	30 5 41 192 20 11 6 75 1,101 23 118 28 3 11 163 37 163 41 181 4 4 4 5 5 3 3 41 181 40	3 8 8 1855 15 15 3522 9 9 1777 175 6 6 9 241 36 2566 6,687 125 1,114 359 5 1 1,364 2 2 59 5 5 1 1,364 170 6 11 1,364 106 11 13 86 162 159 7 6 6 7 7 4 2	1 3 48 1 107 5 5 4 696 500 3 72 11 144 70 2 1,933 32 422 124 2 2 8 27 17 6 1 1 28 13 103 32 8 34 444 34 1 9 9 2 2	19 20 108 14 17 5 3 3 26 13 84 4 3 54 16 16 16 16 16 16 16 17 18 8 8 18 18 18 18 18 18 18 18 18 18 18	244 366 138 13 17 11 41 425 27 77 12 13 13 11 688 1	3 1600 1 5355 44 4 45 3 8600 16 888 49 9 1 7 7 56 1 1,266 1 1,266 1 1,266 1 1,266 1 1,266 1 1,266 1 1,266 1 1,266 1 1,266 1 1 1,266 1 1 1,266 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 6 6 5 5 1 1 6 6 6 5 5 1 1 6 6 6 6 5 1 1 6 6 6 6	38 5 8 8 7 247 9 6 8 8 31 10  10  15 8 8	9 44 122 2 2 59 13 3 26 3 26 166 2 237 1 1 1 3 30 19 65 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	270 7 30 13 3 41 95 2 2 15	309 111 27 6 3 3 3 99 2 21 440 11

SESSIONAL PAPER No. 25

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for Canada at the Port of St. John for the Fiscal Year ending June 30, 1906.

Occupation.										DESTINATION.						
Clerks, Traders, &c.		Miners.			vants.	Not Classifie		ified.	Provinces.				an.		ımbia.	
Male.	Female.	Children.	Male.	Female.	Children.	Female Servants.	Male.	Female.	Children.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	22 2 3 1 1 1 1 3 1 3 1 1 1 3 1 1 1 1 3 1	1 1 3 25 6 6 3 17 2 2	1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4 4 3 3 3 5 5	99	222 1 3 2 1 1 1 3 2 1 1 2 2 1 2 1 2 2 1 2 2 1 2 1	4 1 1 2 2 2 2 2 2 3 3 1 1 1 1 1 1 1 1 1 1	1 5 3 1 3 1 1 7 7	2 7 7 1 1 65 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 32 90 1 1 90 1 1 441 900 366 8 1 1 91 4077 1 1 1 632 6	1 138 211 172 2,926 402 124 13 31 122 9 9 1400 73 6 18 57 6 6 1 8	3 87 7 999 7 6 1,071 53  142 2 37 14 143	36 71 119 27 26 	3 8 16 93 4 18 3 12 8 8 37 92 37 1 19 19 19 19 5 10 19 9 7	, 1 2 7
344		92	156	18	23	535	1 42			1,378	2,462	4,677	4,696	1,074	725	324

#### PORT OF QUEBEC.

For the fiscal year ending June 30, 1906, there arrived at the port of Quebec 97,495 passengers, of whom 5.496 travelled saloon and 91,999 steerage. Of the saloon passengers 5,218 were destined to Canada and 278 to the United States. Of the steerage passengers 78,525 were for Canada and 13,474 for the United States. Included in the steerage passengers for Canada were 5,726 returned Canadians and 1,359 tourists, leaving the immigration proper at 71,440 souls, an increase at this port over the previous fiscal year of 10,597 persons.

Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrivals of steerage passengers, Table III. with the monthly arrivals of immigrants for Canada, and Tables IV. and V. give summaries of the information obtained from immigrants for Canada upon arrival.

TABLE I.

Nationality and Sex of Saloon Passengers arriving at the Port of Quebec for the Fiscal Year ending June 30, 1906.

	Canai)a.				υ	NITED	Stares	S.	Canada and United States.			
Nationality.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total,
African, South Australian Australian Belgian Dutch French German Bavarian English Welsh Scotch Irish West Indian Freek Italian New Zealand Polish Wwedish Norwegian Armenian J. S. Citizens Janadians Courists	1 3 1 4 1 27 12 1 1,185 5 238 500 1 1 1 4 1 1 2 7 3 6 4 1 1 1 1 1 1 1 2 7 7 1 2 7 7 1 2 1 2 1 1 2 1 2	5 3 15 7 794 1172 25 11 11 11 11 11 23 723 419	1 79 25 3 3 2 85 49	11 99 177 12 200 12,0588 6435 788 11 11 13 34 41 11 34 41 11 34 41 11 34 41 11 34 41 11 34 42 43 57 86 11 11 11 11 11 11 11 11 11 11 11 11 11	8	15 4 3 3 	13	1 2 2 45 2 12 17 7	1 3 3 5 3 27 12 1 1,211 7 246 54 1 1 1 1 1 2 1 2 1 2 1 1 1 1 1 1 1 1 1	15 8 809 1 1766 28	2 83 25 3 15 85 51	2,10 44' 8. 21: 1,54' 98:
Totals	2,783	2,190	245	5,218	147	111		278	2,930	2,301	265	5,49

TABLE II.

NATIONALITY and Sex of Steerage Passengers arriving at the Port of Quebec for the
Fiscal Year ending June 30, 1906.

		Can.	<b>ADA.</b>		U	NITED	States	S	Can	ADA AN Stat	D Uni	TED
Nationality.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.
African, South Australian, Austrian, N.E.S. Bohemian. Buckowinian. Croatian. Galician. Hungarian, N.E.S. Slovak. Belgian. Bulgarian. Dutch. French. German, N.E.S.	15, 38, 201, 23, 715, 3, 2,219, 138, 4, 324, 324, 85, 85, 541,	5 13 90 20 110 1 748 78 1 138 	3 8 105 34 168 2 838 90 1 118  32 198 292	23 59 396 77 993 6 3,805 306 6 580 150 1,004	2 5 110 4 1 11 43 114  113 4 33 25 221	1 3 59 7  22 55  47  23 15 181	39 7  28 21  48  27 8 167	6 8 208 18 , 1 93 190 , 208 4 83 48 569	17 43 311 27 715 4 2,262 252 4 437 7 118 566 692	6 16 149 27 110 1 770 133 1 185 56 280 418	6 8 144 41 168 2 866 111 1 166  59 206 459	29 67 604 95 7993 7 3,898 496 6 788 7 233 1,052
Alsace-Lorraine. Bavarian Prussian English Welsh Scotch Irish West Indian Bermudian Greek Hebrew, N.E.S. Russian Polish.	19,454 301 5,302 1,837 1 189 1,400	1 9,524 105 2,600 898 1 1 4 147 972 3	1 5,623 52; 2,042 425 8 110 1,085	4 1 16	3 603 23 185 129 6 16 100	5 413 12 122 106  1 20 113	7 265 3 76 47  1 167 1	15 1,281 388 383 282  8 57 380 2	20,057 324 5,487 1,966 1 57 205 1,500	9,937 117 2,722 1,004 1 1 5 167 1,085	12 9,888 55	4 1 31
Austrian German Italian Japanese Newfoundland New Zealand Portuguese Poles, N.E.S. Austrian German	87 14 1,304 1	62 5 44 1 4	69 10 41 1  1  4  14 	218 29 1,389 2 2 16 2 40 46 11	1 67 1 2	12  18 1	12  19	8 1 91 1 1 84 3	88 15 1,371 1 12 2 76 20 6	4	73 10 53 1  1 23 16 3	226 30 1,480 2 2 17 2 124 49 13
Russian Persian. Roumanian. Russian, N.E.S Finns. Doukhobors. Spanish. Swiss Servian. Danish	154 44 535 342 77 3 55 1	1 26 332 151 53 2 15 15	21		12 14 1,126 1,113 2 10 1 186	7 738 513 1 6	2 6 805 251	27 2,669 1,877 3 18 1 321	166 4 58 1,661 1,445 77 5 65 2	53 1,070 664 53 3 21 1	39 1,275 319 74	261 5 130 4,006 2,438 204 8 109 3 557
Icelandic. Swedish. Norwegian Turks. Armenians. Egyptians. Syrians Arabians. U. S. A. Citizens. Negroes.	50 573 461 26 50	49 257 182 1 5	61 229 180	160 1,059 823 28	679 1,044 19 7	1 419 687 1 1	282 442 3 3  1	$\begin{array}{c} 4 \\ 1,380 \\ 2,173 \\ 23 \end{array}$	52 1,252 1,505 45 57 3 64 12 412	50 676 869 2 6	62 511 622 4 7	164 2,439 2,996 51 70
India Total immigration Returned Canadians Tourists Totals	37,454 3,401 714	$ \begin{array}{r}                                     $	580 65	71,440 5,726 1,359	5 6,461 21 6,482	1 4,058 12 4,070	6	13,435 39 13,474	20 43,915 3,401 735	1,745 592	71	27 84,875

TABLE III.

Monthly arrivals of Immigrants for Canada by Nationalities at the Port of Quebec for the Fiscal Year ending June 30, 1906.

Nationality.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June,	Totals.
African, South. Australian Austrian, N.E.S. Bohemian Buckowinian	10 3 85 11 49	20 20 20 10 11	7 39	1 2 35 1 9	2 9 4 16				 	6		11 47 5 219	59 396 77
Croatian	315 61	80 12	58 6 2	71 9	95 27						2,4 <b>3</b> 5 117	751	3,805
BelgianBulgarian	72	39 8	61	54 9	$\frac{72}{8}$					8	166 3 31	····	580 3 150
French	133 83 3	86 100	102 68 1	86 147	52 65					2 2	319 300		1,004 1,000 4 1
Bavarian Prussian English Welsh Scotch Irish	4,179 68 808 340	3,771 52 1,041 334	1 4,112 41 710 417	2,845 30 491 235	1,213 21 265 83					1,488 1 27 51	8 10,972 155 3,445 1,040	1 10,021 90 3,157	38,601 458 9,944 3,160
West Indian. Bermudian. Greek. Hebrew, N.E.S. Russian Polish.	8 117 490	4 66 433 30	1 8 81 507 1 12	5 35 282 1 59	5 13 150					1 7 61 3 4	5 74 639 4 24	27 53 895	1 63 446 3,457 12 218
Austrian German Italian Japanese	6 74 1	12 62	3 54	101 1	33 					1	825	239	1,389 29 1,389 2
Newfoundland New Zealand Portuguese Poles, N.E.S	2 1 4	$\begin{bmatrix} 1\\3\\ \dots \end{bmatrix}$	2 1 5	1	······i						4 20		16 2 40
Austrian	3 4 34 2	5 1 29 1	1 3 39	12 2 16	 13					1	$egin{array}{c} 13 \\ 1 \\ 70 \\ 2 \end{array}$	40	46 11 242 5
Roumanian	369 97 2	4 119 54	7 108 81 198	8 106 73						9	48 290 64	23 274	103 1,337 561 204
SpanishSwissServian	1 11	8	6	8	3		ļ ļ			1	28 28 2	<b> </b>	5 91 2 236
Danish Icelandic Swedish Norwegian. Turks.	34 98 181 114	35 92 65	33 12 143 92 2	25 1 105 47 12	10 3 35 39					2 6 2	58 6 277 292 2	40 224	160 1,059 823 28
Armenians	15 3 11 1	35 7	27	12 2	3 						7 i	12  14 3	59 3 100 14
U.S.A. Citizens Negroes India	9 10	4	10 1 2	5 5	2					1	5 1		58 1 21
Totals	8,002	6,673	7,085	4,957	2,356					1,703	22,666	17,998	71,440

TABLE IV.

Monthly arrivals of Immigrants for Canada by Occupations and Destination at the Port of Quebec for the Fiscal Year ending June 30, 1096.

												<del></del> -	
	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Totals.
Agriculturists. General labourers. Mechanics. Clerks. Miners. Female servants. Not classed. Totals.	2,595 1,218 2,341 460 143 508 737 8,002	1,727 883 2,128 419 215 391 910 	1,887 983 2,408 504 165 517 621 7,085	1,064 847 1,606 402 145 402 491 4,957	665 351 792 144 89 185 130					613 274 605 94 8 69 40 1,703	5,583 6,714 1,111 391 1,107 735	4,267 5,635 1,181 347 994 903	4,315 1,503 4,173
Maritime provinces Quebec Ontario Manitoba Saskatchewan Alberta British Columbia Yukon Totals	187 1,688 2,871 2,179 417 411 249 	121 1,505 2,855 1,367 290 268 267 	121 1,708 3,026 1,353 372 236 268 1 7,085	74 1,346 2,144 729 257 235 172  4,957	34 546 973 444 146 110 102 1 2,356					14 394 753 368 83 63 28 	5,067 7,881 6,106 1,628 1,149 552 1	173 3,837 7,024 4,370 1,156 892 545 1 17,998	16,916 4,349

6-7 EDWARD VII., A. 1907

TABLE
NATIONALITY, Sex, Occupations and Destination of Immigrant arrivals for

====	IIONA.							auton					==
		Se	v									TRAI	DE OR
Nationality.					Farm Labo	ers or ourers C	Farm lass.	Genera	ıl Labo	urers.	<b>M</b> e	chani	cs.
	Male.	Female.	Children.	Totals.	Male,	Female.	Children.	Male.	Female.	Children.	Male.	Female.	Children.
		<u>H</u>	<del>-</del>		- N				<u> </u>			- <del></del>	
African, South	15 38	5 13 90	3 8 105	23 59 396	4 16 56	3 26	 1 56	1 6 88	 i 12	1 13	7 9 41	4 2 25	1 3 25
Austrian, N.E.S Bohemian	201 23	20	34	77 993	5 240	1 49	1 115	5 451	2 21	5 42	5	3 5	7 9
Buckowinian Croatian	715	110	168 2	6	1	1	2	2					
Galician Hungarian, N.E.S.	2,219 138	748 78	838 90	3,805 306	$\frac{950}{64}$	342 39	539 59	1,156 41	159 9	242 14	95 13	16 6	31 3
Slovak Belgian	$\begin{array}{c} 4\\324\end{array}$	1 138	$\begin{array}{c} 1\\118\end{array}$	580	149	38		38	1 11	1 10	100	41	32
Bulgarian Dutch	3 85	33	32	3 150	 41	·	20	19	2	$\begin{vmatrix} \cdots \\ \mathbf{i} \end{vmatrix}$	l ⊢ 18	· · · · · · · · · · · · · · · · · · ·	····.
French German, N.E.S	541 471	265 237	198 292	1,004 1,000	295 209	107 120	122 195	50 91	15 12	24 19	75	32 41	23 51
Alsace-Lorraine	2	1	1	1,000	1	1	. 1	i			1		
Bavarian Prussian	7	4	5	16	3	3	5	2	11111	1 770	1		
English	19,454 301	9,524 105	52	38,601 458	6,261 99	$\substack{1,877\\26}$	2,193 16	34	10	1,753 6	113	$\begin{vmatrix} 2,919 \\ 19 \end{vmatrix}$	16
Scotch	5,302 1,837	2,600 898	$\begin{array}{c} 2,042 \\ 425 \end{array}$	9,944 3,160	1,637 669	451 110	543 103	768 427	207 77	263 83	2,141 446	763 211	787 159
West Indian Bermudian	1	$\frac{1}{1}$	• • • • • •	$egin{pmatrix} 2 \\ 1 \end{bmatrix}$	· · · · · ·							·····i	
Greek. Hebrew, N.E.S	51 189	4 147	8 110	63 446	5 14	5	6	37 20	1 15	2 19	$\begin{array}{c} 1 \\ 127 \end{array}$	• • • • •	65
n Russian	1,400	972	1,085	3,457	138	76	142	265	115	141	913	100 561	633
Polish Austrian.	87 87	$\frac{3}{62}$	$\frac{1}{69}$	12 218	1 11	1 5	$\frac{1}{6}$	12	7	12	5 60	1 29	40
German	$14 \\ 1,304$	5 44	10 41	29 1,389	5 30	1	1	$\begin{array}{c c} 1\\1,174\end{array}$	28	33	63	$\begin{array}{c c} 4 \\ 2 \end{array}$	9 2
Japanese	1 1	1	ĩ	2			••••	1			i	i	ī
New Zealand	11	4	1	16	3	• • • • •					3	1	1
Portuguese Poles, N.E.S	$\frac{2}{29}$	7	4	2 40		1		16	3		5	i	1
" Austrian " German	20	$\begin{vmatrix} 12 \\ 4 \end{vmatrix}$	14 3	46 11	8 3	5 1	$\frac{6}{2}$	1	3			3	2
" Russian Persian	154 4	48 1	40	242 5	37	11	16	63	11 1	16	45	10	8
Roumanian Russian, N.E.S	44 535	26 332	33 470	103 1,337	$\begin{vmatrix} 10 \\ 203 \end{vmatrix}$	$\begin{array}{c} 7 \\ 120 \end{array}$	18 <b>21</b> 4	18 169	4 53	7 106	16 132	8 70	6 100
Finns	342	151 53	68 74	561 204	30 75	6 50	13 73	293	33	39	11	7	6
Doukhobors Spanish	77 _3	2		5		1		1			1		1
Swiss Servian	55 1	15 1		$\begin{array}{c} 91 \\ 2 \end{array}$	22 1	5 1	10	10	<u>.</u>	2		5	
Danish	148 50	52 49		$\frac{236}{160}$	58 30	10 16	9 46		$\begin{vmatrix} 6\\3 \end{vmatrix}$			14 2	
Swedish Norwegian	573 461	$\frac{257}{182}$	229 180	$1,059 \\ 823$	193 170	68 49	127 96	245 170	42 17	68 28	102		27
Turks	26 50	1 5	1 4	28 59	8	1		16 25		1	1	1	
Armenians Egyptians	3			3	2						8	· · · · · ·	1
Syrians Arabians	63 12	26 2	11	100 14	91 1	1	1	24 9	3	1	8	8	
U.S.A. Citizens Negroes	31 1	16		58 1	5		1	7			7	7	6
India	15	6		21	3			3			1	i	
Totals	37,454	17,363	16,623	71,440	11,791	3,646	4,810	9,400	2,033	2,973	11,776	4,989	5,464

SESSIONAL PAPER No. 25

V

Canada at the Port of Quebec for the Fiscal Year ending June 30, 1906.

Occupat	rion.											D	ESTINA	TION.			
Clerks,	Trad	lers,	M	iners	<b>.</b>	vants.	Not	Classi	fied.	ces.			,	an.	,	umbia.	
Male.	Female.	Children.	Male.	Female.	Children.	Female Servants.	Male.	Female.	Children.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
2 2 3 6 6	33 2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	22 3 3 2 2 2 2 150 43 16 131 3 3 16 131 2 2 3 3 3 5 5	3 7 8 8 9 9 177 199 3 3 111	151144677	15 4 4  256	33 7100 3688 2 10 1199 1 12 2 2 2 1 1 133 3 4 65 97 3 1 1 2 2 10 119 1 12 1 12 1 13 1 13 1 13 1 13 1 13	11 11 12 12 12 12 12 12 12 12 12 12 12 1	1 4 4 4 3 6 6 2 2 9 9 4 588 9 9 1 1 3 3 4 4 3 1 1 1 1 6 6 1 1 2 2 2 3 3 2 2 1	2 1 1 7 7 7 2 1 1 7 6 6 1 5 1 1 6 4 5 2 2 2 2 0 3 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	33 199 211 188 23 5516 162 162 162 40 40 40 41 41 41 41 41 41 41 41 41 41	\$2 1,718 685 	3 97 421  1 26  38 38 248 248 243 11 37	100 122 1688 288 286 522 11 1888 60 3411 4300 2 682 7,178 2,3522 682 77 11 222 77 19 2 66 522 2 8 575 21 1955 242 1 60 151 415 242 1	22 54 446 446 446 119 146 119 146 119 146 119 146 119 146 119 119 119 119 119 119 119 119 119 11	4 39 10 51 180 32 26 65 73 30 61 21 27  5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	111 399 39 313 313 313 314 315 666 315 315 315 315 315 315 315 315 315 315	11
2 5 8	1 1					3	7 	5 1	4	8	13 15 1 11	25 5	8 <sub>1</sub>	i	2 1	2	
2,318 1	,122 <sup> </sup> ii-	875 -31/2	826	254	423	4,173	1,343	1,146	2,078	1,006	16,091	27,527	16,916	4,349	3,364	2,183	

#### PORT OF VANCOUVER.

For the fiscal year ending June 30, 1906, there arrived at the port of Vancouver 8,333 passengers, of whom 1,533 travelled saloon and 6,800 steerage. Of the saloon passengers 1,171 were destined to Canada and 362 to the United States. Of the steerage passengers 4,749 were for Canada and 2,051 for the United States. Included in the steerage passengers for Canada were 1,628 returned Canadians and 1,080 tourists, leaving the immigration proper at 2,041 souls.

Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrivals of steerage passengers, Table III. with the monthly arrivals of immigrants for Canada, and Tables IV. and V. give summaries of the information obtained from immigrants for Canada upon arrival.

TABLE I.

NATIONALITY and Sex of Saloon Passengers arriving at the Port of Vancouver for the Fiscal Year ending June 30, 1906.

		Cana	ADA.	,	. τ	NITED	State	s.	Can	ADA AI Sta	nd Uni tes.	TED
Nationality.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.
Australian Austrian Belgian Chinese Dutch Dutch French German English Welsh Scotch Irish West Indian Greek Italian Japanese New Zealand Portuguese Russian Spanish Swiss Danish Swedish U. S. Citizens India Canadians Tourists	39 5 17 27 311 2 633 18 1 1 1 1 39 23 139 123	25 1 1 2 3 4 170 33 4 170 33 13 1 13 11 3 13 13 13 13 13 13 13 13	42 42 1  2 2 2  3  8	70 10 15 3 20 31 523 97 222 22 11 14 38 2 11 13 3 3 2 11 17 2 17 2 17 2 17 2 17	10 2 7 18 2 1 1 16 1 1 97 1	12 3 2 11 1 	1 16	233 1 5 9 29 3 1 23 4 5 1 68	49	37 1 1 26 6 6 181 	1 1 1 2 3 3 2 3 1 1 1 1 9 8 7	90 1
Totals	705	391	75	1,171	210	133	19	362	915	524	94	1,53

TABLE II.

NATIONALITY and Sex of Steerage Passengers arriving at the Port of Vancouver for the Fiscal Year ending June 30, 1906.

		Cana	ADA.		τ	NITED	STATES	s.	Can ·	ADA A Sta	nd Uni TEs.	• Ted
Nationality.	Male.	Female.	Children.	Total.	Male.	Fernale.	Caildren.	Total.	Male.	Female.	Children.	Total.
Australian Austrian Belgian Chinese Dutch French German English Welsh Scotch Irish Hebrew Italian Japanese New Zealand Portuguese Roumanian Russian, N.E.S Finns Icelandic Swedish Norwegian Turks Syrians U. S. Citizens India Total Immigration Returned Canadians Tourists	84 4 51 22 22 6 1,058 31 31 4 4 2 6 1 111 1336 1,629 1,548 918	444	9 29 16 2 29 16 2	192 4 	1 1 1 29 11 29 11 29 11 29 12 20 12 12 20 12 12 12 20 12 12 12 12 12 12 12 12 12 12 12 12 12	1 2 5 10 2 6 6 11 133 9 1 1 50 1 50 1 272 45	17 3 19 101	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	129 5 1 1 4 4 2 15 80 3 29 11 1 4 1,751 43 3 1 1 8 4 7 7 3 86 343 2,538 1,548 1,609	955	27	348 5 1 5 5 4 21 121 3 40 22 2 2,106 82 2 1 12 1 12 1 12 1 1 1 1 1 1 1 1 1 1 1 1 1
Totals	4,095	438	<b>2</b> 16	4,749	1.600	317	134	2,051	5,695	755	350	6,800

TABLE III.

Monthly arrivals of Immigrants for Canada by Nationalities at the Port of Vancouver for the Fiscal Year ending June 30; 1906.

Nationality.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	Totals.
Australian Austrian Chine e. Dutch. German English. Welsh Scotch Irish Hebrew.	34  1  20 	20  7 		5  9 1 4	3	13	6 29 9	3 1 1	31  9 1 1 3	2 2 2 4	40 2 1 1 4 2	19 1 11 11 5	192 1 5 1 5 80 2 31
Japanese	65 10	54 6		$\frac{27}{3}$	78 8	75 2	 4 4	138	43 6	91 1	455 17	152	1,263 58
Portuguese Russian Icelandic Swedish Norwegian Turks Syrian	4	1 1 . 6				1	· · · · 6	2					1 6 1 8 2 6
U. S. Citizens India	17 12	$\frac{2}{2}$	1 14	1 4	1 40	15	10	31	10	····.	4 88	31	26 337
Totals	176	101	119	56	133	110	47	176	104	182	615	222	2,041

# TABLE IV.

MONTHLY arrivals of Immigrants for Canada by Occupations and Destination at the Port of Vancouver for the Fiscal Year ending June 30, 1906.

	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Totals.
Agriculturists. General labourers. Mechanics. Clerks Miners. Female servants. Not classed Totals.	28 27 19 40 4  58		38	4 8 9 4 4  27 ————	15 3 2 36  77 133	29 1 36	7 4 2 	55 1		110 1  45	21 103 4 12 299	74 37 30 1 43	394 196 137 484 38 12 780 2,041
Maritime Provinces. Quebec. Ontario. Manitoba. Saskatchewan. Alberta. British Columbia. Yukon.  Totals.		 94 	3 115 	<u></u>		104	47	• • •	1	181	••••	216	1 5 24 20 6 32 1,952 1 2,041

TABLE NATIONALITY, Sex, Occupations and Destination of Immigrant arrivals

												===	=
•		Se	_								7	RAD:	E OR
Nationality.		DE.	x.		Farm Labo	ers or ourers (	Farm Class.	Genera	al Lab	ourers.	Me	chan	ics.
	Male.	Female.	Children.	Totals.	Male.	Female.	Children.	Male.	Female.	Children.	Male.	Female.	Children.
Australian Austrian Chinese Dutch. German English Welsh Scotch Irish Hebrew Japanese. New Zealand Portuguese. Russian Icelandic Swedish Norwegian Turks Syrian U. S. Citizens India	84 4 4 51 1 22 22 6 1 1,058 31 3 1 2 6 1 1,336	1 20 6 5	64 2 9 3 29 16	192 4 5 5 80 2 31 11 1,263 58 1 6 6 1 8 2 2 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1	13 9 273 14	3 1 4 1 38 3	2	1 105	1 13	1	26 2 2 3 144 5 2 2 2 2 3 1 1 3 1 16	4 	10 1 1 3
Totals	1,629	272	140	2,041	321	50	23	177	16	3	104	18	15

V.

for Canada at the Port of Vancouver for the Fiscal Year ending June 30, 1906.

Occup.	ATION.											1	Dest	INAT	ION.		
Tr	Clerks, aders,	tc.		Miners	•	vants.	Not C	Classi	fied.	es.				an.		ımbia.	
Male.	Female.	Children.	Male.	Female.	Children.	Female Servants.	Male.	Female.	Children.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
11 1 1 1 5 4 4 301 2 1 1	22 2 1	4	12 1 1  8 2 3 3 3	3	11	11	8 8 364 1	288 77 1 2 75 5 1 1 3 1 1	411 	1	1 2 2	3 3 1 6 5	15	1 4 · · · · · · · · · · · · · · · · · ·	222 	144 3 4 1 1 68 2 23 10 1,256 6 1 8 2 24 337	
422	46	16	29	7	2	12	576	123	81	1	<u>-</u> 5	24	20		32	1,952	

#### PORT OF VICTORIA.

For the fiscal year ending June 30, 1906, there arrived at the port of Victoria 2,021 passengers, of whom 126 travelled saloon and 1,895 steerage. Of the saloon passengers 95 were destined to Canada and 31 to the United States. Of the steerage passengers 1,412 were for Canada and 483 for the United States. Included in the steerage passengers for Canada were 518 returned Canadians and 77 tourists, leaving the immigration proper at 817 souls.

Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrivals of steerage passengers, Table III. with the monthly arrivals of immigrants for Canada, and Tables IV. and V. give summaries of the information obtained from immigrants, for Canada, upon arrival.

TABLE I.

Nationality and Sex of Saloon Passengers arriving at the Port of Victoria for the Fiscal Year ending June 30, 1906.

		Can	ADA.		τ	JNITED	STATE	s.	Can		nd Uni Tes.	(TEI)
Nationality.	Male.	Female.	Children.	Total,	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.
Australian Austrian French German English Scotch Irish Japanese New Zealand U. S. Citizens Tourists	6 40 4 3 2 1 7	1  11 4  1 1 8 1	1 1 1	6 52 9 3 3 2 16 2	2 2 1 13 4	1 1 	2	3 1 2 1 19 5	2 6 42 4 3 3 1 20 5	1 1 1 4 1 1 1 12 2	1  1 1 	2 3 1 6 54 9 3 4 2 35 7
Totals	64	27	4	95	22	7	2	31	86	34	6	126

TABLE II.

Nationality and Sex of Steerage Passengers arriving at the Port of Victoria for the Fiscal Year ending June 30, 1906.

		CANA	ADA.		U	NITED	STATES	š.	CAN	iada ai Stat	nd Uni es.	TED
Nationality.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Total.
Australian Austrian.  Ninese.  Dutch French. German English. Velsh cootch rish Freek talian Apanese. Few Zealand Coles Cussian, N.E.S Finns Danish. Swedish Wordish Wordish Total Immigration Returned Canadians. Courists  Totals	33 22 11 14 14 1554 44 277 22 327 691 491 46 1,228	3 3 1 1 88 88 	266 144 122	66 22 122 20 	1 2 11 13 5 1 13 5 5 1 190 7 7 1 2 5 5 28 8 42 1 1 344	1 1 2 1 15	5 	37	23 2: 11 3 16 629 1 18 86 63 3 17 744 111 27 7 7 3 3 2 2 8 555 491 66 1,035 491 66 1,592	15 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	55 4 3 3 	44' ; 1: ; 1: ; 22 ; 44' ; 22' ; 55; 55; 77' ; 21; 21; 10; 11; 10; 11; 10; 11; 10; 11; 10; 11; 11

## TABLE III.

MONTHLY arrivals of Immigrants for Canada by Nationalities at the Port of Victoria for the Fiscal Year ending June 30, 1906.

Nationality.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Totals.
Japanese New Zealand Poles Russian, N.E.S. Finns Swedish Norwegian U.S. Citizens.			14		1 3 2 2 3 1 1 7 2 6 3 1 1 5 1	2 2 2 1	7	3  1 41	3  1  63 1	135 135	44 11 22  1  230  1 4 2 2 2	139 1	1 2 65 2 2 2 2
Totals		1	15	15	58	39	' 7	65	68	148	254	147	81

# TABLE IV.

Monthly arrivals of Immigrants for Canada by Occupations and Destination at the Port of Victoria for the Fiscal Year ending June 30, 1906.

	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Totals.
Agriculturists General labourers Mechanics Clerks Miners Female servants Not classed Totals.		1 	4 2 6 3 15	<sub>2</sub> <sub>4</sub>	1 24 17 6  10 58	12 4  3	···· 7	8 9 1 12 35 65	7 27  13	36 37 9 42 3  21 148	14 78 16 57 1 1 87 254	34 8 8 47 1  49 147	112 194 70 210 5 1 225 817
Maritime Provinces Quebec Ontario. Manitoba. Saskatchewan. Alberta British Columbia. Yukon. Totals.		1	15	15	····	38		65	68	148	• • • •	147	

6-7 EDWARD VII., A. 1907

TABLE

NATIONALITY, Sex, Occupations and Destination of Immigrant arrivals for Canada, at

		~	·								•	TRAD	E OH
Nationality.			EX.			ers or fourers c			enera ourei		Me	echan	ics.
	Male.	Female.	Children.	Total.	Male.	Female.	Children.	Male.	Female.	Children.	Male.	Female.	Children.
Australian Austrian Lhinese French Jerman English Scotch Irish Freek Italian Lapanese New Zealand Poles Russian, N.E.S Finns Swedish Norwegian U. S. Citizens India	33 22 11 55 144 5 1 554 4 4 27 7 7 2 2 3 3 27 6 25	88	3 3	6 2 12 1 5 20 9 1 33 1 656 4 27 7 2 2 27 6	1  95 1 1 1	7	1	1 1 1 2 1 132 6 4 2 2 3 14 3	19	2	1 22 33 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	i	3
Totals	691	100	26	817	1.04	7	1	173	19	2	66		

47

# SESSIONAL PAPER No. 25

v.

the Port of Victoria for the Fiscal Year ending June 30, 1906.

												DEST	INAT	ION.		
lerks,	Trade	rs, &c.	M	[iner	s.	ants.	Not	t classif	fied.							
Male.	Female.	Children.	Male.	Female.	Children.	Female servants.	Male.	Female.	Children.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatch- ewan.	Alberta.	British Columbia.
i	5	6	1					3					1			$egin{array}{c} 5 \ \dots \ 2 \ \dots \ 12 \ \dots \ 1 \ \dots \end{array}$
2 1 2	i	3	<b>2</b>				4 2	3		• • • • • • •				, 		20
149 1 6	29	4	1 1 1			1	151	ծ1	7							656 4 27
				 [		   	 2 2									7 2 3  27
162	35	13		<u></u>	 		20		7							25 815

#### UNITED STATES PORTS.

For the fiscal year ending June 30, 1906, there arrived in Canada, via ports in the United States, 18,792 passengers, of whom 571 travelled saloon and 18,221 steerage. Included in the steerage passengers were 111 returned Canadians and 1 tourist, leaving the immigration proper at 18,109 souls.

Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrivals of steerage passengers, Table III. with the monthly arrivals of immigrants, and Tables IV. and V. give summaries of the information obtained from immigrants upon arrival.

TABLE I.

NATIONALITY and Sex of Saloon Passengers, for Canada, via Ports in the United States for the Fiscal Year ending June 30, 1906.

Nationality.		Can	ADA.	
Nationality.	Male.	Female.	Children.	Total.
Belgian French Ferman Inglish Velsh Footch Frish Footch	5 1 2 95 24 6 2 4 1 1 2 1 6	3 1 1 1 74 1 1 13 5 1 	2 10 2 4 2 4 2 8	10 2 3 179 15 5 4 4 1 18
Vegro Janadian	139	123	22	284

TABLE II.

NATIONALITY and Sex of Steerage Passengers, for Canada, via Ports in the United States for the Fiscal Year ending June 30, 1906.

NATIONALITY.		Can	ADA.	
	Male.	Female.	Children.	'Total.
frican, South	2	 		
ustralian	28	5	6	_3
ustrian, N.E.S.	$\frac{466}{3}$	128 3	123	71
roatian and Slovenian	190	12	9	21
almatian	10	<u>.</u>	····	1
alicianungarian N.E.S	16 154	7 50	4 49	2 25
lagyar.	231	39	48	31
uthenian	193	31	42	26
ovak	111	14	14	18
elgianulgarian	100 . 65	24	18	14
razilian.	2			C
ninese.	1			
utch	84	19 106	14	11
rench	$\frac{229}{186}$	82	48 85	38 <b>3</b> 8
nglish.	3,050	939	1,259	5,24
elsh	33	8	6	. 4
otch	665 288	173 82	87 29	92
est Indian	12	6	1	39 1
maican,	1			•
reek	145	6	15	16
ebrew, N.E.S  Russian	$\begin{array}{c} 30 \\ 238 \end{array}$	237	9 264	78 78
Russian Austrian	250	6	204	1
alian	4,356	348	265	4,96
panese	1 1			
ew Zealandbles, N.E.S	11	1	2	1
Austrian	74	14	11	ĝ
German	17			1
Russian	$\frac{34}{140}$	5 1 7	2 4	1 1
issian, N.E.S	374	255	254	88
nns	162	28	7 1	19
anish	$\begin{array}{c} 5 \\ 29 \end{array}$	$\frac{1}{9}$	1	
vissrvian	11	3	3	3 1
nish	57	20	11	8
vedish	178	61	30	26
orwegian	$\begin{array}{c} 141 \\ 275 \end{array}$	$\begin{array}{c} 41 \\ 23 \end{array}$	40 14	22 31
rks	6		1.1	91
rians.	77	25	12	11
.S.A. Citizens.	1	1	3	
otal Immigration	12,492	2,826	2,791	18,10
eturned Canadians	67	37	2,707	11
purists	1			
·	12,560	2,863	2,798	18,22

TABLE III.

Monthly arrivals of Immigrants, for Canada, via Ports in the United States for the Fiscal Year ending June 30, 1906.

								_==_					
Nationality.	July	Aug.	Sept	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May.	June.	Totals.
African, South Australian Austrian, N.E.S.	25	7 1 2	1	23	3	4	1 4 2	2 5	22 7	2 40 2	2 409	3 196	2 39 717 1 6
Croatian and Slovenian  Dalmatian  Galician  Hungarian, N.E.S.	2 4  55	12  26	6 3	18 5	 , 1	17 4 5	5  1	22 4 1	32 1 37	65 2 10 18	17 83	15 9	211 10 27 253
Magyaran, N.D.S.  Ruthenian. Slovak Belgians	1 14 5	12 12 2	13 1 1 5	29 5 8	5 6 2	37 7 12 3	39 6 7 2	68 27 23 9	42 9 27 29	50 175 45 63	21	32 4 14 3	318 266 139 142
Bulgarian Brazilian Chinese Dutch.		2		2 1	3			6	 6	36 83	2  14	2 1 2	65 2 1 117
French	30 20 63 4	6 18 81	30 23 72 2	27 4 31	6 5 74	22 9 <b>7</b> 5	11 6 96	23 45 187	41 36 837 13	121 87 2,459 23	27 78 1,158 4	39 22 115	383 353 5,248 47
Scotch Irish West Indian Jamaican:	20 10 1	8 20 2	11 15 2	5 10 1	10 7	17 5	50 11	60 26	110 37	438 134 1	138 86 12	58 38	925 399 19
Greek. Hebrew, N.E.S. Russian Austrian	7	6 17	7 2 8 4	9 5 1	1 2 8	6 2 26 1	34	2 37 9	7 15 189 2	61 21 339	28	32 69	166 45 739 17
Italian. Japanese. New Zealand. Poles, N.E.S.	180 1	56		2	103	94	75	566	502	1,271	1,206 2	746 1	4,969 1 2 14
Austrian German Russian Roumanian	6	 6	 1 18	1	3	7 4 3 8	1 3 10	7 9 6	5 9 12	54 1 18 84		12 6 2	99 17 41 151
Russian, N.E.S. Finns. Spanish. Swiss.	28 4 2	10 4 3 1	7 6 3	16 1	59 3 5	29 8	8 15 1	57 13	47 10 4	141 47 3	400 65 1 16	81 21	883 197 6 39
Servian. Danish. Swedish. Norwegian	3 33 25	1 3 4 2	1 3 6 21	1 3 9 8	19 19 10	1 1 3 6	11  2 11	6 3 3	31 21 9	2 14 61 42	86 86 62	15 22 23	17 88 269 222
Turks. Armenians. Syrians. U.S.A. Citizens.	9 4 2	8 1 4	3 1 5	3 1 18	38 2 14	26 22	1	13 1 1	9	53 9 3	66 10	80 26	312 6 114 5
Totals	574	330	371	337	394	464	420	1,252	2,170	6,081	4,006	1,710	18,109

TABLE IV.

Monthly arrivals of Immigrants, for Canada, by Occupations and Destination, via Ports in the United States for the Fiscal Year ending June 30, 1906.

<u> </u>	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Totals.
Agriculturists. General labourers. Mechanics. Clerks. Miners. Female servants Not classed.  Totals.	138 246 60 21 4 34 71 	40 117 44 28 2 26 73 330	56 127 39 38 11 20 80 371	59 126 36 17 15 16 68 337	64 155 70 19 7 24 55 394	205 79 36 4 12 73	42 188 83 47 1 12 47 420	165 723 164 61 17 35 87	209 1,046 471 102 34 73 235 2,170	641 3,190 1,250 370 72 167 391 	1,111 1,491 721 173 48 169 293 4,006	388 879 148 51 15 45 184 1,710	2,968 8,493 3,165 963 230 633 1,657 18,109
Maritime Provinces Quebec Ontario Manitoba Saskatchewan Alberta British Columbia Yukon.  Totals	30 123 234 106 27 26 28 	3 54 183 26 20 8 36 	54 205 39 14 21 31 2	29 74 120 45 7 7 55 	6 96 166 73 18 18 17 	57 1 11 42	12 105 209 39 31 14 37 1	$ \begin{array}{r} 34\\ 158\\ 700\\ 135\\ 31\\ 51\\ 139\\ 4\\ \hline 1,252 \end{array} $	21 406 1,208 288 62 100 85  2,170	83 1,147 3,025 1,142 210 217 256 1 6,081	1,030 1,881 602 167 103 155	12 468 803 196 78 46 107 	

6-7 EDWARD VII., A. 1907

TABLE

NATIONALITY, Sex, Occupations and Destination of Immigrant arrivals for Canada,

NATIONALITY.			Si	ex.								7	[RAD	E OR
African, South 22 5 6 39 4 11 2 1 8 1 5 Australian. 22 8 5 6 39 4 12 2 1 8 1 5 6 39 6 Austrian, N.E.S. 466 128 123 717 213 44 70 222 18 26 19 4 3 8 6 Austrian, N.E.S. 30 6 1 1 12 1 9 6 2 11 1 13 6 6 1 1 1 12 1 9 6 2 14 1 1 15 6 1 1 1 12 1 9 6 2 14 1 1 15 6 1 1 1 12 1 9 6 2 15 6 1 1 1 12 1 9 6 2 15 6 1 1 1 12 1 9 6 2 15 6 1 1 1 1 15 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Nationality.	-				Farm	Lab	ourers			3.	Mec	hani	cs.
Austriain, N.E.S.		Male.	Female.	Children.	Totals.	Male,	Female.	Children.	Male.	Female.	Children.	Male.	Female.	Children.
Totals	Australian. Austrian, N.E.S. Bohemian Croatian and Slovenian Dalmatian. Galician. Hungarian, N.E.S. Magyar Ruthenian. Slovak. Belgian Bulgarian Brazilian Chinese Dutch French German. English Welsh Scotch Irish West Indian Jamaican. Greek. Hebrew, N.E.S.  "Russian" Austrian Italian Japanese New Zealand Poles, N.E.S.  "Austrian Italian. Russian, N.E.S.  "Russian, Russian, Russian, Russian, Russian, Russian, Russian, Roumanian, Russian, Roumanian, Russian, Roumanian, Russian, Roumanian, Russian, Nesservian Danish Swedish Norwegian Turks. Armenians Syrians. U.S.A. Citizens	288 466 190 100 154 2311 100 655 288 122 186 3,050 238 655 288 121 117 344 147 374 162 577 178 141 275 6 777 1	128 3 122 7 50 39 31 14 24  19 10 82 939 82 6 6 6 348  1 1 1 1 1 1 1 1 1 1 1 1 1	123 9 44 49 48 42 114 18 144 48 85 1,259 1 15 264 265 2 21 11 30 40 114 12 31	39 717 6 6 211 100 27 27 253 318 266 139 142 65 2 1 117 383 353 5,248 47 925 399 19 1 166 455 739 17 4,969 19 17 4,969 19 17 41 11 883 197 6 6 39 17 41 151 883 197 6 6 39 17 4 5 1 151 5 883 197 6 6 114 5 5	1 655	1 12 12 12 14 13 82 14 15 15 16 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17	1 18 4 4 14 29 93 16 6 6 2 4 44 5 1	12 2222 121 10 121 197 194 186 199 322 622 945 1114 86 73 5 3,305 117 114 117 85 117 117 117 117 117 117 117 117 117 11	18 4 144 126 200 5 2 2 3 8 193 1 1 173 1 6 6 1 .	26 3 1 16 37 34 4 16 441 7 171 22 4 72 16 14 4 5 9 9 1 9 9 1	19 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 3 3 1 6 7 3 3 1 6 7 3 1 1 1 1 2 2 3 1 1 8 8 2 6 6 1 4 1 9 9 5 5 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 1 1 1 4 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 2 3 1 2 2 3 1 2 2 3 1 2 2 3 1 2 3 3 1 2 3 3 1 2 3 3 1 3	3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4

SESSIONAL PAPER No. 25

V.

via Ports in the United States for the Fiscal Year ending June 30, 1906.

Occup.	ATION.											DES	STINATI	ON.			
Cle e	rks, Ti	rad- - 	M	iners		rvants.	Not	clas	sified.	vinces.			_	/an.		umbia.	
Male.	Female.	Children.	Male.	Female.	Children.	Female Servants.	Male.	Female.	Children.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
36	1 1 9 1 69 18 7 7	32	2 1 1 1 1	3 1 10 2 2 2	44 133	241 11 22 20 5 6 5 4 7 20 20 177 -1 34 30 3 62 2 2 66 14 11 35 12 7 9	1 2 2 566 88 1644 1 311 211 1 4 4	4 355 333 1633 3 544 21 2 300 1 1 54 4 4 6 2 2 111 5 5 2 2	21 3 15 11 14 8 6 6 72 4 15 14 11 6 6 6 72 33 5 5 86 6 6 72 11 11 11 11 11 11 11 11 11 1	2 6 5 6 5 6 6 1 1 1 1 1 1 2 2 2 2 2 2 2 1 4 1 1 1 1 2 1 2	111 67 67 80	22 255 1844 100 100 999 137 73 500 188 655  111 499 131 3,003 25 491 11 2,830  24 21 21 21 21 21 21 21 21 21 21 21 21 21	3 2299 225 77 577 333 95 2271 888 855 1114 884 5 2001 81 103 66 26 4 22 88 83 65 66 77 12 24 88 83 33 144 70 103 104 105 105 105 105 105 105 105 105 105 105	17 14 	150 11 12 12 12 12 12 12 12 12 12 12 12 12	3 28 2 5 5 3 16 6 3 29 9 5 5 7 14 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 5 1
699	157	107	184	25	21	633	344	557	756	320	3,815	8,970	2,748	638	622	988	8

The report which I have received from the Women's National Immigration Society, 87 Osborne street, Montreal, is to the effect that 671 immigrants passed through the home of the society during the year, including nine parties sent out under the auspices of the president of the British Women's Emigration Association in England. The Women's National Immigration Society is doing very useful work in looking after female immigrants, finding places for domestic servants, &c.

The repatriation of French Canadians from the United States has engaged the attention of the department for some years past, and considerable progress has been made in this connection. The department makes an annual grant in aid of the work of the Montreal Repatriation and Colonization Society, and in addition to what is done by this society we employ some agents of our own, including the Rev. Father Blais, O.M.I., Rev. Father Vachon, O.M.I., Rev. Father Corbeil and Mr. Damase Gauthier, who make frequent journeys into the United States and carry on an active propaganda among the French Canadians who have drifted over there, with a view to inducing them to come back and make their homes in Canada, principally in the Northwest.

The Ottawa Valley Immigration Aid Society, with headquarters at 50 Rideau street, Ottawa, receives some financial aid from the department, and carries on a useful work. This society, besides conducting an information bureau in Ottawa, employs an agent to give lectures in the schools, and does what it can by this and other means to inform the rising generation and others of the resources of Canada and of the desirability of the youth of this country remaining in their own land and developing such resources. The society sent a delegate to the Colonization Congress which was held at St. Jerome in November, 1905, and a communication from the president of the Ottawa Society was read at this congress. The society conducted several excursions in the interests of colonization during the year.

The work we are carrying on generally through our agents in the United States is reviewed by Mr. W. J. White, Inspector of Agencies, in his report.

Your obedient servant.

W. D. SCOTT,
Superintendent of Immigration.

#### OPERATIONS IN EUROPE.

REPORT OF THE HIGH COMMISSIONER.

OFFICE OF THE HIGH COMMISSIONER FOR CANADA,

17 VICTORIA STREET, LONDON, S.W.,

September 4, 1906.

The Honourable

The Minister of the Interior,

Ottawa, Canada.

Sir,—I have the honour to transmit, herewith, the reports of the agents of your department in Europe on emigration matters for the year ended June 30, 1906.

At the present time these representatives are Mr. W. T. R. Preston, 11 and 12 Charing Cross, London (Commissioner of Emigration); Mr. A. F. Jury, Old Castle Buildings, Preeson's Row, Liverpool; Mr. G. H. Mitchell, Newton Chambers, 43 Cannon Street, Birmingham; Mr. John Webster, 14 Westmoreland Street, Dublin; Mr. E. O'Kelly, 17 Victoria Street, Belfast; Mr. J. B. Walker 37-39 St. Enoch Square, Glasgow; Mr. H. M. Murray, Western Mail Building, Cardiff; Mr. Paul Wiallard, 10 Rue de Rome, Paris, and Mr. D. Treau de Cœli, Antwerp.

The special and temporary agents appointed during the year, and the names and dates of their appointment, are as under, and doubtless they have reported direct to you:

Mr. Thos. L. Morton, of Gladstone, Manitoba, appointed July 1, 1905. Mr. A. Burrows, of Detroit, September 20, 1905. Mr. H. F. Morel, of Edmonton, Alta., December 12, 1905. Mr. William Carson, of Whitewood, Sask., December 15, 1905. Mr. Kenneth Morrison, Point Tupper, C.B., January 15, 1906. Mr. S. Larcombe, of Birtle, January 27, 1906. Mr. C. C. Carter, of Regina, February 2, 1906. Miss Fitzgibbon, of Toronto, February 9, 1906. Mr. B. Pipe, of Wapella, Sask., March 26, 1906. Rev. M. A. F. Custance, of Rapid City, April 24, 1906. Mr. J. Hawkes.

#### METHODS OF WORK.

Your department is fully aware, from the communications which have been made to you from time to time, of the measures that have been taken to stimulate inquiry and to promote emigration.

#### LECTURES.

It may be mentioned that a great number of lectures have been delivered, not only by the regular government agents, but also by schoolmasters, clergymen and gentlemen who have visited Canada. These lectures have been, on the whole, well attended, and have been most valuable in interesting large numbers of people, and impressing upon them the attractions of Canada as an emigration area.

#### snows.

The various agents of your department have also attended, with exhibits of agricultural produce, the more important of the agricultural shows in the United Kingdom. They have taken advantage of these occasions to distribute, among the farming classes who attend these meetings, the pamphlets which had been placed at their disposal. They have also, at the same time, been given many useful opportunities of personal interviews with the farming class, of which they have freely availed themselves, and, in this way, literature bearing on the attractions of Canada has been carried into the homes of the agriculturists in the rural districts of the United Kingdom.

#### GENERAL.

In addition to such work as is outlined above, the agents attend to the routine duties of their offices—the correspondence—the personal inquiries, and in short they avail themselves of every opportunity which occurs from time to time of advertising the advantages of the Dominion of Canada, as a field for the intending emigrant. It is to prompt and careful attention to the details of this work that we must look for successful results, and this is fully realized by your agents.

In view of the great volume to which the stream of emigration to Canada has grown, it becomes more necessary than ever that the utmost care shall be exercised in securing that only suitable emigrants shall be allowed to land in Canada. It is, of course, laid down as a rule by the Dominion that no immigrant should land in Canada who is feeble minded, is medically unfit, who has been convicted of a crime, or who is likely, from whatever cause, to become a public charge. This we have endeavoured to impress upon the authorities in this country, as well as upon private individuals, and the subjoined correspondence in respect of a young man convicted of a crime will illustrate the action taken in cases to which my attention has been drawn; as whatever the sympathy for such persons, any proposals to send them to Canada must, on public grounds, be opposed:—

'CENTRAL CRIMINAL COURT,
'SESSIONS HOUSE, OLD BAILEY, E.C.,
'November 6, 1905.

'SIR,—I am directed by the recorder to acknowledge your letter of the 1st instant, which I forwarded to him in due course.

'The recorder desires me to say that ———— was a very young man, being only 20 years of age, who was not only not an habitual criminal, but did not in any sense belong to the criminal classes, but on the contrary was of highly respectable parentage, having a mother living, and a brother in excellent employment.

'The offence to which ——— pleaded guilty was the misdemeanour of obtaining money by false pretences, the charge of felony was not proceeded with.

'Three of these cheques he very improperly gave to \_\_\_\_\_, who filled them in on July 1, 1905, for £3-10-0, £4-14-0 and £2-10-0, respectively, signing the fictitious name of \_\_\_\_\_ as the drawer.

'These cheques he changed by purchasing various articles from three different radespeople.

tradespeople.

'On being arrested he at once admitted his guilt, and expressed his deep contrition, and a very earnest appeal was made to the recorder by the brother not to send to prison, but to allow him to go to Canada, where the recorder was informed he had some relations who would start him in life again.

'The recorder thought this would give the young man an excellent opportunity of retrieving his character and becoming a useful citizen.

'A similar course has constantly been taken, not only by the present recorder, but by his predecessors, and by His Majesty's judges, when the offence, as in this case, was an isolated one, and the accused very young and previously of excellent character.

'The only reason ———— was accompanied to Canada by a police officer was that his brother could not well leave his situation, and the recorder thought some one should see him off. The police officer was, of course, in plain clothes.

(Signed) 'H. K. AVORY, 'Clerk.'

'Office of the High Commissioner for Canada, '17 Victoria Street, London, S.W., 'November 11, 1905.

'SR,—I beg to acknowledge and to thank you for your letter of the 6th instant, in which you are good enough to convey to me the explanation of the recorder of London, in connection with the case of ————, and to detail the circumstances which led to the action taken therein. I am forwarding a copy of your communication to Ottawa, for the information of the Canadian government.

'I can only repeat that the government of the Dominion are opposed to the sending to Canada of any person who has been convicted of a crime, and I am afraid that the explanation given of the case under review is not likely to alter the views which are held in Canada in regard to such cases.

(Signed) 'STRATHCONA, 'High Commissioner.'

Quite recently, in dealing with a similar case to the foregoing, Judge Rentoul absolutely refused to be a party to the emigration of a young man to Canada, in view of the representations which had been made as above mentioned.

It was also found necessary to make representations through the Foreign Office in regard to the emigration of 'undesirables' from Denmark, and Norway and Sweden, and, as a result, the emigration of such persons from these countries has been discontinued.

The encouragement of immigration to the Dominion has been confined to those who might, broadly, be termed 'agricultural' immigrants; that is to say, those who have experience of farm work, and those physically and otherwise suitable who intend to work on the land—and also to female domestic servants. As in the past, your agents have followed this policy, and no encouragement has been given to emigrants to proceed to Canada except to such as intended following agricultural pursuits, and females going into domestic service.

On March 20, 1906, I was notified by your department that it had been decided to make a change in the system of payment of bonuses to booking agents on tickets sold to emigrants to Canada on and after April 1, 1906. Briefly, the effect of the change in question was to provide that, as above, the government would pay a bonus of £1 to the booking agents on each person of the under-mentioned classes, eighteen years of age or over, and 10 shillings per head on those between one and eighteen years. The prescribed classes were: Farmers, farm labourers, gardeners, stable-men, carters, railway section men, navvies or miners who have signified their intention of following farming in Canada, and female domestic servants. It was also provided that satisfactory evidence should be forthcoming to your department as to the bona fides of the immigrant in respect of whom the bonus was paid.

These changes were communicated by circular to the agents of your department and to the steamship agents. A considerable correspondence ensued, and I also had several interviews with the representatives of the large steamship companies in the matter. Mr. Blair, of your department, paid a visit to this country, for the purpose of explaining to the agents the new regulations, and finally, after some slight initial difficulties had been overcome, the new provisions were put into operation, and are working satisfactorily.

As you are aware, a departmental committee of the Colonial Office was appointed in July of last year to consider Mr. Rider Haggard's report on agricultural settlements in British colonies. Mr. Rider Haggard was nominated by the Colonial Office to proceed to the United States to inspect and to report upon the conditions and character of the agricultural and industrial settlements which have been established there by the Salvation Army, and also to visit Canada to report upon the application of the system in a British colony. The committee invited me to give evidence on behalf of Canada. In respect of special settlements in the colonies I informed them that, in my view, and

speaking personally, such settlements had not been successful; although subsequently, the persons forming these colonies, after distributing themselves among the people of the country, had done well, but that, from my past experience, I should doubt very much if Mr. Rider Haggard's scheme would be successful. I added, however, that no doubt the Canadian government would be glad to give every help and assistance they properly could in the selection of emigrants, but they would take no responsibility afterwards, and that I did not think Canada or Canadians would in any way object to emigrants being selected under a proper scheme, if carefully selected, because there are a large number of persons in the United Kingdom well fitted to become prosperous settlers in Canada—people who, from one cause or another, have not means to go out, but who, if assisted would become excellent settlers. I emphasized the need of careful selection, and that, as to men from the towns, success would depend greatly upon the class sent, and indicated that the Canadian government would object to those belonging to the 'submerged tenth'—those who have so degenerated that they care very little about work.

In the report of the committee the relative advantages of emigration following the ordinary form of settlement as compared with the so-called 'colonies' are dealt with as follows:—

'We do not see, therefore, that any of the arguments which have been brought forward in favour of colonization in principle are convincing. On the other hand, the arguments in favour of emigration, as contrasted with colonization, are many, and appear to us to be very forcible. The machinery is ready at hand—the existing emigration societies have shown that they are well able to make a wise selection of persons to send out, and to find suitable openings for them in Canada and other British colonies; the demand is in excess of the supply; the cost of emigration to Canada does not amount to more than £10 a head, and some of the societies (especially those managed by ladies) seem to be successful in securing the repayment of at least a part of the money advanced. In other words, £300,000, which Mr. Rider Haggard estimates as the necessary sum for forming a colony of 1,500 families, would enable at least 6,000 families to go out as emigrants.'

Another phase of the emigration movement which during the past year or two has created much interest and attracted much public attention in Great Britain, is the emigration of pauper children to Canada. Several proposals and schemes have been put forward in the press and otherwise in respect of the emigration and subsequent treatment of these children, but it would appear that the receiving homes in Canada of the various immigration agencies afford the best means of handling them.

These homes are admittedly well administered, they distribute the children with the Canadian employers, and they are brought up in the privacy of a Canadian home. In this way the taint of pauperism is removed, and they receive a training which is not possible in a publicly supported institution. It is admitted that however well managed such an institution may be, it cannot impart to the inmates, in a full degree, those qualities which are the outcome of home influence and training. Children brought up in a public institution cannot ordinarily be so well equipped for the battle of life as those who have received that individual treatment and been subject to those impressions which are inseparable from a home. It may, therefore, be said that so long as there is a demand from Canadian homes adequate to the number of children immigrating, the system outlined above offers the simplest and best method of dealing with this important matter.

I have the honour to be, sir,
Your obedient servant.

STRATHCONA.

## No. 1.

#### REPORT OF W. T. R. PRESTON.

(Appended to High Commissioner's Report.)

11-12 CHARING CROSS, LONDON, W.C., September 4, 1906.

The Right Honourable

LORD STRATHCONA AND MOUNT ROYAL.

My LORD,—The time is probably opportune for a brief review of the results following the active emigration propaganda on this side of the Atlantic which was instituted under the direction of the Honourable Clifford Sifton, late Minister of the Interior.

It was not until the situation in Great Britain and the continent had been carefully studied that the department decided upon entering energetically into the work of endeavouring to divert a somewhat larger share of the emigrating populations from these countries to Canada. In 1897 the emigrants from Great Britain to Canada numbered 11,383, and from the continent 7,921. An analysis of these arrivals raises serious doubts as to whether a considerable number of these did not immediately make their way to the United States.

As a result of the methods authorized by the late Minister of the Interior an improvement soon became evident in the interest taken in the Dominion by the emigrating populations in Great Britain and the continent of Europe. The growth of this movement to Canada can perhaps be better explained by the returns of the arrivals taken from official Canadian sources, as set forth in the following table:—

Arrivals in Canada from Great Britain and the Continent of Europe for the Calendar Years 1897 to 1900, inclusive.

	1897.	1898.	1899.	1900.
British	11,383 7,921	11,608 10,285	10,660 21,938	10,360 18,837
Total	19,304	21,893	32,598	29,197

Arrivals for the Fiscal Years ending June 30, 1901, to 1904, inclusive.

	1901.	1902.	1903.	1904.
British	11,810 19,352 31,162			

6-7 EDWARD VII., A. 1907

								1
ARRIVALS	for	the	Fiscal	Years	1905	to	1906.	inclusive.

	1905.	1906.
British	65,359 37,255	85,796 44,472
Total	102,614	133,268

The general effect of the work in Great Britain is more particularly evident from the statement that when this active emigration propaganda was instituted here Canada received about 12 per cent of the emigrants leaving the shores of Great Britain for the North American continent, including, of course, the United States, the figures for the calendar year 1901 being 15,757, out of a total emigration from Great Britain to North America of 119,952, as shown by the British Board of Trade returns.

A steady change has taken place from then until now, so clearly established in the following statement of figures taken from the British Board of Trade returns for the calendar years set forth:—

#### EMIGRATION from Great Britain and Ireland.

	To Canada.	To United States.	Excess in favour of United States.
1901.	15,757	104,195	88,438
1902.	26,293	108,498	82,205
1903.	59,652	123,663	64,011
1904.	69,681	146,445	76,764
1905.	82,437	122,370	39,933
Seven months of 1906.	79,078	79,629	551

A further analysis of the British returns, which cannot but be regarded as exceedingly instructive and interesting to the staunch advocates of the policy of the government, so energetically instituted by the department, shows that this improvement in the emigration to Canada from the British Islands has not been confined to any particular portion where for the time being actual want of employment occurred.

STATEMENT from the British Board of Trade Returns of the emigration from Great Britain and Ireland to the North American Continent during the years 1901 to 1906.

YEAR 1901.			
	To Canada.	To United States.	Excess in favour of United States.
English. Scotch. Irish	12,176 2,235 1,346	57,246 11,414 35,535	45,070 9,179 34,189
Total	15,757	104,195	88,438

#### YEAR 1902.

English	20,985 3,811 1,497	58,382 12,225 37,891	37,397 8,414 36,394
Total	26,293	108,498	82,205
. Year 1903.			
English Scotch Irish	46,760 10,296 2,596	68,791 15,318 59,554	22,031 5,022 36,958
Total	59,652	123,663	64,011
YEAR 1904.			
English	54,051 12,715 2,915	76,546 17,111 52,788	22,495 4,396 49,873
Total	69,681	146,445	76,764
YEAR 1905.			
English. Scotch Irish	64,876 14,214 3,347	58,229 19,785 44,356	Can. 6,647 5,571 41,009
Total	82,437	122,370	39,933
Seven Months of 1906.			
English. Scotch. Irish	60,746 15,456 2,876	40,754 13,273 25,602	Can. 19,992 Can. 2,183 22,726
Total	79,078	79,629	551

These figures show that the means adopted for educating the British emigrating people upon the advantages offered in Canada were widespread and thorough, corresponding increases being evident throughout England, Scotland and Ireland. A still closer analysis will show that every county, and almost every hamlet, in the United Kingdom has contributed proportionately to this stream towards the Dominion of Canada.

The figures given herein clearly establish a steady decline of the excess of the emigrating movement from Great Britain to the United States, over and above that received by the Dominion of Canada. A cursory glance at the emigration returns from the continent justifies the contention that the carefully planned propaganda throughout Europe has not been unsuccessful, notwithstanding the criticisms which from time to time have been applied to the continental policy, both as to the manner of carrying on the work, and as to the general results. I think I can claim that there has been nothing discreditable to Canada in the manner in which the work has been carried on, and I can also add that the advertising of the Dominion on the continent, and the diversion of a portion of the emigrating stream to Canada has been done without violating the laws of these countries. The increases shown in the annual returns of the department indicate a commendable growing interest in the Dominion as a favourable field for successful emigration. It can fairly be claimed that the results furnish ample vindication of the policy of the department in connection with this phase of the work.

To achieve these results has meant the most painstaking efforts on the part of those charged with the responsibility of carrying out the government policy on this side of the Atlantic. The methods adopted, and the details of the work have been subjected to criticism, and I may be pardoned for saying, somewhat unfairly in many of its aspects; and yet I may be excused for claiming that had it not been for faithful work, ungrudging devotion to duty, and loyalty to the department, to say nothing of patriotism to one's country, these magnificent results would never have been attained.

These figures, I submit, carefully studied, will furnish suggestive reading matter

for students of the emigration problem.

I have the honour to be, my Lord, Your Lordship's obedient servant,

W. T. R. PRESTON,

Commissioner of Emigration.

#### No. 2.

## REPORT OF A. F. JURY.

(Appended to High Commissioner's Report.)

OLD CASTLE BUILDINGS, PREESON'S ROW, LIVERPOOL, July 16, 1906.

The Right Honourable

LORD STRATHCONA AND MOUNT ROYAL, G.C.M.G., &c., &c.

My Lord,—In presenting a report of the emigration work done in this district during the year just closed, there is not anything new to mention. The work has been carried on along exactly the same lines as during the eight years I have been here, with the exception that to my knowledge during the winter and spring of the last financial year there has not been any advertising done, but in spite of that fact the circumstances in regard to the demand for farm labour and the easy opportunity for a man to acquire free land in Canada are such that we have been able to attract an ever increasing number of immigrants to our shore. The reasons for this are not hard to find. They are combined in two main facts, viz., the lack of demand for labour in the United Kingdom and the fact that Canada is the only country within easy reach that enjoys democratic government, and is suitable for the poor surplus industrial population of these isles, who wish to engage in agriculture. In my opinion, while these conditions exist, nothing can prevent the increase in numbers of the last five years continuing.

Canada has already commenced to realize the truth of the old saying that the best immigration agent is the successful immigrant, in the large number of people who have entered Canada during the last three years to join their relations and friends, who have succeeded in making homes for them, or who think the opportunities offered are such that they have no hesitation in advising them to try their fortune in Canada.

I think we should try and take full advantage of our superior position in regard to attracting emigrants by judicious advertising, by bill-posting, attending all agricultural gatherings for the purpose of exhibiting the products, and distributing the literature prepared by the department.

With regard to general newspaper advertising, I would respectfully suggest that the local agent of the department should decide in which papers, in his district, he should advertise, and the patronage be placed in his hands, though payment could be made from London. This would help the agent to obtain newspaper reports of his lectures and notices of shows and other work. The cost of such advertising may in the first instance be increased, but in the end I think we should get more for our money in the way mentioned above.

I have arrived at the conclusion, after considerable experience, that we could add greatly to the results of our work if each agent was supplied with a sufficient quantity of the various products of Canada, to supply the local steamship agents of their respective districts with an exhibit for their windows. By this means we should obtain the free use of hundreds of windows in the best positions of the principal towns and cities in the British Isles to advertise our country. I am strongly in favour of this being done, because my experience tells me that the best emigrants for Canada are those booked by the ordinary local steamship agent; they are more self-reliant (and they are the kind we want), than those sent out by professional emigration societies, some of which, I think, work in connection with the boards of guardians to relieve them of their semi-pauper population. The people booked by the local agents go out of their

own volition and pay their fare, and are consequently more likely to be good 'hustlers' than those requiring the help of an emigration society.

During the year just closed I have attended the usual number of agricultural shows, and delivered the usual number of lectures. Our correspondence has not been so large as usual, but this is to be accounted for by the fact of no advertising being done for some time. I am convinced that with an active propaganda, all previous records can easily be beaten.

I am, my Lord,
Your obedient servant.

ALFRED F. JURY.

### No. 3.

# REPORT OF J. BRUCE WALKER.

(Appended to High Commissioner's Report.)

35-37 St. Enoch Square, Glasgow, June 28, 1906. 65

The Right Hon. LORD STRATHCONA, 17 Victoria Street, London, S.W.

My Lord,—I beg most respectfully to submit herewith the annual report of the Glasgow office for the year ending June 30, 1906.

The past year has been one of unprecedented success, so far as emigration from Scotland and the Clyde is concerned. The figures for the financial year ending on June 30, will show an increase in Scottish emigration to Canada of something like 50 per cent.

While the increase in numbers is extremely gratifying, it is perhaps still more satisfactory to note that, year by year, the class of persons proceeding to the Dominion from Scotland becomes of a higher standard. Increasing numbers are able to take with them a fair amount of capital, and the demand for Scottish farm labour in Canada continues to increase in such a manner as to make it comparatively easy for every man to secure employment either before he leaves these shores or immediately upon his arrival on the other side.

The departure of two ships per week, laden with passengers for the Dominion, has enabled the shipping companies sailing from Glasgow to handle the stream of emigrants fairly well, although in March it was impossible to find transportation accommodation upon any steamer before the beginning of June.

The sympathetic attitude adopted by the Scottish press has done much to further a knowledge of the country amongst the class of persons who have few opportunities of studying the possibilities of the Dominion. In addition to keeping up a regular propaganda through the newspapers, I have occupied myself throughout the winter with frequent lectures, and have, I hope, lost few opportunities of bringing before the people of Scotland the claims of Canada as a home for the Scottish farmer and farm labourer.

Your obedient servant,

J. BRUCE WALKER, Canadian Government Agent for Scotland.

## No. 4.

## REPORT OF MR. G. H. MITCHELL.

(Appended to High Commissioner's Report.)

43 CANNON St., BIRMINGHAM, June 30, 1906.

The Right Honourable

LORD STRATHCONA AND MOUNT ROYAL, G.C.M.G., &c.,
The High Commissioner for Canada,
London.

My Lord,—I have the honour to present my report for the year 1905-6.

It has been eventful only in the way which was most desirable, namely, the success which has attended the work; the complete numbers are, of course, not yet available, but judging from the reports of the steamship agents in my district a record will have been made in emigration from the English Midlands to Canada, and not only have the numbers been larger, but there has been a continued improvement in the class; a big proportion of the people have been possessed of considerable amounts of money, and those whose means were not large were in every other way fitted to succeed. Needless to say my advocacy of emigration has been confined to those able and willing to take up agricultural work in the case of men, and domestic service in the case of women. I have been very careful to put the conditions of Canadian farm life and its prospects fairly before inquirers, concealing nothing of the one, nor exaggerating the other, and I have found that this course begets confidence and is most effective, as many approach the subject with some amount of suspicion.

That the results to the emigrants themselves have been satisfactory has been shown not only from the direct testimony to that effect which has been received by myself and others, but from the fact that so many have sent for their relatives and 'friends, and by the remittances sent home through the medium of the post office, and by dollar bills inclosed in their letters. The firms who make a business of money-changing inform me that they are daily exchanging Canadian bills for English currency. There has also been a very noticeable decrease in the correspondence to the Midland newspapers from dissatisfied emigrants.

The work itself has been conducted on lines similar to those of former years; inquiries by post and callers have to be attended to, and the questions asked are of extraordinary variety and show in a large number of cases how advisable it is to have centres at which personal advice can be obtained; our pamphlets can only deal with the subject and advise in a general way, whereas the circumstances or desires of each person differ in some particulars, and require to be specially dealt with. Letters or cards of introduction have been furnished when requested or in those cases in which it was thought they would be of special service.

I have visited steamship agents throughout the district, having my intention advertised where it could be arranged, to give intending emigrants who could not come to Birmingham the opportunity of an interview. I have advised steamship agents on points they have submitted, and have kept them supplied with pamphlets; to the most important of them I have regularly forwarded Canadian newspapers, and also type-written sheets of Canadian news, the object being to create an intelligent interest in the work, and by furnishing them with current information of value to those thinking of moving, make them something more than mere booking agents.

I have given lectures myself and arranged for others with the help of the lantern slides, for which there has been a good demand, and have had special distributions of our literature made at agricultural shows and on other suitable occasions.

The bonus system as recently revised will furnish a considerable amount of extra and responsible work in checking the agents' claims, and in examining the emigrants sent to the office for inspection; but the scheme is well designed to encourage steamship agents to bring Canada before the classes whose emigration your department is anxious to promote.

Emigration from localities is much influenced by local circumstances, the failure of the potato crop in Lincolnshire last year, for instance, detaining many whose intention it was to leave for Canada in the spring, but the returns from the district as a whole will, I trust, be considered satisfactory.

I have the honour to be, Your obedient servant,

G. H. MITCHELL.

#### No. 5.

#### REPORT OF JOHN WEBSTER.

(Appended to High Commissioner's Report.)

Canadian Government Offices,

14 WESTMORELAND St., DUBLIN, July 10, 1906.

W. T. R. PRESTON, Esq.,

Commissioner of Emigration,

London.

SR,—I beg to submit a short report of my work in Ireland for the year ended June 30, 1906.

My time during the above twelve months has been actively employed in the interests of Canada, and I hope successfully. During the summer season I attended the weekly markets and monthly fairs in the various counties, where the farmers assemble in great numbers for the transaction of their business. Here a splendid opportunity presents itself for meeting them and for distribution of literature; the work which I do at these places is valuable. The fairs and markets are the most useful hunting ground for the Canadian agent. I find that a good attractive poster conspicuously displayed is of considerable advantage, as it gets farmers talking about the country and gives one an opening for conversation.

When travelling through Ireland, I take advantage of the opportunity for calling on steamship agents, and stirring them up to fresh activity; this has a good effect. I would suggest that the steamship companies make a careful revision of their agents, a large number of them not being suited to the work.

The agricultural shows are a first-rate medium for coming in contact with the farming community. I therefore, as far as possible, attend these events, and having secured space, put up a small portable tent; here the people call to see me, and I keep a man all day distributing literature to a most desirable class. Surely work of this nature must bring good results.

It is to be regretted that for the last couple of years I have been refused space at some of the agricultural shows, where I had been accustomed to be present in other years, this owing to the effort made in Ireland to keep the Irish people in their own country. Notwithstanding this opposition I am still successful in obtaining admission to some of the most important shows, and hope to continue doing so.

During the winter months I accept as many lecturing engagements as possible, and am generally anxious that they be in a rural district, so that the opportunity may obtain for reaching that class from which the most desirable settlers are recruited. My lectures are largely illustrated by slides, taken by myself when in Canada, and this, coupled with my practical experience in the Dominion as a farmer, adds very considerable force to my remarks. I have many times been impressed by the good results coming from one lecture, and hope during the coming winter to prosecute this work with vigour. Our spare slides are largely in demand, and usually out on loan.

The hanging map of the Dominion has been in great demand, and is much appreciated. I have it in a great many schools in my district. This map should serve a useful purpose.

The buildings for the Irish International Exhibition to be held next year in Dublin, are now well advanced. The exhibition will be a most important one, and I would respectfully suggest to the department the advisability of making a representation at this great event.

. I am glad to note, from the board of trade returns, that the Irish emigration to Canada for the twelve months ended June 30, shows a very appreciable advance on the same period for the preceding year.

Your obedient servant.

#### No. 6.

#### REPORT OF EDWARD O'KELLY.

(Appended to High Commissioner's Report.)

CANADIAN GOVERNMENT OFFICES, 17 AND 19 VICTORIA ST., BELFAST, July 5, 1906.

The Commissioner of Emigration. London.

SIR.—I beg to present my annual report for the year ending June 30, 1906.

The number of callers at my office in the past year for literature and information about Canada, and who registered their names and addresses exceeded those of the previous year by 891, the total being 3,450.

One thousand seven hundred and ninety-nine letters were received at my office and attended to. I fully expect that the number of emigrants who have left my district for Canada in the past twelve months will show a proportionate increase to the number of callers.

I attended six of the most important show fairs at which I could obtain space for my stand of Canadian specimens of fruits, grain and grasses. I can safely say that the Canadian stand attracts more visitors than any other exhibit at those shows. The interest in Canada appears to me to grow quite as rapidly as the prosperity of the country, and that being so, I take every opportunity of meeting the farming and labouring classes at the stock fairs held throughout my district, as well as at the show The letters I receive from time to time from settlers showing that they are satisfied with their prospects, and which the newspapers kindly publish for me, produce the best effect amongst those desirous of bettering their condition in another country. Many who emigrated within the past four or five years have been able to afford a trip to see their people here, which fact combined with their anxiety to return to their Canadian home, is the best proof of the popularity of Canada, and the success of the immigration propaganda of the government.

I have settled numbers of young, inexperienced men with farmers in Ontario that they might obtain a knowledge of Canadian farming before going west to take up land. In this undertaking, I have been very successful, having had only one complaint, and that not from the emigrant, but from his people here, who appeared anxious to find a grievance, real or imaginary. The majority of those leaving my district settle in the provinces of Manitoba, Saskatchewan or Alberta, and I say with confidence, no colony ever received men, and women too, more likely to assist in developing a new country than Canada is now getting from Ulster. Most of the families emigrating

possess considerable capital.

I continue sending our literature to those who, I see by the newspapers, are advertising their farms for sale, and where possible, attend at the auction.

I also take every opportunity of bringing the immense possibilities of Canada as a farming and stock-raising country home to the landed proprietors of Ireland who are preparing to draw their stakes in this country (owing to recent legislation), and bring their capital, which will be very considerable, and their knowledge of farming and stock-raising, which is undoubtedly good, to another country.

On my calling your attention to the numbers of callers I had from the Isle of Man during the holiday season, desirous to obtain information about Canada, you suggested I should visit the island, taking a stock of literature with me. I did so early in August, and spent some days amongst the people. I was satisfied before I left the island that

good results would follow my visit, and have since seen by their papers that 200 left the island this spring for Canada.

Having advertised the fact that I was in a position to give a copy of our splendid new wall map of Canada to public schools, libraries, working men's institutes and reading rooms, I have had a large number of applications for it, and have supplied 168 of the applicants with this map, and from all of them have received letters expressing their admiration of the map and their obligation to the government that supplied it.

With reference to the results likely to follow the increased bonus paid upon tickets to Canada sold to persons of certain prescribed classes on or after the first of April last, I can as yet say little, other than that government agents have to be very careful in examining the emigrant mentioned in the claim, and that the steamship companies should see that their agents expend some of the increased bonus granted in advertising themselves as steamship agents anxious to procure passengers to Canada, and not content themselves with obtaining the increased bonus by selling only the same number of tickets they did under the old scheme. In justice to several booking agents, I should say I know from experience that in many districts they hardly dare advertise, either in their windows or the newspapers, as much as they would wish.

The number of trade inquiries received at this office is small and have been attended to immediately.

Your obedient servant,

EDWARD O'KELLY.

#### No. 7.

#### REPORT OF H. M. MURRAY.

(Appended to High Commissioner's Report.)

DOMINION OF CANADA EMIGRATION OFFICES, WESTERN MAIL BUILDINGS, CARDIFF, WALES.

The Right Honourable

LORD STRATHCONA AND MOUNT ROYAL, G.C.M.G., 17 Victoria St., London.

My LORD,—I have the honour to submit to your lordship my report on the work done in the district covered by this office for the year ending June, 1906.

I was glad to note from the latest returns furnished by the department that there had been a satisfactory increase of British emigrants into Canada during the previous calendar year, and I am sure that this increase has continued even to a greater extent since January up to the present. In this increase I am happy to say that the several counties under my supervision have contributed their quota. Wales has done exceedingly well, better in fact, than I had anticipated, considering, as I have beforetimes stated, the scanty agricultural population. A large number of miners who had previously been on the land have gone out to resume farming operations, besides a proportion of the ordinary population bent on acquiring a knowledge of agricultural work as also tradesmen, the latter being warned that they must accept all responsibility for employment on arrival.

The counties of Somerset and Gloucester have had satisfactory results, more especially the former, one agent alone having booked 300 experienced agriculturalists.

In Gloucestershire, the city of Bristol has again come to the front, over 1,500 persons having booked their passages through the local steamship agents. Satisfactory results have also been obtained from Herefordshire and Monmouthshire.

The emigrants who have gone out this year have been of a much better class, in fact, as years go on not only the quantity, but also the quality seems to improve, and, of course, my own efforts are directed to obtaining for Canada the very best class of agriculturalists, both those with capital and the ordinary farm labourer. The former are, however, very hard to move. They are imbued with the old fashioned idea that there is no place in the world compared to England, and that this country is good enough for them. They are also bound down by leases and by the fact that when they give up their farm holdings either voluntarily or compulsorily they receive nothing in the way of compensation for the money they have laid out in improvements, hence unless compelled to, they are loath to give up. These people are, however, in a great many cases allowing their sons to go to Canada; I have come into frequent contact with them and have heard from their friends satisfactory accounts of their success in the Dominion; these are the people we want, and they form grand advertising agents for Canada.

As was the case last year, I have endeavoured in so far as possible, to direct inexperienced young men in Ontario; this is, I think, in accordance with the wishes of the minister; very few appear to make for the maritime provinces, all wanting to go 'West,' and in many cases it requires much persuasion to get them to understand how much better it is for a young inexperienced hand to receive tuition in the east before going to the Northwest for a free grant.

During the spring season I spent many days visiting the booking agents, advertising my visits and receiving callers anxious to obtain information regarding their

prospects in Canada. Satisfactory results have followed this work. In one case forty-nine passengers booked with an agent a few days after my visit.

Although not present with an exhibit at any agricultural show this year, I have had our literature well distributed, and will continue doing so until the end of the season.

Our lantern slides were in great demand during the winter months, lectures having been delivered with their aid, and supplies of literature having been sent to each meeting. Canada has, in this manner, been kept well to the front.

The New South Wales and other Australasian colonies are making a big bid this year for emigrants, part passages being paid, so that desirable settlers may reach these colonies almost as cheaply as Canada, still we are more than holding our own, and will, I think, continue to do so in spite of all opposition.

The re-arrangement of the payment of bonuses is much more satisfactory than under the old system. It does away with the payment to agents of a bonus on classes who, although they declared their intention of becoming agriculturists, were in many respects unfit for the life; clerks, shopkeepers, &c., &c., a good number of whom, through their own want of stamina and willingness to work, returned, giving in many cases a grotesque account of the country. Even now the agents have to be carefully watched, day after day I am returning bonus certificates improperly filled up or giving wrong or at least doubtful information. This shows the importance of the certificates being in the first place sent to the government agent in whose district the emigrant is booked. In a great many cases the booking agent does nothing to earn this bonus. Some do not pay a cent for advertising, they may have a few of the steamship companies' bills in their windows, the company advertise them in the local newspapers, and if perchance an intending passenger who has the qualification under which the bonus is paid casually enters their premises and books his passage, the pound is earned in the easiest possible manner. Others again spend a lot on advertising, and these I find are the men who have the best results. In this regard I have in my mind one agent who during the past few weeks has booked forty bonus emigrants apart from others.

I keep a good display of the country's products in my show case and office, which affords a practical lesson to intending settlers of what Canada can produce.

In conclusion, I can assure your Lordship that everything possible on my part will be done to secure a desirable class of emigrant for Canada.

> I am, my Lord, Your obedient servant,

> > H. M. MURRAY,
> > Agent for Wales and West of England.

#### No. 8.

#### REPORT OF PAUL WIALLARD.

(Appended to High Commissioner's Report.)

10 RUE DE ROME,

Paris, July 1, 1906.

To the Superintendent of Immigration, Ottawa.

SR,—I beg to submit my annual report for 1905-6, with the hope that my operations, as well as the way they have been conducted, will meet with the department's approval.

Our efforts this year were directed in several districts which, so far, had been neglected for want of opportunities and connections: of these 'l'Aveyron' and 'les Basses-Pyrénées.' Inquiries from these two regions came in great numbers, and the emigrants who went to Canada from both said districts were of a very good class indeed, in fact the best that could be desired. Brittany was again also a productive field, and important results were obtained in that direction as well as in 'les Charentes' and 'Savoie,' while 'Isère' and 'Drôme' have furnished, as last year and the year before, their quota of good emigrants.

The methods employed this season were exactly the same I had patronized and used previously. Being not at liberty in France to advertise on a large scale, nor to give public lectures, nor even to distribute our literature in an ostentatious way without contravening the law, I kept on answering carefully and promptly by correspondence all demands for information about Canada. And, when a certain number of persons in a given district would be ready and desirous of getting verbally some detailed indications on our country, I would arrange for a private meeting, and would go and answer all questions which can enlighten these would-be emigrants on the matter, and analyse before them the advantages offered by our country to all emigrants, mainly to agriculturists. These private meetings are necessitating quite a good deal of travelling, part of which has been done by my colleague, Mr. Pierre Foursin, whose experience and knowledge of Canada have helped me in bringing about the success of this last campaign.

If we remember that in France, as well as in nearly all other European countries, there exist restrictive emigration laws, I may say that the course we have taken was not only for the best, but really the best. Moreover, as I have explained on other occasions, the people of France have to be educated to the idea of emigrating, while in other countries, like England, for example, they have been accustomed to consider emigration as a natural and sometimes as an inevitable move.

Again this season our correspondence has increased to a large extent. No less than 5,000 letters were exchanged with inquirers anxious to know all about prospects in Canada.

Without knowing what will be the exact returns for this year, I think I can safely count that more than 500 emigrants above last year's number must have been recorded during the past season at the different arriving ports of Canada.

I am also happy to call the department's attention to the fact that many French emigrants are travelling second-class and even first on their way to our country, and that even most of the third-class passengers could boast, when leaving France, of some means of their own which will be added to their savings of the first experimental year in our country, and help them when they are ready to take up their homesteads,

which they will do as soon as they have gained sufficient knowledge of the Canadian agricultural methods.

All taken in consideration, I sincerely believe that the department will have every reason to be satisfied with the situation here, which is showing, after three years, or nearly so, of strenuous work, an ever growing number of emigrants of the finest agricultural stamp or ready to take up that profession. The department will also congratulate itself in seeing with what favour Canada is now thought of in France, and in considering that the problem of promoting and establishing a serious and uninterrupted exodus from this country to ours has made such progress that nothing save gross mistakes or mismanagement can stop the natural development of French emigration to Canada.

With due credit to the cordial and courteous help received from the London agency in all matters of service, and with thanks also to the department for prompt attention given to all subjects I have submitted to consideration, I remain,

Your obedient servant,

PAUL WIALLARD.

#### No. 9.

#### REPORT OF D. TREAU DE CŒLI.

(Appended to High Commissioner's Report.)

Antwerp, Belgium, June 30, 1906.

75

To the Right Honourable LORD STRATHCONA. High Commissioner for Canada, London.

My LORD,—I have the honour to submit this my annual report for the year ending June 30, 1906.

The great success obtained by the Canadian pavilion at the exhibition at Liège, has called the attention of every one to Canada. Visitors had never dreamed that this country could give such crops of grain, fruit, &c., nor that the soil contained such invaluable richness. After the close of the exhibition more information was eagerly This encouraged me to give a great number of illustrated lectures to farmer clubs, school teachers, popular universities and other societies. In most cases an extensive advertising was done and large and commodious buildings were provided, all free of charge. The notabilities of the place always attended these lectures, mostly presided at them, and the press rendered the most eulogistic reports.

In September, 1905, a 'Congres d'Expansion Mondiale' was held at Mons, I attended it as one of the members, and I am pleased to state that a great deal of attention was given to Canada, as one of the countries offering the greatest advantages to emigrants, and that at the meeting of September 27 a vote of thanks was tendered to the agent of Canada in Belgium, for the gift of a certain number of books and geographies relating to the Dominion. As a consequence of this congress, and acting upon its suggestion, a large number of teachers and principals of high schools have

written me for a supply of maps, pamphlets, &c.

The geography of Canada is now taught in 284 public schools in Belgium, and lectures are often given in different high institutions, to which I willingly give my lantern and the views. This movement is officially encouraged by the school inspectors and others, and I expect the best results from it.

There has been a decrease of correspondence, no advertising having been done; notwithstanding this the number of emigrants has sensibly increased; while the statistics of 1904-5 give only 796 emigrants, the returns for 1905-6 will certainly show that 50 per cent might be added to last year. I shall, in a few days, send the statement of the shipping agents.

I am in correspondence with quite a number of Belgians in Canada, and I can safely state that every one of them feels satisfied, and I receive continually the most encouraging letters, which I communicate to their friends or countrymen, giving these ample proof of the great advantages Canada offers to the sober, industrious and courageous worker.

I am confident that the difficult period of the emigration work in Belgium is over, and that a continual increase of the well-to-do farming class of Belgian emigrants is now guaranteed.

Your obedient servant.

D. TREAU DE CŒLI.

# OPERATIONS IN THE UNITED STATES.

REPORT OF W. J. WHITE, INSPECTOR OF AGENCIES AND PRESS AGENT.

DEPARTMENT OF THE INTERIOR, OTTAWA, August 4, 1906.

The Superintendent of Immigration, Ottawa.

SIR,—In presenting you with my ninth annual report, it is with pleasure that I direct your attention to the official report of the department, which shows that the immigration to Canada from the United States during the fiscal year just closed, was 57,176 persons. This is very gratifying to those who have had the direct charge of this part of the work. The prospects for the ensuing year are exceedingly bright, and it would not be surprising if from the United States the figures for 1906-7 amounted to 70,000.

When it is realized that these form a class of active, industrious workers, whose knowledge of farming has been gained upon the prairies of the Western States, where the conditions are so similar to those of our own prairies, and that, in addition to their practical worth as farmers, they have brought with them a large amount of money, stock and personal effects, it becomes difficult to place an estimate on their value to the country which will not be put at too modest a figure.

#### AGENTS SATISFACTORILY LOCATED.

Your attention is called to the fact that in every portion of the territory in which the agents of the government have been working there has been a considerable increase in the number that have gone forward. This is evidence that in the location of the agents such judgment has been used as admits of no suggestion of any change. The agencies recently opened in Washington (state) and Montana and also in Pennsylvania have been doing good work, while farther east our interests have been carefully looked after, and good results are now following the establishment of the office at Boston.

#### EDUCATIONAL WORK.

To-day there is scarcely a state in the union that is not contributing to the empire building that is going on in western Canada. From Maine to California, and from the Dakotas to Florida a system of education has been carried on, larger and greater of its kind, than has ever been carried on before by any country. Of the classes that it is intended shall be reached there are very few that have not received their first lesson on the resources and possibilities of Canada, especially that portion lying west of the great lakes.

This education is carried on in different ways; by means of specially prepared literature, well illustrated and attractively printed, and advertisements are inserted in

the papers likely to reach the classes wanted on our agricultural lands. Following are examples of our advertisements:—

# \$16.00 AN ACRE Western Canada

is the amount many farmers will realize from their wheat crop this year.

### 25 Bushels to the Acre will be the Average Yield of Wheat

The land that this was grown on cost many of the farmers absolutely nothing, while those who wish to add to the 160 acres the Government grants, can buy land adjoining at from \$6 to \$10 an acre.

Climate splendid, schools and churches convenient, railways close at hand, taxes low.

Send for pamphlet "20th Century Canada" and full paticulars regarding rate, etc., to Superintendent of Immigration, Ottawa, Can.; or to the following authorized Canadian Government Agent

## MIXED

### FARMING Wheat Raising

Ranching
Three great pursuits have again shown wonderful results on the

# Free Homestead Lands of WESTERN CANADA

Magnificent Climate—Farmers plowing in their shirt sleeves in the middle of November.

"All are bound to be more thus pleased with the final results of the past scason's harvests."—Extract. Coal, wood, water, hay in abundance—schools, churches, markets convenient. This is the era of \$1 wheat. Apply for information to Superintendent of Immigration, Ottawa, Canada; or to the following authorized Canadian Government Agents:

# Twenty-five BUSHELS



# of WHEAT to the Acre

means a productive capacity in dollars of over

# \$16 per Acre

This on land, which has cost the farmer nothing, but the price of tilling it, tells its.

**Canadian Government** 

gives absolutely free to every settler 160 acres of such land.

Lands adjoining can be purchased at from \$6 to \$10 per acre from railroads and other corporations.

Already 175,000 farmers from the United States have made their homes in Canada.

For pamphlet "20th Century Canada," and all information apply to Superintendent of Immigration, Ottawa, Canada; or to the following authorized Canadian Government Agent:

When space can be secured at state and county fairs, exhibits showing the grains and grasses grown in Canada are arranged and placed in charge of competent men who are able to impart information about the country, quote railway rates and designate routes. In some districts lectures are delivered; in special cases it has been found necessary to bring some settler back to his old home to tell his friends and neighbours of his success; it frequently occurs that a useful plan is to send delegates to look over the country and report.

These methods are not new, and the only reason for their continuance (and it is the very best), is that in the past they have been successful.

Besides the placing of exhibits at the fairs just spoken of, and which are looked upon as an annual event in several of the states, some of the boards of management feature the Canadian exhibit as one of the attractions. Splendid work was done during the year by the Agricultural Department, in the installation of an exhibit at the Pittsburg exposition. Advantage was taken of this to distribute literature to the crowds that were daily in attendance. Already the influence of this work has been felt and we look for much greater results. Pennsylvania is now looked upon as a good field for immigration efforts, and in order to further facilitate the work there an attempt was made last year to secure the co-operation of the large and influential body of writers forming the Pennsylvania Editorial Association, but without much success

until during the spring months of 1906. It was only then that the vote of the association was secured in favour of making a trip through western Canada. As a result, at the time of writing, one hundred and seventy-five Pennsylvania editors, in their special train of five Pullmans, are being shown through the farming districts of our west. I look for a lot of splendid editorial correspondence from the pens of these members of the fourth estate. Their work will be followed up by the personal solicitation of our agents.

It has not been considered advisable to make any changes in the method of advertising. The plan adopted in the early stages of the work, which has brought the number of settlers up from less than a thousand to nearly sixty thousand in the space of nine years, has been considered good enough to adhere to. No other plan can be submitted that would be more effective.

The country weekly and the farm journals are the principal mediums used. It is found that they reach the class of people mostly desirable as settlers. The city daily and magazine have not been used to any extent, not being found as valuable for reaching the farming public as the others just mentioned. Nearly 7,000 newspapers were contracted with. Only such were used as circulate in the districts in which it is considered advisable to operate, and no advertising is carried during a portion of the summer months, nor in the Christmas holiday season. In the past year advertising was placed in the newspapers at an earlier date than previously, and the results have justified the change. The advertising that has proved so successful should, I think, be continued even more vigorously than ever. It is hardly necessary to point out that advertising has been the keynote of the increasing success that we have been able to chronicle year after year. Canada has great possibilities, its agricultural resources are the best, but to become known and appreciated they must be advertised.

#### OPPOSING INFLUENCES.

There are a great many opposing influences now operating and which cannot be ignored.

Various state organizations have been brought into existence for the purpose of retaining their people; newspapers have been subsidized to publish articles detrimental to Canada; holders of large tracts of land in different parts of the States, especially in the south and west, have at their back the combined influences of railroads. All these factors are felt, as they carry on a propaganda of advertising that was not attempted a year or so ago, while their agents are scattered everywhere. The literature they distribute is in the best style of the printer's art, attractive and 'catchy,' thus making it necessary for us to present the very best that can be procured. It has been found that 'Twentieth Century Canada,' issued by the department, is well received and favourably commented upon. In fact our literature has always been of a high class, and so popular that in many cases it has been used as text-books in the schools. In this connection it might be interesting to append the following references to it. The British Vice-Consul at Port Townsend, Washington, says, in thanking the department for copies of 'Twentieth Century Canada': 'the colour work, subject-matter and appearance generally are far in advance of anything I have seen. I have no doubt that your enterprise, as evidenced by these publications, will redound to great benefit to your country.' A prominent lawyer of Paterson, N.J., says: 'A friend sent me last year one of your illustrated pamphlets, exhibiting the attractiveness of the Northwest for immigrants. It was one of the most beautiful publications, typographically, that I have ever seen. If not too much trouble I would like to have two or three copies to send to friends in England.' (I trust this digression may be pardoned, while I refer again to some of the opposing influences referred to in opening this paragraph.)

The opening up of large tracts of land suitable for irrigation has the assistance of the United States government, and with the extensive advertising that is given them the probable mover has a choice between these lands and the lands in Canada. In addition to this, there are the Indian reservations, which are being opened up from time to time, another element added to the difficulties of securing people for Canada.

As I write I have before me a report that in one day of last week one thousand homeseekers passed through Sioux City, South Dakota, on their way to the vacant lands in that state. The information is also given that trains are being run in two sections, so great is the rush. It is stated that 1,000,000 acres of government land will be opened up there very shortly. Then there are Texas, Mexico, Colorado, Wyoming, and other western states, with land, whether good, bad or indifferent, upon which people are being asked to settle. Thus it will be seen that everything is not coming Canadawards.

The rapidly increasing price of farm lands in Canada prevents many of a certain class from going. This, however, is not as great a difficulty as might at first appear. The resources of the Canadian west are great, the fertility and productiveness of its soil are being made known by every available means, and the thoughtful and prudent realize that even the present enhanced figures are low, and give opportunity for good returns from the investment.

Even with the conditions as they have been outlined, it will be possible to show a very satisfactory increase in the results of our work during the present year, if the plans as they have been pursued are followed up with the vigour and earnestness which have been the keynotes of the past.

The correspondence at the head office and also at the various agencies, together with the number of callers at these agencies, show the interest that our efforts have created. But greater than all is the evidence found in the figures showing the influx to Canada during the past year.

### AGENTS' WORK IS SATISFACTORY.

It is again my pleasing duty to be able to say that the work of the agents has been highly satisfactory. They are uniformly courteous in the treatment of those seeking information, and, as it often happens personal attention is required by the man about to move, so that he may get his effects properly packed and shipped, the agents prove to be very valuable in rendering the assistance that their experience has taught them is necessary.

#### EXTRA HELP REQUIRED.

In some of the offices the correspondence has been so great that it has taxed the energies of the small staff to take care of it. Extra help has had to be secured from time to time, and by this means it has been possible to come through the year with little cause for any complaint.

During the year it has been found necessary to increase the staff in the eastern states, where some considerable portion of the work consists in the repatriation of those who went there some years ago. This is fairly successful.

Special efforts are made amongst the French Canadians, the Scandinavians and Germans, and agents able to speak the different languages have been employed.

Your obedient servant,

W. J. WHITE, Inspector of United States Agencies and Press Agent.

# REPORTS OF IMMIGRATION OFFICIALS IN WESTERN CANADA.

#### REPORT OF THE COMMISSIONER OF IMMIGRATION.

WINNIPEG, MANITOBA, July 1, 1906.

W. D. Scott, Esq., Superintendent of Immigration, Ottawa, Ont.

SIR,—I beg to submit the following report in connection with this branch of the department for the fiscal year ending June 30, 1906, and to anticipate the various reports made by immigration agents, land agents, land guides, interpreters and others, by recalling the still increasing volume of business which has been thrown upon the officers of the staff during the past twelve months, a duty which has been in every case cheerfully performed, and I am assured, with general and mutual satisfaction to the immigrants and the public generally.

The many localities (increasing in number and extent from year to year) which have received so many new arrivals in the past continue to receive the friends of those already established on the land, thereby more closely settling these various districts; but the past twelve months has been marked by the extraordinary distances which thousands of new settlers have travelled from railways in their desire to secure a portion of the free domain of Canada. It is a matter of easy calculation that to secure for the homesteaders alone railway accommodation not more than ten miles from their land, would require the construction of not less than 1,300 miles of new railway.

This rapid and wide extension of new settlements has rendered the work of the office and outside staff much more complex than in previous years, as we have felt the responsibility placed upon us of seeing that no persons get beyond the influence of recognized authority, and thus leave themselves liable to possible vicissitudes and hardships which might, on publication, do serious injury to the immigration propaganda of the government. The details of the work connected with this branch of the public service cannot be successfully enumerated or counted, inasmuch as the diversity of human needs creates from time to time new and kaleidoscopic conditions which have to be met in a practical manner, and the way in which these multitudinous and minute duties have been performed entitles the officials of the department to considerable credit.

It is gratifying to be able to record the increase in the general immigration movement to Canada, the completed returns showing a very handsome increase in the number from Great Britain and Ireland, and the slight falling off recorded in arrivals from the United States during the previous year has been more than made up by the increased number during the last fiscal year, and if indications received in years past, and which have proven valuable, are accepted with some reserve as in the past, they clearly point to a large increase in American immigration for some years.

A most satisfactory feature during the past twelve months has been the presence of but a small percentage of undesirables, and the arrival of classes of people in every sense better fitted to make prosperous and permanent settlers in western Canada than have been received in any previous year.

The marked increase in numbers and the satisfactory improvement in financial condition and working capacity of those arriving from the old land continue to be a bright and gratifying feature of the government's immigration work, and I am pleased 25—ii—6

to be able to report that the rapid development and opening up of the country, added to more highly organized efforts and careful generous treatment of all new arrivals, have, I hope, been carried out to the satisfaction of all concerned. Generally speaking, the situation of the labour market has changed very materially, and while the department is, of course, able to guarantee work for any one desiring such on a farm at any time of the year, there is now a condition which requires more help by way of farm labourers than we have been receiving for some time past. The wages offered by farmers have increased during the last few months forty and fifty per cent, for temporary employment, and with the prospects of immense demands for men on railway construction the present condition of western Canada presents a very desirable opportunity of showing to the world outside, and those desiring to emigrate, that conditions warrant their emigration.

The number of arrivals from Wales is not anything like what we would desire to have, but we hope that the continued success of Welshmen already in Canada will prove to be an animating agency in connection with this work.

Around Lemberg, Saskatchewan, there has been a settlement of Germans originally from Austria, for eight or ten years. They are buying up more land and are preparing to cultivate to a large extent, and there is not to be found a more prosperous and thrifty people in the whole of the Canadian west. Several hundred German families have located and settled in the older district of Balgonie, largely devoting their energies to wheat raising, and being hard workers and frugal, are well-to-do. A visit to the Langenburg and Riversdale districts indicated a great improvement since the settlement was commenced, ten years ago. Some of these German and Bohemian families moved from there some years ago but have all returned and are seeking to buy land to increase their holdings as quickly as possible.

Mariahilf.—The settlers in this colony originally came from Bukowina, and began to settle there in 1892. There are two schools, both built of stone, in the colony, and a stone church seating about three hundred people. One hundred families, containing probably five hundred souls, are successfully settled here, and the original sod and log houses are giving place to good stone and frame buildings.

Neudorf.—This settlement was commenced in 1889, by settlers moving from south of Medicine Hat. There are possibly 300 families, making 1,800 souls, in this district. There are three churches and three schools. The settlement near Fishing lake has not increased in numbers because of the lack of free land in the neighbourhood. Financially the people are in good circumstances, and numerically consist of about 150 souls.

Kronsberg.—These settlers are now doing extremely well. There are about 60 families, aggregating probably 300 souls. The settlement has two good schools and church.

Strassburg.—This is almost an exclusive German settlement from Germany, founded in 1886, containing about 80 German families, with probably 400 souls.

South Qu'Appelle.—This colony was started in 1888, and has steadily increased on account of nearness to a railway station. There are probably 300 families, 1,800 souls, in the district. Five schools have been established, and the district is generally successful, many of them increasing their holdings in land by purchase.

All German settlements are making excellent progress.

It is estimated that 75 per cent of our Scandinavian immigrants have settled on land; the balance have readily found work as labourers and domestic servants at good wages. This class of settler is generally prosperous all over western Canada, and thousands more could be immediately placed at remunerative labour on railway construction or other works, if they could be obtained. A personal inspection showed that the Scandinavian settlements at Fleming, Stockholm, Percival, Kinistino and Glen Mary were very successful, and the farmers there were adding more land to their farms by buying adjoining property.

Icelanders continue to come to us direct from Iceland and from the United States. Those from the States bring with them more or less means, live stock, farming implements and household effects, and a number of last year's arrivals went to Quill Plains

district to augment the Icelandic settlement there. The Icelandic people are maintaining their excellent reputation for working hard and saving up their means, which enables them to settle on a homestead at an early date. Some engage in business, and their success in educational achievements is very marked. The settlers in the Icelandic colony at Thingvalla, Saskatchewan, arrived about eighteen years ago, with little means. They are now found to be in comfortable circumstances, many of them having acquired a whole section of land and built dwelling houses, granaries and barns. The country is well adapted for stock raising, and considerable dairying is carried on, there being a first-class creamery at Churchbridge station. Three of the settlers have, in partnership, purchased a first-class threshing outfit. It is estimated that about 500 persons of Icelandic nationality are settled in this district.

The number of Swiss arriving during the past year has been disappointing, as they are such very desirable people.

Davidson, Saskatchewan, has a small colony of Dutch and Belgian settlers, rather widely distributed. As these people only arrived there last year, they have had no opportunity of proving what they can do, but they appear to be satisfied with their present home and prospects, and are sending for a number of their countrymen. Some smaller scattered communities of Hollanders are succeeding. The start is difficult for them, but they readily adapt themselves to the new conditions afterwards.

Very few of the Hebrew immigrants of the past year have settled on land permanently, but persist in remaining in towns or peddling goods about the country. For this reason they cannot be classed as likely homesteaders or extensive producers in an agricultural country like western Canada. A small colony of Hebrews has been settled in township 19, range 1, W.P.M. The district of Wapella contains some of the best Hebrew farmers in the west, their land under cultivation ranging from 75 to 250 acres on their respective farms. These people go in for mixed farming, and that portion of their land which is not cultivated is fenced for pasture purposes.

In the Roumanan colony in townships 20 to 24, range 15, W. 2 M., there are 24 families, with probably 150 souls. They have been on the land about two years, having started with practically nothing; they now have comfortable houses and are a thrifty class of settlers.

A settlement of Galicians lies between Camrose and Bawlf, on the Wetaskiwin branch of the Canadian Pacific Railway, and Vegreville, on the main line of the Canadian Northern Railway, conveniently known as the Camrose colony. The majority of these people appear to be well fixed and prosperous. There appears to be danger from summer frosts in this locality; this and the low price paid for wheat were the only two serious drawbacks these people had. The Galician settlers on the south slope of the Riding mountain, known as Rossburn and Shoal Lake colonies, appear to be the most prosperous and advanced of the Galician colonies in Manitoba. The soil is excellent, though on the surface at some points stony and badly broken. An inspection of the Galician settlers in the Teulon and Gimli districts shows about 600 heads of families resident therein. They appear to be fairly prosperous and are quite happy and con-A number of these settlers are hauling cordwood into Teulon and Winnipeg Beach stations. At Rosthern the people are enjoying great prosperity. Most of them have three, four or more horses, from 10 to 20 head of cattle, &c., and many of them have 50 to 100 acres under cultivation. It is reported that the Galician people sold at Vonda station, on the Canadian Northern Railway, 200,000 bushels of wheat in one month. The Galician settlement in the Edmonton district forms a striking illustration of the advantage of successful settlers writing to their friends. The first nine families came from Galicia in 1894, and settled near Star, not far from Edmonton, and nearly 20,000 souls are in this district to-day; many of them have from 20 to 200 acres under crop, and from 10 to 100 head of live stock. The yield of wheat was good in quality and quantity, ranging from 15 to 25 bushels to the acre. All other Galician settlements are continuing to progress, and the men are in great demand for railway construction.

. The number of Hungarian immigrants has been about the same as last year, but the financial standing has been better, since the greater number arrived from the United States, where they had worked and had saved some money before coming to Canada. These people come with the general intention of farming, and are unhappy when obliged, on account of poverty, to remain in towns in order to earn money to go on their land. Several new colonies have been established within the last twelve months. over 40 settlers having gone southeast of Winnipeg to Woodridge, and more are joining them. A new colony has been started northwest of Touchwood hills, with about 50 homesteaders. The colony of Esterhazy, being the first Hungarian settlement, is very prosperous, and these original settlers are hiring considerable help to enlarge their The Stockholm settlement, four years old, is exceptionally prosperous. The Hungarian colony 15 to 25 miles east of Rosthern has only been founded about three years. The people are well satisfied with their present conditions, and being some distance from a railway have done more mixed farming than wheat raising. There are possibly 100 families in this settlement. The Hungarian settlement at Otthon has about 60 families, and Beaver Hills about 40. The former is a settlement twelve years old, the latter not over six years. Both are some distance away from a railway, and grain growing is not very profitable as yet. Many of them have large herds of cattle. With the advent of the Grand Trunk Pacific Railway this will prove to be among the best settlements in the west.

#### IMMIGRATION ACCOMMODATION.

The Dominion government has erected and maintained immigration halls at Winnipeg, Brandon, Saskatoon, Lethbridge, Moosejaw, Yorkton, Qu'Appelle, Dauphin, Regina, Rosthern, Prince Albert, Calgary, Strathcona, Craik, Davidson, Duck Lake and Lloydminster, and have rented for the same purpose buildings at East Selkirk, Saltcoats, Ponoka, Innisfail, Lacombe, Edmonton, Prince Albert, Battleford, Leduc, Stettler, Daysland, Virden and Elkhorn, and at other points where necessity arose temporary accommodation by way of tents has been provided. In view of the rapid construction of railways reaching into newly opened districts, further immigration buildings will be required to meet the necessities of the spring of 1907. It is the intention to close certain of the buildings hitherto used, as the tide of immigration passes beyond them.

#### EMPLOYMENT.

Five hundred and three applications for married couples were received at this office during the fiscal year, but we have found it impossible to fill all the applications received. We readily found employment for those without children, and there has been no real difficulty in placing willing working people, even with small families. Seven thousand three hundred and fifty-six individual applications with stated wages, and 1,501 general applications were received from farmers for farm help, and no difficulty has been experienced in distributing new arrivals. As a matter of fact, at no time has our supply of help been equal to the demand. Seventeen thousand seven hundred and forty-nine harvest hands entered western Canada from the east for the harvest season of 1905, and were distributed as follows:—

By C.P.R. main line	5,853
West Selkirk branch	
Deloraine branch	2,983
Glenboro branch	
Arcola-Regina branch	
Brandon-Estevan branch	1,826
Emerson branch	111
Teulon branch	26
Yorkton branch	636

Rapid City branch       4         Brookdale branch       3         Miniota branch       13         Lenore branch       7         Pheasant Hills branch       15         Prince Albert branch       85         Portal branch       35    Canadian Northern points—	0 4 7 8 5		
Brandon and Hartney branch	3 6 5 3 3		
<del></del>	- 1,266  16,338		
Hired through government and other employment offices			
	17,749		

Of these 4,834 declared their intention of remaining in western Canada.

#### CORRESPONDENCE.

During the past twelve months 29,364 letters have been received, and there have been sent from this office 2,336 registered letters and 32,968 not registered.

#### HEALTH OF IMMIGRANTS.

The large number of arrivals has necessitated continuous care on the part of our medical officer, and frequently two and three visits a day have been made throughout the various buildings. During the year medical attendance was given to 194 cases of sickness, of which 42 were cases of measles. Four children died from inflammation of the lungs following measles. During the year 71 certificates were given recommending deportation of undesirable immigrants. During the past year incoming immigrants have been exceptionally free from infectious and contagious disease, and it is hoped that the proposed change of part of the immigrant hospital for isolation purposes will be immediately carried out, so as to be prepared for any emergency which may arise.

#### TRAVELLING IMMIGRATION AGENTS.

Arrivals by train are checked by ten officers who personally secure necessary information for our records. All have been busily engaged with the increased immigration. Our travelling agents at Port Arthur and meeting trains from eastern Canada note an increased number of people from the old country, and a large increase of the agricultural class from Scotland. The extent of the movement from Ontario and other points in eastern Canada to the west has been greater than previous years, and during the months of March and April, 1906, over 2,000 cars of settlers' effects passed westward. The railway company have furnished immigrants with hot water for making tea, &c., at divisional points, without charge. This has been much appreciated, but our agents exercise continual care to see that the trains carrying immigrants are kept in a thoroughly clean condition, and an abundant supply of good cold water is provided.

Dozens of steam ploughs can now be seen in operation along the Soo line. Fine homes are being put up on the farms; also large granaries; indicating the entire confidence of the people.

The coal mines in the Estevan district tributary to this railway are working at their full capacity, and the output is more than double any previous year. Land values

are still increasing.

On April 24, 1906, it was deemed advisable to place an agent at Fernie, B.C., to check the trains carrying settlers east of the Rocky mountains, from points in the Northwestern States. With few exceptions these people were going to Alberta and were desirable people in every sense. It is noted that a number of miners who came to Fernie from Scotland in June of this year have failed to get work, and left for the United States.

One hundred and seventy-eight cars of settlers' effects were received at Lethbridge, Kootenay Landing and Fernie for points in Alberta. Apparently all these cars passed through Macleod.

#### DISTRICT REPORTS.

#### EAST, SELKIRK.

At the beginning of last July, 45 persons were detained in the immigration hall, 24 of them suffering from measles and pneumonia. During the first six months of 1906, only 49 persons received accommodation in this hall, and as the indications point to the tide of immigration having passed this point, this hall is being closed.

Our agent collected and cured in the immigration hall at this point a very large quantity of clover and grasses and peavine for exhibition purposes.

#### PORT ARTHUR AND FORT WILLIAM.

The new arrivals have been more independent of government agents than usual, owing to the fact that plenty of work can be had at good wages. A most excellent class of settlers is going into the Rainy River district, and better results could be secured if the provincial government could have more townships made available by survey. The White Fish valley, on the Duluth branch of the Canadian Northern Railway, has made great development, and there is now a settlement extending from Stanley junction to Silver mountain, a distance of 40 miles, and at least 7 miles wide, taking in the entire valley. School-houses have been erected and industries established. The crop prospects, so far as can be learned in these somewhat widely distributed settlements, are good, and, generally speaking, mixed farming is successful.

#### BRANDON.

This is the centre of one of the oldest districts in Manitoba; the labour bureau attached to our immigration hall at this point has been very extensively used by farmers from the surrounding district in order to secure help of various kinds; but such has been the demand, that we have not been able to supply all their needs during the past year. Indeed, this is the story throughout the whole of the west, plainly showing that there is no difficulty in the government carrying out the guarantee of employment on farms to any number of willing workers. This district continues to be one of the largest producers of wheat, and the acreage is from 15 to 20 per cent more than any previous year. Conditions of the crop could not give better promise than at the present time.

87

SESSIONAL PAPER No. 25

#### VIRDEN.

This being the centre of a very large and prosperous farming district, absorbed no less than 1,719 labourers during the past twelve months. It is estimated the crops will require 500 harvest hands this year, as there is an increased acreage—probably 15 per cent. Four hundred and five thousand bushels of wheat was sent out from this point by the Canadian Pacific Railway Company, and fully 100,000 bushels is still in store. Adding to this the wheat shipped from Canadian Northern Railway points south of the town, it will probably make a grand total of 680,000 bushels of wheat shipped from the Virden district. A well established brickyard, making a good quality of brick, has been busily engaged throughout the year, shipping 216 carloads. From this point 35 cars of live stock were exported; 36 cars of horses were sold here, and the dealers in town received 125 cars of lumber, 9 cars of hardware and 11 cars of cement. Twenty cars of settlers' effects were unloaded at Virden, and there is a general desire to increase the acreage under crop by breaking more land this year.

#### MOOSOMIN.

The homesteads in this district being largely taken up, new-comers have been purchasing vacant or improved land, at very reasonable prices. Our agents' interviews with them indicate appreciation of this particular district. They have first-class crops, and are making headway. Many from the United States purchased land, and brought personal effects of great value. As an indication of the increased value of real estate, wild lands are now selling at from \$8 to \$14 per acre, and partially improved farms \$15 to \$27 per acre. Twenty-five cars of settlers' effects were received at this station, and the indications are that a number of farm hands will be required for the harvest and next year's operations. Fifteen per cent increase is estimated for this year's crop.

#### WAPELLA.

This being an old settled district, the homestead entries are not very numerous, but the crop area has increased about 10 per cent, and is in excellent condition.

#### QU'APPELLE.

Owing to the tide of immigration having passed this point, the government has sold the immigration building, and our offices have been closed, but a number of settlers with means to purchase land, are continually arriving, and the district is improving rapidly. The crop conditions indicate that there will be a scarcity of labour for the harvest, and this condition is likely to increase from year to year, as a larger area is being broken up from time to time in this very desirable locality.

The same remarks apply to Indian Head, which has become famous as a great wheat centre, and in consequence land values are fully as high as in any part of Manitoba.

#### REGINA.

Three thousand two hundred and ninety immigrants were accommodated in our buildings at this point during the past year, consisting of British, 971; Germans, 967; Austrians, 79; Americans, 495; Canadians, 355; Norwegians, 239; Galicians, 68; Roumanians, 51; Russians, 31; Swedes, 18; Icelanders, 14; Swiss, 12. It is estimated that 70 per cent of all arrivals were well supplied with means to go on farms, the balance seeking labour. Not many cars of settlers' effects are unloaded at Regina, but it is an important junction point for the Prince Albert branch, and there passed through Regina since the beginning of 1906, 1,451 cars of settlers' effects, indicating the rapid settlement of Saskatchewan. The crops in this district are most promising, and the acreage is increased by 50 per cent. The city of Regina is taking its place as the provincial capital, and business and municipal development is very marked.

#### MOOSEJAW.

This district is experiencing the general prosperity which has settled over the Canadian west, and good homesteads within a radius of 20 to 25 miles of Moosejaw are few and far between; but with the extension of railways there would be no difficulty in providing for new-comers. A conservative estimate shows 100,000 acres under crop, and hundreds of harvest hands will be required to assist in taking the same off this year, if present conditions continue. The class of new settlers appears to be far above the average, and assists in making Moosejaw city an important point, the town itself having many branches of industry which are very successful. Twenty carloads of settlers' effects have been unloaded at this point. The general outlook of the city and district is good. A number of investors with capital have purchased real estate, and large quantities of land have changed hands at greatly increased prices.

#### WILLOW BUNCH.

The past winter was mild, with little snow, and all kinds of stock came through in good condition. Spring opened early and grass made a good start at the beginning of April. People are progressing and therefore contented. The prices for live stock and wool are good, and the hay crop will be above the average. This district is now receiving extensive attention, and incoming settlers are frequently seen prospecting the district. About 125 homesteads have been located since the beginning of April, the settlers coming mostly from North and South Dakota and from Ontario, and if the prospective railway through this district is assured, a very large increase may be early expected. Little grain has been sown owing to the long distance from a railway, but a good many of the new settlers will be breaking their land this year.

#### HERBERT.

This is a new settlement on the main line of the Canadian Pacific Railway, in a district which until a year or two ago was generally considered within the semi-dry belt, but has now a large number of Mennonites from Manitoba and other parts, rapidly increasing in number by the arrival of their friends. The first year very little grain was sown, but the result was good. In 1905, 2,000 acres were in crop, from which 45,000 bushels were threshed. This year about 8,000 acres have been placed in crop, and the prospects are promising. The price of wild lands for sale has increased from \$6.50 per acre last year, to \$10 per acre this year. Five school districts have been organized, and others are in course of formation. About 100 carloads of settlers' effects have been unloaded at this point, and over 60 carloads of building lumber arrived since last summer; yet lumber dealers are without material for farmers. This district bids fair to be one of the best in the Northwest, because those forming it have prospered and received their successful experience for the most part in Manitoba, before reaching this locality.

#### SWIFT CURRENT.

Large numbers of homeseekers and settlers have come into this immediate district during the past twelve months, approximately 2,500 souls, bringing with them about 300 cars of settlers' effects; Mennonites from the province of Manitoba predominating in numbers. Last year the grain was grown mostly on first breaking, and averaged 30 bushels to the acre—all the yield being needed for seed. In this district 25,000 acres will be under crop this year, with every prospect of a bountiful harvest.

#### MAPLE CREEK.

The past year has been one of marked success in this district, the number of homestead entries being more than double, and the class of settlers coming in and taking up mixed farming well adapted for the purpose. It is estimated that 10,000 acres is under

crop at the present time, and giving splendid promise of harvest. Horses, cattle and wool are in great demand, and prices are good.

#### MEDICINE HAT.

At this point and at Irvine 210 families, with 40 cars of effects were received, and homestead entries numbered 375, a large increase over the previous year. The entire district appears now to be one vast green pasture, and looks exceedingly well. The losses during the winter in cattle, horses and sheep were very slight. The farmers prepared a large acreage for crop, and with the unusual rainfall in May and June, prospects are very bright. Imported at these points during the season 424 horses, 1,195 cattle. Exported, horses, 2,720; cattle, 13,025; sheep, 13,424; wool, 252,823 lbs.

#### CALGARY.

The immigration passing through this gateway indicates that Alberta has received more immigrants than in any previous year, and of a better working class. Traffic from this junction point has required two passenger trains to the north and two to the south daily. During the year 1,203 immigrants received accommodation in the immigration building. Crop prospects at present are a great deal better than was expected early in the spring, owing to very little snow during the winter, and some of the fall wheat having failed. This wheat appears to be gaining rapidly in popularity, and it is estimated that there is 50 per cent more under crop than in the previous year. Oats could not look better: in fact all spring grains are in the best condition. The total acreage sown this year has increased over 1905 by 100 per cent. There has been plenty of rain, and farmers are well pleased with the prospects. The hay crop will be good, and cattle on the ranges never looked better. Horses are in good demand, and are bringing good prices. A good span will bring from \$300 to \$350, and some as high as \$400. There are 43 creameries in the province of Alberta, 19 of which are operated by the Provincial Department of Agriculture. One hundred and ten cars of settlers' effects were unloaded at this point. The city and surrounding district are prospering: the difficulty now being the insufficient number of cheap houses to rent. Irrigated lands are being sold very rapidly.

#### KAMLOOPS.

The number of arrivals at this point is up to the average. Fifteen heads of families and 24 single men have settled within a short distance of this town in a district until recently given up entirely to stock raising. Two families came from England and 15 unmarried men from the States. If this settlement proves a success, other districts will be opened up and settled. Two cars of settlers' effects and stock came from the state of Washington and were unloaded at this point.

#### NEW WESTMINSTER.

In many cases holders of lands in this district have subdivided their farms for disposal to home-seekers. A large number of new settlers have come in through this point from the United States.

#### CARSTAIRS.

A very large number of first-class American and Canadian settlers have arrived in this district, and, added to the general development, have proved an important factor in the extraordinary growth and progress of the district. The town of Carstairs has grown to twice the size during the past year, and the construction of a rural telephone line is proceeding. One hundred and fifty cars of settlers' effects and 8,000 tons of freight were unloaded at this point. Land values range from \$8 to \$30 per acre, and practically all good homesteads 25 miles to the west and 75 miles to the east have been located by first-class settlers. Every farmer is breaking all he can, some of them having

as much as 1,200 acres ready for winter wheat this year. A careful estimate would place the acreage of this district under crop at 75,000. There has been an abundance of rain and plenty of sunshine, and the present condition of the crop could not be surpassed.

#### DIDSBURY.

Our reports show that the homesteads from range 22, W. 4 M., to range 5, W. 5 M., in townships 30, 31 and 32, are nearly all taken up, and settlement from this point east of the Red Deer river is impossible without a bridge. Twenty-five carloads of settlers' effects were unloaded this year, mostly from Iowa and Washington. Winter wheat is doing very well. Two hundred thousand pounds of creamery butter was shipped from this point during the year. Each homesteader for 40 miles east and 20 miles west is breaking land for fall wheat, and it can be safely estimated that each farmer will have not less than 15 acres, while the older settler will have as much as 100 acres in fall wheat this year, making an estimated area of 10,000 acres under this cereal alone.

#### OLDS.

During the year, 426 homesteads were entered for at this point, and as 218 patents were applied for, the settlement appears to be drawing more closely together. Three times more breaking has been done this year than in any previous similar period. Occasional fields have been damaged with cut-worms, but this year's crop bids fair to be a large one. General prosperity is to be noted here and in neighbouring towns.

#### INNISFAIL.

Although a large portion of this sub-agency was settled during previous years, 225 homesteads were taken within the last twelve months, being mostly by men with families and some capital, from Great Britain, eastern Canada and the States. Land that could be bought four or five years ago for from \$3 to \$4 per acre, is selling freely at \$12 to \$15, and some as high as \$25 for land 7 miles from this town. About half a million bushels of grain was threshed last year in the district of which Innisfail is the centre. An increase of from 10 to 15 per cent is estimated for the current year. Innisfail continues to be an important centre of the dairying interest; the Innisfail creamery produced nearly 200,000 lbs. of butter. A new factory has been started 20 miles east, in a district that was only occupied by ranchers a little over a year ago. Three train-loads of steers were shipped from Innisfail this spring, in addition to what was shipped last fall. An average of two cars of live hogs per month were shipped from this point last year. Mixed farming appears to be successful. It is estimated that 50 or 60 farm hands will be required here for the harvest.

#### RED DEER.

The influx of settlers has been largely in excess of any previous year, and the high standard of the immigrants has been maintained. The advantages peculiar to this district appear to be an equable and balmy climate, a rich and productive soil, an unlimited supply of pure water, an abundance of timber, and an inexhaustible supply of coal. The Swiss, German, French, Finnish and other settlers of foreign extraction are also exceedingly prosperous. The trend of settlement has been naturally to the east on account of the proposed railways running east from Lacombe and Wetaskiwin. Last season's winter wheat crop was very satisfactory, much of it going as high as 55 bushels to the acre, which was disposed of to the home market for seeding purposes, at prices ranging from \$1 to \$1.30 per bushel. About 50 per cent more ground was sown in winter wheat last season than the previous one, and while early in the season prospects were not very promising, especially on high ground, conditions have materially improved. During the past twelve months 3,859 homestead entries were granted in this land district, being an increase of 1,744 over the previous twelve months.

#### BLACKFALDS.

This district has received a fair number of new settlers during the past year, many of whom have means to buy lands, and the improvement in buildings on homesteads is noticeable. The crops appear to be better than last year, and if no unforeseen setback occurs, our agents report, the crops will be excellent in quality and quantity. This new district is like many others, and for the first time is likely to experience the need of outside help for harvesting operations. Forty-six carloads of settlers' effects were unloaded here during the past year.

#### LACOMBE.

This is a junction point on the railway from Calgary to Edmonton, and with the proposed early construction of the Canadian Pacific Railway line from Moosejaw to Lacombe, should increase in importance, although in a little while the homesteads in the immediate district will be all taken up. The new arrivals are of an exceptionally good class, with ample means to make a good start. Many have purchased improved farms and railway lands. The acreage under crop is largely increased, but many of the farmers who planted fall wheat find that a quantity was killed during the winter. Good homesteads can yet be obtained from 35 to 60 miles west in the Medicine River valley, but none nearer than 70 miles east of this point.

#### STETTLER.

One hundred and eight homesteads were entered for at this sub-land agency during the month of May, this year, and 160 during June; this office only being opened on the first of May, 1906. A noticeable majority of the new settlers for these months were Germans, apparently well provided with means to settle on land at once. From 30 to 50 cars of settlers' effects have been unloaded at this point each month since the beginning of the year. Three hundred and forty-nine persons have received accommodation in our immigration hall. Many have already broken quite an area, and the new district will average at least 5 acres of breaking and crop their first year. The acreage under crop is estimated as follows: Flax, 600 acres; spring wheat, 3,200 acres; fall wheat, 50 acres; oats, 9,000 acres; potatoes, 550 acres. Fully 1,000 acres will be planted in fall wheat this year. This is the centre of a comparatively new district, and the town shows marked progress. With the extension of the railway eastward towards Moosejaw, the very large number of settlers who are now in that unprovided for district will have much needed railway accommodation. The French colony that came direct from France are a credit to the district and have progressed satisfactorily. The other settlers, with the exception of a few English people, who apparently expected too much, are also in satisfactory circumstances.

#### RED WILLOW.

Crop conditions appear to be excellent in this district. A large quantity of land is being broken up, some farmers breaking as much as 200 acres on their individual holdings, and it is difficult to find a dissatisfied settler in the district. The following are some striking instances of the fertility of the soil in this district. One field of 6 acres raised 219 bushels of wheat; a field of 17 acres raised 1,265 bushels of oats, weighing 40 lbs. to the bushel; 3 acres of barley produced 115 bushels. A 4½-acre field of wheat gave 182 bushels. One man produced 90 bushels of barley from one acre; and a 50-acre field of oats threshed out 3,800 bushels.

#### PONOKA.

At this sub-land agency 302 entries were made for homesteads. The amount of breaking shows an increase of 10 per cent over the previous year, and winter wheat sowing 20 per cent. There are plenty of homestead lands 25 miles west of Ponoka

good for mixed farming. Settlers are turning their attention very largely to stock and creameries, and three of the latter are now shipping from Ponoka. Land values have increased over last year, and a generally good spirit prevails.

#### WETASKIWIN.

There has been a steady influx of settlers into this district, consisting of the better class of Canadian and American farmers, English and Scandinavians. The homesteads in this district are practically all taken. The district itself is best known as a mixed farming district, some 3,500 head of fat cattle having been shipped from this point during the past year; and while 750,000 bushels of grain were marketed at Wetaskiwin, there is still a large quantity in the farmers' hands. The crop acreage has increased 30 per cent, and the outlook for harvest could not be improved. Hitherto there has been no lack of farm labourers in this district, because of the new immigrants arriving, but with the demand for railway construction work it is expected there will be need of help from outside during next year, if not for the coming harvest.

#### HEATHER BRAE.

This district is fast filling up with prosperous people. Mixed farming appears to succeed as indicated by the large number of stock in the district. A number of creameries are being built, and there is 25 per cent more land under crop than during last year. Daysland is the detraining point for this district, and has received a large number of cars of settlers' effects. The extension of the railway from Daysland towards Saskatoon has caused homesteaders to take up land fully 60 miles east of this point.

#### MILLET.

This point has not received a very large number of settlers this year, and our agent believes that it is caused by the lack of good roads from the town. In his report he states it is almost impossible for one to proceed west of Pigeon Lake even with pack horses, and those taking up homesteads find no means of moving in their effects.

#### STRATHCONA.

The records of the agent at this point show 4,742 immigrants arriving, bringing in 152 cars of settlers' effects. In some of the older localities the cut-worm did considerable damage, necessitating re-seeding. The increase in acreage in the older localities will not exceed 5 per cent, while in newer places will probably be 200 per cent. No complaints are heard from the farmers, and the district continues to prosper and improve.

#### EDMONTON.

As expected, the reports from this point show a very largely increased number of arrivals from all points, and most were men with experience and capital, a marked feature being fully 50 families from California, as a result of the good reports of a single family who settled near the Pembina river a year previous. A number of good Dutch farmers from Pennsylvania arrived, and their reports should result in better figures from that state in future. The number of immigrants from Germany, France, Belgium and Austria has greatly increased, making Edmonton probably the most important point in immigration matters during the past year; and as a natural consequence merchants and business men throughout Northern Alberta have bright hopes for a continuance of the present satisfactory conditions. The advent of the National Transcontinental Railway is a feature which should maintain and increase the present prosperity. Edmonton is experiencing the same conditions as some other large centres, and finds that settlers are obliged to go miles away in order to secure land for settlement at what seem to Canadians moderate prices. The Pembina River district to the northwest of this city is being particularly favoured. A large number of settlers from

Kansas and Oklahoma are settling northeast of Edmonton. This district is part prairie and part timber, with an abundance of hay and water. The area under cultivation in the Edmonton district is probably double any previous year, and farmers are satisfied with the prices they are receiving. General prosperity is written large in this district; settlement spread out in all directions; new towns springing up; new railways building and projected; weather good, and the crops excellent. There has been an increase of 50 per cent in land broken this year. Over 500 cars of settlers' effects arrived from the United States, and the live stock coming in is first-class. The rush of immigrants requiring temporary accommodation necessitated occupying the exhibition building for a short period, and it is hoped that the new immigration building, which is now in course of construction, will meet the requirements of this point for several years to come.

#### EDISON.

Practically all the land surveyed in this immediate locality is homesteaded. Crops are very good and are maturing early. Owing to the distance from railway communication the average crop of the 200 settlers in the neighbourhood does not exceed 10 acres.

#### FORT SASKATCHEWAN.

Nine hundred and twenty homesteads were taken in this sub-land agency during the past six months, by a good class of settlers with capital to make a good beginning, and most of them came from the United States. Within this district the Federal and Alberta governments have combined and set aside a park known as the 'Elk Park,' consisting of 10,240 acres, in the Beaver Hills district, comprising sections 12, 13, 14, 22, 23, 24, 25, 26, 27, 34, 35 and 36, in township 54, range 20; and sections 18, 19, 30 and 31, in township 54, range 19, all west of the fourth meridian, and it is hoped that this will tend to preserve the large game, an important feature from several standpoints. Tributary to this point is a large Galician settlement, and reports show they are succeeding wonderfully well. The young people soon learn English, and make first-class labourers for other farmers. Fifteen new school districts have been formed in this Galician settlement since the first of January, 1906. It is estimated that for every 160 acres occupied at least 30 acres is under cultivation.

#### WOSTOK.

The acreage under crop is probably one-sixth more than the previous year, and as fast as the settlers can secure horses and machinery the acreage under crop will be increased from year to year. This point is 53 miles from the nearest railway station, and our agent estimates that probably 350 new settlers have arrived during the past year.

#### WHITFORD.

This district, some distance from a railway, is rapidly filling up with good settlers, Vegreville being the nearest railway station. The crops at present indicate they will be the best on record. A large number of Galicians continue to arrive and make entry for land in this district, and practically all homesteads are entered for.

#### ATHABASKA LANDING.

This is a new sub-land agency which is likely to become an important point, with largely increased business, during the present year. The district is inclined to be somewhat light in soil, but the crops indicate a good return, and thus far the rainfall has been sufficient for all purposes, and is making the hay crop above the average.

#### LETHBRIDGE.

The total arrivals recorded at this point were 2,555, a decrease of 268. This, doubtless, has been caused by the opening up of large Indian reserves south of the

international boundary line, and the action of the United States government in vigorously prosecuting irrigation works. The spring opened in Southern Alberta with a very droughty aspect. The soil was very dry last fall, and much of the winter wheat did not come up well. Many farmers re-sowed with oats in May last, and rainfall set in, since which spring wheat and other crops have come on well. The declared destinations of immigrants recorded at this point were: to Southern Alberta, 1,329; Northern Alberta, 974: Saskatchewan, 217: British Columbia, 28, and other points, 7. They comprised the following nationalities: Americans, 1,846; British, 184; Canadians, 177; Germans, 114; Danes, 17; Swedes, 50; Norwegians, 34; French, 15; Swiss, 9; Finns, 46; Hungarians, 49; Italians, 12; Japanese, 2. Of the whole number over 1,300 were farmers, not counting women and children or farm hands. The irrigation ditches have been widened and extended 50 miles, and during the past year fully 25,000 acres of irrigable and non-irrigable land have been broken and are in preparation for crop. Land sales exceeded 300,000 acres, of which a large portion must still be in the hands of the speculating purchasers. In this large district some 30 steam ploughs are operating, and the following elevators indicate an extensive area producing crop: one at Lethbridge, one at Raymond, one at Cardston, one at Raley, two at Spring Coulee, and two at Magrath. A party of German settlers from Wisconsin arrived and broke a large acreage of land; they also produced large quantities of excellent butter which has found a ready market at 22 cents a pound. The cattle industry appears to be prospering equally as well as in previous years, and shipments were made earlier owing to the good condition of the stock. Sheep have not increased. The price paid for wool was  $16\frac{1}{4}$  to  $16\frac{1}{2}$  cents a pound. Sheep realized from \$4 to \$4.50, and lambs \$2 to \$2.50. Hitherto about 75,000 sheep have been grazing upon the Irrigation Company's lands, but they have ordered their removal after the shearing season is over. The lumbering camps in mining towns west of this point have afforded ample opportunity for work at good wages, and there is demand for more men. The new coal mine accompanied by iron on the west side of the Belly river, 6 miles from Lethbridge, has been partly developed, and other discoveries indicate enormous areas in this district which are underlaid with coal. The beet sugar industry appears to be progressing notwithstanding competition by importation of sugar at Pacific coast points. The Raymond Beet Sugar factory produced nearly 5,000,000 lbs. of sugar during a run of two months last year; 18,000 tons of beets were converted into sugar, the producers of the beets receiving \$5 per ton. Prices for wheat were comparatively low, but the yield of 28 bushels to the acre compensated for the same. During the past year 751 homesteads were taken in the land office at this point.

#### COUTTS.

One hundred and eighty-eight cars of settlers' effects were passed by the customs authorities at this outport, valued at \$140,000.

#### PINCHER CREEK.

Farming is steadily progressing, notwithstanding lands within 15 and 20 miles of the town are all homesteaded, and 75 per cent of the land available for purchase has been acquired and occupied. Some of the best portions, however, suffer from lack of transportation facilities, and the acreage under wheat would be quadrupled in some districts if such facilities could be furnished. The acreage under cultivation has increased 30 to 50 per cent, and the crops are in prime condition at present. A small percentage of fall wheat was killed by prematurely warm weather in February. Conditions have been materially improved, and together with oats, roots and hay, a first-class crop is assured. If the present low price of cattle continues a few years more the eattle industry will be largely disturbed and disappear.

#### HIGH RIVER.

Two hundred and fifty-nine homestead entries were granted at this sub-land office, and practically all available homesteads for 40 miles east of this station have been taken up, and the same may be said as far west as the foot hills of the Rockies. The dry spell last fall and during the early spring of this year did damage to fall wheat, but many farmers sowed oats on the same land this spring. All crops are doing well. Cattle turned out well. Horses not quite so well, owing to grass coming too slow, but are now looking excellent. Every prospect of favourable predictions being fulfilled is present in this district.

#### STAVELEY.

The immigration at this point is very satisfactory in number and class. One hundred cars of settlers' effects arrived, and land has increased \$5 per acre in price. Some of the winter wheat was killed by frost, but is turning out better than early reports showed. The prospects are good for an average crop. Wheat harvested in 1905 an average of 42 bushels per acre. It is estimated 30,000 acres are in crop this year, and conditions are highly satisfactory to the settlers.

#### CLARESHOLM.

Owing to the long distance from the town to the vacant homestead lands, the returns are much lighter from this point than in previous years; nevertheless, our agent reports having located 100 homesteaders, and other settlers comprising 250 good farmers, 75 per cent of these being Americans. The district has about 50,000 acres in crop, looking well. Forty carloads of settlers' effects were unloaded at this point last year, and the town itself has now a population of between 900 and 1,000.

#### MACLEOD.

The prospects for crop this year were never better. Plenty of rain, and fall wheat now appears to be very successful. All spring crops are looking well and there is likely to be some demand for help during harvesting and threshing. Most of the immigration to this district comes from the United States, and are men who understand farming in a practical sense. During the year 185 homestead entries were granted through this office.

#### REDVERS.

The prospects never looked brighter in this district for a bountiful harvest. The acreage under crop in this district will be 50,000 acres. Fifty cars of settlers' effects were unloaded, and about 200 new settlers, mostly Americans, came in during the past year. Land is rapidly changing hands at from \$20 to \$25 per acre which three years ago would not bring more than \$6 to \$10. A very large amount of new breaking is being done.

#### ALAMEDA.

Twenty-five carloads of effects have been unloaded at this point this year; the majority of settlers are Americans and Canadians, with a very noticeable increase of new settlers from Great Britain. There is a general air of prosperity, and already a scarcity of farm help. The crop area is 15 per cent greater than last year. The estimate in the last year's report of 25 bushels per acre was fully realized. Homestead entries for the year were 2,371, an increase of 715 over the previous year.

#### DUBUC.

This point is on a comparatively new branch of railway, yet over 85,000 bushels of wheat was shipped from this station last season. An increase of more than 50 per cent is expected over last year.

#### LIPTON.

Settlements all around this point are thriving and prosperous. The Jewish settlement situated east and northeast is expected to market forty or fifty thousand bushels of grain this year. The Hayward settlement, 20,000; Kronsberg, 40,000; Parklands, 20,000; Headlands, 12,000; while the Lipton district itself will have 20,000, all the crops being in a flourishing condition, and not in any previous year so far advanced as at this time. Twenty miles north of Lipton is a new Hungarian settlement which has little this year, but is getting a large amount of land broken for next year. These people make very good settlers. A Swedish settlement northeast do more stock raising, as their lands are more rolling. The new-comers in this district will afford ample help for the harvest.

#### TOUCHWOOD HILLS.

Last year's crop was taken off in good shape, the grain being heavy and of good quality. Oats appeared to be the main crop, realizing a general average of about 50 bushels per acre. All garden stuff, cattle and horses in good condition. Probably 25,000 acres of new land will be broken during the present summer. A large number of settlers have arrived, but as they unloaded their stock at so many different stations in order to reach this district, it is impossible to give the figures. Homesteads on straight prairie land are well taken up, but many good homesteads are vacant in the park country near the proposed line of railway, and which are unexcelled for mixed farming and dairying. In the north and northeast of this district settlers are chiefly Americans and Canadians, with a number of Scandinavian; and to the south and southwest a large number of Hungarians and Germans with a considerable mixture of English-speaking settlers amongst them.

#### 'SOO' LINE.

The crops along the whole of this line, from North Portal to Moosejaw, are very promising. It is estimated the general acreage under crop is at least 25 per cent greater than in the previous year. Since the last annual report Milestone district has received the largest inflow of settlers in its history. Upwards of 200 cars of settlers' effects were unloaded at Milestone, 70 cars at Lang, and 70 cars at Wilcox siding. The new arrivals came from England, Ireland, Continental Europe and the United States as far east as Massachusetts and as far south as Kentucky. A considerable majority of the American arrivals this year are native Americans, and not American citizens of foreign descent. The area under cultivation has more than doubled during the year. and will probably double again during the present year by new breaking. Flax is still a favourite crop for new settlers on new breaking. It can safely be sown up to June 20, and a larger cash return can be secured for flax the first season than from any other grain. Approximately, 110,000 bushels of flax was shipped from Milestone last year, making this the largest flax exporting station in Canada. A factory was built at this point last fall for the manufacture of flax straw. Two thousand tons were purchased at \$2 per ton. The number of large farms in this district has increased, and several farmers are working two or more sections at one time. A number of steam ploughs were working this spring, but several were obliged to cease operations on account of exceptionally wet weather. One hundred and sixty-five homestead entries were taken at this point. A notable incident of the year was the eagerness of all persons who were eligible to become naturalized, and our agent reports that careful inquiry shows that every one who has resided three years in this district is naturalized. After allowing for the new arrivals who would be available for harvest work, it is estimated that 150 additional men will be required. A number of settlers have found it advisable to go into the townships west of Estevan, and 344 homestead entries were granted during the past year. This immediate district is well settled, and a favourite one, as evidenced by the fact that 247 applications for patent were received. General contentment prevails. Conditions are generally satisfactory.

#### MINNEDOSA.

As most of the homesteads are taken within a large radius of this point, not many new people have arrived, and it is intended to close this agency. The crops last year were good, and this year most promising. The pasturage appears to be excellent at the present time, and the owners of cattle will benefit largely thereby. Evidence of prosperity can be seen in all directions.

#### RANCHVALE.

This district is very largely settled by Galician farmers who have progressed very satisfactorily, as they invest all their savings in improving their farms and buying more stock for their operations. In this settlement there are five or six threshing outfits and three or four new ones will be purchased this year. A number of these Galicians continue to work out during parts of the year and earn good wages while leaving the rest of the family at home to attend to the farm.

#### SALTCOATS.

The Galicians settled north of this point have very largely increased their crop area, stock is in good condition, and a considerable acreage of new land broken. The travelling dairy for instruction purposes was furnished by the provincial government of Saskatchewan, and has materially aided some of the foreign settlers in this district to improve their dairy products. All other settlers are prospering satisfactorily.

#### YORKTON.

The last year has been one of rapid development in this district from the farmers' noint of view, the yield of grain being exceptionally heavy and prices good. elevator capacity is altogether inadequate to meet the storage demand in the threshing A larger area is under crop this year, and with present prospects even the bountiful harvest of 1905 will be surpassed. It is estimated that two and a quarter million bushels of grain will pass into the elevators at Yorkton alone, and to this must be added the output of Saltcoats, Churchbridge and other points in the vicinity, so that the Yorkton district may reasonably claim to ship out 5,000,000 bushels of grain this year. During the year 2.161 homesteads were granted, chiefly to immigrants from Great Britain, which numbers will outbalance the large foreign settlements in this district. Of such settlements the Galicians appear to continue their record for diligent farming, and the residents consider them and their success admirable in every respect. In view of the fact that the area under cultivation on the farms in this district is increasing, more help will be required than in previous years. The prospects for a banner crop were never better. In every direction the smile of satisfaction is on the farmer's face; his crops and his cattle show that he is in a prosperous condition and making money. The acreage under crop is one-third more than the previous year, and every farmer is breaking more land if he can get teams for the purpose. Our agent at this point is in close touch with the Galician settlers, and reports they are all doing well, get plenty of work, and receive the best wages. This appears to be an important grain shipping point, as during the past year the elevators handled 1,360,000 bushels. Thirty-nine cars of settlers' effects were unloaded during the past year. The tide of immigration appearing to have set many miles west of this point; it is intended to close this agency at an early date.

#### KRISTNES.

The majority of recent settlers in this district have been Scandinavians and Icelanders from the United States, mostly from North Dakota. They are first-class settlers, used to farming and possessed of considerable means. The balance of the new arrivals are Englishmen and a few Canadians from the eastern provinces. The people generally

express their satisfaction with their present condition. Last year's crop turned out well, although considerable had been sown on new breaking. At the time of this report settlers are busy breaking up new land, and at present the crop looks better than ever. There will be abundance of hay. Work on the railway line from Sheho westward has commenced, and will be extended from 35 to 40 miles this summer.

#### DAVIDSON.

Over 500 cars of settlers' effects were unloaded up to June 15, since New Year's Day, 1906. More settlers came into this district from Ontario and Manitoba than during previous years, and all arriving were of the best class. The wheat crop will be almost double and looks excellent. The population of the town of Davidson is now about 500, and new and old arrivals appear to be contented and satisfied.

#### KENASTON.

At this station 410 new settlers arrived, with 62 cars of settlers' effects, and among these were some Slovacs from Hungary and the United States. A very large area of wheat and oats is under crop, and many townships show over a thousand acres of new breaking this year.

#### HANLEY.

Seven hundred and ninety-one homesteads were taken through this sub-land office, and over 300 carloads of settlers' effects were unloaded here. The arrivals consisted principally of Americans and Canadians, probably 3,000 in the aggregate. The acreage under crop is double, and an immense amount of ploughing by steam and horse-power has been done for next year's crop. Fears are expressed that there will be demand for outside labour at this point at harvest time. Old and new-comers appear to be satisfied with their conditions.

#### SASKATOON.

Our agent estimates over 6,000 souls arrived at this point, bringing with them 600 cars of settlers' effects. Steam ploughs can be seen at work in all directions, more breaking having been done early in 1906 than in any three previous years. The crops are looking well. The settlers are mostly Americans, English and Scotch. Many new-comers are going southwest beyond Goose Lake to Eagle Lake, fully 150 miles from a railway. Land has risen in value from \$9 to \$20 an acre. One thousand nine hundred and forty-three applications for homesteads were filed in this office.

#### ROSTHERN.

The Rosthern district is a large one, containing several large settlements of foreign nationalities, as well as English-speaking people, and possibly 4,500 new arrivals settled around this district, bringing with them 425 carloads of settlers' effects. Sixty-four thousand five hundred acres were under crop last year, and there was marketed in this district two and a half million bushels of various kinds of grain. The crop area has increased this year to 78,000 acres, and is expected to yield three and a quarter million bushels. At the time of this report the crop is in excellent condition, and for the first time in the history of this new district the present supply of farm labour may be insufficient for the harvest.

#### DUCK LAKE.

There has been practically no increase in the immigration arriving at this point, because the district is already well settled. Those who have come during 1905-6 are of the better class, with money enough to take up farming operations at once. The acreage under crop is increasing year by year, and in many cases two-thirds of the farm has been ploughed. One hundred and fourteen homesteads were granted through

this sub-land agency. The acreage under wheat is estimated at 25,000 acres, with 10,000 acres under oats, all in good condition. Farmers well satisfied.

#### PRINCE ALBERT.

During the year 1.888 homestead entries were granted, representing probably 8.000 new arrivals in this land district. The only new settlements opened up in the last twelve months are those of Sturgeon Lake and Lost River colony, the former about 18 miles north of this city, the latter some 25 miles north of Star city. A steady process of filling up the older settlements by good settlers has been going on, and the immigration arriving has been of a very desirable class. As a whole, the settlers are in a very prosperous condition owing to bountiful harvests during the past few years, the high prices ruling for wheat, and the employment furnished by large lumber industries operating at this and other points in the locality. The valuable fisheries to the north were operated last winter, and it is expected the operations during the coming winter will be largely augmented and will furnish employment for a considerable number of men and teams. The crop prospects for the present season were never better in any previous year, but there will be no special demand for harvest help, as a good many of the men employed in lumber camps are available as farm hands during the summer season, making this district an 'all year' district. A new Galician settlement has been started in the brushy country to the northeast. The number of settlers arriving was the limit of the accommodation of the immigration hall, being 520 persons during the year, consisting of 132 English, 141 Norwegians, 32 Americans, 23 Scotch, 14 Swedes, 26 Russians, 1 Belgian, 31 Canadians, 12 Irish, 20 Germans, 24 Dutch, 42 Galicians, 21 French, 1 Dane. Seventy-one cars of settlers' effects were unloaded at this station. Crops this year are looking very well, although the cut-worm seems to be damaging some oats. Work appears to be plentiful on farms and in saw-mills. The value of land in town and country has materially increased, and both appear to be desirable means of investing capital.

#### DAUPHIN.

General prosperity has been enjoyed throughout the district. Many thousands of bushels of wheat were shipped, and a considerable quantity delivered at local flour mills. Much attention is paid to mixed farming, though more sheep and hogs could easily be carried by the farmers. A number of well-bred animals were brought in, and the improvement in stock is marked. All farm produce secured fair prices, the demand being fully equal to the supply. A great improvement is needed in the roads and Land values are increasing, one half-section 3 miles from Dauphin town having been sold for \$19,000. The district east of Lake Dauphin has been settled to a considerable extent owing to the fact that a branch of the Canadian Northern Railway is expected there at an early date, but there are still a good many lands in that locality for settlement. During the year 621 homestead entries were granted in this land district. Lumber operations during the past winter were carried on with the usual vigour. Demand for farm labour has been generally met by new arrivals. Thirty-five families and 513 men were employed by local farmers, through our agent, in this district. Thirteen cars of settlers' effects were received, but this in no way indicates the extent of development in the district, because the extension railways beyond this junction point carry immigrants and their effects nearer their ultimate destination. It is estimated that 48,500 acres are under crop, and while probably 5 per cent damage was done by cut-worms, the present indications are the yield should be 25 bushels of wheat to the acre. Hay, roots and vegetables give promise of abundant results. Live stock of all kinds is improving, and generally the district is progressing very satisfactorily.

#### CANORA.

The acreage under crop in this district has doubled during last year, and the increase is likely to continue, as a large immigration of American farmers with capital

has gone into this locality, and this class brings land under cultivation very rapidly. This district was favoured with good crops, some farmers reaping 42 bushels of wheat and 100 bushels of oats per acre. Wild hay and other fodder for mixed farming grows in abundance, and the settlers are now hoping that the provincial government will establish a creamery in the locality. Fifty carloads of effects accompanied 800 settlers arriving at this point during the year, and most of them were able to commence farming operations without being obliged to hire out beforehand.

#### INVERMAY.

The settlers arriving at this point largely consist of English and Norwegians. Twenty-five families brought 15 cars of settlers' effects. Hay may be scarce on account of excessive rain having filled the marshes. There are about 1,000 acres in crop in the immediate vicinity, but some improvement will have to be made to the roads before other settlers can be induced to go in on the large number of homesteads still vacant.

#### MUENSTER.

This district was first settled by some farmers from Pontiac county, province of Quebec, and has been added to by numerous good people from eastern Canada and the United States. The soil is good, good water plentiful, and pasture excellent. It is difficult in this new settlement to obtain anything like an accurate estimate of the acreage under crop, but without exception settlers are improving their holdings; shanties and tents are giving place to roomy substantial homes, and a great many carloads of live stock were unloaded at this station. Grain crops give every prospect of a magnificent harvest, for which they will have sufficient help, but their progress indicates that next year assistance may be required to take off the harvest.

#### HUMBOLDT.

The outlook for a good crop is excellent. Settlers appear glad to have reached this district, and they have succeeded beyond their expectation. Large tracts of land have been broken during the past year, amounting to probably 15,000 acres. The district is largely settled by German-Americans, and those who came in two or three years ago have from 80 to 100 acres under crop. One Russian from South Russia, arriving there two years ago, has 120 acres under crop this year. The Mennonite settlement south of Humboldt, started two years ago, is progressing satisfactorily, some of the individual farmers having from 100 to 150 acres under crop. It is estimated between five and six hundred homesteaders have settled on land in this extensive district during the year. Three hundred and two cars of settlers' effects have been unloaded at this point since the first of January, 1906. It is not considered necessary to send any outside help for the harvest, as many new settlers are continually arriving.

#### BATTLEFORD.

A great increase in the volume of business during the year has taken place at Battleford, and the homestead entries which totalled 3,618 in the very busy previous year, increased during the fiscal year now closed to 7,873. Commencing very early in the spring, or in fact while winter was yet on, a large number of settlers were daily passing through Battleford and other nearby points, on their way to their homesteads. Many of these settlers' parties were composed of Canadians and Americans, and had with them complete outfits of horses and agricultural machinery. A German colony a short distance south of Battleford has increased somewhat in numbers and continues to prosper. The general prosperity reported from year to year in this district continues, rain having been abundant throughout the whole district, with the exception of the Tramping Lake region, where some deficiency was experienced, but not sufficient to cause serious injury. The farmers disposed of their last year's grain crop at high

prices, and while the price of beef stock for export was low, the local demand caused by railway construction, and incoming settlers, compensated for this.

#### LLOYDMINSTER.

During the last winter not many persons occupied our buildings at this point, but commencing with February it has been fairly well filled by those who were without means to reside upon their land at once. The largest number of persons occupying the immigration building was 168, during the month of April. Most of the arrivals came from England, also some Irish and Scotch families. A large number of homesteads were taken in the district, and during the early part of 1906 a number of Swedes and Americans arrived, bringing with them carloads of settlers' effects, which enabled themto start farming at once. Eighty-four carloads of settlers' effects were unloaded. One party of Norwegians arrived from Minnesota with six carloads. They settled 30 miles south of Lloydminster, and expect to give a good account of themselves. The original Barr colonists are, generally speaking, doing well. Many of them have from 25 to 80 acres under crop. The crops in the district are in a splendid condition, and every one looks forward to a successful year. The acreage under cultivation has doubled during the past year, and farming is done on a more practical scale than formerly. Individual progress has been very marked, and it is noted that the people who came here with the original Barr colony, with practically no means, but who worked their homesteads, are to-day in a fairly satisfactory position. Since the advent of the Canadian Northern Railway through this district, Lloydminster has become an important centre for immigration, large numbers leaving the train here and seeking land in all directions within a radius of 75 and 100 miles.

#### VERMILLION.

During 1905 and 1906 this has been a very important point from which new settlers start for their homesteads. It is estimated that not less than 800 have arrived at this station, and have been located through government land guides during the past twelve months, and all of them were first-class settlers in every respect, with sufficient means to enable them to settle on the land almost immediately. The difficulty which was apparent in the past has been overcome by the provincial government erecting a substantial bridge across the Vermillion river at this point, thus throwing open for settlement a large district to the north which was cut off for want of this accommodation. The town of Vermillion itself is a remarkable instance of the rapidity with which towns come into existence in a new country. Being only nine months old, it has practically established within its limits every branch of commercial business found in large towns. The crop reports could not be improved upon, and in fact the farmers in this district hope to compete very favourably with Manitoba as a wheat-growing country within the next few years. The rainfall has been sufficient for all agricultural purposes. The snowfall did not exceed four inches, with almost constant sunshine; consequently the stock came through the winter in good shape. A train load of cattle shipped from this point was reported by Winnipeg authorities to be the best average trainload received in Winnipeg during the past five years. A large number of homesteads, particularly between Vermillion and Saskatchewan rivers, are yet available for those desiring the same.

#### SWAN RIVER.

While this district is not sharing in the remarkable inrush of settlers like other districts, yet the intervening vacant homesteads are being eagerly sought, and lands are changing hands at increased figures. The grain crop is increasing year by year; in 1904, 230,000 bushels of wheat were marketed; in 1905, 500,000 bushels, and it is estimated that at least 750,000 bushels will be marketed in the fall of 1906. The settlement known as the Fort Pelly district is attracting a great deal of interest, many new settlers having located there during the past year. The prospect of an extension of the

Canadian Northern Railway passing through this locality is a great attraction. The proposed line is from Swan river to Rosthern, a distance of 200 miles, and will open up a very fine tract of country. Fifty-eight carloads of settlers' effects were unloaded at this point, and 176 homestead entries were made during the past twelve months.

#### MELFORT.

Our agents at this point have not sent any better report than they do this year. From 50 to 75 per cent more land is under cultivation, and homesteads are being taken up very rapidly. One hundred and seventy-five carloads of settlers' effects from eastern Canada and the United States were unloaded here. From this point a small settlement of Galicians have settled north, and a settlement of French to the southwest. Twice as much land has been broken during the past year than in any previous equal period, and the fact that whole quarter-sections are being broken up is an indication of the stability and enterprise of the farmers. Crops are well advanced, the majority of the wheat fields being headed out at the present time, with the prospect of a harvest two weeks earlier than usual. It is estimated 50 per cent more land is under crop, and a large amount of breaking is being done throughout the whole district. Quite a number ci townships contiguous to this point are all taken up so far as homesteads are concerned, and our agent estimates that 1,000 settlers have located within the limits of this sub-land agency during the past year. Sixty-five cars of settlers' effects were unloaded at Melfort, 65 cars at Tisdale and 60 cars at Star City. The majority of the new settlers are from the United States, and are very desirable.

#### WINNIPEG GIRLS' HOME OF WELCOME.

During the calendar year 1905, 1,531 people passed through the home, 547 were bona fide immigrants, 377 transients and 607 servants, housekeepers, &c. The immigrants, of whom 90 per cent were English-speaking, were all given twenty-four hours' free board and lodging.

#### GRAIN EXHIBITS.

During the past year the staff connected with this office purchased and prepared for exhibition purposes 557 large cases of grains and grasses which were forwarded to Great Britain, points in Europe and the United States, and doubtless were effective illustrations of Canada's possibilities. In addition to the above a large number of visitors passing through secured from us small samples of grain, and as in former years, we had a very extensive and substantial display of grains and grasses at the Winnipeg Industrial Exhibition, to which large numbers of visitors were specially invited, with, we hope, beneficial results. As Canada becomes more widely known, the demand for grains and grasses for illustration purposes increases, and I respectfully submit that there is no better means of advertising our capacity to provide homes for immigrants than the extension of this branch of the service.

Under all existing circumstances, and adding the inevitable results of prosperous settlement, we may confidently look forward to a steadily increasing immigration, and it will be the desire and effort of my office to continue in the special work of enabling new-comers to provide themselves with not only a living, but a chance to secure a competence in due course by their own efforts.

Respectfully submitted,

J. OBED SMITH,

Commissioner of Immigration.

# REPORT OF C. W. SPEERS, GENERAL COLONIZATION AGENT.

Brandon, Man., July 1, 1906.

W. D. SCOTT, Esq., Superintendent of Immigration, Ottawa, Ont.

SIR,—I have the honour to submit to you a report of my work in the immigration branch from June 30, 1905, to June 30, 1906.

During July, 1905, I inspected the different colonies throughout Saskatchewan, and made a report on some districts suitable for future settlement; report dated July 3, 1905, to the Superintendent of Immigration. During the same month I investigated certain complaints where settlers had been charged an excessive rate for their equipment; report dated July, 1905. During the same month I made an inspection of matters of importance to the department at different agencies in the west: also requesting agents in certain districts to examine lands for colonization; report dated July, addressed to J. Obed Smith, Commissioner of Immigration. Report of inspection of different nationalities settled throughout western Canada, with special report on English colonists at Lloydminster; report dated July, 1905. Subsequent report on certain districts suitable for Galician settlement.

Under instructions from the deputy minister I inspected and adjusted certain matters of interest pertaining to the English colonies; full report to the deputy minister, dated July, 1905. Later I visited some districts in the interests of German colonization, with some influential German agriculturists. A complete report, with proposition to colonize submitted July 18, 1905.

I had some difficulty with a small faction of the Doukhobor community who

became restless with their religious mania; report August 12, 1905.

Report August 14, 1905, on the importance of exhibiting at our local exhibitions. Report August 14, on the general prospects in the west; the approximate yield of grain, and general prosperity among our settlers.

Report August 14, concerning the Doukhobors.

Investigation reports, including letters to Peter Veregin, leader of the Doukhobors; Commissioner Perry, Northwest Mounted Police, re the Doukhobor community.

According to instructions, I accompanied Mr. Arthur Hawkes, of the London Times, through a portion of western Canada; report August, 1905, to Superintendent of Immigration.

On August 28, 1905, a full report on the settlement of the Doukhobor difficulties.

A full report, August 28, of my trip accompanying the Agricultural Editors of the United States, through their entire journey to Western Canada, according to instructions from the department.

On September 7, 1905, an exhaustive report to the minister pertaining to the Doukhobor community settled in western Canada.

I visited the Springfield State Fair, as instructed by the department, and completed the exhibit, assisting state agent C. J. Broughton. I feel more than ever convinced that these exhibits are doing a great deal to promote immigration.

I made a full report on the Doukhobor community, giving villages and districts they occupy, with an approximate census of the different districts, on October 5, 1905.

During the same month I visited Lloydminster, accompanied by Mr. J. Obed Smith, Commissioner of Immigration. We were in a position to see much of the progress of the new settlements along the Canadian Northern. At that time, under instructions from the Deputy Minister of the Interior, I turned over to the Canadian

Northern Railway some property from the department in which they were interested. Full report dated November 4, 1905, addressed to the deputy minister.

During the same month, under instructions from the deputy minister, I supervised an investigation and inspection of the Doukhobor settlements situated in Saskatchewan, at Yorkton and Prince Albert, respectively. This work was done through officers of the Dominion lands branch, Messrs. T. Young, D. C. McNabb, White and J. Seale. After placing these officials in possession of all the information pertaining to this community, they proceeded at once with the work as outlined by the department, which occupied considerable time. In connection with this work reports were made, dated November 4, to the Commissioner of Dominion Lands, and to the different officers entrusted with the work.

I inspected the different colonies situated throughout Saskatchewan and Alberta, and submitted a full report to the Superintendent of Immigration, dated November 4, 1905.

A report to Professor James Mavor, of the Toronto University, dated November 18, 1905.

Under instructions from the Deputy Minister of the Interior, to investigate and adjust certain matters at Lloydminster, existing among the British settlers, I completed this work and submitted a full report to the deputy minister, November 22, 1905.

During December, my time was pretty well occupied in connection with the Doukhobor investigation which was going on at that time. In January, after an inspection of our settlements in western Canada, full report submitted to the Superintendent of Immigration, January 24, 1906.

Complete report on the results of an investigation made by the Dominion lands branch concerning the Doukhobors, dated February 24, 1906.

During February, I visited the United States and met a number of important delegations, in addition to a large Polish committee in Chicago, who contemplate moving fifty thousand families to Canada.

In the month of March I discussed very fully in Ottawa, with Mr. J. W. Greenway, Commissioner of Dominion Lands, many matters of importance concerning the foreign colonies in western Canada; and also features of interest in connection with the Doukhobor investigation by that branch of the department, which was then complete.

During the latter part of March and April I visited many important points in Western Canada where we were anxious to have every facility to care for and receive the large influx of immigrants arriving in the spring, and after having fully discussed the situation with Mr. J. Obed Smith, Commissioner of Immigration, had everything in perfect readiness to receive the people.

During the month of April I visited many points that were receiving a large contribution of people, to see that the best facilities were available for the care and comfort of the people and their early despatch to the lands they intended to occupy. Reports dated May 8, 1906, to the Superintendent of Immigration.

Under instructions from the deputy minister, a complete report and inspection of the Lloydminster district and town; also a report re Saskatchewan Valley Land Company, June, 1906.

I beg to say that in addition to the above duties my time has been occupied in looking after many matters of detail, as in the case of applications for seed grain, &c. In addition to this, there is the care and supervision required over new settlements until they are permanently established. With the great number of new-comers, many going far beyond railways, a vigilant eye is required to be kept upon the settlements until they have overcome their initial difficulties. I am pleased to observe that this has been the policy of the department, and that I can safely say that no settlement of any nationality has been established in Western Canada in the last ten years that is not to-day characterized by thrift and prosperity, and the prospect before them is a very bright and hopeful one.

We are securing with our increased numbers a very superior people, and without wishing to be invidious, I may, I think, say that no people settled in Western Canada

have made greater progress and been a greater acquisition to the country than the Austrian people. Their settlements at Edmonton, at Yorkton, at Dauphin, Pleasant Home, Stuartburn and Shoal Lake speak for themselves. They are frugal, industrious and making marked progress. We have to-day about 70,000 of these people scattered throughout Western Canada. We commenced in 1894 with 10 families settled near Edmonton, and you will observe that we have been twelve years securing approximately 70,000 people.

Considering that we have many thousands of miles of railway to construct, it must be apparent to all that a class of rugged industrious labourers who will become progressive agriculturists after assisting in the construction of these lines by doing the early rough work connected therewith, would be the greatest and best acquisition to the country. The harvest about to be reaped is an abundant one, and requires many labourers. The domestic homes in Western Canada, both urban and rural, are at a loss to secure competent help. The country is progressing rapidly. The great difficulty with which we are confronted is the labour question; wages are very high, and may yet interfere with the honest industry of agriculture. For these, and many more reasons, I would like to see thousands of labourers come to Western Canada. While I have a desire for the superior classes, I am convinced that the good honest labouring man is badly needed, and in a few years will establish himself as a producer upon our fertile lands. The great public works referred to are only in embryo yet; the consummation of these works is a long way off, and there is no danger for many years to come of any lack of work for the unemployed. Not only the public works under construction, but the great areas being brought under cultivation and the increased produce of the country will open the way for work for all.

We have vast areas yet unsettled. One year ago I pointed out that a quarter of a million souls could be settled on good land, using Battleford as a distributing point. I am pleased to note that that particular point has received a generous contribution during the past year, and still there is room. The country from Prince Albert to Edmonton, on the north side of the Saskatchewan, although a little rougher in its nature, is well adapted for mixed farming, and can be settled by people anxious to go into the diversified industry of agriculture.

In conclusion, I beg to say that as a whole our settlements are in a state of prosperity, and most hopeful for the future. The crop promises to be an excellent one, which is the most potent factor after all in promoting immigration. The good work of our agents in the United States and Europe is being felt. The touring editors who have visited Canada have been astonished at the possibilities of our wonderful country, and these, through the agency of the pen, will do effective work. The flowing tide is with us, as can be readily seen by results. The work so well begun, and so well perpetuated through a judicious policy, is telling with effect. The year has been a most satisfactory one, and there is every reason for thankfulness for the peace and prosperity of our people.

Your obedient servant,

C. W. SPEERS, General Colonization Agent.

REPORT OF P. M. BREDT, INSPECTOR OF AGENCIES AND FOREIGN COLONIES.

REGINA, SASK., August 22, 1906.

The Superintendent of Immigration, Ottawa.

Sir,—With reference to your letter asking me for an annual report, I beg to say that the just finished fiscal year has been a year of good progress in all the foreign colonies, more especially in the German settlements. All the new settlements in the Beaver Hills, Touchwood Hills, Last Mountain, Quill Lake and other districts are showing remarkable progress. In many of these settlements last year only a few acres were broken, and only here and there a few small sheds could be seen, but now everywhere good substantial houses can be noticed, large tracts of land are broken and well prepared for next year's crops, and the settlers feel that they are on the right way to prosperity.

There is only one German settlement to my knowledge not making as good progress as desired, and that is about 30 miles north of Chaplin station, on the Canadian Pacific Railway main line, in township 22, range 7, west 3rd meridian, but the fault is with the people themselves. These people came about sixteen months ago from Cincinnati, U.S.A. They are all townspeople, and they picked out the land for settlement and made their plans without asking anybody's advice; the result was disappointment, and about half the people left the settlement and went back to the United States. Those remaining were good people but unaccustomed to farming, and as there were hardly any old farmers around there, the district being a ranching country in the past, the outlook was not very promising for them, but many good practical farmers from Ontario and the United States have since settled among these people, and the land being good and the people willing to learn, there is no reason why they should not succeed. I have paid special attention to this settlement, and it is my intention to visit it again before winter; in fact several of the settlers have asked me by letter to see them before winter.

The older foreign settlements north and south of the Canadian Pacific Railway main line, and on the branch lines to North Portal, Arcola and Kirkella are showing a most wonderful progress. On many farms during the last year substantial barns have been erected and many of the farmers are working from 320 to 640 acres of land, and there are not a few of them who will harvest this year from 2,000 to 6,000 bushels of wheat. On the other hand there is a general desire noticeable to improve their stock. and not a few of them have spent quite large amounts of money in the nurchase of good sires, both horses and cattle. Another good feature is the fact that in some districts where new villages spring up on the railroad line some of the more enterprising ones, sons of old farmers, branched out in other business and opened stores and other business concerns, and where they did not go into business at their own expense, they hired out as clerks with some English-speaking business men. All this will tend more and more to the amalgamation and assimilation of the English-speaking people and the foreigners, and in fact in these old foreign (German) districts, marriages between people of Canadian or English origin and German origin are taking place quite frequently, and my observations are such that I must say that there is hardly another foreign-born immigrant who is ready and fit to assimilate with the Canadian people as quickly as the German-speaking immigrant, and more than that, who will, after having been assimilated, become as true and faithful a citizen as he does, who not only takes an interest in the affairs of the country, but prides himself on his new fatherland. These are facts proven not only in other countries, as for instance the United States, but in our own old province of Ontario, and I should regret very much if the influx of German immigrants should decrease.

Your obedient servant,

P. M. BREDT, Inspector of Agencies and Foreign Colonies.

# JUVENILE IMMIGRATION.

# REPORT OF G. BOGUE SMART, CHIEF INSPECTOR OF BRITISH IMMIGRANT CHILDREN AND RECEIVING HOMES.

OTTAWA, June 30, 1906.

The Superintendent of Immigration, Ottawa.

SR,—I have the honour to submit my seventh annual report as Chief Inspector of British Immigrant Children and Receiving and Distributing Homes.

The duties which appertain to my position are purely sociological in character, and therefore entail a wider range than one might casually conclude. The care, training and oversight of orphaned and unbefriended childhood, and the study of child life in its various phases, are subjects of unremitting interest.

The class of juveniles sent to Canada has proved a desirable and useful addition to our population in relieving, to some small extent, the stringency in the juvenile labour market.

The method of placing and indenturing these young immigrants, with farmers, on their arrival in Canada has worked well. Should they afterwards prove unsuitable for farm work, it will then be time enough to choose other occupations for them.

There has been no curtailment in the operations of this branch of the service since I last had the honour to report.

The different receiving and distributing homes have been inspected during the past twelve months and I have appended brief reports on the operations of these agencies.

There are 13 distributing centres for children, located as follows: Ontario, 8; Quebec, 2; Nova Scotia, 1; Manitoba, 2. The majority of these homes have been established at no inconsiderable cost, and their maintenance requires a large expenditure. In these homes children are received on their first arrival and when changing situations. Amongst the children as a whole I have found a fine sense of honour. To be returned to the home is considered rather a humiliation. To the credit of the children I may say that in the course of my inspections I have found a smaller number in the homes than one would naturally expect.

In addition to a large number of children from the private and philanthropic homes in England, twelve hundred and five poor-law children were individually inspected in 1905, and reports on these inspections were from time to time transmitted to the Local Government Board at London, pursuant to the arrangement entered into with the British government. The compilation of such reports and their preparation for transmission to Whitehall involves much time and labour.

To adequately appreciate the labour necessary, and the amount of travel requisite to the accomplishment of the work of this branch, one has only to bear in mind the fact that the children are scattered throughout nearly every county in the provinces of Ontario, Quebec, Nova Scotia, New Brunswick, and in some instances, notably in Manitoba and the new provinces, they are distant from each other a hundred or more miles.

The demand on the societies and agencies for juvenile labourers reached such proportions that only a small percentage of the available places have been filled.

Notwithstanding the fact that the Department of the Interior does not undertake the placing in situations of juveniles, no fewer than 19,374 persons have made application to me for children during the year just ended. In discussing this phase of the subject, the General Superintendent of the Barnardo Homes in Canada said, 'Despite'

the large emigration to Canada, which I believe has surpassed previous records, there seems no cessation in the demand for boys on the farm, and if the two hundred we had to place' (in the early spring of 1906) 'had been two thousand, there would have been a good situation in readiness for every individual of the party.' A similar condition of affairs was experienced by the other agencies in Canada.

From reports received from time to time concerning the general acceptability of these youthful settlers, I am enabled to say that with the exception of an insignificant few they are doing well. This gratifying condition of affairs relates chiefly to such of the children as have undergone a definite pre-emigration training in the homes. It has been demonstrated time and again that almost any boy or girl possessing qualities of earnestness and perseverance can reach the goal of success in Canada.

After having witnessed the real condition of child life in Great Britain, and seeing for myself the thousands of poor little children who through misfortune are thrown on the world, homeless, friendless and destitute, I can better appreciate the real benefit of the emigration of this class, whether it be to Canada, South Africa or other British colonies.

Doubtless owing to past results the child-emigration movement is gaining favour in the old country. On the occasion of my visit to Great Britain in 1905, many plans for its extension were suggested to me, such as the following: One would ask, 'May I send any of the children in my school to Canada?' My reply was invariably 'Yes, under certain conditions, first that the child has spent a definite period under training in morals, religion and industriousness. Second, they must pass a careful medical examination, and be found physically and mentally healthy, and third, when they reach Canada and are placed in homes and situations they will be carefully looked after until they attain the age of 18 years.'

I might say here that in the case of poor-law children the Local Government Board insists on the fulfilment of these stipulations, and I have yet to find any one identified with the movement who has exhibited a desire to disregard such requirements. The fact is there are indeed few, if any, engaged in this benevolent cause who have not already a thorough appreciation of the type of juvenile that is acceptable to the Canadian agriculturist.

As a reward for good conduct, emigration is by many of the authorities kept before the children during their training and equipment. From a Canadian point of view, I regard this policy as a matter of national economics, and, judging by cases coming within my personal experience, it has operated most satisfactorily. In his work on 'Child Life and Home Training,' S. I. M. Henry states that the desired result is character, and the only process by which it can be obtained is self-government. As a rule discipline by suitable reward is more effective than by penalty. No child is ever, within my knowledge, forced to go to Canada.

For the most part the home boys and girls may be found in Canada with farmers, whose social conditions may be described as (a) young men, just married, and starting out on their own account, and who cannot afford the expense of keeping a 'hired' man. (b) Elderly couples, whose own children have grown up and probably gone to the wheat fields of Western Canada, and (c) extensive farmers who keep a number of farm labourers, but who require a boy to do odd jobs about the house and barns.

While as yet the larger number of the girls are placed in country homes, the percentage in domestic service in Canadian towns and cities is annually increasing.

In Wales, in the southern districts especially, I learn that a demand for English home boys as farm helps has arisen. Some of the authorities, who formerly sent their children to Canada, are now sending them to Wales, chiefly, I imagine, for economical reasons, but this scheme is as yet experimental.

As has been stated by me in previous reports, juvenile emigration to Canada has not yet reached the stage of universal popularity in the old land, and many arguments have been adduced against the policy. Here, for example, is a very frequent argument: 'England is sending her best children to Canada and is retaining the physically and morally defective; and further, England is being filled up with the refuse of Europe.

We should close our ports to foreigners, and then we would have more room for our own children.'

When a child is sent to Canada the agency through which its emigration has been effected is held responsible for its proper care. In other words it stands in loco parentis to the child until it has reached the age of 18 years. Therefore it will be observed that a proper degree of discriminating judgment with regard to the children must be exercised. First they must be perfectly sure it is the right type of child to emigrate. It would be palpably unwise to send a juvenile across the ocean until it has been under training and discipline for a minimum period of three months. This I find to be, happily, the general policy.

During their sojourn in the homes and schools they are, as I have personally witnessed, medically examined and, I am assured, this examination is repeated at least four times during the year by a physician. Should a child show any tendency whatever to organic disease or evince undesirable tendencies it is certain of detection, and could not be sent to Canada. Time was when one frequently heard fears expressed that children tainted with disease might be sent to Canada, but the regulations of the Local Government Board, Liverpool Board of Trade, ship's surgeon, and lastly our departmental regulations make make a continuous could be a surgeon as a lastly our department.

mental regulations, make such a contingency well nigh an impossibility.

The procedure on admitting a child to a home is first to find out what is wrong about the boy or girl and second, to know its character. The late Dr. Barnardo stated to me in this connection, 'My ladies get to know the girls and my men get to know the boys, and when they go to Canada my agents there are furnished with particulars of everything about the child for whom they must assume parental responsibility.'

A most striking feature of the work, and one which impressed me greatly during my visit to Britain, is the deep personal interest which is taken in the welfare of the individual child.

There are various methods of training poor and necessitous children in England. I was much pleased with all I saw in the private and poor law schools in this regard. In many of the homes before and after school hours the children do a considerable portion of the domestic work. The 'half time system' is good: a certain class of boys and girls attends school say in the forenoon and industrial work in the afternoon. Those who take this work in the forenoon attend school in the afternoon. In some of the schools the boys and girls receive a special training in farm and dairy work. The general training which the majority receive is sufficient to allow one to expect them to develop into a useful and industrious citizenship, should they find their way to Canada through the societies or otherwise.

In the larger or district schools, where I found several hundreds of children, I was immediately impressed by the military precision which characterized their actions. This I at once realized is quite unavoidable, as the strictest discipline must be exercised where there are such large numbers. Yet, I am happy to say the tendency in England to-day is to remove as far as possible the appearance of institutionalism and to treat the children as members of a family. Having made a personal study of child life in the old land, particularly in the ranks of those classes whence our annual immigration is derived, and after having personally followed the individual careers of hundreds of these youthful Britons on this side of the Atlantic, I am prepared to assert without fear of contradiction, that the money so liberally contributed by English philanthropists for the uplifting, training, educating and emigrating of the poor and unbefriended children has, as an investment of national and private funds, been repaid a hundred-fold. The movement is unique in that it is purely voluntary, and is conducted without appeal on the part of the government of Canada.

My visit to Great Britain afforded me an experience which has proved of much value to me in the pursuit of my official duties. I have seen the industrial training which these young immigrants receive in all its phases, and to me it would appear to be amply sufficient to qualify them for careers of usefulness in after life. My visit to Great Britain has also led me to appreciate more keenly the fact that in my capacity as Chief Inspector of British Immigrant Children and Receiving Homes in this country,

I must share the responsibility devolving upon emigration workers in the old land of seeing that these children are provided with homes wherein their moral, mental and industrial character will be moulded and developed. It is no exaggeration to say that a nobler work can scarcely engage the attention of any British or British-Colonial citizen.

The following is a statement showing the number of juveniles emigrated to Canada during the past year by some of the principal societies, and the number of applications received for children:-

Society or Agency.	Boys.	Girls.	Applications rec'd for children.
Bristol Emigration Society, St. John, N.B. Dr. T. Bowman Stephenson, Hamilton.  *'The Coombe,' Misses Smyly, Hespeler Miss Macpherson, Stratford. Church of England Waifs' and Strays' Society, Sherbrooke Church of England Waifs' and Strays' Soc., Niagara on the Lake.	(32) * 145 88	62	118 480 56 739 153 396
Mr. Fegan's Hone, Toronto Rev. Robert Wallace, Belleville  *Mrs. Birt, Knowlton  *Mr. Middlemore, Halifax	160 81 (191)	31	(a) 500 788 943
Catholic Emigration Association, Ottawa.  Mr. Quarrier, 'Fairknowe,' Brockville  Dr. Barnardo's Homes, Toronto, Peterborough, Winnipeg and Russell, Manitoba	320 101	39 86 421	824 1,210 12,511
*The Salvation Army  Total	2,532	726	19,374

<sup>\*</sup> Boys and girls. (a) Approximately.

Inspector R. W. Hillyard says in his report for the year that 'In the majority of cases the children from the different homes are well and comfortably "placed" and are giving general satisfaction. Many of them are held in high esteem by their emplovers.

'The average Canadian farmer's home affords much comfort to these juvenile immigrants, and the training received by the boys is of great value to them in after years. Only a small percentage of immigrant children have been failures.'

The report of Mr. Thomas Cory, Assistant Inspector for Manitoba and Western Canada states:—'As regards the children that have come under my inspection during the past fiscal year, they may be described as being on the whole first-class. The character of the situations provided for them have been satisfactory, and for the most part they are indentured with well-to-do farmers.

'Their employers have given them good characters and their usefulness as farm helps is well recognized. In fact many farmers informed me that it would be hard to part with them when their indentures expire. In my personal interviews with the boys I questioned them carefully as to their treatment and satisfaction with their lot, and in nearly every instance they expressed contentment. Reports as to behaviour have been generally favourable to the boys.

They welcome a visitor and are pleased to have some one interested in their welfare. The cause of many leaving their situations is due to inducements held out by neighbours of increased wages. Many farmers throughout the west have applied to me for boys and I am safe in saying that I could place fifty within a month. Taking all the boys I have inspected this year, to date, they are giving entire satisfaction.'

MANCHESTER AND SALFORD BOYS' AND GIRLS' REFUGES AND HOMES.

Children from these influential schools are sent to Canada each year under escort to Marchmont, Belleville, and are placed in situations and homes by the Rev. Robert

Wallace. Over fifteen hundred have already been emigrated. The efficiency of these excellent homes and schools is enhanced by the industrial training which they provide. The children receive every encouragement. Each boy is paid a wage which varies according to the work he performs. On Saturday, pay day, the lads are given pocket money, the juniors a half-penny and those attending school a penny each, and every effort is made to treat the children as entities. As a result of this policy I was immediately struck with the freedom with which the children moved about. They were very polite and conversed with me unreservedly, giving an account of their treatment and daily routine in the home. It is quite impossible, in the space at my disposal, to adequately describe in detail the training afforded the children in these homes. It is sufficient, however, to say that the training and discipline are thorough, and one may look for good results from the children selected for emigration to the Dominion.

During the last half of this present year 31 girls and 73 boys were emigrated, 44

of whom were orphans and 21 had one parent living.

I desire here to express my appreciation of the kind hospitality and the efforts put forth by Mr. Ackroyd, Honorary Secretary, and officers of the homes which facilitated my inquiries into the care and training of the unbefriended and needy children of Manchester.

### FAIRKNOWE-BROCKVILLE, ONTARIO, CANADIAN BRANCH MR. QUARRIER'S HOMES.

On the date of my inspection there were no children at Fairknowe. One hundred and one boys and 86 girls have been distributed during the year.

A good system of oversight of the children is maintained, and a year of efficient work has been accomplished.

# MISS MACPHERSON'S HOME, STRATFORD, ONTARIO.

On May 14, the eighty-fifth emigration party reached Stratford. Children are received in the homes in England from four years of age up to fourteen. There is no definite period of training through which the prospective emigrants pass. From Mr. James Macpherson Merry I learn that each case is dealt with according to its individual necessities. Since the death of Miss Macpherson the work inaugurated by her is carried on as heretofore by her nephews, the Messrs. Merry. Their Canadian branch is well maintained, and my inspection gave me a very favourable impression. The children in the home were neatly dressed and happy.

# THE CHILDREN'S HOMES AND ORPHANAGES (FOUNDED BY DR. T. BOWMAN STEPHENSON), CANADIAN BRANCH, HAMILTON, ONTARIO.

The number of children under the supervision of the Canadian branch of the children's homes and orphanages now exceeds 300. This home, as I have previously reported, is efficiently maintained.

On June 23 there were 4 boys in residence, all of whom were found busily engaged

about the house and area.

The greater number of the children are from Edgworth and Farnborough farm schools. Such practical training as I have witnessed there cannot fail to be beneficial to the children when they reach Canadian farms. The average training before emigration is five years, during which term children are under excellent influences.

# THE BRISTOL EMIGRATION SOCIETY, ST. JOHN, N.B.

Forty-one boys and 31 girls were emigrated to New Brunswick during the year. They came from Bristol and vicinity and were placed, with one or two exceptions, in the maritime provinces. This society has recently arranged for the establishment of a receiving home at St. John, which has been long required.

### THE GIBB HOME, SHERBROOKE, QUE.

There were only 2 boys at the home on this date, and their stay was temporary, while changing places. Eighty-eight boys from their English homes have been placed in situations during the year. The home was exquisitely tidy throughout.

CHURCH OF ENGLAND WAIFS AND STRAYS SOCIETY, 'OUR WESTERN HOME,' NIAGARA-ON-THE-LAKE, ONTARIO.

I made my annual visit of inspection to this home on November 21, 1905. There were 28 little girls here, and all were attending the private school in the home. I questioned them concerning the various routine of their studies, and their replies showed good intelligence. The home was tidy and in good order throughout.

# DR. BARNARDO'S HOMES.

My annual visits of inspection to the Toronto and Peterborough homes were made on June 19 and 22, respectively.

The number of children emigrated by the Dr. Barnardo homes during the past year was 1.314, making a total emigration to Canada of 18,037.

At Peterborough two parties of girls have been received.

Since 1883, 4,320 girls have been emigrated through the agency of these homes.

At present there are 2,500 (girls) under actual visitation.

From the superintendent of the Canadian agencies I learn that approximately there are 6,400 boys under supervision, of whom 609 are 'boarded out.' These statistics, however, do not represent those with whom he is in touch, as an interest and correspondence are maintained with many even after they have passed the limit of age at which ordinary supervision ceases.

There has been no variation in the zeal and efficiency of these agencies, and

business principles appear to prevail in the work of the homes.

At Peterborough I inspected 50 young girls, and their manner and appearance gave me a most favourable impression as I saw them at work in the kitchen and sewing-rooms.

MARCHMONT HOME-REV. ROBERT WALLACE, BELLEVILLE, ONTARIO.

There are approximately 600 children under the supervision of this home.

During the year just ended 109 children (78 boys and 31 girls) were received and distributed under Mr. Wallace's direction.

The past year has been a successful one both as regards the health, progress and acceptability of their juvenile immigrants.

There were only 2 children in residence at the date of my visit, June 20.

The deep personal interest taken in the children calls for special comment.

THE COOMBE HOME, HESPELER, ONTARIO-THE MISSES SMYLEY OF DUBLIN.

(Formally opened December 13, 1905.)

My first official visit to this receiving and distributing home was made on June 21, 1906.

The home was originally the residence of Jacob Hespeler, the founder of the thriving town of that name. The house is a large, handsome, cut stone structure, situated on a high elevation, surrounded by twelve acres of land, and a healthier or more suitable location could hardly be found. The living rooms and dormitories are nicely furnished and afford a cheerful outlook for the children. Boys and girls received here are from the Bird's Nest and other well known training homes in Dublin and its vicinity. There were 17 boys and 5 girls in residence at the time of my visit. The boys were busily engaged at gardening, poultry raising and such employment, and the girls were being taught domestic work. It is desired to keep each party of children

here a year before indenturing them, in order that they may become familiar with Canadian ways. During their stay at the home they attend the town school. In selecting situations for the children an effort will be made to place them within a radius of 6 miles of Hespeler, under personal supervision. There are 28 boys in situations.

The Irish Protestant Benevolent Society, of Toronto, and the citizens of Hespeler have shown a kindly interest in the home, which is under very efficient management. The Misses Smyley are to be congratulated on acquiring this excellent property.

ST. GEORGE'S HOME-THE CATHOLIC EMIGRATION ASSOCIATION, HINTONBURG, ONTARIO.

This association has 1,385 children, 332 girls and 1,053 boys, under actual supervision.

Since my last inspection 187 children have been placed in situations by the honorary manager. There were 20 boys in residence at this date, all bright and prosperous looking. A number of the girls are to be found in domestic service in Ottawa. An excellent system of visiting the children is maintained. During the year the children are given entertainments and treats at the home, and much interest is taken in their comfort and welfare.

The home is conveniently arranged, and the children's quarters satisfactorily laid out.

# MR. MIDDLEMORE'S HOME, FAIRVIEW, HALIFAX, NOVA SCOTIA.

On June 28 I visited this home. Two hundred and ninety-eight juveniles have been sent to Canada under Mr. Middlemore's auspices during the past year. There are at this date approximately 800 children under the personal supervision of this agency. The health of the children has been excellent, and only two deaths occurred during the year. It was unfortunate that I should have missed the superintendent of the home, who had just left on a tour of the provinces, distributing the children who had arrived from Birmingham. There were no children in the home at this date, and the number in residence at any one time during the year has seldom exceeded 4. The home has a pleasant situation and appears to be well maintained.

### MR. J. W. C. FEGAN'S HOMES.

One hundred boys have been received at this home during the past year, an increase of nearly 50 per cent over their numbers of the previous year.

The total emigration to Canada from Mr. Fegan's homes has reached, approximately, 2,000.

Since my last report I have had an opportunity of inspecting the training schools at Southwark, London and Stony Stratford. The former is a well equipped industrial school, where the lads are taught various trades such as printing and shoemaking. The Stony Stratford school is for younger children. There were 115 boys in this excellent home.

The training afforded the children impressed me as being very thorough and useful. The deepest personal interest is taken in the children, and it was apparent that they responded to the excellent influences brought to bear on them. While there is no farm, for the special training of the boys, a large garden forms the area to the home and the boys are taught gardening, a training and experience which cannot fail to be useful to such as are emigrated to the Dominion.

# MRS. BIRT'S HOME, KNOWLTON, QUE.

I paid my annual visit of inspection to this home on March 5. Their first party of juveniles for the year had arrived only a few hours previous to my reaching Knowlton. I was, therefore, able to make individual inspections of 62 children, 61 boys and 1 girl, of an average age of twelve years. While at the home, farmers from the various districts began to arrive to take the children home with them. They were a nice-looking lot of juveniles, and I was impressed by their good manners and clear and open 25—ii—8

countenances. The general arrangements for the reception and distribution of the children are very satisfactory.

I concluded my last annual report as follows:-

'The suggestion having been made from time to time, that in view of the importance of juvenile immigration, I should pay a visit to Great Britain for the purpose of studying the nature of the training given prospective children emigrants in the various homes and schools in the United Kingdom, and that suggestion being approved by the department, I left for England in the middle of June, and shall give some account of my experiences there in my next annual report.'

It was, however, deemed better that I should make a report upon my English visit without waiting for the expiration of the departmental year, and such report having been made accordingly, and published, it is unnecessary that I should add anything further on the subject here.

Your obedient servant,

G. BOGUE SMART.

## REPORT OF THE CHIEF MEDICAL OFFICER.

OTTAWA, July 2, 1906.

W. W. Cory, Esq.,

Deputy Minister of the Interior,

Ottawa.

SIR,—I have the honour to transmit the third annual report of the medical inspection service, it being for the year ending June 30, 1906.

The work covers the same field of operations as that of the previous year, with the addition of that of a medical officer stationed at New York since January, 1906. Thus the medical inspection of immigrants has been regularly carried on at Quebec, Halifax, St. John, Montreal, Victoria, Vancouver, and for six months at New York. Through the courtesy of the Department of Commerce and Labour of the United States it has been possible to obtain a return of immigrants destined to Canada, arriving at the ports of Portland, Boston, New York, Philadelphia and Baltimore. Thus the actual number of immigrants arriving in Canada, whether subject to primary inspection at our own seaports, whether at United States ports or to examination subsequent to their being admitted to Canada will be found to have notably increased during the past year.

As was stated in the report for 1904-5, the methods for inspecting immigrants at the several seaports have become, with increased facilities and enlarged experience, of a very precise and thorough character. Quebec has a staff of four medical officers, of whom the chief is the superintendent of the detention hospital, who, with the hospital assistant, devotes all his time to the work of the service. At Halifax there are two physicians, one acting as medical inspector, and one as superintendent of the detention hospital; St. John has one physician, acting both as medical inspector and superintendent of detention hospital, while Montreal has similarly one physician in charge of the medical inspection and the detention hospital.

At Vancouver there is one physician acting as medical inspector and another has charge of the detention hospital, while at Victoria one physician devotes his whole time to the work of inspection and the care of detained immigrants.

At all these points, with the exception of Victoria, hospitals fully equipped exist, and the quality of the medical work performed by them is of a high order. At Victoria the great increase in the number of detentions has made it necessary to construct there an hospital as well. The officers of the staff at all these ports are enthusiastic, and an amount of clinical knowledge is being accumulated, especially with regard to diseases of the eyes and nervous system, which will prove of great future importance.

The addition, during the past year, of New York to the ports where the medical inspection of Canada-bound immigrants is carried on is also to be noted. During the fiscal year 1905-6 a total of 880,543 aliens arrived at this port, of which the larger number entered since January. Of this total 13,654 were booked for Canada. Of these the inspection since March 1, included 44 who were deported as undesirables. The medical officer who has charge of the work reports that he has received 'the most cordial treatment from the United States officials.'

6-7 EDWARD VII., A. 1907

TABLE I.—Statement for the Ports of Halifax, St. John and Quebec, showing the number of Immigrants detained and the number of Immigrants deported in the Fiscal Year 1905-6.

SS. Line.	Port.	Number	Deta	ained.	De-	Ratio of de- tained to	ported to
oo, mie	1 01 6.	examined.	Male.	Female.	ported.	Number examined.	Number examined.
	Halifax St. John Quebec	21,553 2,048 43,219	213 8 158	93 5 84	8 93	1 in 70 1 in 157 1 in 179	1 in 2,694 1 in 1 in 465
	Total	66,820	379	182	_ 101	1 in 119	1 in 662
Dominion SS. Line	Halifax Quebec	5,746 21,518	18 217	11 118	1 65	1 in 198 1 in 64	1 in 5,746 1 in 331
	Total	27,264	235	129	66	1 in 75	1 in 413
Canadian Pacific SS. Line	St. John Quebec	16,399° 25,076	282 446	98 128	31 157	1 in 43 1 in 44	1 in 529 1 in 160
	Total	41,475	728	226	188	1 in 43	1 in 221
Donaldson SS. Line	St. John Quebec	938 2,157	2 6	4	4	1 in 469 1 in 216	1 in 539
	Total	3,095	8	4	4	1 in 258	1 in 774
	Halifax, St. John Quebec	1,310 231 29	27 1 2	4	1 1 1	1 in 42 1 in 231 1 in 15	i in 1,310 1 in 231 1 in 29
/	Total	1,570	30	4	3	1 in 46	1 in 523
Grand total		140,224	1,380	545	362	1 in 73	1 in 387

To the list of immigrants in this table, almost all of whom come from European ports, may properly be added for clinical purposes those of similar nationalities destined to Canada via United States Atlantic ports, all of whom are examined by officers of the United States Marine Hospital Service, while most of them are again reviewed by our own officers either at New York or at Montreal. Of the latter entering Canada from either Portland, Boston or New York, 137 were detained at Montreal on account of disease. An examination of the table gives comparative figures of much interest, as in some measure indicating the quality of immigrants booked by different steamship companies. The table shows there was 1 detained in every 73 examined, as compared with 1 in every 56 in the previous year. Of these only 1 in every 387 was deported, as compared with 1 in every 228 in 1904-5. It is further interesting to note that the Allan line, at the several ports, showed relatively, as in the previous year, the fewest detentions and deportations, there being 1 in every 119, and 1 in every 662, respectively, as compared with 1 in 130 and 1 in 490 in 1904-5. It is rather remarkable, however, that there should be such notable variations for different ports. It has, however, invariably occurred that everywhere the vessels arriving during the winter and early spring months have more detentions, especially due to trachoma, than those later in the

The vessels of the Dominion line have indicated improvement, but still show a notably large number of detentions, there being 1 to every 75, and 1 deportation to every 413.

The detentions on the Canadian Pacific Steamship line are still too high, being 1 in every 43, as compared with 1 in 38 last year, while the deportations are 1 in 221, as

compared with 1 in 153. It is to be remembered, however, that this is practically the only steamship line bringing passengers direct from continental ports.

The Donaldson line, which last year first carried passengers, has shown a remarkable improvement, there having been but 1 in 258 detained, and 1 in 774 deported, as compared with 1 in 11 detained and 1 in 16 deported in 1904-5.

The total results, due we must conclude to the steady influence of strict inspection resulting in the companies preventing the embarkation of undesirables, are most gratifying. While the total number of immigrants arriving at these ports in 1905-6 is 140,224, as compared with 113,298 in the previous year, the total detained has been but 1,925, as compared with 2,016. The deported likewise has fallen from 496 to 362, or 27 per cent.

TABLE II.—Statement showing the number of Immigrants detained or deported from Montreal and from Victoria and Vancouver during the Fiscal Year ending June 30, 1906.

Arrivals.	Total Number Arriving.	Port of Arrival.	Total Detained.	Total Deported.	Total Released.	Still in Hospital.
Montreal	8,650	Montreal via U. S. Ports	137		120	17
Victoria	8,697	$\left\{egin{array}{ll} \mathbf{V} & \mathbf{ictoria} & \dots & \\ \mathbf{V} & \mathbf{ancouver} & \dots \end{array} ight\}$	1,456	118	1,273	65
Total	17,347		1,593	118	1,393	.82

The above table shows the number of immigrants recorded as arriving at Victoria and Vancouver, from which it would appear that a very large number, viz.: 1 in 7 were detained and 1 in 74 were deported. The detentions, however, have been from the total second-class and steerage passengers coming from the United States ports as well as from Transpacific ports. For instance, at Victoria there were 743 vessels inspected, which had 87,210 on board, of whom 55,514 debarked at Victoria, while the intermediate and steerage alone at Vancouver numbered 8,169. It is apparent, however, making due allowance for detentions from tourists, for diseased Chinese and others who have been previous residents in Canada, that the diseased amongst those from China and Japan is very large. In nearly all cases the disease has been some form of ophthalmia, either trachoma or conjunctivitis, presumably in some instances contracted on the long sea voyage.

We have thus seen, in the several tables presented, the history of the results of inspection of immigrants before their admission to Canada at the several ports of entry from across the ocean, while in the following figures are seen as well the operation of the Act resulting in the deportation of those who, within a year of their admission to Canada have proved undesirable. In all there were:—

1. Number of immigrants deported prior to admission t	
Quebec, Halifax and St. John	
2. Number of immigrants deported at Pacific ports	
3. Number of immigrants deported after admission to Canada.	
4. Number of immigrants deported prior to admission a	
United States Atlantic ports (in last four months).	. 44
Total	. 661

There is, however, further interest attaching to the fate of the immigrants of many diverse nationalities from Europe and Asia on their arrival at the seaports. The following table shows the results of medical examination and detention in hospital:—

TABLE III.—STATEMENT of Deportations by Nationalities of Immigrants seeking admission to Canada during the Fiscal Year 1905-6.

		ATLANTI	c Ports.	Pacific	Ports.	Тот	ALS.	
Nationality.	Total Arrivals.	For, Canada.	For U.S.A.	For Canada.	For U.S.A.	For Canada.	For Ų.S.A.	Total
Austrian, N.E.S. * Buckowinian dalician Hungarian Belgian Chinese French Fernan, N.E.S English Scotch rish Welsh Hebrew, N.E.S  Russian Holish Hebrew, N.E.S  Russian Holish Talian Polish Talian Apanese Poles, N.E.S Russian Roumanian Roumanian Roumanian Rousel Swedish Celandic Norwegian Curks Armenian Syrian	1,324 1,355 5,656 739 1,106 18 1,648 1,745 65,135 15,846 5,018 797 254 731 6,056 260 44 7,959 1,922 155 385 396 3,152 1,103 474 1,802 168 1,415 357 82 336 18	22 13 33 2  1 39 - 4 6 1 1 2 2 26  1 43 8 1 1 43 1 4 4 5 1 1 1 4 4 1 1 1 1 1 1 1 1 1 1 1	7 1 1 1 1 2 2 2 10	8 1 1 1 2 2	15	22 13 33 2  9 4 5 40 48 8 1 2 26  1 44 53 1 8 8 1 1 36 5 1 1 36 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7 1 1 1 2 2 2 3 10 15 1 3 3 8 6	22 11. 44. 33. 46. 63. 11.
Arabian Newfoundlander J. S. Citizens Negro Nedia	340 57,919 42 387			1 15 2 17	ii	1 15 2 17	1	• 1 1
Total	186,145	284	78	102	16	386	94	48

<sup>\*</sup> Not elsewhere specified.

What is apparent from a first glance at the table is that of the total 480 deported, 94 had indicated their destination to be the United States. This relatively high number is but a repetition of that of previous years and has been explained partly on the ground of there being a tendency on the part of such immigrants, who have failed to find an entrance by United States ports, to attempt the Canadian route, and partly on the ground that there being fewer immigrants to examine more time is given to individual cases, while contract labourers are wholly excluded.

As compared with the total immigrants the number of British deported on arrival at some port of entry has been few as compared with those of the continental nationalities. Thus of the 65,932 English and Welsh, 15,846 Scotch and 5,018 Irish, or 86,796 in all, there were deported 43 English and Welsh, 4 Scotch and 8 Irish, or 55 in all, that is 1 in 1,578 for the total, for English 1 in 1,533, for Scotch 1 in 3,961 and for Irish 1 in 627. Of the 44,349 immigrants from the continent of Europe, 425, or 1 in every 104.3 was deported. There were notable variations in different nationalities. Thus of the total Austrians 9,334, including Buckowinians, Galicians, Hungarians and Austrian Hebrews, 78 in all were deported, or 1 in 120. Of the French and Belgian

2,754, in all 1 in 551, and of the 5,130 German and Swedes, Norwegians and Icelanders, 1 in 256 were deported. There were in all 7,959 Italians, of whom 1 in 180 was deported. Of 794 Turks, Armenians, Syrians and Arabians, 21, or 1 in 37 were deported, while of 254 Greeks, 3, or 1 in 84 were deported. Of the 10,696 Russians, including Russians proper, Russian Poles, Russian Hebrews and Finns, 132, or 1 in 80 were deported.

From the same table we gather interesting comparative facts regarding the Oriental immigration coming in by the Pacific coast ports of Vancouver and Victoria. At first this immigration was principally of Chinese. Then of late years since the Chinese exclusion tax it has been almost wholly of Japanese and of Chinese returning after a visit to China. This year has seen the first of an East Indian immigration. Altogether there were 2,327, including 18 Chinese, 1,922 Japanese and 387 East Indians, of whom 96 were deported, or 1 in 24, these being 1 in 1.8 Chinese, 1 in 28 Japanese and 1 in 21 East Indians. Compared with the exclusions at Atlantic ports this is very high, and places these people in much the same class as the people of the eastern Mediterranean as regards physical disease. From what is gathered from the hospital reports it is abundantly plain that these people from both eastern and western, and now from southern Asia suffer very generally from trachoma, the disease for which most have been excluded. Its importance is great, not alone as a communicable disease to be excluded, but because it is in a large measure the index of the low social condition of the sufferers from it. Were these people who have shown themselves on admission in most instances industrious and law-abiding, forced by municipal regulations to occupy better houses, and prevented from crowding into old and insanitary houses, for which landlords exact excessive rents, there seems no reason from the public health standpoint why they should not be allowed to enter where accepted as physically healthy.

### THE DETENTION HOSPITALS.

Since the department, in 1904, undertook the establishment of immigrant detention hospitals, for the treatment of immigrants who though they might be desirable were nevertheless detained on account of some curable disease, the work has been enlarged until it covers the regular inspection of all immigrants arriving in Canada by sea, whether directly or indirectly. Thus at Quebec a fully equipped hospital has been in operation for two years, at St. John for two years, at Halifax for over one year, at Montreal for over one year, at Vancouver for four months; while detention, in boarding-houses, with treatment has existed in Victoria for over one year.

The Immigration Act of 1902 placed the cost for the treatment of all immigrants detained upon the steamship companies bringing them to Canada; and when the department undertook the work of treatment as well as detention it arranged that the various companies should pay the cost thereof. The amount at present paid by them is 75 cents per day for each patient, and 50 cents per day for each person accompanying a patient, as for children with parents. This rate has prevailed during the year at Quebec, Halifax and St. John. At Montreal it has also applied to all arriving by Canadian ocean ports; but it has not been collected from the railway companies bringing passengers arriving yia United States ports, as they were found not legally liable under the Act. In the case, therefore, of the immigrants so arriving they were, as far as possible, made to pay for their own treatment. Montreal hospital is in another respect under conditions different from the seaport hospitals, as it is the chief port at which immigrants being deported are detained until arrangements can be made for their reception in the country from where they have come.

The hospital at Vancouver has only been in operation since April, 1906, so that the receipts for nine months are at the rate of 35 cents per day for medical treatment, the same amount as that still collected at Victoria where there is no hospital, the immigrants maintaining themselves in boarding-houses.

As seen in the following table, the revenue received as applied to daily maintenance and salaries may be considered satisfactory, but if against it were charged the

cost of the hospitals, including their equipment and maintenance, the amount would prove inadequate.

TABLE IV.—STATEMENT showing total Earnings, total Receipts and total Expenses of daily maintenance of hospitals at Quebec, Halifax, St. John, Montreal, Vancouver and Victoria for 1905-6.

Port.	Year.	Days in Hospital.	Rate per Diem.	Total Earnings.	Total Receipts.	Total Expenditure
£1.7°			Cents.	8 cts.	S cts.	\$ cts.
Quebec	1905-6	15,977	75	11,982 75	14,294 60	21,709 18
Ju	1905-6	. 4,344	50	2,172 00		
Halifax	1905–6	9,262	75	6,946 50	6,706 25	3,920 31
	1905-6	52	50	26 00		
StauJohn	1905-6	4,781	75	3,585 75	958 85	3,091 99
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1905-6	1,581	50	790.50	0.001.05	
Montreal	1905-6	3,216 495	. 75 50	2,412 00 <b>247 50</b>	-2,091 85	5,157 96
Vançouver	1905-6 1905-6	4,233	35	1,481 55	1,481 53	3,435 49
	1905-6	4,154	75	3.115 50	1,401 00	
77 " · · · · · · · · · · · · · · · · · ·	1905-6.	304	. 50	152 00		
Vietoria.	1905-6	7,469	35	2,614 15	2,091 85	1,558 05
Totals		55,868		35,526 20	* 27,624 93	38,872 98

<sup>\*</sup> Partial receipts are for previous year and part of the year's earnings will appear in next year's receipts.

A glance at the table shows that in only one hospital, that at Quebec, have the expenditures greatly exceeded maintenance. An examination of the per capita daily cost for maintenance there, apart from salaries, shows no great difference from the others, but the salary list is especially heavy in consequence of the extra guards required, owing to the use of the temporary hospital, and the necessity for allowing the immigrants in the hot summer weather to wander about the grounds. It is hoped that the facilities in the new hospital under construction, will lessen the need of so many guards. In addition to this expense there has been that of the transfer of immigrants to the hospital, a distance of two miles. But another, and quite notable addition to the cost, was the occurrence of measles in children who had either passed quarantine, unreported by the ship's surgeon, or in those accompanying their parents, detained on account of some other disease. A separate camp of tents, quite apart from the hospital proper, had to be maintained, there being cases in five families in all. Two special nurses for severe pneumonia cases added considerably to the expenses during May and June.

The total number of hospital days for all the hospitals was 55,868, and the total expenditure was \$38,872.98. A comparison with an average hospital expenditure elsewhere is of interest. Thus the General Hospital, Ottawa, with 26,777 hospital days, cost for salaries and daily maintenance 74 cents per patient, excluding heating, lighting, water, &c., as compared with 82 cents at the six detention hospitals, where the salaries of the six medical superintendents alone was \$6,700, as compared with the total salary list of Ottawa hospital of \$7,997.77. Remembering how large the necessary additional salary list for hospital guards must be, the total cost must be considered very moderate.

## DISEASES AND OTHER CAUSES OF DETENTION.

In the following statement have been classified the total detentions at the six ports where hospital and medical treatment are carried on:—

TABLE V.—Statement giving the Diseases and other causes for which Immigrants were detained at the ports of entry, Quebec, Montreal, Halifax, St. John, Vancouver and Victoria.

		<u> </u>	•		
Class of Disease.	Cause of Detention.	Number Detained.	Number Released.	Number Deported.	Number yet in Hospital.
I. Contagious diseases	Measles	1.9	19	·····	
•	DiphtheriaQuinsy	2 1	(1 died) 2 1		,
	Totals	22	22		
II. General diseases	Tuberculosis	4 2 1	(1 died)	3 2 1	
	Totals	7	1	6	
III. Eye diseases	Trachoma Conjunctivitis Keratitis Blepharitis Ulcer of cornea Ophthalmia neonatorum. Partial blindness.	1,542 1,310 1 2 3 2 4	1,117 1,256 1 2 3 1 1	312 7 	113 47
	Totals	2,864	2,381	322	161
IV. Nervous system	Insanity Epilepsy. Idiocy Mental infirmity. Paralysis. Hysteria. Locomotor ataxia	4 7 4 3 8 1	3 2 2 1 1	4 4 2 3 6	
	Totals	28	9	19	
V. Circulatory system	Heart disease	4	2	1	1
VI. Respiratory system	Pneumonia.  Bronchitis	2 2	$(1 \stackrel{2}{\stackrel{\text{died}}}{\stackrel{\text{died}}{\stackrel{\text{died}}{\stackrel{\text{died}}}{\stackrel{\text{died}}}{\stackrel{\text{died}}{\stackrel{\text{died}}}}{\stackrel{\text{died}}}{\stackrel{\text{died}}}{\stackrel{\text{died}}}{\stackrel{\text{died}}}{\stackrel{\text{died}}}{\stackrel{\text{died}}}}{\stackrel{\text{died}}}{\stackrel{\text{died}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}$		
	Totals	4	4		
VII. Digestive system	Hernia	5 1 1	5 1 (1 died)		
	Totals	7	7		
VIII. Genito-urinary system	Gonorrhoea Cellulitis		1	· · · · · · · · · · · · · · · · · · ·	
	Totals	3	3	! 	
IX. The skin	Favus and trachoma Alopecia Eczema Facial lupus Tinia	14 1 3 2 1 1	12 1 2	1 1 2 1 1	1
	Totals		15	6	1
X. Locomotor system	Morbus coxae	3	3		

6-7 EDWARD VII., A. 1907

TABLE V.—Statement giving the Diseases and other causes for which Immigrants at the ports of entry, Quebec, Montreal, Halifax, St. John, Vancouver and Victoria—Concluded.

Class of Disease.	Cause of Detention.	Number Detained.	Number Released.	Number Deported.	Number yet in Hospital.
XI. Malformation—diseases of old age and infancy	Cripple. Deformity. Infantile debility.  Deaf and dumb. Senility and debility Naevus  Totals.	5 3 2 5 21 1	2 (2 died) 3 11 1 19	3 3 2 7 15	3
XII. Accidents, &c	Accidental poisoning Dislocated shoulder Maimed hand Totals	1 1 1 3	1 1 2	1	
XIII. Ill-defined causes	Wounds	1 1 13 2	1 6 (1 died)	6	1
	Totals	17	8	7	2
XIV. Other causes	Accompanying patients  Likely to become a public charge.  Vicious character  Criminals  Sore foot	369 116 7 2 1	309 (2 died) 56 (1 died)	38 58 5 2	22 2 2 
	Waiting money from friends Waiting employment  Totals  Grand totals	1 1 497 3,518		103	26

The preceding table gives in detail the various causes for which the 3,518 persons were detained during the year. It is a notable increase over the previous year, but it is worthy of remark that the number detained at the Atlantic seaports was less than in the former year, the excess being from the Pacific seaports. We thus have introduced a new problem of interest regarding the diseases tending to prevail in the Oriental immigrants, Chinese, Japanese and Hindoos, who form the majority of detentions at Vancouver and Victoria. Altogether 480 were deported, or 1 in every 7.3 detained, as compared with 1 in 4 last year. Class I. shows a notably greater number of cases than last year, there being 19 cases of measles and 3 of diphtheria and quinsy. Of the measles, 2 cases died, while 1 died of pneumonia and 1 of debility following measles. Some of these cases ought properly to have been returned to quarantine, having not been reported by the ship's surgeon. The freedom of the hospitals from cases of diphtheria and scarlet fever has, however, been quite remarkable, remembering the very considerable number of cases of children detained.

Class II. shows but 4 cases of tuberculosis, of whom 1 died and 3 were deported. That there are not more does not imply that more did not come to Canada. It is

evident that in the absence of positive signs, like emaciation, cough and evident weakness, there will always be immigrants admitted who may later develop a latent tuberculosis, in some cases quite unknown probably to themselves, just as other persons in the community very frequently never consult a physician till well advanced in the disease, and then only for some slight stomach trouble or cough. Fortunately the occupations which many take up in Canada in a bright, western climate, often mean recovery of health; but, as has been seen in the table VI. a number of consumptives are sent home really to die.

Class III. dealing with eve diseases is this year, as last, the chief cause of detentions, there having been in all 2,864 cases, as compared with 2,291 last year; or 81 per cent, as compared with 90 per cent of the total detentions were for eye diseases. The number deported, moreover, was notably fewer, being only 322, as compared with 492 the previous year. This notable reduction, not alone in number relatively to the whole detained, but the notably less number deported, indicates that the careful supervision of the previous year has had its direct effect in increasing the strictness of examination at the ports of embarkation, and a great reduction in the more severe and incurable cases. From the scientific standpoint, moreover, the increased experience of the medical officers, with additional facilities for effective work is adding the cure of many cases of trachoma through radical operation under strict hospital methods to the triumphs of medicine. Trachoma has been in the past, in many cases, the despair of the ophthalmic surgeon; but this has been due, not so much to the nature of the disease as to the class of cases in which it has most prevailed and the conditions under which its cure was attempted. Spread through contact of hands, towels or infected water, naturally its presence has always been amongst the poorer classes and in unsanitary surroundings. Further its progress being chronic and its harmful effects slow in making themselves evident, the cases, where treated at all, have been through the casual visit to the physician or public dispensary. In both cases the treatment was intermittent and, under the conditions, ineffective, resulting in cases running along for months or years. To-day in our detention hospitals treatment means all the care that is implied in any severe surgical operation, with results hitherto infrequent, because nowhere have trachoma cases ever before been treated in such large number and under circumstances so favourable for the observation of results in every phase of the disease. It will be observed that of the detentions 1,310 out of the 2,864 cases of eye disease proved to be conjunctivitis. There is a simple and adequate explanation of this, which even from the financial standpoint the steamship companies would do well to consider. While it is quite probable that the continental emigrants are exposed on trains and in boarding-houses at seaports to conditions making them liable to infection, yet there can be no doubt that where, as both at Antwerp and Hong Kong, every emigrant is certified free from disease, the conditions on shipboard during the long voyage must be the explanation of so many cases of infective conjunctivitis. The sanitary conveniences are often defective, towels are used in common, and not infrequently the overcrowding has been such that infection through the air in sleeping rooms is not improbable. It is especially with the crowded ships of the spring season. when the weather is bad, that this prevalence takes place. The advantage of detention of the immigrants in an hospital, apart from mere cure of some infection, has been before adverted to. The rest given to women and children is often needed, while their education into the relatively sanitary modes of house-life in Canada is in itself important.

Class IV.—It is notable that the number of patients in this class has so markedly increased, there being 28, as compared with 14 the previous year, or just twice as many. This is due in large degree to the more strict observation extended, especially to British immigrants, during the past year, as it is found that by far the largest number of those detained in this class were English. Of the 28, in all 19 were deported, those admitted having been allowed out after bonds had been taken that they would be cared for by their family.

In Classes V., VI. and VII. there were but few cases, all presumably acute and cured before being released, and but 1 dying.

Class IX., including diseases of the skin, while having but 22 cases, had notably more favus than in the preceding year, there having been 15, as compared with 9. The other skin diseases were few and of minor importance. The paucity of this class of diseases usually readily diagnosed, may be considered as being directly due to more strict inspection, causing refusal of passage at ports of embarkation.

Class XI. likewise shows a remarkable increase over last year, there being 37, as compared with 8 cases the previous year, or four times as many, of whom 15 were deported. The problem is presented with almost every ship of some crippled or malformed person, usually a member of a family seeking admission, and often presents a problem of great difficulty and delicacy. Is a whole family to go back because of one partially helpless, or to what degree of helplessness has some particular case reached? No absolute rule is possible, and hence each case must be dealt with by itself. The personal equation, that of the character of the individual person and his family counts for much; while naturally occupation and destination enter into the problem. Suffice to say that it is the most important as well as most difficult of all the problems of medical inspection, and demands, not only medical judgment, but a good knowledge of its bearing on the wider social problems Canada will have increasingly to deal with.

Apart from what appeals immediately to the tax-payer, viz., the certainty that the insane and idiot are the most serious of burdens to the state, there is on every side, amongst his patients, the constant reminder to the medical man of the perpetuation of hereditary neuroses in many forms, and which under the stress of modern life are in the older civilizations, whether of Europe or of America, types which are directly affecting the literature, morals and general character of society. Table VI. of deportations after admission not only shows, along with this class, what we have had imported, but also what we have got rid of.

Class XIV. contains the large number of 369 detained on account of other members of a family. Of these 38 were deported with their friends. The 116 detained on account of lack of funds, or other disqualifying causes, is notably greater than last year, but the 58 deported is but 3 greater. There were 9 criminals detained and 7 deported as compared with 13 the previous year.

Viewing the results of the whole work broadly, there is everywhere evidence that the public, the shipping companies and their numerous agents abroad and the officials in Canada have in large degree begun to learn the attitude of the department toward the great body of what may be called the emigrating class in the different foreign countries, viewed at least from the medical standpoint, and that they are governing themselves accordingly.

As shown in the lessening detentions, a knowledge that the unfit will be detained lessens the number sent; hence it follows preventive medicine everywhere has proven, that the most and best work is being done where there are the fewest having to be deported.

TABLE VI.—Statement showing the Number, Nationality and Causes for which Immigrants admitted to Canada were deported after admission.

	·	i	1		
Nationality.	Whence sent for Deportation.	Male.	Female.	Class of Disease.	Cause of Deportation.
			<u> </u>	<del></del>	
Deported at St. John	i	İ	١,		
Irish	Winnipeg	1		General diseases	Tuberculosis.
English	Montreal	1			11
	Winnipeg	$\begin{vmatrix} 1 \\ 3 \end{vmatrix}$		"	Rheumatism
H	1	1			Keratitis.
	l	2		Nervous diseases	
n	Toronto Winnipeg	1			Insanity.
·	Montreal	2	··i		11
Russian			1 1 	"	,
Welsh	Montreal	1	·	11	tt .
Finn			1		11
English	Winnipeg	1 1	1	11	Imbecillity.
11				Skin diseases	Ulcer on leg.
	l 11	2	ļ	i	Varicose ulcers.
	St. John	1		Accidents	Disabled by acc'dt.
11	Winnipeg	i		Nervous diseases.	paralysis
11	St. John	i	2	Ill defined causes.	Physical infirmity.
Irish	Winnipeg	1			
English	St. John	1		Other causes	Accompanying pa-
"	Winnipeg	3	 	11	Likely to become a
				İ	public charge
Scotch	Montreal	1	<i>.</i> .	"	Likely to become a
T/	Winning	1			public charge.  Going to insane
Hungarian	winnipeg	1	• · ·	#	wife.
Irish	Montreal		1		Criminal.
	m-4-1-	30	${7}$		
	Totals	30	<u> </u>		
Deported at Quebec.			ŀ		
Swede	TISA	1		General diseases	Tuberculosis.
Norwegian	11		1	Nervous diseases	Insanity.
Norwegian English	Quebec	1	1		11
1 risn	11	1 1		Ill defined causes.	Vicious tendencies.
English	Winnipeg.	1			Likely to become
			ł	1	public charge. Criminal.
English	Quebec	1	1		Criminal.
	Totals	5	3		,
	100215		ì—		
Deported at Halifax.					
D	Walifar.	1		Nervous diseases .	l Insanity
Dane: Newfoundlander	Halitax			ivervous diseases .	"
riewioundiander	"	<u> </u> -	i—		
	Totals	2			
Deported at Montreal.					
montreat.			1		
Austrian	Winnipeg	1	<b>.</b>	General diseases	
Icelandic	Montreal	1	;-	11	
English		í	1	"	11
Scotch Hebrew, N.E.S	Winnipeg	1		11	Rheumatism.
English	" ····	5			M
Russian	. 11	1	[ <b>.</b> .	Eye diseases	Astigmatism

TABLE VI.—Statement showing the Number, Nationality and Causes for which Immigrants to Canada were deported after admission—Concluded.

Nationality.	Whence sent for Deportation.	Male.	Female.	Class of Disease.	Cause of Deportation.
Deported at Mont- real—Con.		 	 		
English	Winnipeg	1		Eye diseases	Going blind.
Russian Hebrew	Winning	$\frac{1}{2}$		1	11
				Nervous diseases	Epilepsy.
WelshBelgian		3	2		Insanity.
	U.S.A	1 1	1	11	, "
Welch	Montreal			"	
Belgian	Winnineg.	l î			
Icelandic	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ĺ		
IcelandicScotch English		1	····2	11 .,	
English		5	2	11 11	Mental infirmity.
0-1:	Montreal	1 1			
Jalician	Winnipeg	I		ti	Locomotor Ataxia.
English	11	5		"	Paralysis.
"	11	i		[ "	Facial paralysis.
	11	ī			Partial "
Scotch		1			Cerebral   117
English	11	1		"	Sciatica and se-
		۱ ,			nility.
		$\begin{vmatrix} 1 \\ 3 \end{vmatrix}$	· · · · ·	Circulatory system	Muscular atrophy.
Scotch Galicians English	"	1			
Galicians	0		i		
English	Montreal	···i·			Varicose veins
"	THIMIPOS			Digestive system	Gastritis.
0.00	11	1		"	Chronic catarrh of
		2			stomach. Hernia.
	Montreal			Genito-urinary	nerma.
				system	Bright's disease
Galician	Winnipeg	1	1		Venereal :
1X7 a1 a b		1		Locomotor system.	Stiff knee joint
Norwegian	Ottawa	1	į	Old age	Old age.
English	Winnipeg	1		Maltormation	Curvature of spine
Weish. Norwegian English. Jalician. French		1 1	· · · ·	Accident	Old age. Curvature of spine Cripple. Disabled by acci-
. 1011011	"	1	!	l	l dent
Scotch			1	Ill defined causes	Poor physique.
Swede	11	1			Physical infirmity.
Dutch		1		11	u .
English		3			11
Scotch		1		Other corres	Invalid. Accomp'g patients
celandic	Montreel	i	2	Other causes	Accomp g patients
English	Winnipeg.	l i			
English	Montreal	i	3	"	
Scotch	Toronto	, Ī	1		
Scotch	Montreal	2			Likely to become a
					Likely to become a public charge. Likely to become a public charge. Criminal.
English	Oitawa	1	3		Likely to become a
Dane		1		11	Puolic charge.
	11			11	Orimnai.

From the table it is evident that of the 137 cases deported or sent out of Canada, after having been admitted, by far the largest number consisted of people from England. Of these there was a total of 100 out of a total of 65,932 immigrants

arrived in 1905-6, while of 15,846 immigrants from Scotland, 9 were returned, and from 44,349 immigrants from continental Europe, 28 were returned. It thus will be seen that from a comparative standpoint by far the largest number returned were English. The character of those returned is, however, a matter of more importance, since it shows that persons were sent whose physical and mental condition must at the time have been well known either to their friends or to those persons, societies or local authorities who supplied the funds for their emigration. The fact that 20 of these were declared insane, 5 were imbecile, and 3 showed physical and mental debility sufficiently indicates that it has become necessary on the part of the medical officers of the department to exercise the strictest scrutiny, whether in foreign countries or at ports of entry in Canada, if this class, increasing naturally with the number of immigrants, is to be reduced to a minimum.

It would be improper to conclude this report without again referring to what may be called the immunity little short of marvellous of the whole country during this year from outbreaks of acute contagious diseases, directly traceable to the movements of immigrants over thousands of miles and going into hundreds of municipalities and thousands of homes. Practically not a single outbreak has been brought to the attention of the department. In past years, as the quarantine reports show, contagious disease again and again arrived at the ports and occasionally resulted in wide-spread outbreaks. To-day the same systematic inspection has made the steamship companies and their medical officers so careful, that seldom now do such cases occur. In all 22 cases were detained at the port hospitals, while, as the report of the medical officer at Winnipeg shows, the cases occurring amongst the thousands who were housed there from day to day, were only 42 cases of measles, of whom 4 died. With this very remarkable freedom of the immigrants from infectious disease, the fact cannot be overlooked that the many thousands going into the towns and new settlements of the Northwest are exposed, judging by the number of cases of typhoid in immigrants in the hospitals of Winnipeg and elsewhere, to dangers from local insanitary conditions to a much greater degree than are the people of these communities to diseases from the incoming emigrant.

Looking over the whole field of operations for the year, however, whether on the one hand as regards the number and quality of immigrants admitted to Canada and their freedom, whether from contagious disease or from more serious, deep-seated maladies, and on the other hand to their reception in all the provinces, shown by their ready distribution and abundant employment amongst our people, and the mutually satisfactory results measured whether by statistical results or common report, it may fairly be said, comparing the present with the past history of large immigration whether to Canada in the early years of the last century, or of the large immigration in more recent years to the United States, that never have so many persons of a good class relatively come to any country in a single year, and nowhere have so many immigrants been more cordially received or more generously treated.

P. H. BRYCE,

Chief Medical Officer.

# PART III

# SURVEYS

DEPARTMENT OF THE INTERIOR,
TOPOGRAPHICAL SURVEYS BRANCH,
OTTAWA, October 31, 1906.

The Deputy of the Minister of the Interior, Ottawa.

Sir,—I have the honour to submit the following report upon the operations of the Topographical Surveys Branch for the twelve months ending June 30, 1906.

The season for making surveys being generally the summer and autumn months, it is convenient to refer to the operations by calendar years although it involves some repetition in the successive annual reports.

### SURVEYS OF 1905.

One hundred and ninety-three whole townships and two fractional townships were completely subdivided during the calendar year of 1905, while eighty-one townships were partially subdivided. There were also twenty-six whole townships and nine fractional townships completely resurveyed, while forty-nine townships were partially resurveyed. Forty-nine survey parties were employed, forty-five being engaged on township surveys and four on other surveys. Of the parties engaged twenty-nine were paid by the day and twenty were working under contract. Five of the parties under daily pay were located in Manitoba, four in Saskatchewan, twelve in Alberta, and three in British Columbia. The remaining parties worked partly in one province and partly in another. One contractor was located in Manitoba, four in Saskatchewan, fourteen in Alberta and one in the Yukon Territory. The twenty-nine parties under daily day were distributed as follows:—

- 1. C. F. Aylsworth.—Resurveys in western Manitoba and eastern Saskatchewan.
- 2. David Beatty.—Resurveys in north-eastern Alberta.
- 3. P. R. A. Belanger.—Supervisor of surveys.
- 4. E. Bray.—Resurveys east of Lake Manitoba.
- 5. L. T. Bray.—Resurveys in south-western Manitoba.
- 6. R. W. Cautley.—Block lines, north-west of Edmonton.
- 7. W. A. Ducker.—Outlines in south-eastern Manitoba.
- 8. A. Driscoll.—Block lines in the Peace River District.
- 9. C. C. Fairchild.—Subdivision surveys north of Banff, Alberta.
- 10. L. E. Fontaine.—Resurveys west of Edmonton.
- 11. J. Francis.—Subdivision surveys north-east of Yorkton.
- 12. G. A. Grover.—Resurveys north of Winnipeg.
- 13. E. W. Hubbell.—Resurveys south of Prince Albert, Saskatchewan.
- 14. A. W. Johnson.—Subdivision in western British Columbia.
- 15. R. C. Laurie.—Reposting, townsite of Battleford.
- 16. G. J. Lonergan.—Resurveys near Red Deer, Fort Saskatchewan, Alberta.
- 17. J. A. Macdonell.—Exploration survey in British Columbia.
- 18. C. F. Miles. Miscellaneous subdivision work in south-western Alberta.
- 19. W. G. McFarlane.—Inspection of survey contracts.
- 20. T. S. Nash.—Inspection of survey contracts.
- 21. Geo. Ross.—Re-surveys and other surveys.
- 22. J. E. Ross.—Subdivision eastern British Columbia.
- 23. A. Saint Cyr.—Block lines in the Peace River District.
- 24. B. J. Saunders.—Block lines northwest of Edmonton.
- 25. H. W. Selby.-Block lines in the Peace River district.
- 25--iii--1<sub>3</sub>

- 26. J. N. Wallace.—Block lines in the Peace River district.
- 27. Jas. Warren.—Resurveys south of Moosejaw, Saskatchewan.
- 28. M. B. Weekes.—Block outlines in northern Manitoba.
- 29. A. O. Wheeler.—Topographical survey in the Rocky Mountains.

Two inspectors of surveys were employed: T. S. Nash, D.L.S., of the office staff, and Walter G. McFarlane, D.L.S. Each had a party of the usual strength for inspection, and their work extended over the whole season. Mr. McFarlane inspected the survey contracts in western and northern Alberta, and Mr. Nash those in eastern Alberta, Saskatchewan and Manitoba. The number of contracts examined was twenty-seven.

The mileage surveyed in the last three years is tabulated below:-

	1905.	1904.	1903.
	Miles.	Miles.	Miles.
Township outlines Section lines Traverse Re-survey.	1,591	1,285	833
	10,544	24,488	25,982
	1,809	4,441	4,050
	2,579	7,699	5,390
Total for season	16,523	37,913	36,255
	46	80	65
	359	474	558

The following table shows the mileage surveyed by the parties under daily pay and that by the parties under contract:—

Work of Parties Under Daily Pay.	1905.	1904.	1903.
	Miles.	Miles.	Miles.
Township outlines. Section lines. Traverse. Re-survey.	1,008	719	632
	939	235	478
	421	223	236
	2,499	2,122	497
Total for the season	4,867	3,299	1,843
	26	22	12
	187	150	154
Work of parties under contract.	1905.	1904.	1903.
	Miles.	Miles.	Miles.
Township outlines	583	566	201
	9,605	24,253	25,476
	1,388	4,218	3,808
	80	2,809	1,793
Total for the season  Number of parties.  Average miles per party.	11,656	31,846	31,278
	20	57	52
	583	559	601

NOTE.—In the tables of mileage the parties under Messrs. Wheeler, Macdonell and Laurie are not included because of the nature of their work.

### SURVEYS OF 1906.

Prior to July 1, 1906, forty-nine survey parties were engaged on township surveys and four on other surveys. Of the parties employed, twenty-nine were paid by the day and twenty-four were under contract. Eight of the contracts were for the subdivision of townships in Manitoba, three in Saskatchewan and thirteen in Alberta. The twenty-nine parties under daily pay were distributed as follows:—

- 1. C. F. Aylesworth.—Resurveys north-east of Winnipeg, Man.
- 2. David Beatty.—Resurvey and correction north of Prince Albert and east of Battleford, Sask.
  - 3. P. R. A. Belanger.—Resurvey near Yorkton, Sask.
  - 4. L. T. Bray.—Subdivision in southwestern Alberta.
  - 5. Triangulation in the Railway Belt, British Columbia.
  - 6. W. Christie.—Resurveys northwest of Winnipeg, Man.
- 7. W. J. Deans.—Resurvey and subdivision of lands adjacent to Lake Manitoba.
  - 8. C. C. Fairchild.—Subdivision north of Banff, Alta.
- 9. L. E. Fontaine.—Miscellaneous surveys in eastern Alberta and western Saskatchewan.
  - 10. Geo. A. Grover.—Resurveys northwest of Winnipeg, Man.
  - 11. A. H. Hawkins.—Resurveys and subdivision east of Coutts, Alta.
  - 12. E. W. Hubbell.—Resurveys nothwest of Moosejaw, Sask.
- 13. A. W. Johnson.—Survey of southern limit of the Railway Belt, British Columbia.
  - 14. R. C. Laurie.—Reposting townsite of Battleford.
- 15. G. J. Lonergan.—Resurveys and other surveys near Fort Saskatchewan, Alta.
  - 16. J. A. Macdonell.—Exploration survey in British Columbia.
  - 17. Geo. McMillan.—Inspection of survey contracts.
  - 18. C. F. Miles.—Resurvey and subdivision southwest of Calgary, Alta.
  - 19. W. F. O'Hara.—Resurveys south-east of Red Deer, Alta.
  - 20. A. W. Ponton.—Outlines north of Athabaska Landing, Alta.
  - 21. W. R. Reilly.—Resurveys east of Saskatoon, Sask.
  - 22. J. F. Richard.—Miscellaneous surveys at Cumberland and Le Pas on the Saskatchewan River.
  - 23. J. E. Ross.—Subdivision and other surveys in the Railway Belt, British Columbia.
  - 24. A. Saint Cyr.—Block lines in the Peace River district.
  - 25. J. B. Saint Cyr.—Survey of settlement at Vermilion, Alta.
  - 26. H. W. Selby.—Subdivision near Lesser Slave Lake.
  - 27. J. N. Wallace.—Block lines north of Prince Albert, Sask.
  - 28. J. Warren.—Resurveys south of Moosejaw, Sask.
  - 29. A. O. Wheeler.—Topographical survey in the Rocky Mountains.

### DESCRIPTION OF TOWNSHIPS.

Descriptions of the townships subdivided have been compiled from the surveyors' reports received during the twelve months ending June 30, 1906; they are given as Appendix No. 44. The townships are put in order of township, range and meridian and the descriptions are preceded by a list of all townships described.

In the reports of the last three years similar compilations have been published. Prior to 1893 such descriptions were published from time to time in separate volumes covering different portions of the country, but these volumes are now almost exhausted and moreover they are out of date, the surveys of the last fifteen or twenty years not being included. Many applications coming in for description of this nature it is hoped that at some early date authority may be obtained to combine and arrange

all surveyors' reports to date, and to issue revised editions. Such a publication would be of considerable service to land prospectors and others interested in western lands.

### EXPLORATION IN PEACE RIVER DISTRICT.

A party under Mr. J. A. Macdonell was engaged in an exploration with the object of selecting and locating three million five hundred thousand acres of land in the Peace River district of British Columbia, granted to the Dominion as a compensation for the lands in the Railway belt which had been alienated prior to the transfer of the belt to the Dominion. The operations of the party were continued throughout the year. Considerable information has been gathered, but the required tract of land has not yet been finally located.

### YUKON TERRITORY.

Under the supervision of the Director of Surveys at Dawson, work was continued, though on a somewhat less extended scale than last year. The returns of survey of thirty-six group lots were received of which a list is given in Appendix No. 5. Base lines were run on Caribou creek and Lion gulch, on the right and left forks of Eureka creek, on Flat creek and Isaac's gulch and on Bullion creek. A survey was also made of the Frooks hydraulic concession on Flat creek.

### SCHEME FOR WATER WORKS IN KLONDIKE DISTRICT.

Mr. W. Thibaudeau, C.E., completed an extensive survey of the Klondike region in the Yukon Territory in connection with a proposal for bringing water from the Klondike river to be used in the gold mines. From his report the scheme appears to be a practicable one.

### IRRIGATION SURVEYS.

These surveys were formerly carried out by an officer of this branch, Mr. J. S. Dennis, then Inspector of Surveys. When Mr. Dennis was appointed Deputy Minister of Public Works of the Northwest Territories at Regina, it was agreed that he should remain in charge of these surveys and that they should continue to be carried out under the direction of this branch. Mr. J. S. Dennis was succeeded as deputy minister by Mr. John Stocks who also took charge of these surveys. On the formation of the new provinces of Saskatchewan and Alberta, Mr. John Stocks was reappointed Chief Engineer of Irrigation and the irrigation office was transferred from Regina to Calgary. Mr. John Stewart, D.L.S., was subsequently appointed Commissioner of Irrigation in succession to Mr. Stocks. Three parties were engaged on surveys during the present season in charge of Messrs. R. J. Burley, R. M. Saunders and J. F. Hamilton. Gauge readings on a number of streams were continued as in former years; they are generally taken by residents to whom small payments are made

### CAVES OF CHEOPS.

A monogram on the caves recently discovered near Glacier, B.C., known as the 'Caves of Cheops,' has been prepared by Mr. A. O. Wheeler, D.L.S., accompanied by a map of the caves. This monograph is inserted as Appendix No. 41. It is illustrated by photographs taken by Mr. Wheeler and by Mr. W. S. Ayres, and will serve to draw attention to a natural feature of the mountains which in the future will attract many tourists.

### MANUAL OF SURVEY.

The new edition of the Manual of Instructions for the Survey of Dominion Lands, which at the time of the issue of last year's report was in the hands of the printers, has since been published and distributed to surveyors in the field and to the

8,965

# SESSIONAL PAPER No. 25

members of the office staff. Subsequent to the issue of this edition, an Order in Council was passed making various changes in the rates received by survey contractors and surveyors working under daily pay. In addition to this, other amendments were required. They were all printed in booklet form and sent to all the surveyors employed by the department.

The astronomical field tables, which in the past have proved to be of very great value to surveyors in furnishing a ready and accurate means of reducing their observations, continue to be issued. A description of these tables is given in the report of 1904. Formerly each set of tables covered six successive months but those now issued are good in some cases for two months only out of each year and for three successive years; in other cases they are good for three months out of each year and for two successive years. The reason for the change is this: The apparent motion of the pole star is in cycles and it returns approximately to the same position from year to year although not at the same time of the year. Its position then for a given period one year is approximately the same as its position for another period of the next year and so on. It was found that tables, when constructed for a short period of each year but for two or three years as the case might be, could be made to cover six months in this way with greater accuracy than six successive months for a single year. Our surveys are increasing in precision every year and this is due in no small degree to the use of these astronomical field tables in connection with the new pattern of transit theodolite supplied by this office. The chief objection which formerly existed to taking a sufficient number of observations to produce accurate surveys was the amount of time and trouble required to make the reduction. Under present conditions, however, a very few minutes suffice for this work.

As a further aid to surveyors in taking and reducing observations on the pole star, a diagram of the altitude and azimuth of the pole star has been published since last year's report. Although the calculation required in finding the altitude of the pole star and its bearings from the tables is very simple, some surveyors prefer to have no calculation whatever; this condition is fulfilled in the abacus of the altitude and azimuth of the pole star. It is in the form of a printed card six by seven and one-half inches, showing on one side of the card the bearing and on the reverse side the altitude of the pole star. The altitude and bearing of the pole star are given by it to practically the same degree of accuracy as by the tables. The abacus covers the same period as the astronomical field tables and accompanies them when sent to surveyors; it furnishes an excellent check on calculations made from the tables.

### CORRESPONDENCE.

Inc correspondence		
Letters received.	 	8

Letters sent .... 9,452

The staff consists of one correspondence clerk, three stenographers and typewriters and two messengers.

### ACCOUNTS.

### The Accountant's records show:

The correspondence consisted of :-

Number of accounts dealt with	704
Amount of accounts	\$599,780.00
Cheques forwarded	2,056

### OFFICE WORK.

A list of the office staff of part of the Topographical Surveys Branch at Ottawa is given in Appendix No. 12.

A number of changes have taken place during the twelve months. In the Metcalfe Street office Mr. M. J. Cullen has been appointed stenographer and typewriter. Mr. Geo. McMillan, D.L.S., is in charge of a party of field inspecting surveys made under contract. Mr. J. C. Baker, D.L.S., has resigned to take a survey contract. Messrs. W. E. Weld, E. E. D. Wilson, F. W. Rice and A. J. Elder are acting temporarily as assistants to surveyors. Messrs. J. C. Baker, A. A. Bailie, Geo. L. Brown, A. d'Orsonnens, H. V. Finnie and W. J. Graham have left the office. Mr. J. D. Mc-Lennan has been transferred to the Boundary Commission. Mr. A. Groulx has been transferred to the staff of the Geographer. Mr. M. F. Cochrane has been transferred to the Railways and Swamp Lands Branch. Mr. G. B. Dodge has been granted leave of absence to make a hydrographical survey of the harbour of Prince Rupert, the terminus of the Grand Trunk Pacific Railway on the Pacific coast. Mr. P. A. Carson, D.L.S., is in charge of surveys in British Columbia. The additions to the staff during the year are :-Wm. Crawford, D.L.S., A. d'Orsonnens, T. A. Davies, Captain T. E. S. Davies, Wm. Elwell, graduate School of Practical Science, G. A. Grey, M. J. Carroll, graduate School of Practical Science, E. R. Williams. Messrs. A. Rogers and D. C. Robertson have been reappointed to the staff.

### OFFICE OF THE CHIEF DRAUGHTSMAN.

A summary of the work executed in the chief draughtsman's office is given as Appendix No. 7.

This part of the branch was arranged some three years ago in five divisions and the same arrangement is still in force.

# First Division-Instructions and General Information.

In the first division, where a variety of miscellaneous work is carried on, instructions were prepared for the guidance of the surveyors engaged during the year, involving the compilation of 1,092 sketches of township outlines, besides other sketches and copies of plans. About 530 applications for various information as to areas, survey monuments, &c., were dealt with, 245 preliminary plans of townships were made in triplicate and some 400 miscellaneous plans and tracings. The register of all field books, &c., received and other records are kept in this division.

### Second Division—Examination of Surveyors' Returns.

The second division occupies the largest number of draughtsmen. Here most of the field notes received are examined, plans being compiled from them and the accounts of the contract surveys checked. A total of 744 sets of field notes were examined during the twelve months.

It may be of interest to give a short description of the methods now employed in compiling plans.

In 1903, it was decided by the Minister that the plans of the surveys of Dominion lands instead of being made by the surveyors as formerly should be prepared by the office staff from the surveyors' field notes. There were several reasons for such a radical change; among them it may be mentioned that the great amount of work to be done in connection with the examination of returns of surveys and the issue of the township plans in that and the succeeding years required to be handled systematically. It had long been recognized that the old style township plan was lacking in much information that would be of value to those dealing with the plans, such as registrars, land agents and the various officers of the department at Ottawa. Such information as the bearings and lengths of the lines surveyed, the description of the corner monuments, &c., is more useful than the topographical features of the country, the plans being intended primarily as a record of surveyed boundaries and for reference in dealing with the lands. It was found impracticable to merely add this valuable information to the plans as then issued; the principle now adopted is that of issuing two plans, a

land plan, on which is shown such information as is necessary in dealing with the land, and another plan showing features of a topographical nature such as hills, valleys, streams, marshes, the kinds and sizes of the timber and the class of soil, which although not required for the issue of patents, are nevertheless of value for the purpose of general information. But the office staff not being numerically strong enough to meet the demand even for the land plans alone, the topographical plans have not yet been commenced.

The new plans, however, do not overlook the topographical features altogether, as while the small details are omitted, there are still shown the larger valleys and hills, all the rivers, streams and all the lakes of sufficient size to materially affect the value of the quarter sections in which they are situated. The areas, instead of being shown for each quarter section only as formerly, are given in legal subdivisions to the nearest tenth of an acre where the quarter section is broken by a body of water.

On the plans formerly issued, bush, water and swamps were represented by colours; this required that each plan should go through the press several times, once for each colour, which occupied much time and caused delays in the issue. By the system adopted one printing is all that is usually needed, the plans can be printed much more expeditiously and delays avoided. Printing in colours will be limited to the topographical plans.

As a result, the legal tariff of fees charged by the department for printed copies of township plans fixed by the Order in Council of the 12th April, 1880, at fifty cents per copy, was reduced by Order in Council of the 4th November, 1905, to ten cents

per copy, which it is estimated, will fully cover the cost of printing.

The colours, while they served a useful purpose and perhaps made the plans look more attractive, did not give much definite information. For instance, a green wash was used for bush, but there was no way of indicating whether the bush was composed of valuable timber or of a small growth of trees; the colours also being generally given along the surveyed lines only, and the interior of the sections left uncoloured, the plans were apt to mislead persons not familiar with them. The kinds and sizes of timber are indicated in a general way by a note on each plan. A great gain in uniformity has been attained by the plans being prepared in the office from the surveyors' notes. Another advantage of the new system is the speed with which plans can be issued. With the almost phenomenal increase in immigration to the Northwest during the last few years, the number of townships that have been surveyed is greatly in excess of the number surveyed in any other like period of time, with the exception perhaps of the years 1882, 1883 and 1884, when the Canadian Pacific Railway was being constructed. It would have been an almost impossible task to have issued township plans as they were wanted, by the system then in use. By the present system the greater part of the land is open for entry almost as soon as the survey is made. The surv yors are instructed to report, at least once every month, the progress of their work, and to send in sketches of the lines surveyed with their bearings and lengths, distinguishing quarter sections made fractional by water from the full quarter sections. On receipt of these sketches, if the proper information is given and no mistakes in the survey are noticed, a preliminary plan is issued to the land agent in whose district the township is situated, and entry can be granted for the unbroken or full quarters. In the case of the fractional quarter sections, entry is not granted until the issue of the final plan showing the correct areas.

One great cause of delay in the issue of the final plans still exists and probably will never be overcome; that is the difficulty of communication between the head office and the surveyors. It is a very rare occurrence that the field notes of a survey be absolutely correct when received from the surveyor; clerical errors, omissions and discrepancies are nearly always found and it is necessary to ask for further information, sometimes more than once, before the plan can be issued. If, as is often the case, the surveyor is fifty or one hundred miles from the nearest post office, a great deal of time clapses before replies can be received. This correspondence with the surveyor has been greatly reduced, however, since the plans are made in the office, the requests for

further information now being in reference to the field notes only, instead of, as formerly, to the plan and field notes.

The introduction of this system required a large increase in the office staff as well as the adoption of new methods and processes; the latter have gradually been improved until a workable system of handling the returns has been evolved. The work has been, to a great extent, specialized, each clerk having his own particular work to do which he learns to do expeditiously. Uniformity of examination has also been reached to an extent which was not attained under the former system.

After the field book has been received and entered in the register, it is given a cursory examination, noting whether or not all the information required has been entered therein, whether the instructions have been followed and in a general way whether the notes are acceptable. If any serious errors or omissions are discovered, the book is returned at once to the surveyor for correction; if not, the book is accepted and the examination is proceeded with. The astronomical observations are then checked and the information necessary to plot the plan is collected. Any former surveys made in the township and those adjoining have to be looked up, and all field notes and plans relating thereto procured from the Records Office. These consist of outline and subdivision surveys, railway right-of-way surveys, traverse surveys, surveys of Indian and other reserves, and of trails, lots and mineral locations. All plots of rivers and lakes, if not already made on the scale used in plotting the township plan, have to be reduced or enlarged, as the case may be, to the proper scale. This is done by photography; the outline of the lake or river traversed can then be traced directly to the township plan without going through the tedious process of replotting. An exhaustive examination of the field notes is then made, a rough plan being compiled at the same time. This includes checking the account, which in an ordinary township means adding up the chainage and classifying it under the different rates of payment for 250 to 300 items, checking over all triangulations and traverse surveys; entering the necessary information on the rough plans, calculating the areas of the full quarter sections, dividing the broken quarter sections up into legal subdivisions and calculating their areas, comparing the closings and corner monuments with those of adjoining surveys and preparing a memorandum of omissions, clerical errors and discrepancies to be sent to the surveyor with a request for explanations or further information. On receipt of his reply, the corrections which he indicates are made in his notes in red ink and the plans amended accordingly.

When the rough plan has been completed and checked, it is handed over to the draughtsmen who prepare finished plans and who form a distinct division of the office. They are not necessarily conversant with the details of the survey work, as the examiners must be.

The progress of the work in connection with the field notes and plans in this and other divisions is kept track of by means of slips attached to books or plans. Each separate set of notes is given a 'job number,' and as the slip passes from one man to another, the dates and number of hours each was engaged are entered on it, forming a complete record from the receipt of the field notes to the issue of the printed plan. These slips show that many of the jobs pass through as many as twenty hands from first to last.

## Third Division—Drawing for Reproduction.

The third division of the draughting staff is engaged chiefly in drawing plans for reproduction by photo-zincography or lithography. Four hundred and forty-four township plans and eight plans of settlements or townsites in addition to thirty-five other plans of various descriptions were completed during the year.

The method of preparing township plans for printing is that outlined in the annual report of the Surveyor General for 1905. All distances, bearings, areas and corner markings are stamped on the plans by means of type stamps. During the past year an effort has been made to have all the remaining work required on town-

ship plans done in the same manner. The great difficulty is to secure suitable styles of type, those in use for ordinary printing being, as a rule, not suitable for plans, However, type has been procured suitable for stamping names of lakes, rivers, railroads, &c., but for some of the work none has yet been obtained. It is also very difficult to stamp lettering which lies on a curve. Such work is being done at present in the old way by our more expert draughtsmen, though the aim in view is to have everything done by type.

The plans of townships in British Columbia, owing to the mountainous character of the country, are usually quite complicated and irregular. These plans are the most difficult to prepare and take up much more time than plans of prairie townships. It is necessary to carefully arrange all the details so as to have everything clear and unmistakeable, giving each feature its proper prominence, and at the same time endeavouring to produce the most pleasing effect as a whole.

The work has been systematized so that at present each man has one particular line and no one man turns out a complete plan. Each doing his own special part, the plan passes from one to the other until each line of work has been performed on it, making a complete plan ready for printing. The result of this system has been a saving in time and also uniformity in the appearance of the finished plans. Four additional stamping outfits have been procured during the year and two more are being made. A small press capable of printing titles, notes, &c., has also been procured; for the work required, it is a great convenience.

## Fourth Division-British Columbia Surveys.

Another part of the office staff (the fourth division) looks after the surveys in the railway belt, British Columbia. The nature of these surveys being peculiar on account of the character of the country, and the earlier provincial surveys largely affecting the subdivision of the Dominion lands, it is found convenient to have men who deal with British Columbia work exclusively and become familiar with the many details which complicate it. Ninety-four books of field notes were examined, the methods pursued being very similar to those employed in the second division and the rough plans when completed being sent on to be copied in the third division.

Two hundred and forty-seven miscellaneous plans and tracings were made and two hundred and seventy applications for various information dealt with.

### Fifth Division—Mapping.

The remaining draughtsmen, the fifth division, compile and draw any maps that may be required. These consist chiefly of the 'sectional sheets' which are plotted on a scale of two miles to an inch and kept up to date from the township plans and any other material available. As soon as, from new surveys or other information, it seems necessary, a revised plan on tracing cloth is made and handed to the photographer, who reduces it to the scale of three miles to an inch on which these maps are lithographed. Another edition on a six mile scale is issued for office use by further reduction, the small maps being found very convenient for many purposes. Twenty-one sheets were issued during the year on both scales. The sectional maps are confined to that part of the country in which subdivision surveys have been made.

Besides the usual routine work of adding new surveys, railways, post offices, &c., and preparing the maps for new editions, extra work was caused by changes in the outlines of the sheets east of the second meridian. As mentioned in last year's report, it was found advisable to alter the scheme of numbering the sheets so as to cover in a uniform plan the whole extent of country in which Dominion lands are situated. The distance from east to west between the initial meridians of the system of survey is uniform (four degrees of longitude), except in the case of the meridian first established, which was run from a point about ten miles west of Pembina, without any reference to longitude, because the location was a convenient one for making the survey of the line. Two sectional sheets cover the space between any two adjoining meri-

dians from the second meridian westerly, but as there are four ranges more between the first (the principal) meridian and the second, this space was mapped on three sheets of which one covered only a few ranges. The size of the sheets is now being made uniform throughout. This necessitated the redrawing of the Lake of the Woods and Cross lake sheets, and a new tracing of the Winnipeg sheet.

Pincher creek and Kamloops sheets also had to be redrawn because the originals were worn out by the numerous corrections and changes made on them; a new tracing of Lytton sheet was made for the same reason.

New blank forms suitable for all sectional maps between the 17th and 25th base lines were drawn and are now being copied on stones by the lithographers.

These new forms are necessary on account of the extension of the surveys northward, the greater convergence of the meridians in the higher latitudes increasing the 'jogs' on the correction lines to such an extent that the diagrams in use for districts further south become unsuitable.

Apart from the sectional maps, a diagram of the Rocky Mountains triangulation with tables of angles and distances was drawn for photo-lithography; also a map of the semi-arid area of Alberta, and a series of diagrams showing the rainfall in different places for a number of years.

A list of the sectional sheets issued since the last report is given in Appendix No. 8.

### ARREARS OF WORK.

The volume of business in this part of the branch is so large that it is found impossible to keep it up to date with the present staff, and even the most essential part of the work cannot be handled with the promptness that is desirable.

The delay in closing surveyors' accounts and in furnishing final plans of newly surveyed townships and of resurveys, is a cause of frequent complaint. Many of the old plans which are out of print require recoupling and printing, but we have been unable to prepare any during two or three years past. It is also very desirable that the series of topographical plans previously mentioned should be proceeded with. The surveyors' field notes contain a large amount of information as to lakes, ponds and swamps, hills and ridges, limits of tracts covered by bush and scrub, nature of timber and classification of the soil in respect to its value for agriculture, which is not at present readily available to the public, or even to officers of the department, being necessarily omitted from the land plans. Any attempt to place these details on one set of plans, in addition to those required for dealing with the lands, would result in so overcrowding the plans as to render them indistinct.

Some of the delay in issuing plans is unavoidable, and some is caused by circumstances exterior to the office and largely beyond our control, such, for instance, as surveyors failing to send in their field notes within a reasonable time or to supply the additional information needed for plotting. Much of the delay would be avoided if the office staff were stronger, but the most serious cause of weakness is the constant changing of the personnel of the office. From January 1, 1905, to date, no less than forty-four men left for one reason or another; some resigned to take employment elsewhere, others were transferred to different branches of the department. The result is that the staff is composed chiefly of men with very little experience and imperfectly acquainted with the business of the office. Effective administration under such conditions is an impossibility. It is most desirable that the staff should be increased to a number commensurate with the amount of work to be done and that after men have been trained to our business and are conversant with it, we should be allowed to retain them. To show how far behind the office work is, it may be mentioned that the plans of about five hundred townships of which surveys have been completed or in which resurveys have been made, remain unissued; new issues of the plans of about eight hundred townships are also needed, but cannot be prepared by the present staff.

### PHOTOGRAPHIC OFFICE.

In the photographic office there is a large increase in the work executed over that of last year, the total number of negatives and prints being eight thousand eight hundred and twenty-six against four thousand seven hundred and forty-six last year. The increase is chiefly in the number of silver prints, five thousand one hundred and twenty-four, as compared with nine hundred and sixty-six last year; many of these prints were for the Forestry Branch.

In the wet plate and photozincography department the township plans are reduced by photography from a scale of thirty chains to a scale of forty chains to the inch. Each plan is photographed on a 16-inch x 18-inch wet plate negative and printed on an 18-inch x 20-inch sheet of zinc. The process of photozincography, introduced in 1903 and 1904 and described in my report for 1904, has proved a success and is far superior to the old method of photolithography. It is more economical and the quality of the work is better. In less than one hour, a township plan can be photographed, printed on zinc and transferred to the power press, a stage which could be reached under the old system only after four or five hours' work and frequently more when the weather conditions were unfavourable.

Sectional maps on a scale of two miles to the inch are reduced for publication to a scale of three miles. They are photographed in two sections on 18-inch x 20-inch wet plate negatives: they are then impressed on zinc and transferred in the lithographic office to large stones for printing. It is hoped in a short time to print these from the zinc plates direct. Another issue of the sectional maps is reduced by photography to a scale of six miles to the inch and printed from zinc for office use.

In addition to the above are the traverses of lakes and rivers furnished by the surveyors with their field notes; they have to be reduced to the thirty chains scale. The average number pinned on the camera board is fifteen. They are first greatly reduced, after which the negative is placed in the enlarging camera and adjusted to the proper size. The image is thrown on bromide paper and when developed, washed and dried, is used for plotting out the township plans.

The work for the Geological Survey consists principally of photographing sections of maps for the purpose of enlarging or reducing the scales, a great help and saving of time to the draughtsmen.

On several occasions lantern slides transparencies were made for the Forestry Branch for use in illustrated lectures abroad and at home.

A schedule of the work executed is given as Appendix No. 10.

The staff is the same as at the date of the last report, namely, one photographer in charge, one photo-lithographer and photo-engraver, three photographers and two assistants. A large part of their work is in direct connection with the preparation of township and other plans, reducing plans to proper scale for compiling and photographing for reproduction on zinc or stone the plans furnished by the draughtsmen.

### LITHOGRAPHIC OFFICE.

Work was continued in the lithographic office on the same lines as last year. There has been some increase in the number of maps and forms printed and a decrease in the number of township plans.

No change was made in the staff, which consists of one foreman, one transferer, one power press printer, one lithographer, one stone polisher and one apprentice.

### VISIT TO SOUTHAMPTON.

The methods and processes for the preparation and reproduction of plans outlined above were, to a large extent, adopted from those in use at the Ordnance Survey, Southampton, as described in their publications. This is the largest map making establishment in the world; it is under the direction of specialists of great ability and everything pertaining to map making has been brought there to a high degree of perfection. Owing to the enormous increase in the number of plans issued by this

office, their mode of production has assumed considerable importance and it is most desirable that the latest improvements should be introduced in our practice. I was accordingly authorized to visit the Ordnance Survey in order to become acquainted with the details of the organization and mode of execution of their work, which in technical matters of this kind, cannot be fully understood from printed descriptions. The High Commissioner, Lord Stratheona, was kind enough to introduce me to Colonel R. C. Hellard, R.E., Director General of the Ordnance Survey, by whom I was received with the utmost courtesy. I was shown over the whole establishment by Colonel S. C. M. Grant, C.M.G., R.E., in charge of the Publication Branch, and Capt. W. J. Johnston, R.E., in charge of the Trigonometrical Branch; they spared no pains to show and explain everything in connection with their work. Advantage was taken of my presence in London to visit the establishments where the surveying instruments supplied to our surveyors, are made. I had conferences with the makers and discussions with their men which resulted in marked improvements in the patterns of our instruments. At the request of the Minister of Inland Revenue, I called at the International Bureau of Weights and Measures to obtain information respecting the organization and work of the bureau.

### BOARD OF EXAMINERS FOR DOMINION LAND SURVEYORS.

The regular meeting of the board was held as directed by clause 101 of the Dominion Lands Act, on the second Monday in February, 1906, and following days. Special meetings were held from the 12th to the 16th December, 1905, on the 20th April, on the 1st May, and from the 7th to the 16th May, 1906.

The regular examinations were held during the February meeting at Ottawa, Toronto, Regina and Edmonton. Professor Stewart, D.T.S. of the School of Practical Science, presided at the examination in Toronto, F. J. Robinson, D.L.S., in Regina, and J. N. Wallace, D.L.S., in Edmonton, the two latter gentlemen having been appointed as special examiners by an Order in Council, dated February 10, 1906.

Twenty-five candidates successfully passed the 'Preliminary Examination for admission as articled pupil' as follows:—

A. H. Arens, Orillia, Ont.

D. D. Cairnes, Ottawa, Ont.

W. M. Carthew, Edmonton, Alta.

A. L. Cuming, Ottawa, Ont.

E. Flexman, Edmonton, Alta.

P. W. Greene, Orillia, Ont.

R. M. Hannon, Edmonton, Alta.

E. Harrison, Belleville, Ont.

S. N. Hill, Ottawa, Ont.

P. N. Johnson, Edmonton, Alta.

G. R. Jones, Brantford, Ont.

A. E. Jupp, Toronto, Ont.

F. Lambart, Ottawa, Ont.

N. C. Mackinnon, Red Deer, Alta.

W. L. MacIlquham, Ottawa, Ont.

J. F. Menzies, Staples, Ont.

B. F. Mitchell, Hamilton, Ont.

G. L. Rainboth, Aylmer, Que.

F. W. Rice, Ottawa, Ont.

H. F. Routly, Cambray, Ont.

C. Ryley, Ottawa, Ont.

W. A. Scott, Galt, Ont.

W. M. Setwart, Hamilton, Ont.

P. B. Street, Toronto, Ont.

W. M. Treadgold, Ottawa, Ont.

Nineteen candidates passed the 'Final Examination for Admission as a Dominion Land Surveyor,' as follows:—

J. C. Baker, Vermilion, Alta.

E. R. Bingham, Toronto, Ont.

P. A. Carson, Ottawa, Ont.

W. Christie, Chesley, Ont.

F. F. Clarke, Deer Park, Ont.

T. A. Davies, Ottawa, Ont.

J. S. Dobie, Regina, Sask.

A. H. Hawkins, Listowel, Ont.

F. D. Henderson, Ottawa, Ont.

A. J. Latornell, Meaford, Ont.

F. H. Mackie, Ottawa, Ont.

G. McMillan, Ottawa, Ont.

H. J. McAuslan, Heathcote, Ont.

H. L. Seymour, Ottawa, Ont.

J. D. Shepley, Leamington, Ont.

C. C. Smith, Ottawa, Ont.

A. G. Stacey, Ottawa, Ont.

C. M. Teasdale, Concord, Ont.

W. M. Tobey, Ottawa, Ont.

Bonds for the sum of one thousand dollars each, as required by clause 115 of the Dominion Lands Act, were received from seventeen candidates who had previously passed the necessary examinations for commissions as Dominion Land Surveyors.

Sixteen commissions to Dominion land surveyors were issued,

Every Dominion land surveyor is required by clause 125 of the Dominion Lands Act to be in possession of a subsidiary standard of length furnished by the Secretary of the Board of Examiners. Eleven such standards were issued during the year. A list of surveyors who have been furnished with standard measures up to June 30, 1906, will be found in Appendix No. 4.

The correspondence of the board amounted to:-

Letters, &c., received	627
Letters sent	564

The examination papers used at the regular examination in February, 1906, and at a special examination in May, 1906, are submitted as Appendix No. 43.

### APPENDICES.

The following documents are appended:—

No. 1.—Schedule of Dominion land surveyors employed, and work executed by them, from July 1, 1905, to December 31, 1905.

No. 2.—Schedule of Dominion land surveyors employed and work executed by them, from January 1, 1906, to June 30, 1906.

No. 3.—Schedule showing for each surveyor employed during 1905, the number of miles surveyed of township subdivision lines, township outlines, traverses of lakes and rivers, and resurvey; also cost of the same.

No. 4—List of Dominion land surveyors who have been supplied with standard measures.

No. 5.—List of lots in the Yukon Territory of which surveys have been confirmed during the year ended June 30, 1906.

No. 6.—List of miscellaneous surveys in the Yukon Territory of which returns have been received during the year ending June 30, 1906.

No. 7.—Statement of work executed in the otice of the chief draughtsman.

No. 8.—List of sectional maps revised and reprinted from July 1, 1905, to July 1, 1906, on three mile and six mile scales.

No. 9.—Statement of work performed in the survey record office for the twelve months ending June 30, 1906.

No. 10.—Statement of work executed in the photographic office during the twelve months ending June 30, 1906.

No. 11.—Statement of work executed in the lithographic office during the twelve months ending June 30, 1906.

No. 12.—Names and duties of employees of the topographical Surveys Branch at Ottawa.

No. 13.—Report of C. F. Aylesworth, D.L.S.

No. 14.—Report of D. Beatty, D.L.S.

No. 15.—Report of P. R. A. Belanger, D.L.S.

No. 16.—Report of E. Bray, D.L.S.

No. 17.—Report of L. T. Bray, D.L.S.

No. 18.—Report of R. W. Cautley, D.L.S., survey of sixteenth base.

No. 19.—Report of R. W. Cautley, D.L.S., survey of thirteenth base.

No. 20.—Report of W. A. Ducker, D.L.S.

No. 21.—Report of A. Driscoll, D.L.S.

No. 22.—Report of C. C. Fairchild, D.L.S.

No. 23.—Report of L. E. Fontaine, D.L.S.

No. 24.—Report of G. A. Grover, D.L.S.

No. 25.—Report of E. W. Hubbell, D.L.S.

No. 26.—Report of A. W. Johnson, D.L.S.

No. 27.—Report of G. J. Lonergan, D.L.S.

No. 28.—Report of C. F. Miles, D.L.S.

No. 29.—Report of W. G. McFarlane, D.L.S.

No. 30.—Report of T. S. Nash, D.L.S.

No. 31.—Report of Geo. Ross, D.L.S.

No. 32.—Report of J. E. Ross, D.L.S.

No. 33.—Report of A. Saint Cyr, D.L.S., for 1905.

No. 34.—Interim Report of A. St. Cyr, D.L.S., for 1906.

No. 35.—Report of B. J. Saunders, D.L.S.

No. 36.—Report of H. W. Selby, D.L.S.

No. 37.—Report of J. N. Wallace, D.L.S.

No. 38.—Report of Jas. Warren, D.L.S.

No. 39.—Report of M. B. Weekes, D.L.S.

No. 40.—Report of A. O. Wheeler, D.L.S.

No. 41.—Report on the Caves of Cheops by A. O. Wheeler, D.L.S.

No. 42.—Report of W. Thibaudeau, C.E.

No. 43.—Examination papers of the Board of Examiners of Dominion Land Surveyors.

No. 44.—Descriptions of surveyed townships submitted by Dominion Land Surveyors during the year ending June 30, 1906.

I have the honour to be, sir, Your obedient srevant,

> E. DEVILLE, Surveyor General.

[These appendices will appear in supplement form.]

# PART IV.

# REGISTRARS.

# REGISTRARS

### No. 1.

# REPORT OF THE REGISTRAR AT BATTLEFORD.

LAND TITLES OFFICE, BATTLEFORD, June 30, 1906.

The Secretary.

Department of the Interior.

Ottawa.

SIR.—I have the honour to inclose herewith the report of this office for the fiscal vear which ends to-day. The large increase in the work and revenue over the preceding year, and particularly the increase in the months of the present calendar year, will be observed. For the first time in the history of this office I believe it can now be said that it has reached the self-supporting stage.

Your obedient servant,

J. W. HANNON,

Registrar.

STATEMENT of transactions at the Land Titles Office for the West Saskatchewan Land Registration District, Battleford, Saskatchewan, from July 1, 1905, to June 30, 1906.

						es Receivi	ED.	
Year and Month.	Free Certifi- cates Issued.	Total Certifi- cates Issued.	Total Instru- ments Registered	For Certifi- cates of Title.	For Registra- tion of Instru- ments.	For Searches, Abstracts, Copies, &c.	For Assurance Fees.	Total.
1905.				\$	\$	\$	\$	\$
July August. September October November December	1 1 82 212 165 48	17 23 104 228 170 63	29 30 136 237 170 87	71 00 78 00 69 00 58 00 16 00 58 00	11 50 9 00 7 00 17 00 141 00	35 75 10 75 12 25 12 50 11 25 19 25	28 14 45 48 56 15 37 78	146 39 143 23 144 40 125 28 27 25 156 05
January	12 38 37 14 17 74	52 64 90 40 72 105	68 65 93 61 91 55	150 00 91 00 186 00 97 00 179 00 126 50	116 00 102 00 20 50 28 50 120 50 52 00	33 50 79 35 47 75 53 50 50 75 70 75	110 80 79 75 74 45 83 85 133 91 134 01	410 30 352 10 328 70 262 85 484 16 383 26
Totals	701	1,028	1,122	1,179 50	525 00	437 35	822 12	2,963 97
For 1904-1905	259	352	398	339 00	87 00	148 25	198 33	772 58
Increase in 1905– 1906	442	676	724	840 50	438 00	239 10	623 79	2,191 39

J. W. HANNON.

Registrar.

### No. 2.

LAND TITLES OFFICE.

Calgary, N.W.T., July 12, 1906.

The Secretary,
Department of the Interior,
Ottawa.

SIR,—Inclosed will be found the statement of the transactions in regard to registrations in this office for the year ending June 30, 1906, as also for comparison, a similar statement for the year ending June 30, 1905.

Your obedient servant,

W. ROLAND WINTER,

Registrar.

## SOUTH ALBERTA LAND REGISTRATION DISTRICT, CALGARY.

COMPARATIVE STATEMENT of Registrations, &c., in the Land Titles Office, South Alberta Land Registration District (Calgary), for the Years July 1, 1904, to June 30, 1905, and July 1, 1905, to June 30, 1906.											
Year and Month	Number of Instruments Registered.	Free Certificates only.	Aggregate Number of Certificates.	Assurance Fees,	Total Fees.	Year and Month	Number of Instruments Registered.	Free Certificates only.	Aggregate Number of Certificates.	Assurance Fees.	Total Fees.
1905.				\$ cts.	\$ cts.	1904.				\$ cts.	\$ cts.
FulyAugustSeptemberOctoberNovemberDecember	598 670 685 649 689 602	132 154 221 98 116 15	415 482 508 432 480 357	459 20 658 65 587 10 587 85 679 90 718 15	2,245 55 2,022 90 2,191 25 2,454 05	July August September October November December	501 696 511 571 485 484	95 215 71 187 93 106	355 536 343 42 347 339	395 40 389 50 348 00 312 75 326 60 404 70	1,605 15 1,787 80 1,604 15 1,435 25 1,507 60 1,521 30
1906.						1905.					
January February March April May June	841 934 1,034 869 1,130 1,862	126 159 224 85 189 946	564 689 741 620 758 1,537	817 25 870 80 1,000 85 1,139 70 f,272 15 1,285 50	3,264 80 3,632 15 3,695 95 4,135 75	January February March April May. June	514 477 608 594 710 819	71 26 79 55 139 281	315 295 409 402 508 642	451 05 441 90 575 03 1,074 10 542 50 655 60	1,758 00 1,820 05 2,159 73 2,768 35 2,293 45 2,412 55
	10,563	2,465	7,583	10,077 10	35,210 00		6,970	1,418	4,533	5,917 13	22,673 38
Irrigation plans.	4				4 00	Irrigation plans.	4				4 00

Certified correct, W. ROLAND WINTER, Registrar.

No. 3.

# REPORT OF THE REGISTRAR AT DAWSON.

Land Titles Office, Dawson, Y.T., June 30, 1906.

Report made by J. E. Girouard, Registrar of the Land Titles Office for the Yukon land registration district, of transactions of the office, from the 1st day of July, 1905 to the 30th day of June, 1906.

77 1 1 M 13	No.	No. Certificates		Income.			
Year and Month.	Deeds Recorded.	of Title Issued.	Fees.	Assurance Fund.	Total.		
1905.			\$ cts.	\$ cts.	\$ ct		
July August September October November December	71 48 49 20	36 37 28 18 13 5	254 42 296 80 211 15 159 85 80 75 37 00	12 08 31 75 32 30 14 15 4 00	266 56 328 56 243 49 174 00 84 78 37 00		
1906.							
January February. March April May June	14 42 24 33 31	5 8 15 15 19 14	20 80 39 11 82 70 111 35 145 55 145 15	2 80 11 74 6 35 4 65 8 40 4 70	23 60 50 88 89 00 116 00 153 90 149 80		
	410	213	1,584 63	132 92	1,717 5		

J. E. GIROUARD,

Registrar.

### No. 4.

# REPORT OF THE REGISTRAR AT EDMONTON.

LAND TITLES OFFICE, EDMONTON, ALBERTA, August 20, 1906.

The Secretary,

Department of the Interior, Ottawa.

Sir,—Inclosed please find my annual statement showing number of registrations and total amount of fees collected in the North Alberta Land Titles Office for the year ending June 30, 1906, amounting to \$35,574.70.

I am, sir,

Your obedient servant, GEO. ROY.

Registrar.

STATEMENT showing number of Registrations and amount of Fees collected in the Land Titles Office for the North Alberta Land Registration District, for the Year ending June 30, 1906, and a comparison with the work done the previous year.

Month.	Number of instruments registered.	Total number of certificates issued.	Number of free certificates issued.	Amount of assurance fees.	Total amount of fees collected.
1905.		•		\$ cts.	\$ cts.
July August September October November December	874 644 673 686 766 741	450 466 399 397 447 378	112 186 126 80 118 100	391 55 423 10 410 50 543 30 605 25 681 25	2,106 55 1,915 35 1,930 25 2,264 65 2,418 00 2,311 25
1906.		Y			
January. February. March. April May. June.	1,171 664 1,292 1,064 1,239 1,029	726 344 713 621 271 119	212 90 86 145 785 642	1,009 35 590 85 1,238 40 1,043 35 1,063 65 1,056 50	3,890 35 2,175 00 4,679 40 3,825 95 4,038 55 4,019 40
Totals	10,843	5,331	2,682	9,057 05	35,574 70
Registrations for year ending June 30, 1905	8,401	4,631	1,476	4,966 00	23,835 55
Showing increases over previous year	2,442	700	1,206	4,091 55	11,739 15

### No. 5.

## REPORT OF THE REGISTRAR AT PRINCE ALBERT.

LAND TITLES OFFICE,

PRINCE ALBERT, SASK., July 6, 1906.

The Honourable

Minister of the Interior.

Ottawa.

Sir,—I herewith beg to submit my report of the proceedings of this office for the year 1905-06.

The receipts show a very satisfactory increase over the preceding year, that of \$3,988.50.

This increase has not been attained without a great strain on the part of the staff, considering that only during ten weeks has additional help been allowed us, but I must now most urgently point out the immediate necessity of enlarging the staff so as to compete with the work before us. In my opinion the work of this office now warrants the appointing of a deputy registrar and a stenographer, making a staff of five in all.

These appointments should be made at once as both the free work and pay work

are far behind.

I must also report that vault accommodation is badly needed; the shelves in the vault are now more than full, many registers and other papers and books standing on the floor. The condition of the vault itself is not at all satisfactory, the walls being cracked by the subsidence of the foundation; the door is badly cramped so that it has to be forced open with an iron bar and closed with a heavy maul. I beg to acknowledge with gratitude the willing help afforded me at all times by the staff.

1 have the honeur to be, sir, your obedient servant.

S. BREWSTER,

Registrar.

Annual Report for the East Saskatchewan Land Registration District, Prince Albert, Year 1905-6.

Year and Month.	No. of Instruments	Free Certificates Issued.	No. of Certificates Issued.	Assurance Fees.	Total Fees.
1905.				\$ cts.	\$ cts.
July August September October November December	400 311 292 279	102 106 69 62 28 94	231 228 192 173 165 231	235 10 146 10 189 25 226 35 196 85 229 45	1,058 15 896 45 867 50 934 55 1,016 85 940 20
1906.					
January February March April May June	401 449 351 485 418	50 97 65 40 37 28	176 265 289 219 308 394	255 75 277 10 327 65 321 85 611 45 445 60	1,013 75 1,166 85 1,451 40 1,329 60 2,064 45 1,638 10
Totals	4,435	778	2,871	3,462 50	14,377 85

The total receipts for the year 1904-5 were \$10,389.35, showing an increase this year of \$3,988.50, and an increase over 1903-4 of \$6,876.15.

S. BREWSTER,

Registrar.

PRINCE ALBERT, Sask., July 5, 1906.

No. 6.

# REPORT OF THE REGISTRAR AT REGINA.

LAND TITLES OFFICE, REGINA, N.W.T., July 16, 1906.

The Deputy Minister,

Department of the Interior,

Ottawa, Ontario.

SIR,—I beg to report as follows regarding the work of the Land Titles Office for the Assiniboia Land Registration District, for the year ending June 30 last past.

The following is a statement of the fees received during each month of the said year:—

	For Certific of Tit	ate	For Registra of Instrum	on	For Search		For Assurai Fees	ice	Total F	ees.	Deposi	its.
1905.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	s	ets.
July August September October November December	2,359 2,230 2,156 2,021 2,314 2,658	00 35 75 45	912 888 695 809 768 794	00 50 50 25	472 452 378 612 737 644	65 25 30 10	1,318 1,597 1,305 1,377 1,747 1,621	35 45 15 35	5,062 5,168 4,538 4,820 5,567 5,718	3 00   5 55 0 70 7 15	5,062 5,168 4,535 4,820 5,567 5,718	55 70 15
1906.												
January. February. March April May June. Totals.	3,378 3,800 5,280 3,444 4,359 5,830	60 95 30 70 65	1,258 1,447 1,873 1,234 1,450 1,723	00 75 00 75 00	794 757 1,220 780 1,070 936	55 45 25 30 50	2,598 2,537 3,688 2,480 3,171 4,349 27,793	85 95 80 85 05	8,029 8,543 12,064 7,939 10,052 12,839 90,339	3 00 4 10 9 35 2 60 9 20	8,029 8,543 12,064 7,939 10,052 12,839 90,339	00 10 35 60 20

The total of these fees for the year ending June 30, 1905, was \$63,646.15, showing an increase, roughly speaking, of 45 per cent. Besides the above work free certificates were issued on grants to the number of 2,607, an increase over last year of 1,213, or about the same increased percentage. The volume of 'Free' work done for the Northwest Territories and province of Saskatchewan for the same time would not show quite this increase, I am satisfied, and as it would necessitate a large amount of clerical time being taken to figure this with certainty, I have not done so, not considering it of sufficient importance. Each item would have to be picked out of the general work of the office.

Twenty-two new town sites have been registered, as have twenty-six additions to and subdivisions of heretofore existing town sites, an increase of nearly 25 per cent over last year.

The contingent expenditure of this office outside the payment of temporary clerks has been for the past year only \$1,284.10. This was almost altogether expended for postage.

The increase of work in this office necessitated some change if section 33 of the Land Titles Act was to be always complied with, and I have instituted a receiving book in which all work is entered as of the day, hour and minute when received. This work then passes along to the examiners and such as is found to be correct and ready for registration is placed on the day-book and given date, hour and minute taken from the receiving book in order that the section of the Act may be followed. The incomplete work is returned.

The transfer to the Southern Alberta Land Registration District of the ten ranges west of the fourth meridian caused a congestion of the work in this office, but I am pleased to be able to report that with the assistance of the night staff, lately established, all arrears have now been cleared off, except the issue of certificates of title on grants, and the work is being regularly done. It takes from five to six days to get a piece of work through the office, but I hope later on to shorten this time by a day or two.

I would suggest that if in future any division of registration districts is made the new one be established and have its officers appointed, and that they come right into this building (supposing the division is in this district), and while doing the registration work for the new district they would be gradually transferring the papers and records to that office, and thus after a time, without stopping or interfering with the work of this office they would have the registrations of the new district up to date and all instruments and documents that would have to be transferred, picked out and filed in their own files, and the only delay would be the day or two required to move the files and place them in position in their new quarters.

Besides the registrar and deputy registrar the staff to-day consists of thirteen permanent clerks and twenty-one temporary clerks. Nine of these clerks constitute the night staff. This staff is employed making out duplicates and copying duplicate certificates of title into the registers.

If this Land Titles Office is to occupy this building for another year increased vault accommodation should be provided.

I have the honour to be, sir, your obedient servant,

F. F. FORBES,

Registrar.

# PART VI

# ROCKY MOUNTAINS PARK OF CANADA

# ROCKY MOUNTAINS PARK OF CANADA

# REPORT OF THE SUPERINTENDENT OF THE ROCKY MOUNTAINS PARK OF CANADA.

Banff, Alta., September 1, 1906.

To the Hon. Frank OLIVER,

Department of the Interior,

Ottawa.

SR,—I have the honour to submit for your consideration my report as Superintendent of the Rocky Mountains Park of Canada for the year ending June 30, 1906.

It is a sincere pleasure to me to be able to report that my anticipations of only a few years ago have been already more than realized. The National Park has already developed beyond all reasonable expectations, and from present indications it is difficult to limit its usefulness not only as a unique pleasure resort for the people of the Dominion as well as for visitors from almost every quarter of the habitable world but also as a health resort of the highest and most beneficial character.

Nowhere on the continent of America is there to be found so attractive a beauty spot as the Rocky Mountains Park of Canada. Its magnificent scenery is absolutely unrivalled; the air is clear and invigorating and everything that can be done with the means at the disposal of your department is being done to permit tourists and others to eniov with the least possible discomfort the many and varied beauties with which the park abounds. It is also pleasing to be able to report that the more recent discoveries are, if anything, more magnificent and more diversified than those of earlier date. The scenery in some portions of the Yoho Valley district baffles description. Tourists who have penetrated from Laggan northwards are unanimously enthusiastic in their praise of the magnificent scenery to be found between the main line of the Canadian Pacific Railway and the Saskatchewan river. In this connection, I would respectfully suggest that the northern limit of the park, in the province of Alberta at least, should be increased from its present boundary, the northern limit of township 34, to the Saskatchewan river which is to-day the natural, though not the official, northern limit in this province. As you are already aware, the present northern boundary is altogether theoretical, the country not having as yet been surveyed, and for the preservation of game as well as for other obvious reasons, the Saskatchewan river would form an ideal and easily recognizable boundary. The country to be included, should my suggestion meet with your approval, is the natural complement of Canada's great playground, and should prove easy of access in view of the proposed construction of railreads through the mountain passes and Northern Alberta to the Pacific coast. The following graphic description of the country adjoining the southern bank of the Saskatchewan river and the district known as the Kootenay Plains, both of which are at present outside of the park limits, is well worthy of perusal, more especially as it is from the pen of Mrs. Schaffer, of Philadelphia, Pa., a lady who, from long acquaintance with the mountains and thorough knowledge of her subject, is eminently well qualified to speak :-

'A recent visit to the Saskatchewan river and Kootenay Plains district, covering a period of three weeks, furnishes ample proof of the desirability of including those sections of the country within the limits of the National Park.

'Our party left Laggan on July 24, heading almost directly north and following the course of the Pipestone river. The Pipestone and the adjoining valleys are in themselves some of the most picturesque features of the trip. Having its birth in the snows of the Pipestone Pass thirty miles from Laggan and 8,400 feet above the sea level, the Pipestone winds along between parallel ranges of comparatively low moun-

tains. These mountains, presumably of limestone, have a uniform dip towards to west or southwest. The summit of the pass is a sight to be long remembered. One follows the course of the Si Fleur river for miles from Laggan away in the south, winding like a silver thread through the green meadows and still greener forests until it becomes lost in the medley of mountains around the Saskatchewan.

'Here the botanist will find a profusion of the rarest alpine plants, and it may be safely said that nowhere through the entire country will the botanist find himself more

pleasantly at home.

'The Kootenay Plains are marvels of beauty. A magnificent open grassy valley surrounded by low hills 7,000 or 8,000 feet high and watered by the winding Saskatchewan, it is an ideal resting place for the nature lover or as a temporary refuge from the increasing civilization of this vast country. The Indians have named this section Ka Soona Finda or the Winding Valley, from the soft wind which blows constantly from the north. This chinook wind sweeps away the winter snows and keeps the whole valley delightfully green throughout the entire year. During the summer season the melting snows from the higher mountains which surround it, make the river almost impassable to the tourist. The best trail is on the north side of the river, but owing to the high water the south trail had to be resorted to. This is a more or less dangerous route as the banks of the river are badly undermined and one needs to keep a sharp watch on one's pony, which, although usually a clever trailer, sometimes makes faulty calculation as to the stability of rotten banks.

'Twenty-five miles carries one to the junction of Bear creek and the Saskatchewan river, under the shadow of Mount Wilson. Here is the heart of a magnificent panorama of the higher and less known mountains. Murchison, Pyramid, Sarbach, Survey, Forbes, Saskatchewan and the Freshfield range form a group well worth several days' travel to reach. Turning now towards the south and following Bear creek, the mountains are seen here and there gleaming from among the rich pine forest. The Wild Fowl lakes are among the first to attract the eye in the long series of water stretches. The first of these will promptly appeal to the artistic eye, and the countless ducks fully justify the title. The second, half a mile distant, is almost if not quite as beautiful as its sister. Peyto lake, probably the most dramatic and effective of all the lakes in the Bow region, lies on the north exposure of the Divide. This is a sight which no tourist should fail to see. It lies like a great emerald set in rugged rocks. At its upper end a superb glacier feeds its green waters which eventually merge into Bear creek. One mile further to the south one climbs the last gentle slope and stands on the summit of the Bow Pass.

'Here the well known river which flows through Alberta past Banff and Calgary to the Saskatchewan first sees the light of day. Two beautiful springs of crystal clearness bubble from among the green meadows and start in joyous chatter on their journey south. Even if one goes no further than Bow Summit one feels glad to have seen the vision of beauty which here greets the eye.

'The Bow lake and Glacier appear two miles further down the valley. One takes a novel trail to skirt the lake, not other than the water of the lake itself. The wise little horses much prefer the pebbly lake bottom to the soft and treacherous muskeg of the shore.

'Lake Hector is the last of this superb group, and we say farewell as we follow the still magnificent mountains and the constantly widening Bow. The last two days of travel to Laggan are but a poor ending to 150 miles of unsurpassable scenery. Twelve miles of muskeg with constant fear of being engulphed, weary horses and miles of fallen timber are the chief characteristics. But it is all worth many times the trouble and inconveniences to be endured which are small enough in comparison with the stupendous magnificence of a district whose beauties will appeal to every lover of nature's treasures.'

I think it unnecessary to add anything to the extract quoted above except to again impress upon you the desirability of including this magnificent district within the con-

fines of the National Park by extending the northern boundary to the Saskatchewan river.

The popularity of the National Park as a tourist resort may best be gathered from the photographic reproduction appended of a page from the register at the Banff Springs Hotel. This is a most interesting contribution to the literature of the park,

	BANFF SPRINGS	S HOTEL. ·\
PLE	ASE NOTICE—To prevent losses, Visitors are requested to dep otherwise the Hotel cannot be b	osit their money, or other articles of value, IN THE SATI
of Room.	NAME.	RESIDENCE. TIM
	Thursday a	ig 4th (Continued)!
66	I. Ells worth	
155	Mo Mr M' Ewan Johann	iesburg dowth Aprice
152	locator by	esornes
154	S. J. Campbell	
144	A. P. Subten	Honeroney
85	ashur and &	Sing of new 5.5
267	J. Tonckher	the stague
268	- Feelsch	Macagar
27/	Lenes	Villach, Austria
147		1 / 4
36	Oleve R. Harmon	Warren Ohro -
49	"hom michall	England
142	Min Saley Gerry Beck	Rydo Jahan,
	Trisair au	3 5th 1104
01	In King M. M. Wind	Schianas
96 88	This Authorne Rain	S
25-5-	•	
231	Mes & 1 Drapus & marsh	
232 233	les is 'llings.	
234		New York
77	Shippan	Mourreal Re:
ien	Mit of Mis Sk & Sudge	Porlaw re

showing as it does the truly cosmopolitan character of our visitors, and inferentially the fact that the National Park has become known throughout the civilized world. On

a single page are to be found the names of visitors from such distant points as Johannesburg, Borneo, Hong Kong, Paris, Austria, Ohio, England and Japan. What more need be said?

As will be seen from a comparison of the figures for the year ending June 30, 1906, with those for the preceding year, the number of visitors at the Banff Springs Hotel has almost doubled, while the Sanitarium and other hotels at Banff show a very large increase. As a consequence the revenue of the park has increased by leaps and bounds. The subject is dealt with in detail in another part of my report but I should like to point out here the significant facts that while in July, 1903, our revenue from baths amounted to \$263.50, for the same month this year it has reached the eloquent sum of \$1,429.50. Similar evidence of increased revenue will be found in the comparison of the amounts received by way of rent. For the year ending June 30, 1903, the revenue from this source amounted to \$2,214; for the year ending June 30, 1906, the revenue from rents amounted to \$4,055. In other words, the revenue from rents has almost doubled in three years. A comparison of the figures appended hereto with those of former years will show that the revenue from other sources has also largely increased within the same period.

The establishment of the Alpine Club of Canada has already done a great deal to make the National Park attractive to lovers of mountain climbing. This club, which was organized at Winnipeg in March last year under excellent auspices, held its first summer camp at the summit of the Yoho Pass from July 9 to July 16. Over 100 members attended, and the proceedings were entirely successful. The situation was admirably chosen, only twelve miles from the village of Field, and at the same time in the heart of the mountains. The weather was perfect throughout, and Edouard and Gottfried Feuz, the Swiss guides in attendance, did their work most satisfactorily. Eight of the higher mountain peaks were successfully surmounted, Collie, the President, the Vice-President, Marpole, Michael's Peak, Wapta, Burgess and Field.

Forty-four graduating members, of whom fifteen were ladies, duly qualified for active membership by climbing peaks at least 10,000 feet above the sea level. For the official climb the peak known as the Vice-President was selected. This is by no means an easy climb, involving nearly all the various phases of mountaineering. The ascent occupies from seven to eight hours. Visits were also made to points of interest in the vicinity. One of the most pleasant of these was a two-day trip around the Yoho valley, going by the lower trail, stopping the night at the Laughing Falls and returning by the upper trail after a visit to the Yoho Glacier and Twin Falls. The parties each consisted of about twenty persons and all seemed to be delighted beyond expression.

As a consequence of the phenomenal success attending the first camp, the location of the next camp has already been decided upon, and the club has arranged to assemble next year at Paradise valley in the province of Alberta, when it is hoped that the membership will be largely increased.

I may add that the club, under the able presidency of Mr. A. O. Wheeler, F.R.G.S., will during the coming winter issue its first Year-book, which should be of immense assistance in making known to the world some of the wonders of our great Dominion. The Alpine Club has already become a national institution whose importance to the country has, I am pleased to say, been already recognized by your department.

Another matter to which I respectfully desire to draw your attention is the necessity for some more suitable and permanent provisions for the caged animals in the park. These animals, as you are already aware, are now maintained in temporary structures in the Buffalo park, about two miles from the village, and are subject to all the inconveniences naturally arising from the absence of proper sanitary and other necessary equipment. The village of Banff is now provided with an adequate waterworks and sewer system, and I would respectfully suggest that an appropriation be made without delay for the purpose of establishing in the grounds surrounding the museum building a properly equipped zoological garden, where permanent provision might be made for the keeping of our caged animals. Cages constructed of cement and iron in such a

way as to allow their being kept in proper sanitary condition would be not only much more healthful for the animals themselves but much more convenient for visitors to the museum. As will be seen from the details given hereunder we have now in captivity sheep, goats, antelopes, mountain lions, bears, wolves, foxes, &c., which suitably distributed in a convenient place should be most attractive. I am strongly of opinion that the outlay which I have suggested would be well justified by the results and that in a few years the zoological gardens should become one of the leading attractions for visitors to this portion of the National Park. I may add, in this connection, that the birds at present in captivity close to the museum buildings are visited during the season by thousands of persons, who are delighted even with the few specimens on exhibi-We have adjoining the museum about four acres of suitable grounds. can with very little expense be cleared of underbrush and made into a pleasant and cool resting place for summer visitors. The advantages of the sewerage and waterworks systems in connection with the establishment of the zoological garden are too obvious to require further comment and the central location of the grounds would make the garden most easy of access. I sincerely hope you may be able to see your way to carry out this suggestion which I think will, in a great measure, solve some of the difficulties under which we labour.

The roads and bridges throughout the park have during the past year been maintained in good repair. In all about eight miles of new road have been constructed since the date of my last report. The two bridges over the Kicking Horse river, mentioned in my report last year, were completed during the past winter and have been in use since the beginning of the present season. These bridges, as you are already aware, are on the main carriage road leading to the Yoho valley, and their usefulness cannot be really proved until the roadway is constructed to its termination.

The wooden bridge over the Kicking Horse at Leanchoil has been raised beyond the reach of high water, and new abutments and trussing have been put in. This bridge is on the road from Leanchoil, on the line of the Canadian Pacific Railway to Wapta Falls and the Ice River valley, where about nine miles of good driving road had been already built by the government of British Columbia before this district was included in the park limits. About nine miles of equally good road has been built by me under your directions from Field to Ottertail, and I now propose, with your approval, to connect Ottertail and Leanchoil by the construction of nine miles more of roadway so as to have a continuous driving road all the way from Field to the Ice River valley, a distance of about thirty miles and through a district which has been described by Mr. Edward Whymper, the famous mountain climber, as 'The beauty spot of the Rockies.'

A bridle trail three miles in length from Leanchoil to the Hoodoos has also been constructed since the date of my last report and five new bridges have been built on the bridge trail already existing between Leanchoil and Wapta Falls. These trails have been needed for a considerable time for the purpose of rendering accessible two points of very great interest. The Hoodoos here are undoubtedly the finest in the mountains and are well worth a visit. They consist of natural columns of cemented gravel standing straight up to a distance of in some cases a hundred feet. The Wapta Falls, which have to some extent been already described in my various reports, are truly magnificent and have been much appreciated during the present season by a large number of visitors. The falls are situated at the junction of the Kicking Horse and Beaver Mouth rivers, the former suffering a sheer drop of about 75 feet, and forming a magnificent waterfall owing to its width which is about 200 feet.

In the village of Field, the streets have been thoroughly cleared and graded and as a consequence the appearance of the town has been much improved. The Emerald lake and Ottertail roads have been carefully looked after, and the damage caused by snow and mud slides as well as by the ever-recurring washouts has been repaired. Work on the carriage road to the Yoho valley is well under way, about seven miles in all having been completed up to the present. This enables the tourist even now to cross the Yoho river near its mouth so as to get a glimpse of the wonders which will be made accessible as soon as the road has been constructed into the valley itself.

A handsome office building for my assistant has been erected at Field. The building, which is of the bungalow style which has become so popular in the park, harmonizes gracefully with its surroundings and its interior is finished in the handsome woods in which the district abounds.

It will be necessary at an early date to replace the present temporary bridge over the Kicking Horse river, at Field, by a structure of a more permanent character, as it is the only artery connecting the village with Emerald lake and the Yoho Valley district. The hotel register at the Mount Stephen House shows about 4,000 visitors at Field during the past year, about 90 per cent of whom would undoubtedly have visited Emerald lake as well. It is estimated that about 1,000 tourists also visited the Yoho valley, even under the present crude conditions. It is therefore evident that, in view of the large and constantly increasing traffic, a permanent bridge is an almost absolute necessity.

In that portion of the park lying east of the village of Banff a good deal of useful and necessary work has been and is now being done. As I stated in my report of last year a good driving road is under construction by the government of the province of Alberta, between the City of Calgary and the eastern limit of the National Park. The work of grading the western end of this road is now being proceeded with, and I have had a number of men employed in grading and otherwise improving the road between Canmore and the eastern limit already mentioned; as a result, although the road from Calgary to Banff is not as yet in at all as good a condition as I should wish, it has been extensively used by residents of Calgary and the surrounding district, who have by this means been enabled to bring their horses and carriages to Banff during their summer stay, and are therefore enabled to provide themselves and their families with a very necessary and inexpensive mode of locomotion. I may add that this road runs through the new but thriving town of Exshaw mentioned in another portion of this report.

In the village of Canmore one and a half miles of roadway connecting the coal mines with the railway station have been constructed and graded.

I have found it necessary to make arrangements for the replanking of the traffic bridge across the Bow river at the village of Banff. This bridge, which is the only connecting link between the north and south sides of the river, carries a very great deal of the traffic, and the present flooring, which was put in about ten years ago, has survived its usefulness.

The Mountain Park reserve, at Glacier, which was instituted by order in council, in November, 1903, is, as you are aware, outside the limits of the Rocky Mountains Park and Yoho extension. It comprises a territory of about 700 square miles and includes among other things the famous Deutschman caves and the great Glacier of the Rockies, and some of the highest and most magnificent peaks to be found in the Selkirk range, including Mounts Sir Donald (10,800), Fox (10,572), Bonney (10,205), Kilpatrick (10,636), Augustine (10,762), and Cyprian (10,712). Glacier House on the Canadian Pacific Railway line is the centre of this magnificent district and a favourite resting place for tourists. It is the nearest point for those wishing to visit the Glacier and the Deutschman caves, which only need to become known to make them attractive to large numbers of visitors.

During the spring season of the present year I constructed a permanent bridle trail from Ross Peak station to the Deutschman caves, a distance of four miles. This trail with its numerous 'switchbacks' or corkscrew trails affords a charming ride and the scenery from the different points along the road baffles all description. Already, since the construction of this trail, an average of about 50 persons per week have visited the caves. A short distance from the railway I built a log cabin 16 x 18 for the convenience of tourists alighting from the train at Ross Peak, where there are no other buildings of any kind; a similar cabin 18 x 40 has also been erected near the entrance of the caves, and small buildings for storing tools, &c. These cabins are of rustic design, being of split cedar on heavy log frames. In this connection I may say that in the construction of all necessary buildings, I have endeavoured as far as possi-

ble to carry out the rustic design, which is by far the most suitable as well as the prettiest for all buildings in the park. These cabins have been furnished with camp-stoves, cooking utensils and sleeping bunks, so that tourists as well as our caretakers may make themselves as comfortable as possible under the circumstances. The climatic conditions at the summit of Cougar mountain, where the caves are situated, are such as to render some place of refuge necessary for belated travellers, many of whom have already expressed their gratitude for the provision made for their comfort.

In the Deutschman caves, the entrance to that described on the map already sent you as No. 1 has been considerably enlarged.

In the auditorium, one of the vast chambers in the cave, I built a bridge across that portion of Cougar creek which runs through it, to avoid crossing tourists on the temporary raft, which was a constant source of danger. A pathway has been blasted out of the solid rock in this cave to a length of over 200 feet. This, however, is merely the commencement of the work necessary to be done in the caves, which, as I have already reported, are of enormous area and have as yet been explored only for the extent of about a mile.

The caretaker has done a good deal of exploration work himself during the past season, when not occupied in conducting tourists. Altogether it may safely be predicted that the Deutschman caves will in the very near future attract thousands of visitors, who will be amply repaid for the inconvenience accompanying the trip by the wonders of nature which they will be enabled to see.

At Laggan, work has been continued on the carriage road from Lake Louise to the valley of the Ten Peaks. This road is now in use for a distance of about eight miles. I hope to have the remaining four miles completed before winter, so as to enable tourists to visit the famous Moraine lake in the valley. This is one of the most beautiful of the many beautiful spots to be found in the park, and I am informed on good authority that as soon as the road is completed, a handsome chalet, similar to those already built at Lake Louise and Emerald lake, will be erected by the Canadian Pacific Railway Company. When that has been done the latter places must look to their laurels, as competent authorities claim that the beauties of Moraine lake are more accentuated than those to be met at any other point.

The road from Laggan station to the chalet at Lake Louise is now being gravelled and finished. I have experienced no trouble whatever from washouts since the construction of this road, which I am informed may be utilized for an electric tramway in the near future, subject of course to your approval. No formal application for permission has, however, been made as yet, although the matter has been mentioned to me unofficially.

### THE VILLAGE OF BANFF.

The beautiful village of Banff, which has been facetiously described as the 'Capital' of the National Park, continues to improve in every desirable direction. The popularity of Banff as a summer home is best evinced by the fact that there are at present no less than 525 lots under lease, producing an annual revenue of over \$4,000. Of these nearly one-half have been taken up within the past year and I am daily in receipt of applications for leases of the lots still remaining. I am pleased to report that many of the lessees have erected handsome buildings altogether in harmony with the surroundings, and Banff has to-day many rustic homes which for beauty and comfort it would be difficult to rival. In the business portion of the village some buildings have recently been erected which form in themselves a pleasant addition to the many existing attractions. Amongst these is the building now erected for the Imperial Bank of Canada, which in tastefulness of design and prettiness of appearance stands out prominently. Plans are also being prepared for the erection of barracks for the local detachment of the Royal Northwest Mounted Police, and it is to be hoped that the general idea of rustic design, which I strongly favour, will be carried out in the construction of this building also.

The contract let last year to Messrs. Breckenridge & Lund for the construction of a waterworks and sewerage system is now almost completed, and we are eagerly looking forward to the day which is already close at hand when the residents of the village will be provided with modern sanitary appliances as well as with an abundant supply of excellent water, which will be found invaluable for the purpose among others of beautifying the streets and lawns throughout the village. Our electric light system has proved most satisfactory, more especially in regard to street lighting. We have now thirteen incandescant are lights, each of 1,200 candle power, placed where most necessary throughout the village streets, and several others will be needed in the future owing to the opening up of new streets and the erection of buildings in the outlying districts. The money expended in this direction is being well spent. The bright light enhances the beauty of the village to incoming travellers, many of whom expect to find themselves in a primitive and unprogressive village, rather than in a beautiful, well-lighted and well-appointed little town, having every characteristic of genuine prosperity and comfort.

Owing to the recent large increase in the number of lots applied for I have found it necessary to clear and grade over two miles of new streets, among these being those shown on the townsite plan as Otter, Cariboo, Wolf and Muskrat streets. The clearing and grading of these streets is a somewhat tedious operation, meaning nothing less than cutting through the virgin forest, felling growing timber, clearing, grubbing out roots, and ploughing the soil so as to bring the streets to a proper grade. About four miles of the main road from the village to Lake Minnewanka has been freshly gravelled and is now in excellent condition. This road requires no little attention as it carries the heavy traffic to Bankhead as well as to Lake Minnewanka. A good deal of work has been done on the road, on the south side of the Spray river, since the date of my last report. Owing to the heavy character of the work, I have been able to complete only one mile in addition to five miles already built. Some unforeseen but necessary work which had to be done in other places prevented me from leaving my workmen on this work for any very great length of time, but I hope by next year to have this road fully completed as far at least as the Canyon or Spray Falls, a distance of about seven miles from the village.

All the roads in the vicinity of the village are being kept up to their usual standard, repairs being made without delay whenever necessary.

### MUSEUM BUILDINGS AND GROUNDS.

As will be seen from the report of the curator of the museum (which is appended hereto), over 9,000 visitors registered at the museum building during the past year, besides many others who visited the building but failed to register their names.

Additions are being made from time to time as opportunity offers, to the various collections of specimens on exhibition, and the greater number of visitors seem deeply interested in the different exhibits. The reading and writing rooms are also well patronised, the latter being a great convenience to passing tourists.

I have already pointed out the desirability of clearing the four acres adjoining the museum building, to be used as a zoological garden.

### HOTEL ACCOMMODATION.

The ever-increasing number of visitors to the National Park is still a puzzle to the hotel managers at the different points of interest. In Banff itself, Banff Springs Hotel, although now of enormous proportions, is entirely inadequate to the number of its patrons, and the Canadian Pacific Railway Company finds itself again compelled for the third time to make another large addition to its already magnificent building. The Sanitarium has recently been more than trebled in capacity but has again to find more room for its patrons. In the village all the hotels, the King Edward, the Alberta, and

the Park have been more than doubled in capacity, yet it is not an infrequent thing to find numbers of visitors wandering around in search of accommodation, while thousands have been warned against stopping over owing to the lack of room everywhere.

At Laggan, the Canadian Pacific Railway Company has found it necessary to more than double the capacity of the Chalet, which has now been transformed into a palatial hotel, gloriously situated in the centre of one of the most attractive spots to be found in the park. No less than 5,454 people were accommodated at this point during the past year, nearly all of whom were obliged to reserve rooms some time in advance. From present indications the number of visitors to Lake Louise for the present year will be at least double the number given above.

Nearly 4,000 visitors chose the Mount Stephen House at Field as their headquarters, for the purpose of spending a few days at Emerald lake. The accommodation for visitors at both places is excellent but entirely inadequate.

At Glacier House, which is the centre of the Glacier Park, nearly 5,000 were accommodated, which is a tribute to the increasing popularity of this recent addition to the attractions of the mountains. Many people were induced to visit this district owing to the propinquity of the Great Glacier and the Deutschman caves which have already been described.

### CAVE AND BASIN AND UPPER HOT SPRINGS.

At the Cave and Basin the increase in the number of bathers has exceeded all reasonable expectations. As already reported, the additional dressing rooms were added in 1904. In 1905 eight more rooms were added and during the past year I added six more rooms, making in all 32 rooms now in use. This accommodation during the past season has proved altogether inadequate, intending bathers being compelled to wait sometimes for hours to secure a dressing room for themselves. Owing to the limited area of the pools the erection of additional dressing rooms would be of doubtful advantage. The question of increasing bathing facilities is one that will have to be carefully gone into, as it will probably involve considerable expense. At the present time the most obvious solution of the difficulty is the erection of another large bathhouse at the middle spring, which should to some extent relieve the congestion at present existing at the Cave and Basin. The register at this place for the year ending June 30, 1906, shows 9,566 visitors. For the month of July last past, about 4,000 bathers used the Basin alone. These figures will show the absolute need of increased bathing facilities. I have found it necessary to employ additional temporary help for the laundress in charge of bathing necessaries, during the months of July and August. The revenue from this source has more than trebled within the last three years. Every bather is supplied with a bathing costume and fresh towels at a charge of 25 cents (bath included). This, as you will have seen, is one of the most popular of our attractions.

The popularity of the baths at the Upper Hot Springs, although not quite two years in operation, has caused similar difficulties to those experienced at the Cave and Basin. Indeed, here the difficulty seems to be almost insurmountable. The pool, which is patronised almost entirely by invalids who come from all parts of the world, has become altogether too small for the number of those using it. I originally had eight dressing rooms built, which I thought would have been ample for some time to come. I very soon found it necessary to add eight more, and this year I shall have to add eight more, making in all 24 rooms. There is no advantage in adding further accommodation, for the reason that the pool is only 24 x 48 feet in all, and our private baths are only ten in number. The marvellous cures effected here have become known in distant lands, and the result is that invalids from every conceivable place come here for treatment, which in almost every case results in a cure. The problem now before your department is to find means to meet this ever-growing demand. In my opinion it will be necessary with the least possible delay to erect a modern hydropathic establishment

with a resident physician in charge. The revenue to be derived from such an establishment will undoubtedly in a very short time repay all the expense of construction and maintenance besides leaving a handsome surplus. Moreover, the enormous benefit which the government can in this way confer on suffering humanity would entitle the administration to the sincere gratitude of the people of Canada and other countries as well. It is impossible for one who is not on the spot to realize the curative properties of the waters at the Upper Hot Springs. In rheumatism and kindred ailments, some marvellous cures have already been effected, with the result, as stated above, that it has become almost impossible to cope with the increased patronage, or to give relief to many who urgently need it. I trust that you will give this matter your earliest attention.

I reproduce for ready reference the analysis made by A. McGill, government analyst, of the water from this spring:

	Millegrammes per litre.	Grains per gallon.
Chlorine (in chloride)	. 6.0	0.42
Sulphuric acid (SO <sub>3</sub> )	. 550.0	38 • 50
Silica (SiO <sub>2</sub> )		2.31
Lime (CaO)		24.85
Magnesia (MgO)		4.87
Alkalies (expressed in terms of Na <sub>2</sub> O)	. 8.9	0.62
Lithium	lecided trace.	Trace.
Sulphuretted hydrogen (H,S)	$4 \cdot 3$	0.30
Temperature of water	15 · 5° F.	
Albuminoid nitrogen	None.	None.

### THE AVIARY.

The golden eagle, a splendid specimen, is being kept at the Buffalo paddock, owing to lack of proper accommodation in the Aviary. The great horned owl and a large fish hawk, also fine specimens, are also confined at the paddock for similar reasons.

The birds in the Aviary show a fairly satisfactory increase, without any loss whatever, but I do not as yet feel justified in setting any of them at liberty. Our different varieties of pheasants are seen daily by large numbers of visitors. Since my last report I have added a large wire cage  $20 \times 50$ , containing specimens of Canadian wild geese, wild ducks and mud hens. The cage is built over a natural pond in the museum grounds and the birds up to the present seem to be in a healthy condition. I hope when opportunity offers to secure further specimens of native water fowl to add to our present little collection.

## THE FAUNA OF THE PARK.

The animal paddock, in which are kept our herd of buffalo and other big game as well as the caged animals, has during the past year fully maintained its hold on popular favour, the number of visitors passing through the gates being 12,090 as against 8,000 for the year preceding. In addition a large number of pedestrians visit the paddock and inspect the animals from the outside fence. Of these no record is kept.

During the past year the buffalo have increased by ten head, making our herd in all 61 head. All the animals are healthy and in a thriving condition. The elk, moose, mule, deer, Persian sheep, goats, and indeed, all the animals in our collection have shown satisfactory increase and are doing well. Since the date of my last report a fine specimen of the male antelope has been added. As already pointed out, I hope to secure your approval to the transfer of the caged animals to the museum grounds, where they can receive better care and attention and be placed in the less irksome confinement.

The animals now in captivity in the park under my care are as i	follows :—
Buffalo	61
比比	8
Moose	12
Mule deer	16
Persian sheep	4
Angora goats	5
Antelope	1
Mountain lion	2
Bear	
Wolves	4
Coyotes	
Foxes	5
Badgers	2

### THE FLORA OF THE PARK.

The past year has been remarkable for the large numbers of botanical students who have visited the park, attracted no doubt by the glowing reports of earlier visitors. The botanical specimens on exhibition at Lake Louise, Field and Glacier House have also attracted visitors, who find here an unsurpassable field for botanical research. Even to the non-botanical mind, the wild flowers of the National Park are a revelation.

'Here are pink garlics, harebells swaying in wild waywardness, veronicas looking up with their wide-open blue eyes, heathers red, rose and white, amethyst asters, and sweet scented orchid, all mingling their perfume with the shining green leaves and waxen petal of the rhododendrons and great snowy chalices of the globe flowers.'

It is difficult to describe the glorious beauty of an alpine meadow. Here indeed man meets nature face to face and finds that it is good.

The recent publication of Mrs. Henshaw's excellent work on the mountain wild flowers of Canada will do much to provide lovers of nature who visit the park with a popular and at the same time scientifically accurate guide to the striking wild flowers which they are most likely to meet in the course of their rambles, besides affording to the ordinary tourist a means of identifying some at least of the many wild flowers whose beauties obtrude themselves on his attention at every point.

## THE BANKHEAD MINLS.

At the Pacific Coal Company's mines, at Bankhead, which have been in steady operation during the past year, a large amount of development work has been done and several new seams of marketable coal have been opened up. Up to date nine seams have been encountered, and of these, eight vary in thickness from 4 feet 6 inches to 10 feet. Seven seams have been extensively developed, but at the present time, the output from three of these is sufficient to supply the demands for the product of the mines, which is now on sale from Winnipeg to Vancouver, and from Edmonton on the north, to Spokane, Washington, and Great Falls, Montana, on the south.

The breaker, which was in course of construction during the summer of 1905, was completed and in operation at the beginning of November. In this building the coal as it comes from the mine is cleaned and sized, and from it passes to the various bins underneath. From these bins it is drawn off as required, and loaded into railroad cars by means of a carrying belt and Victor Box Car Loader. The breaker is designed for an output of 2,000 tons in a day of ten hours. It has at present a capacity of only half that amount, but it is the intention ultimately to instal the remainder of the machinery, when the plant will be equal to any demand which may be made upon it.

Compressed air locomotives, of which there are now five in operation, are used for underground haulage, for handling the coal cars in the yard and the cars for dumping

the dirt and refuse. These locomotives are equipped with storage tanks, designed to carry air at a pressure of 800 lbs. per square inch, which is reduced, by means of reducing valves, to a working pressure of 140 lbs. per square inch.

Surface improvements during the year include the building of 25 five-room cottages for employees, and the erection of a school-house, which during the past session

has had an average attendance of 44 scholars.

It is the intention of the coal company to manufacture briquettes from the coal dust, which is unavoidably produced in the preparation of the various sizes of cleaned coal; and at the present time, there is under construction a briquetting plant, which will have an ultimate capacity of 400 tons per day of 24 hours.

For the present, and until a market has been worked up for this class of fuel, only a single unit plant will be installed, but all the buildings are designed for the purpose of a two-unit plant. These buildings comprise melting-house, where the binding material is melted, before being mixed with the coal dust, a briquetting house, in which are mixers, to thoroughly mix the coal dust and binder, and a press, which moulds and compresses these materials. From the briquetting house, the hot briquettes pass to the cooling-house, where on a travelling cooling table they are cooled and thus hardened before passing to the bins, from which they are loaded into railroad cars.

These briquettes have been thoroughly tested, in locomotives, and steam boilers, furnaces, stoves, ranges and grates, and have been found to be an excellent fuel for all purposes, and when the public has had an opportunity of judging of the quality of this fuel, there is little doubt but that it will come into general household use. This will mean the steady employment of a considerable number of additional hands at Bank-

head, and increased prosperity for that growing town.

### THE EXSHAW CEMENT WORKS.

The industrial assets of the park have been increased since last year by the establishment of a Portland cement mill of large capacity. The enterprise is located at Exshaw, in the province of Alberta. In order to find material for the manufacture of Portland cement, with which to supply a portion of the great demand of the west, a prospecting party under direction of the managers of the Cement Company at Hull, Quebec, was put in the field at Winnipeg in 1903. This party worked west as far as the foot hills and into the mountains before the necessary materials were discovered in sufficient abundance and in close enough proximity to warrant the erection of a large mill. In August, 1904, at a point of the Canadian Pacific Railway, north of Lake des Arcs or Sand lake, about three miles east of the Gap, a large deposit of limestone was found, bearing a high percentage of carbonated lime. Shale containing the necessary proportions of silica and alumina and some iron were discovered close by, and as coal is plentiful in the vicinity, steps were taken to acquire the various parcels of land in which these materials were located. The limestone and cement shale were found to be within the park limits and leases were applied for and granted in 1905. Another tract containing shale situated at Radnor, outside the park limits, as well as a large freehold area of coal lands at Anthracite were purchased outright. In August, 1905, a company was incorporated, called the Western Canada Cement and Coal Company, Limited. The above mentioned properties were taken over by this company and operations were commenced at once.

The total area of the company's property aggregates 1,271 acres all within economical distance of the mill, which is being constructed at the location of the heaviest constituent, the limestone rock.

Beautifully situated on a gentle slope overlooking Lake des Arcs, with a magnificent view in every direction, the new town of Exshaw, the centre of a great manufacturing industry, has arisen out of the valley of the Bow river.

The plant itself is being constructed in a most substantial manner. The foundations for the machinery and mills are of concrete, and the buildings of reinforced con-

crete and cement blocks with heavy concrete arches and piers. The tunnels are of solid concrete two and three hundred feet long. Structural steel trusses and girders, all covered by metal roofing, make the buildings absolutely fireproof. The mill buildings cover an area of about seven acres and the roof area alone is over three acres.

The machinery consists of six 80-foot rotary kilns, seven rotary dryers, 12 Krupp ball mills, 18 tube mills with crushers, shafting, conveyors and electrical apparatus of the best and most modern pattern. The power-house, which consists of three turbines developing 1,000 K.W. each, operated by seven Babcock and Wilcox boilers, will be one of the largest power-houses in Canada. The mill is planned to have a minimum capacity of 1,500 to 1,800 barrels per day with room for extension. The cost when completed will be \$1,000,000. About half of that amount has already been expended.

The town is well laid out and contains already twenty or more neat buildings, consisting of dwelling houses, hotel and a general store. Both the town and the mill are supplied with excellent water from a mountain stream, on which is being built by means of a concrete dam, a reservoir of 7,000,000 gallons capacity. Several thousand feet of water mains have been laid already and the mill is provided against fire with twelve hydrants each throwing water at a pressure of 90 lbs. Hydrants are also placed at convenient places throughout the town. At the time of writing, the employees at Exshaw with their wives and families number about 500 people, living, some in cottages and some in tents, until suitable dwelling houses can be provided by the company at a rental equal to a moderate rate of interest on the actual cost. Many of these cottages are now under construction. In addition to the water supply, a telephone system has been installed, and water and sewerage connection made with each house. The houses and mills as well as the streets will be lighted electrically as soon as the power plant has been put in running order.

The erection of these large cement mills within the park will prove an important step in the building up of Western Canada. With an output of half a million barrels of cement a year they will not only circulate a large sum of money in this neighbourhood, but they will provide a most necessary material for the construction of railways and large industrial buildings throughout this country and supply cheaper and better building material for the settler than he is now able to procure.

### PRESERVATION OF GAME.

I find no little difficulty in enforcing the laws regarding the preservation of game, within the limits of the park. Game is generally killed only in the more remote districts, and offenders are careful to see that their actions are unobserved, so that there is very great difficulty in securing evidence of unlawful killing other than the possession of game during close season. Again, as I have already pointed out, the boundaries of the park are in some places not by any means clearly defined, and it is therefore obviously difficult in many cases to secure convictions for shooting game within the park limits. In this connection I would strongly recommend the appointment of two permanent guardians who would act as fish guardians and fire wardens as well. One of these should devote his attention to that portion of the park that is within the province of Alberta, while the other should look after the portion located within the province of British Columbia. I have found the engagement of temporary game guardians during a few months in each year to be most unsatisfactory in result. These men. knowing that their position is merely a temporary one, are inclined to wink at breaches f the law rather than incur the enmity of their neighbours. If, however, the appointment were made a permanent one, I have no doubt whatever that game guardians would properly appreciate the responsibility of their position, and would as far as lies in their power see that the law was carried out. The proper protection of game is just as important in the winter season as during the summer months. Trappers have been known to come in on the snow, and shoot and trap large quantities of game, as well as drive herds of big game well out of the park limits to a remote place where they may destroy

them with comparative safety. There is at present a good number of big game in the park, consisting chiefly of moose, elk, deer, bear, sheep, lynx and goat, as well as marten and beaver, besides an unlimited number of game birds. As the park is the natural breeding ground of many varieties of animals it is not at all uncommon to run across a herd during one's wanderings in the mountains. The present is by far the best time to give these animals proper protection so that the different herds may increase naturally, and that the large expense incident to the restocking of the game preserves in the future may be avoided.

Among the offenders against the game laws, the Indians are by far the worst. They invade the National Park at all seasons of the year, and slaughter any animal they run across without regard to age or sex. The greater part of the meat of the animals so killed is dried and packed away for future use. The Indian has been led to believe that he is entitled to slaughter game at any time of the year and wherever he may find it. I would recommend that your department should without delay instruct all Indian agents in the west to notify the Indians in their charge that they are not permitted to shoot any game of any kind at any time in the Rocky Mountains Park, and that any offender against the law in this respect would, if convicted, be subjected to the maximum penalty allowed by law. The adoption of this course would, I think, effectually put a stop to the indiscriminate killing of game within the park limits and more especially around the southern boundary of the Yoho valley extension, which in my opinion should be surveyed without delay so as to leave no possible excuse as to ignorance of the delimitations of the park. I would also recommend that no further mining or timber licenses be granted within the park, for the reason that I have found by experience that the establishment of large camps of men invariably leads to trapping and snaring and in fact to almost every possible breach of the laws for the protection of game.

### FISH AND FISH HATCHERY.

The excellent fishing to be had in the park has during the past year attracted large numbers of followers of 'the gentle art.' I must, however, draw your attention to the fact that the big catches which were common in former years are becoming almost unknown, and the irresistible conclusion, more especially with regard to the more accessible lakes and streams, is that these are being rapidly fished out, and that it will be necessary in the near future either to restock many of them or to curtail or even abolish the open season for some time.

As you may be aware, the open season for trout fishing instead of being shortened as in my judgment it should have been has been extended this year in Alberta so as to allow trout to be taken two weeks earlier and two weeks later than heretofore. This, in my opinion, is a very grave error, as far as the Rocky Mountains Park is concerned. Throughout the entire open season hundreds of visitors to the park are to be found on the banks of the more accessible fishing grounds busily engaged in taking fish, without any limit whatever as to the number. I would urgently recommend that the open season in the Rocky Mountains Park should be very much curtailed rather than extended. No person should be allowed to fish without having first obtained a license so to do, and a license fee might reasonably be demanded from non-residents of Canada. A limit should also be placed upon the number of fish to be taken by any one person in any one day. These are among the enactments which, as the result of my experience, I think should be made for the proper regulation of trout fishing in the park. It is my intention at an early date to submit for your consideration a set of proposed regulations which, if you approve, should be added to those now in force, and which would render the National Park independent of the general fishing regulations of the country.

Since the date of my last report the Canadian Pacific Railway Company has brought in no less than three carloads of trout from Lake Nipigon and from the Wisconsin hatchery. These have been placed in the rivers near Banff, at Lake Louise, near Laggan, and at Emerald lake in the Yoho valley.

In order to maintain an adequate supply of trout and other suitable fish for our lakes and streams, I would again urge the establishment of a properly equipped fish hatchery at some one of the many suitable locations to be found within the park. We should then be in a position to supply not only our own requirements but those of the provinces of Alberta and Saskatchewan as well. As already pointed out, there are in the park many lakes and streams apparently suitable for the support of fish which are as yet entirely devoid of either lake or brook trout. The establishment of a fish hatchery would in a short time remedy this state of things, besides making the park still more attractive for fishermen as well as for other visitors desiring to study the various phases of fish life.

#### PREVENTION OF FOREST FIRES.

Owing to the dryness of the past season serious forest fires broke out at several points in the park, the suppression of which involved a great deal of trouble and expense. A large area of green forest was unfortunately destroyed, although no other damage was done. All the men regularly employed in the park as well as all the outside help available were engaged day and night for a considerable time fighting these fires and preventing them from spreading. Although large tracts of timber were consumed, we succeeded to a very large extent in retarding the progress of the flames.

Our fire guardians, who patrol the railway regularly twice daily, have on many occasions been successful in preventing what would otherwise be disastrous fires caused by sparks from passing trains. At present, even with the greatest vigilance, it is impossible to prevent fires from spreading, and the cost of detecting and suppressing these fires has during the past year been one of my heaviest items of expenditure, for which no provision has been made. I would respectfully suggest that a sum of money be appropriated during the present year to meet contingencies of this kind, as it is hard to say what we may be called on to expend at any time should we meet with a continuance of dry seasons.

#### REVENUE.

The revenue of the Rocky Mountains Park is now more than double the amount ordinarily required for current expenditure and maintenance.

I have again to acknowledge the liberality of the grants made by parliament for the maintenance and development of the park. I have endeavoured to the utmost of my ability to expend the moneys entrusted to me as economically and judiciously as possible and to ensure the best and most lasting results. The constantly increasing popularity of the park and the prospect of the large additional revenue which is to be derived from different sources would undoubtedly seem to justify the still larger expenditure necessary to keep pace with growing requirements.

I would again draw your attention to the meteorological reports which will be found appended hereto. A perusal of records of temperature to be found therein will indisputably show that the climate of the National Park is exceptionally mild and equable, and that the district is quite as well adapted for a winter resort as it undoubtedly is for a holiday resort in summer. All the hotels in the village are kept open throughout the winter and the clear, bracing mountain air has proved most beneficial to those who have taken up their winter quarters in the National Park. It is gratifying to note that the number of winter visitors is also rapidly increasing.

In conclusion, I desire once again to acknowledge the faithful work done by the employees who have worked under my directions during the past year, as well as the loyal and cordial support given me by the officers and men of the Royal Northwest Mounted Police in my efforts to maintain law and order within my jurisdiction.

I have the honour to be, sir, your obedient servant,

HOWARD DOUGLAS,

Superintendent Rocky Mountains Park of Canada.

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### VISITORS.

### CANADIAN PACIFIC RAILWAY COMPANY'S HOTEL.

Canada	2,345
United States	6,703
England	77
Ireland	21
Japan	27
India	23
Hungary	2
South Africa	6
New Zealand	37
	9
New South Wales	22
Germany	
Australia	48
China	37
Italy	2
Switzerland	3
Gibraltar	2
Egypt	2
France	7
Portugal	4
Transvaal	4
Jamaica	2
Fiji	4
Belgium	$\hat{2}$
Austria	2
intovita	L
Total	0.004
Total	9,684
-	
SANITARIUM HOTEL.	
Canada	4,496
United States	2,075
England	96
Scotland	21
Australia	59
New Zealand	52
Ireland	32 11
Germany	
	10
China	9

Japan.... India....

Portugal...
Switzerland...

Korea.....

#### KING EDWARD HOTEL. Canada.... 2.904 United States.... 880 23 England..... 20 Ireland.... .... .... .... 3 4 Italy.... 4 New Zealand.... 4 2 2 West Indies..... 2 Total.... .... .... .... .... 3.848 ALBERTA HOTEL. Canada.... .... .... .... 2.267 United States.... 907 England..... 19 Scotland.... 10 Ireland.. .... 10 New Zealand... 17 France.... 1 Australia..... 5 South Africa...... 2 India.... 2 Japan..... 2 China...... 1 1 Sumatra.... .... .... .... .... .... 1 1 Egypt.... .... .... .... .... 3 New South Wales.... 1 Total..... 3,250 PARK HOTEL. 1.200 GRAND VIEW HOTEL. 1,350 293 United States.... .... .... .... England.... 25 Germany.... .... .... .... .... 4 Australia...... 11 New Zealand.... .... .... 10 Scotland.... .... .... .... .... .... 5 2 Holland.. .... .... .... .... .... 1 5 4 Mexico.... .... .... .... .... .... 1 3

Total.... .... ... ... .... ....

1,714

#### HOT SPRINGS HYDROPATHIC.

Canada United States Scotland England	414 171 2 6
Total	593
SUMMARY,	
Canadian Pacific Railway Company's Hotel	9,684
Sanitarium Hotel	6,847
King Edward Hotel	3,848
Alberta Hotel	3,250
Park Hotel	1,200
Grand View Hotel	1,714
Hot Springs Hydropathic	593
Excursions not registered	1,500
Summer visitors residing in cottagés and camps	1,500
Total	30,136
LAKE LOUISE CHALET.	
LAKE LOUISE CHALET.	
Canada	991
United States	4,171
England	143
Scotland	13
Ireland	5
Australia	31
Germany New Zealand	25 13
New South Wales	12
China	11
Hawaii Islands	6
West Indies	5
South Africa	4
France	4
Italy	4
Japan	4
India	2
East Indies	2
PortugalWales	2
Tasmania	1 1
Switzerland	1
South America	1
Philippines	1
Fiji	1
m . 1	
Total	5,454

MOUNT STEPHEN HOUSE, FIELD, B.C.	
Canada	1,336
United States	2,353
British Isles	224
Australia	53
Total	3,966
GE LOTTED TRANSPORT OF LOTTED IN THE	
GLACIER HOUSE, GLACIER, B.C. Canada	1 050
United States	1,850
British Isles	2,850 210
England	15
_	
Total	4,925
-	
MUSEUM.	
Canada	5,027
United States	3,461
England	355
Scotland	128
Australia	52
New Zealand	39
China	33
Ireland	24
Germany	16
Wales	15
Italy	14
France. Japan. Japan. Japan. Japan. Japan. Japan. Japan. Japan. Japan Ja	14 11
New South Wales	10
India	8
Hawaiian Islands.	7
Queensland	5
British North Borneo	5
Russia	4
Channel Islands	4
Denmark	3
Sweden	3
Austria	3
South Africa	3
Natal	2
Bohemia	2
Norway	1
Siam	1
West Indies	1
Greece	1,
Brazil	1
Belgium	1
British Honduras	1
Switzerland	1
Palestine	1
Hungary	
Total	8,961
	-,

#### CAVE AND BASIN.

CAVE AND BASIN.	
Canada	4,439
United States	4,519
England	186
Scotland	161
Ireland	75
Australia	53
New Zealand	36
Queensland	13
New South Wales	9
South Africa	5
India	10
Japan	16
China	15
Fiji Islands	2
Germany	7
Sweden	5
France	4
Russia	2
Holland	4
Switzerland	5
Switzenand	
Total	9,566
UPPER HOT SPRINGS.	
Canada	8,314
United States	1,465
England	74
Scotland	41
New Zealand	7
Australia	20
India	4
Sweden	11
Total	9,936

#### MUSEUM.

Well on to 9,000 visitors are shown on the museum report, this would, no doubt, be well over 9,000 if all had registered who visited the museum.

It is hoped that many specimens may be added in every branch of the work. As curator I have used a good deal of my unoccupied time in collecting the different orders of flies.

I am, sir, yours truly,

N. B. SANSON,

Curator.

H. Douglas, Esq., Supt. Rocky Mts. Park.

### METEOROLOGICAL TABLES.

### ROCKY MOUNTAINS PARK.

Maximum and Minimum Temperatures and the General State of the Weather between July 1, 1905, and June 30, 1906.

	THE	RMOMETE	READI	NGS.			
Date.	Maxi	mum.	Minimum.		Weather.		
	6 a.m.	6 p.m.	6 a.m.	6 p.m.	_		
1905.	۰	,	0	٥			
July 1	63·7 60·3	68·1 69·0	39·5 44·8	40·4 45·1	Fair, rain.  Cloudy, thunder.		
11 2	59.4	70.6	40.8	42 1	Fair, rain.		
., 4	62 9	65.9	40.8	42.0	Cloudy.		
. 5	$6\overline{1}$ $5$	67.9	46.0	46.8	Fair.		
. 6	65.9	72.9	37.5	38.0	" thunder.		
7	66 6	62.4	42 7	44.3	rain.		
ч, 8	61.6	79.3	36.8	37.3	n perfect day.		
ıı <u>9</u>	74.9	84.3	44.3	45 5	l II		
, 10	79.2	77.8	47.7	47.4	Cloudy rain		
11 11	68·1 57·4	59;4 69·3	47 · 2 34 · 5	46·3 35·2	Cloudy, rain. Fair.		
ນ 12 ນ 13	64 6	74.0	37.9	37.8	Cloudy, rain, triple rainbow, vivid lightning.		
и 13 и 14	56.0	59·3	41.8	46.9	Fair.		
11 15	51.5	70.2	41.3	42.0	" lightning.		
16	66.6	64.0	47.2	48.6	n rain.		
17	59.8	61.9	45.1	46.6	Cloudy, rainbow.		
·· 18	56.7	72.4	43.0	43.8	Fair.		
, 19	67:9	79.4	38.1	38.1	"		
11 20	76.0	84.9	42 8 45 2	42·1 46·0	vivid lightning, thunder		
$egin{array}{cccccccccccccccccccccccccccccccccccc$	79·8 76·9	87·4 87·2	47.1	47.0	vivid lightning, thunder		
11 22	78 8	88 1	48.3	48.0	11		
24	72 6	75.2	49.5	49.2	rain.		
25	59 <b>2</b>	69.7	47.2	48.3	Cloudy, rain, thunder and lightning.		
26	59.6	63.0	51.7	51.4	) n 'n		
27	55.8	65 9	49.2	49 5	T. "		
28	63.9	75.0	45.2	42.0	Fair.		
11 29	62:6	68 6	45.2	47.9	11		
11 30	65·8	77·0 72·5	46.0	48.4	" rain.		
31	65.5	74.9	49 8	49.8	Cloudy.		
$\begin{array}{cccc} \mathbf{Aug.} & 1 \\ & & 2 \end{array}$	64.4	78.9	45.6	45.2	Fair.		
3	71.8	69.0	46.7	47.1	thunder and lightning, rainbow, rain.		
4	68.7	77.0	42.9	42.9	11		
ıı 5	70.9	80.5	39.7	45.1	li ii		
·· 6	74 4	83.6	43.2	43.2	"		
· · · · · · · · · · · · · · · · · · ·	77:3	81.5	50.2	49.8	"		
8	76.6	83.5	43 7 51·3	46·2 52·0	1		
" 9	78·4 70·9	78·6 70·2	42.8	42.8	smoke from bush fires.		
" 10	69.6	79.0	41.0	46.5	11 11 11 11 11		
12	68.8	79.5	47.3	48.8	thunder and lightning.		
13	70.6	78.2	43 1	44.9	17		
14	67.2	67.2	39.2	39.9			
15	58 -8	54.4	39.2	39 2	Cloudy, rain.		
11 16	53.1	57 4	45.7	45.8	"		
ıı <u>17</u>	53.7	58.4	43.8	46.2	"		
11 18	54.2	61:3	44.0	48.0	Fair.		
19	57.4	65.9	53·0	52.7	Tair.		
" 20	56·9 63·8	68·0 71·3	41.7	42.1	"		
21 22	62.8	71.5	30.7	31.0			
23	66.4	71.1	30 4	30.0	" " " " " " " " " " " " " " " " " " "		
24	67.9		31 3	31.3	11		

### MAXIMUM and Minimum Temperatures, &c.—Continued.

	Тня	ERMOMETE	er Read	ings.	
Date.	Maximum.		Minin	num.	Weather.
	6 a.m.	6 p.m.	6 a.m.	6 p.m.	
1905.	0	, ,			
Aug. 25	70.0	80:3	34.1	31.2	Fair.     smoke from bush fires.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$73.8 \\ 62.3$	67·7	48·4 33·9	$\begin{array}{c} 51.3 \\ 32.9 \end{array}$	smoke from bush fires.
ı 28	68.8	61.7	43.3	44 0	rain.
29	58:7	67:5	33.0	32.8	(C). 1. ·
30	63·6 44·2	67·0 44·1	35·3 38·7	37·9 38·7	Cloudy, rain.
sept. 1	43.0	60.8	36.2	37.0	" " " " " " " " " " " " " " " " " " "
2	58.4	70.3	33.8	34.0	Fair.
3	67:7	74:3	35.3	35.2	perfect day.
" 4 " 5	69·3 64·5	67.5	33.8	33.2	" lightning.   " rain, fine sunset.
п <b>б</b>	64.7	59.4	37.8	37.0	ii iam, me auneou.
7	52.7	46 6	40.9	40.2	rain.
и <b>8</b>	44.1	60.9	41.9	42.3	Cloudy "
11 9 11 10	53·5 56·0	61 4	43 9 44·1	43.7 43.8	Fair.
" 11	54.2	55.2	43.4	42 8	10 '•
12	47 · 7	67.9	39.7	39.5	geese flying South.
ıı 13	64 6	62.6	33.8	33.8	Cloudy.
" 14 " 15	58·7 48·7	58.9	43 2 25 8	42·7 25·3	Fair.
16	50.1	54.9	39.5	39.1	Cloudy.
17	47 9	51.6	39.7	39.3	" rain.
ıı 18	46.7	53.1	40.4	40.2	11
19 11 20	53·2 57·0	62·5 51·7	43 7	53·1 45·2	11 11
21	50.0	56.4	41.3	41.5	19 11
22	50.5	67.6	47.1	47.6	Fair, rain.
11 23 11 24	58·7 53·9	55 4 69 8	45·2 34·1	44·3 34·4	{
24 25	56.7	49.9	39.3	39.7	Cloudy, rain.
26	45 0	49.3	39.9	39.1	11 11
" 27	41.4	48.4	34.2	33.0	"
n 28 n 29	36·9	49·3 48·1	33·6 30·5	30.0	Fair.
30	42.8	48.2	31.8	32.7	11
Oct. 1	43 4	45.0	26.7	25.5	la." .
" 2	39.7	46.3	35.2	36.0	Cloudy.
" 3	42·9 46·7	51.3 49.0	35·9 35·1	35·9 34·7	rain.
5	41 9	46 2	35.3	35.3	rain, thunder.
6	41.4	41 2	31.8	31.3	rain and snow.
n 7	38·7 34·6	36·2 42·4	33·4 30·7	32·1 31·7	" "
, 9	33.6	40.6	21 6	25.1	Fair, ice on still water.
10	35.6	47.6	23 7	23.9	11
" 11	43.0	46.0	34.8	37 · 2 31 · 2	Cloudy.
" 12 " 13	41 8 32 8	41.8	32·2 20·8	19.2	Fair.
14	35.6	42.3	26.4	24 5	н
15	36 8	36.2	28.8	2819	Cloudy.
16	30·6 32·6	37.7	24.5	26.2	snow.
" 17 " 18	32 6 9·9	16·4 25·1	11·7 - 2·1	9·7 3·3	Fair. $2\frac{1}{2}$ inches on ground.
" 19	21 9	35.2	10 8	13.7	11
и 20	31.9	38 8	22.2	24.0	no snow on ground.
, 21	34.6	40.3	20 2	18.3	
" 22 " 23	37·5 36·9	41·1 43·7	32 3 33 5	31.5 32.9	Cloudy.
21	39.5	46.1	35.8	35.2	rain.
25	42 3			34.3	H H

### MAXIMUM and Mimimum Temperatures, &c.—Continued.

	THERMOMETER READINGS.		ngs.		
Date.	Maxi	mum.	Minimum,		Weather.
	6 a.m.	6 p.m.	6 a.m.	6 p.m.	
1905.	0 .	•	•	۰	
Oct. 26  28 27 30 31 Nov. 1 2 3 4 5 6 7 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 7 8 9 10 11 12 21 22 23 24 25 26 27 28 29 21 21 21 22 23 24 25 26 27 28 29 21 21 21 22 23 24 25 26 26 27 28 29 21 21 22 23 24 25 26 26 27 28 29 21 21 22 23 24 25 26 26 27 28 29 21 21 22 23 24 25 26 26 27 28 29 29 20 21 21 22 23 24 25 26 26 27 28 29 29 20 21 21 22 23 24 24 25 26 26 27 28 29 29 20 21 21 22 23 24 24 25 26 27 28 29 29 20 21 21 22 23 24 24 25 26 26 27 28 29 29 20 20 21 21 22 23 24 24 25 26 26 27 28 29 20 20 21 22 23 24 24 25 26 26 27 28 29 29 20	33       23       66       63       66 <td< td=""><td>38 56 2 1 7 2 3 8 0 0 0 6 7 8 8 8 1 8 2 9 1 9 2 7 8 1 7 1 0 6 9 5 8 8 3 1 4 6 2 8 0 2 3 3 4 5 2 8 1 7 7 2 4 3 2 8 6 3 2 7 8 2 3 3 4 5 2 8 3 1 7 7 2 4 3 2 8 3 1 7 7 2 4 3 2 3 3 3 3 2 2 7 3 4 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3</td><td>20.19.13.8 91.3.8 20.19.2 20.29.2 20.20.2 2</td><td>18 9 9 21 0 6 8 7 7 11 3 7 32 2 2 2 13 6 3 4 1 2 2 2 2 6 0 0 3 0 2 7 2 2 2 2 4 9 2 12 2 4 9 2 2 2 2 4 9 2 2 2 2 2 2 2 2 2 2</td><td>Fair, skating.  "" Fair. Cloudy. Fair. Cloudy. Fair, rain. Cloudy, snow. Fair, no snow on ground. " river frozen over. " " fair. " " first sleighing, but bad. Fair, snow. " " first sleighing, but bad. Fair, snow, ice on Bow, about 6 inches. " " Snow, ice on Bow, about 6 inches. " " squally wind. Cloudy, snow, 4½ in. snow on ground. Fair. " squally wind. Cloudy, " " Fair. " squally wind. Cloudy, " " Fair. " squally wind. Cloudy, " " Fair. " squally wind. Cloudy, " " Fair. " squally wind. Cloudy, " " Fair. " squally wind. Cloudy, " " Fair. " squally wind. Cloudy, no sleighing. " sleighing but bad. " very squally wind. " snow.</td></td<>	38 56 2 1 7 2 3 8 0 0 0 6 7 8 8 8 1 8 2 9 1 9 2 7 8 1 7 1 0 6 9 5 8 8 3 1 4 6 2 8 0 2 3 3 4 5 2 8 1 7 7 2 4 3 2 8 6 3 2 7 8 2 3 3 4 5 2 8 3 1 7 7 2 4 3 2 8 3 1 7 7 2 4 3 2 3 3 3 3 2 2 7 3 4 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	20.19.13.8 91.3.8 20.19.2 20.29.2 20.20.2 2	18 9 9 21 0 6 8 7 7 11 3 7 32 2 2 2 13 6 3 4 1 2 2 2 2 6 0 0 3 0 2 7 2 2 2 2 4 9 2 12 2 4 9 2 2 2 2 4 9 2 2 2 2 2 2 2 2 2 2	Fair, skating.  "" Fair. Cloudy. Fair. Cloudy. Fair, rain. Cloudy, snow. Fair, no snow on ground. " river frozen over. " " fair. " " first sleighing, but bad. Fair, snow. " " first sleighing, but bad. Fair, snow, ice on Bow, about 6 inches. " " Snow, ice on Bow, about 6 inches. " " squally wind. Cloudy, snow, 4½ in. snow on ground. Fair. " squally wind. Cloudy, " " Fair. " squally wind. Cloudy, " " Fair. " squally wind. Cloudy, " " Fair. " squally wind. Cloudy, " " Fair. " squally wind. Cloudy, " " Fair. " squally wind. Cloudy, " " Fair. " squally wind. Cloudy, no sleighing. " sleighing but bad. " very squally wind. " snow.
25vi	3—3				

# \$ 6-7 EDWARD VII., A. 1907 Maximum and Minimum Temperatures, &c.—Continued.

=			<del></del> :=					
		Тне	RMOMETE	R READI	ngs.			
D	ate.	Maximum.		Minimum.		Weather.		
	•	6 a.m.	6 p.m.	6 a.m.	6 p.m.			
1	905.	0 .	0	0	0			
Dec.	27	28.3	26.6	21.9	16.2	Fair.		
11 '	28 29	$\begin{array}{c} 24.0 \\ 22.3 \end{array}$	25·9 23·0	15·7 2·5	18 8 1 3	Cloudy.  Fair.		
11	30	17.1	18.2	8.0	7.5	Lake Minnewanka frozen.		
"	31	11.8	5.8	— 6·1	- 9.4	11		
1	.906.			,				
Jan.	1	6.1	20.7	- 2.8	3.4	squally wind.		
11	$2\dots$	20 · 2	24.3	10.4	5.8	"		
"	3, 4	25·0 33·6	32·3 37·1	18·4 24·0	24·7 29·2	" squally wind. Cloudy.		
	5	29 6	22.6	18.8	15.6	Fair.		
"	$rac{6\dots}{7\dots}$	15·8 15·8	$\begin{array}{c c} 20.6 \\ 21.2 \end{array}$	4·7 0·2	8·9 0·2	Cloudy, ice on Bow about 12 inches.		
11	8	26.8	30.8	16.5	24.9	Fair, squally wind. Cloudy, sleighing only in few places, and that bad except		
,,	9	30.0	29.8	20.2	21.6	on river.		
11	10	21 9	19.2	$9 \cdot 2$	13.8	Cloudy.		
11	$11 \dots 12$	17·8 10·3	9.1	- 1·7	-4.2	Fair,		
"	13	19.6	28.1	5·2 11·2	8.5 15.2	11   11		
11	14	22.9	23.9	9.5	7.7	" no sleighing.		
11	15 $16$	19·6 17·4	23.3	3·5 0·7	2·8 3·0	Cloudy; snow, sleighing, but bad.		
,,	17	21.4	27:0	14.8	16.8	Fair.		
"	18 19	21 · 6 16 · 8	$-\frac{19.6}{2.3}$	1·0 -14·4	-20.5	Cloudy; snow, 54 in. snow on ground. Fair; sleighing good.		
17	20	6.6	<b>- 9·2</b>	-14.6	-18.5	11 11		
**	$21\ldots 22\ldots$	9·0 17·9	$\begin{array}{c c} & 19.1 \\ -8.0 \end{array}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c c} & 12 \cdot 1 \\ -20 \cdot 6 \end{array}$	Cloudy "Cloudy a grow gleighing mad		
11	<b>2</b> 3	4.5	40.0	-12.3	5.3	Cloudy; snow, sleighing good.		
11	$\frac{24}{25}$	41·7 43·9	44·5 45·6	40.5	40.3	Fair; squally wind; thaw; sleighing good		
11	26	42.9	40 3	27.5	24.3	Cloudy; thaw; chinook; sleighing good. Fair; sleighing bad.		
"	27 28	36·1 26·7	35·7 38·2	14·9 18·8	12.3	1 U U		
11	<b>2</b> 9	39 3	40.2	32.9	23 7 30 3	Fair; squally wind, sleighing bad. Cloudy; sleighing bad.		
	$30\ldots$	36.9	46.1	31.8	34.1	Fair: squally wind: ice on Bow 16 in them		
Feb.	1	43·0 42·7	47 0 45 0	38·4 28·6	39·8 27·8	Fair; no sleighing; thaw. Fair; snow only in patches; perfect day.		
11	2	41.0	49.2	29.4	32.9	Fair; squally wind.		
"	$\frac{3}{4}$	43·7 9·7	28·0 27·3	23·8 0·4	9.7	11 11		
**	5	25 8	24 8	0.7	— 3·2	" perfect day.		
"	6 7	$\frac{17.6}{29.6}$	34.7	6·4 5·4	3·8 4·9	11 11		
17	8 ;	27.8	31.2	4.9	— 0·7	ti ti		
11	$ \begin{array}{c} 9 \dots \\ 10 \dots \end{array} $	$\frac{24.6}{13.9}$	24·9 29·1	$1 \cdot 3$ $1 \cdot 2$	7.1	н		
"	11	24.8	23.2	12.8	0 6 10·3	11		
"	$12\dots$ $13\dots$	$\begin{array}{c} 14.7 \\ 6.4 \end{array}$	15.8	2.2	6.3	" snow.		
11	14	17.7	22·7 26·1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	-16.0	"		
11	15	24.6	31 · 1	19.4	17.0	Cloudy.		
11	$16 \dots 17 \dots$	$\frac{29 \cdot 2}{33 \cdot 2}$	35·1 40·2	24·8 29·3	27 6 28 7	Fair.		
11	18	$40^{\circ}2$	41.1	35.4	35 2	Cloudy; rain and snow.		
17	19	34.9	35.9	31 · 7	30.8	J "		

### Maximum and Minimum Temperatures, &c.—Continued.

		Тн	ERMOMETE	R READI	ngs.		
Date.			mum.		mum.	Weather.	
					<u></u>		
_		6 a.m.	6 p.m.	6 a.m.	6 p.m.		
19	906.	a	٥	0	o		
Feb.	20	32.4	35.8	27:1	26.3	Cloudy.	
11	21 $22$	$\begin{array}{c} 31.8 \\ 29.5 \end{array}$	38·3 38·2	28·0 24·0	27·2 23·8	11	
	23	29.7	33.3	16·8	12.9	Fair.	
11	24	27 8	36.9	10.9	14.2	Cloudy.	
11	25	30.1	32.9	16.2	15.2	Fair.	
"	26 27	26·6 26·6	31·2 36·0	7·2 20·8	5·2 17·8	Cloudy.  Fair.	
11	28	29 1	33·7	4.2	0.8	ice on river about 15 in.; perfect day.	
Mar.	1	30.3	32.1	2.1	0 0	Cloudy.	
11	2	29.9	35.6	4.1	3.7	Fair.	
11	3	29·7 32·0	38·2 42·9	$\begin{vmatrix} 2 \cdot 2 \\ 20 \cdot 5 \end{vmatrix}$	1·8 20·9		
"	4 5	37.3	40.6	25.2	21.8	" squally wind.	
11	6	38.0	49.3	33.0	36.0	II 11	
11	7	45.8	49.1	40.0	37.7	Cloudy; rain, robin.	
17	8	38.0	44.2	21·8 20·9	20·8 17·9	Fair.	
11	9 10	20·8	29·5 11·8	10.2	2.2	Cloudy.	
"	11	2.3	3.7	- 5.6	$-\bar{7}\cdot\bar{5}$	" "4"", """	
11	12	6.0	0.7	-12.0	— 7·3	- " - "	
11	13	- 1.2	- 0.8	-7.2	- 8.4	Cloudy.	
11	14 15	- 1·8 11·8	13·9 28·2	$\begin{array}{c c} -19.8 \\ -14.0 \end{array}$	—20·3   —15·4	Fair.	
"	16	25.0	30.3	0.5	-2.5	" "	
"	17	27.2	19.8	10.8	11.0	Cloudy; snow.	
11	18	16.0	15.3	5.5	5.3	Fair.	
II.	19	11.3	28.1	-10.5	$\begin{array}{c c} -10.4 \\ 6.7 \end{array}$	squally wind.	
11	$20 \dots 21 \dots$	25·0 35·1	38·2 41·8	4·2 3·3	1.4	perfect day.	
11	22	39.0	47.6	15.4	18.5	Cloudy.	
11	23	41 0	45.2	29.6	28.7	Fair.	
11	24	41.8	53.4	27·5 25·8	29·1 25·1	" river breaking up.	
H	25 26	47·3 44·0	50·9 51·0	27 4	$\frac{25}{27.7}$	" river breaking up.	
tí tí	27	47.3	52.4	22.2	21.0		
17	28	46.2	51·3	25.7	27.8	11	
11	29	47.2	53 2	21.3	. 21.3	· i	
11	30	48·2 55·7	59·7 53·5	28·8 39·8	29·5 38·7	Cloudy.	
$\mathbf{A}_{\mathbf{pril}}^{"}$	31	46.0	35.9	32.3	30.5	Cloudy, no snow on ground.	
11	2	34.0	41.8	26.8	26.7	Fair, junco, ice out of river.	
11	3	38.7	56.8	18.8	18.5	II magazitass	
IT	4	53·3 53·1	57·6 55·6	31 4 26 9	33·2 30·8	Cloudy, Arctic bluebirds.	
11	5 $6$	53.1	61.1	36.5	35.8	Fair, squally wind.	
"	7	55.2	52.5	42.8	34.3	Cloudy, rain and snow.	
11	8	37 7	47.7	30.3	30.9	Fair, river rising.	
11	9	43.7	43.7	31·8 29·7	31·9 30·2	squally wind, rain and snow.	
"	10 11	38·3 41·8	44.8 42.2	26 9	28.1		
"	12	24.3	45.5	17.6	16.8	" perfect day.	
11	13	42.3	52.3	21.2	20.8	" squally wind.	
11	14	48.0	57.3	24.8	24.4	various birds, butterflies.	
11	15	53.0	63 9 50 · 6	33·4 32·2	33.8	Cloudy, rain.	
11	16 17	58.5 46.2	59·6 44·5	34.3	33.2	rain and snow.	
11	18	41.2	52.4	26.3	26.3	Fair, squally wind.	
11	19	50.0	56.4	43.0	43.0	u u	
11	20		63.9	44.3	43.7	" frogs croaking.	
	21	59.7	73.1	30·9 33·2	30.9	thunder.	

### MAXIMUM and Minimum Temperatures, &c.—Continued.

	<u> </u>					
	THERMOMETER READINGS.		ngs.			
Date.		Maxi	Maximum.		num.	Weather.
		6 a.m.	6 p.m.	6 a.m.	6 p.m.	
19	06.		•	0		
		<b>70.0</b>	40.0	90.7	20.1	
Aprii	$\begin{bmatrix} 23 \dots \\ 24 \dots \end{bmatrix}$	59 · 9 44 · 2	48·8 52·9	30·7 31·0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Cloudy, rain, smoke from bush fire.
	25	48.9	49 2	29.7	29.3	" rain.
11	26	44.2	58.3	27:3	27.2	Fair.
	27 28	51 2 44 0	49·8 55·7	25·4 34·3	26·0 34·2	Cloudy. Fair.
11	29	54.4	67.4	23.9	23.8	H all.
11	30	62 2	66.9	30.0	29.7	much smoke.
May	1	61.5	46.7	38.1	37.9	Cloudy, rain.
11	$\frac{2}{3}$	42.5 53.0	59 9 50·3	32·8 37·7	35·2 38·3	11   U
"	4	38.3	46.0	21.5	21.8	11
**	5	41.8	49.4	19.8	19.9	Fair.
11	6	44·3 38·2	44·6 56·5	29.2	28·9 27·3	"
11	7 8	53.0	. 67.2	23 7	25.0	ti
ŧI	9	63.0	74.3	36.0	36.3	" forest fire.
11	10	69.2	74.5	42·8 36·0	43.6	II mush amala
11	11 12	60·0	65·6 58·0	43.2	35·7 42·3	much smoke.
**	13	54.0	56.7	36.8	37 3	Cloudy.
11	14	53.2	61.2	36.2	36.1	u .
11	15 16	55·2 37·7	44 0 41 7	39·8 33·7	37·5 33·3	rain.
**	17	41.2	51.4	34.8	34.7	1 " "
41	18	49.3	52.2	34.2	34.2	II II
*1	19 20	48·8 52·2	60.1	28 9 36 7	29·8 36·6	Fair.
11	21	59.2	46.2	39 5	35.1	Cloudy, rain.
*1	$22\dots$	34 9	42.4	32.3	32, 6	rain and snow.
t!	23 24	42·1 40·0	47·3 50·4	26 6 34 1	27·8 34·0	rain.
ti	25	48.1	41.7	36.6	35.3	11 11 11 11
11	26	38.5	43.1	33'4	34.3	11
41	27 28	35.9	51.3	29·3 34·3	30·7 35·2	Fair.
**	29	46·2 45·0	48·7 44·9	37.8	38.8	Cloudy.
11	30	40.0	54.3	34 8	35.8	11
June	31	49.8	63.8	28·4 38·2	28.8	Fair.
านมอ	$1 \dots 2 \dots$	59·1 61·4	65 4 67 1	35.3	38·0 36·8	11 11
tt	$\frac{2}{3}$	64.5	72.4	33.3	34.5	11
*1	4	67.7	63.5	48 3	44.2	Cloudy, rain.
- 11	$6 \dots$	45·9 56·5	60.5	37 · 8 34 · 4	35·7	Fair. Cloudy, rain.
11	7	57.2	51.3	41.9	44.0	11
11	8	48.5	57.3	40.9	40.6	_ u _ ,
11	$10 \dots$	55·1 56·4	69.0	32·9 35·8	35·4 35·8	Fair.
†1	11	61.4	. 68.1	37 4	38.9	Cloudy.
TI .	12	68.0	63 4	47.6	48.3	" rain.
*1	13 14	54·4 49·6	58·3 56·5	40·7 40·7	43.3	n n
11	15	51.3	52.3	30.7	30.7	11 11
11	16	42.0	60.9	37 · 7	39.1	Fair.
11	17	57.9	54 3	41.2	41.3	Cloudy, rain.
11	18 19	51·9 54·1	60·3 56·9	37·2 42·8	37·8 44·3	Fair. Cloudy.
**	20					Fair.

### MAXIMUM and Minimum Temperatures, &c.—Continued.

	Тн	ERMOMETE	R READI	ngs.	
Date.	Maximum.		Minimum.		Weather.
	6 a.m.	6 p.m.	6 a.m.	6 p.m.	
1906.	0	D	•	0	
June 21  22  23  24  25  26  27  28  29  30	59·3 49·5 53·3 68·0 74·1 64·6 73·0 54·9 53·9 50·9	55·0 54·3 70·8 78·5 81·6 75·9 70·5 60·3 55·5 66·9	33·2 35·8 30·2 33·5 40·2 47·2 46·8 47·7 41·0 42·6	35·1 40·5 48·2 49·1 48·1	Cloudy, rain.  Fair.  rain.  Cloudy, rain.  Fair.  "Albi-"  Fair. "

N. B. SANSON, Observer.

## PART VII.

YUKON TERRITORY.

### YUKON TERRITORY.

#### No. 1.

#### REPORT OF THE COMMISSIONER.

DEPARTMENT OF THE INTERIOR, DAWSON, Y.T., July 2, 1906.

The Hon. Frank Oliver,
Minister of the Interior,
Ottawa.

Sm,—I have the honour to submit the Annual Report for the Yukon Territory for the year ending June 30, 1906.

The gold yield for the past year amounted to \$6,539,402.85. This was less than the preceding year. The decrease is to be accounted for by (a) the lack of water, due to the exceptionally dry summer, and (b) the fact that many mining properties were not worked pending the installation of dredges and expensive hydraulic plants. This latter cause, while it makes the permanency of the Klondike as a gold producing country certain and will inevitably in the near future increase the output enormously, may, for another year, continue to prevent a large output.

The methods of placer mining in the territory are quickly changing. The cruder methods of working the ground are disappearing and in their stead the auriferous gravels are being worked more extensively and economically by means of hydraulic plants and dredges. Large hydraulic plants have been started and in some cases finished during the past year, and several dredges have been installed and proven to be a great success. The operations of the dredges have proven so conclusively that the ground is suitable for this manner of working that many new dredges have been ordered, so many in fact that the manufacturers cannot fill all the orders this year. The deposits of gold bearing gravel, which can be treated by dredging and hydraulicking, are so extensive that placer gold mining in the Yukon is absolutely assured to be a vast and permanent industry. While much of the gold-bearing gravels will be worked and must be worked by such means, involving the investment of considerable capital, it would be an undoubted mistake to conclude that there are no inducements left for the individual prospector and miner. On the contrary, the Stewart, Pelly, MacMillan, Kluane and many other sections abound in most alluring prizes and will some day give rise to other 'Klondikes.'

Quartz mining has received much attention throughout the territory, and has been particularly active in the southern end, in the vicinity of Conrad city, on Windy Arm. A large amount of development work has been done there and the prospects are most promising. I visited the claims in September and was surprised at the amount of work done and the size and richness of the ledges.

The council of the Yukon Territory met on the 24th of August and prorogued on the 9th September, 1905. During the session a number of ordinances were passed dealing with local matters, and much other business was transacted. Three committees were appointed to act after the close of the session to take steps looking to a mining code, a lien for miner's wages and a general water system. The committees faithfully performed their work and made appropriate representations to the government at

Ottawa. In accordance with the recommendations of these committees, it is satisfactory to note that the Governor in Council has passed an ordinance giving a lien to miners for wages, that the mining code drawn up by the committee has been presented to parliament in the form of a Bill, and that you have instructed officials of your department to inquire fully on the ground into the extent of the gravels available for a general water system should such be installed.

I trust the mining code will be accepted by parliament, as its passage will do much

to render mining conditions more stable and induce the investment of capital.

The necessity of a general water system is well understood by all who know the country, and I would urge that in this matter too, the well considered advice of the Yukon Council as contained in a memorial to the Governor in Council, dated January 27, 1906, be acted upon.

On February 2 I left Dawson for Ottawa to consult with the government regarding some important matters affecting the welfare of the Yukon. I returned here on June 6. Upon my return I found that the work of my office had been carried on in a

most gratifying manner by the Acting Commissioner, Mr. J. T. Lithgow.

The finances of the territory are in splendid condition. For the year ending June 30, 1905, the revenue was \$389,629.97 and the expenditure was \$454,390.52, leaving a deficit of \$24,530.37. For the past year the revenue was \$371,476.49 and the expenditure was \$308,849.47, leaving a surplus of \$62,627.02. Economy has been exercised wherever possible without interfering with the efficiency of the public service or works.

The Yukon Territory during the past year has been practically without crime. This happy condition, however, is not unique as it has prevailed in the territory from its earliest history. This is due and has been due to the remarkably law-abiding disposition of the citizens, and in a measure also, to the splendid administration of justice and the untiring vigilance of the Royal Northwest Mounted Police, under the efficient command of Major Wood.

The past year saw a large number of tourists and investors visit the territory. The country with its delightful summer climate, perfect order and social advantages, was a revelation to them. Notable among these visitors was a large party of members of the American Institute of Mining Engineers. They were extended courtesies by the government and citizens, and were afforded every opportunity to study and understand the country. They manifested a deep interest in the economic conditions of the territory, and already the favourable effects of their visit can be noticed.

It is also pleasant for me to record that you visited Dawson from August 26 to September 1, being the first Minister of the Crown to honour this section of the Dominion with a visit. I would respectfully urge that you avail yourself of the earliest opportunity to revisit the territory and remain for a more extended period; and that your colleagues be also urged to come and gain a personal knowledge of the requirements and possibilities of this rich country.

In conclusion I can say that the future of the Yukon never looked brighter. Mining in the older parts is fast passing through the transition stage. Dredging and hydraulicking have been demonstrated to be successful and millions of capital are now being invested in these methods of extracting the gold from our gravels. Virgin fields also are in plenty. They are attracting individual prospectors, and hundreds of miners who stampeded to the new diggings of Alaska are returning to the 'Mother of the Golden North.' Throughout the whole territory there are sure evidences of an era at hand of great and permanent prosperity.

I have the honour to be, sir, your obedient servant,

W. W. B. McINNES.

Commissioner.

#### No. 2.

### REPORT OF THE TERRITORIAL SECRETARY.

Dawson, Y.T., August 23, 1906.

The Hon. FRANK OLIVER,

Minister of the Interior, Ottawa.

SR,—I have the honour, by direction of the Commissioner, to forward to you inclosed reports of the following officers of the government of this Territory:

Gold Commissioner;

Assistant Gold Commissioner;

Crown Timber and Land Agent;

Comptroller;

Director of Surveys.

I have the honour to be, sir, your obedient servant,

C. B. BURNS,

Territorial Secretary.

#### No. 3.

#### REPORT OF THE GOLD COMMISSIONER.

DAWSON, Y.T., July 28, 1906.

The Hon. W. W. B. McInnes, Commissioner Yukon Territory, Dawson.

Sir,—I beg to submit my annual report for the year ending June 30, 1906.

During the year 53 protests have been issued by the Clerk of the Gold Commissioner's Court.

This is a decrease from the previous years, the number for the year ending June 30, 1905, being 137; for the year ending June 30, 1904, there were 84, and for the previous year again there were 99.

All protests were heard at Dawson with the exception of two, heard at Mayo Landing on the Stewart river.

The decrease in the number of protests is due to the conflict of claims on the old creeks getting more and more settled as time goes on. The change in the regulations as to the side boundaries of claims has, I consider, also tended to minimize disputes, as it does away with the opportunity of hill or bench claims encroaching on the creek bottom, as they did formerly under the very indefinite boundary line of 'base of the hill' or 'rimrock.'

I have the honour to be, sir, your obedient servant,

E. A. SENKLER,

Gold Commissioner.

#### No. 4.

#### REPORT OF THE ASSISTANT GOLD COMMISSIONER.

Dawson, Y.T., July 16, 1906.

The Hon. W. W. B. McInnes, Commissioner of the Yukon Territory, Dawson, Y.T.

SIR,—I have the honour to submit herewith the annual financial report of the Gold Commissioner's Office, Yukon Territory, for the fiscal year ending on the 30th June last, which embodies the revenue of the head office at Dawson for the fiscal year in question; and also the revenues received at this office during the last fiscal year from the offices of the Mining Recorders outside of the Dawson Mining District.

At the same time I beg to submit herewith inclosed for your information and for the information of the department a comparative statement between the fiscal year in question and the previous one; and also a statement showing the number of instruments issued in connection with the said revenues.

The total receipts amount to \$120,563.26.

As you will see by the said comparative statement there is a decrease of \$25,467.47 from the total receipts of the corresponding period of the previous year.

The largest portion of the decrease in question is accounted for by the reduction in the rate of free miners' certificates from \$7.50 to \$5 per annum; and also by the fact that since the 7th October last, inclusive, free miners' certificates were issued to expire on the 30th June, 1906, and that only a proportion of the fee of \$5 was charged, according to the provisions of section 1 of the Order in Council of the 31st July last, amending the Placer Mining Regulations in that respect.

There is also a slight decrease in the amount received from renewal fees and from certificate of work fees, which decrease is accounted for by the fact that a number of claims have been allowed to lapse so as to be incorporated in extension of side or rear boundaries of adjoining claims under the provisions of section 12 of the Placer Mining Regulations; or so as to be relocated under the provisions of the regulations which came in force on the 7th October last, increasing the size of hill and bench claims from 500 feet to 1,000 feet.

There is also a slight decrease in the amount of fees received from relocation grants; and in the amount of fees received from new location grants; and from the recording of documents regarding placer mining claims. There has been, however, on the other hand, a substantial increase in the receipts of fees under the Quartz Mining Regulations in the Whitehorse Mining District.

Notwithstanding the decreases hereinabove mentioned in the revenues collected under the Placer Mining Regulations, there has been very little difference in the amount of clerical work connected therewith.

During the fiscal year ending 30th June last an important change has been by the Department of the Interior in dividing the Yukon Territory into two divisions, viz., the Dawson Mining Division and the Whitehorse Mining Division, at Yukon Crossing, and in appointing Mr. R. C. Miller, who has been the Mining Recorder at Whitehorse since 1899, as an Assistant Gold Commissioner for the Whitehorse Mining Division.

The office of the Mining Recorder at Clear creek was closed on the 30th ultimo, and that portion of said Clear Creek district comprised within the watershed of the Mc-

Questen river has been incorporated in the Duncan Mining district, and the balance of said district has been incorporated in the Dawson Mining district.

It was also decided at the same time to re-establish the Sixtymile Mining district, which was abolished on the 31st January, 1905, and a mining recorder will take charge

of this new office in a few days.

The abolishing of the Clear Creek Mining district was brought about by the fact that a very small number of claims are now in good standing on Clear creek and its tributaries; and the re-establishment of the said Sixtymile Mining district has been brought about by the fact that the Royal Northwest Mounted Police authorities decided last winter to close their detachment on Glacier creek, and it was, therefore, by reason of the large number of claims then in good standing in that locality, decided to appoint a mining recorder to transact the affairs of the miners in that locality.

The Duncan Mining district has given much encouragement to the miners interested in that part of the country during the last fiscal year, especially on Highet

creek.

The Kluane Mining district has not undergone any material change since the date of my report for the fiscal year ending June 30, 1905.

As regards the Whitehorse Mining district, a large number of quartz mineral claims have been staked and recorded in the Windy Arm portion of said district, and a large amount of development work was done during the last fiscal year.

As regards the matter of hydraulic mining leases, several of those leases were can-

celled during the fiscal year ending 30th June last, viz. :

1. Lease No. 22, issued on the 29th March, 1901, in favour of Mr. William Mac-Intosh, for an hydraulic mining location, situated on the left limit of Dominion creek, in the Indian River Mining Division, commencing at a point opposite the left limit of creek claim No. 210 below lower Discovery, thence down stream one mile, which location was thrown open for occupation and entry on the 20th November last;

2. Lease No. 32, issued on the 15th October, 1901, in favour of Messrs. George Foote Washburne and Peter Reid Ritchie, for an hydraulic mining location situated on Kirkman creek, a tributary of the Yukon river, commencing at the upper boundary of Discovery claim on said creek, thence down stream for five miles in direct distance, which location was thrown open for occupation and entry by free miners on the 31st

January last;

3. Lease No. 40, issued on the 25th June, 1902, in favour of the Klondike Consolidated Gold Fields, Limited, for an hydraulic mining location, situated on the Lewes river, in the Yukon Territory, commencing at a point on said river, about four and one-half miles in direct distance, above the mouth of Big Salmon river, thence up stream three miles more or less, by half a mile in depth, on either side of the said Lewes river, which location was thrown open for occupation and entry by free miners on the 19th February, 1906;

4. Lease No. 35, issued on the 25th February, 1902, in favour of the North American Transportation and Trading Company, for an hydraulic mining location situated on Indian river, in the Yukon Territory, commencing at a point two and a half miles below the mouth of Quartz creek, thence down stream a distance of two and a half miles, which location was thrown open for occupation and entry by free

miners on the 12th February, 1906;

5. Lease No. 41, issued on the 18th September, 1902, in favour of the North American Transportation and Trading Company, for an hydraulic mining location situated on Indian river, in the Yukon Territory, commencing at the junction of Quartz creek with Indian river, thence down stream two and a half miles, which location was thrown open for occupation and entry by free miners on the 27th November last;

6. Lease No. 42, issued on the 18th September, 1902, in favour of the North American Transportation and Trading Company, for an hydraulic mining location therein described as situated on the Stewart river, in the Yukon Territory, commencing at a point on the Stewart river three-quarters of a mile below the junction of the Mc-

Questen river with the Stewart river, thence down the said Stewart river five miles, more or less, which location was thrown open for occupation and entry by free miners on the 20th December last.

Besides the above cancellations, the Minister of the Interior issued on the 30th April last notices of cancellation of the following leases, viz.: Lease No. 1, issued on the 12th February, 1900, in favour of the Klondike Government Concession, Limited, for an hydraulic mining location, situated on Hunker creek, in the Yukon Territory; No. 5, issued on the 3rd November, 1899, in favour of the Honourable E. H. Bronson and Mr. C. C. Ray, for an hydraulic mining location, situated on Bonanza creek, in the Yukon Territory; lease No. 10, issued on the 16th March, 1900, in favour of Mr. Joseph W. Boyle, for an hydraulic mining location, situated on Quartz creek, in the Yukon Territory; lease No. 16, issued on the 23rd October, 1900, in favour of Mr. Ernest B. Scroggie, for an hydraulic mining location, situated on Scroggie creek, in the Yukon Territory; lease No. 20, issued on the 8th November, 1901, in favour of Mr. Edward L. Ensel, for an hydraulic mining location, situated on Eureka creek, in the Yukon Territory; lease No. 33, issued on the 16th October, 1901, in favour of Messrs. George Foote Washburne and Peter Reid Ritchie, for an hydraulic mining location, situated on Gold Bottom creek, in the Yukon Territory.

The ground comprised within the said leases Nos. 1, 5, 10, 16, 20 and 33 has, however, been closed from placer mining entry by special Order in Council pending further determination in that regard.

On the other hand, the following hydraulic mining leases were issued by the department during the fiscal year ending 30th June last, viz.: lease No. 47, issued on the 30th August, 1905, in favour of Mr. William Charles Thompson, for an hydraulic mining location therein described as situated on Dublin Gulch, a tributary of Haggart creek, in the Yukon Territory (Duncan Mining district); lease No. 45, which was forwarded by the Department of the Interior for the signature of the lessees, Messrs. James Ollason and A. J. Green, of a tract of land situated on the ancient bed of the Stewart river, in the Yukon Territory.

I have the honour to be, sir, your obedient servant,

F. X. GOSSELIN,

Assistant Gold Commissioner.

#### No. 5.

#### REPORT OF THE CROWN TIMBER AND LAND AGENT.

Dawson, July 5, 1906.

The Hon. W. W. B. McInnes.

Commissioner of the Yukon Territory,

Dawson, Y.T.

Sir,—I have the honour to submit herewith my report for the year ending June 30, 1906.

Attached hereto please find:

- A. Statement of receipts from timber, hay, grazing land and coal royalty.
- B. Statement of revenue derived from Dominion lands.
- C. Statement showing timber and hay permits issued.

The revenue has decreased \$9,446.84.

The decrease in the Timber Branch applies to royalty and to hay permits, and is due to the falling off in sales of lumber and to a lesser number of hay permits having been issued. Timber permits show a slight increase over last year, and this is due to the fact that permits have been issued for the cutting of sawlogs, this latter fact accounting at the same time to some extent for the reduction in royalty. Wood as fuel is being replaced by coal and this too partly accounts for the reduction in royalty on timber.

There is an increase of nearly \$1,000 in seizures, which is not to be considered as due to a tendency among millmen and wood-choppers to evade the laws, but rather to the fact that there have been cases where men have cut wood under contract for mining operations, but, before delivery, the mining operations had ceased for one reason and another, and the wood was offered for sale to others. The office became aware of a few such instances, and as no permits had been taken for the wood it was dealt with under the head of seizures, but, on account of its having been cut in good faith for mining purposes, the ordinary fee of 50 cents per cord, with an office fee of \$5, was charged in each case. Wood contractors do not realize that wood can be cut free only by a free miner for mining purposes and that the moment it is offered for sale it becomes subject to dues.

There were 43 square miles of timber lands applied for, under seven applications, none of which have been dealt with on account of the instructions which you issued September 8, 1905, suspending the operation of the Timber Regulations. Had it not been for such suspension the reduction in revenue from timber would not have been as great as it is.

During the year royalty has been collected on 5,503 tons of coal; a further 3,000 tons have been mined by the lessees of group lot 10 and lot 11, group 10, Y.T., near Tantalus, royalty on which will be paid during the current year; 4,000 tons or more have been mined from property purchased under the old regulations by which \$20 an acre was charged for bituminous coal lands, and in which no provision for royalty was made.

The revenue from Dominion lands sales decreased \$1,135.05. This is due to the suspension of the Lands Regulations, per your instructions of September 8, 1905, instructing me not to dispose of lands outside of townsites until further advised. Only in June were these instructions rescinded, and then only in so far as they applied to lands which were not suitable for agricultural purposes. However, a few applications for lands were approved by you, during the month of June, and only in one instance, that of an application for one acre of land, has the purchase price been paid.

There were 56 applications for land received, covering a total of 4,1631 acres.

An area of 4251 acres, covered by seven applications, has been sold.

An area of 1963 acres, covered by three applications, has been cancelled, leaving 3,5413 acres, covered by forty-six applications, which are now in abeyance pending the receipt of the new regulations from the department before being dealt with.

Twelve applications have been made for coal lands, covering a total area of 2,399 acres; seven applications covering 1,360 acres have been cancelled, and five applica-

tions, for a total of 1,039 acres, are now being dealt with.

A few applications by lessees to relinquish waterfront held by them at Dawson were granted, and this has caused quite a reduction in the rentals.

The work of this office has not decreased, but it has been systematized so as to allow of its being handled by a reduced staff. During the year 1903-04, when the revenue was \$72,252.65, the expenditure for salaries and living allowance charged to this office was \$22,800. To-day my staff is composed of a clerk, who is also a stenographer, and one timber inspector, whose salaries and allowances, together with mine, amount to only \$8,700 per annum.

All of which is respectfully submitted by your obedient servant,

H. M. MARTIN,

Crown Timber and Land Agent.

YUKON TERRITORY.

A.—Revenue from Timber, Hay, Grazing and Coal Lands during the Year ended June 30, 1906.

1905-1906.	Bonus.	Royalty.	Timber Permits.	Seizures.	Fees for Inspection.	Hay Permits.	Grazing Land.	Coal Royalty.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
July		1,040 17 1,399 58	918 50 344 00	417 66 235 64	20 00	73 50 64 00	4 97	163 00	3,637 80 2,088 22
September		583 84 1,034 12	210 50 1,206 00	357 14 839 25				231 20	1,151 48 3,310 57
November		286 99 180 71	235 00 725 00	57 50 28 00					608 09 933 71
anuary Pebruary			287 50 191 00 1,822 50	17 00 29 00 99 00					378 58 468 83 2,210 71
March AprilMay		$1,451 \ 31$ $1,192 \ 67$	745 00 35 00	380 37 97 75			5 03	127 50	2,581 71 1,492 92
une		*	5 <b>49 2</b> 5	105 00					1,127 92
	1,045 00	8,238 18	7,269 25	2,663 31	20 00	194 50	10 00	550 30	19,990 54

H. M. MARTIN,
Crown Timber and Land Agent.

B.—Revenue from Dominion Lands During Year ended June 30, 1906.

1905–1906.	Gene Sale		Rentals.			tration ees.	tent ees.		rvey ees.	Total.		
	\$	cts.	\$	cts.	\$	cts.	\$ ets.	. \$	cts.	\$	cts.	
July		7 61 9 55		5 25 7 09		2 50	 • • • •				2 86 9 14	
September		3 09		8 10	(	28 50	 	1.		1.08		
October	1,30			0 10	1	5 00				1,31		
November	7,00			8 28	İ	2 00					7 37	
December	34	65		9 28	1,	• • • • • • •	 			35	8 93	
January			41	3 21		4 00	 			41	7 21	
February	5	2 27			.	5 00	 			5	$7\ 27$	
March	82	3 66			.	2 00	 	1	.00 00		0 66	
April		31		5 31			 				562	
May		D 21		0 26	1	4 50	 			8,47		
June,	12	9 26	1,44	4 64		• • • • • •	 		• • • • • • •	1,57	3 90	
	4,00	1 99	11,78	1 42		53 50	 	1	.00 00	15,93	6 91	

### H. M. MARTIN, Crown Timber and Land Agent.

### C.—Timber and Hay Permits Issued during Year ended June 30, 1906.

Kind.	No.	Quantity.				
Timber Cordwood Sawlogs House logs	119 6 30	11,593 cds. 210,000 feet				

H. M. MARTIN, Crown Timber and Land Agent.

#### No. 6.

### REPORT OF THE COMPTROLLER.

COMPTROLLER'S OFFICE,

Dawson, Y.T., July 23, 1906.

The Hon. W. W. B. McInnes, Commissioner of the Yukon Territory, Dawson, Y.T.

SIR,—I have the honour to submit my eighth annual report, for the year ending June 30, 1906.

The expenditure under the vote, 'Administration of the Yukon,' through the Department of the Interior disbursed through my office was \$168,357.54, monthly statements with vouchers being sent to the department.

The local revenues and expenditures of the Yukon Territory for the year were: revenue, \$371,476.47; expenditure, \$308,849.47, administered through my office; a copy of the report is attached thereto. Quarterly statements were sent to the Auditor General as required by Order in Council.

The disbursements for the Department of Justice were \$29,111.90 for services in connection with this territory, monthly statements being forwarded with youchers.

For the Department of Indian Affairs, the expenditure was \$6,419.04, of which \$3,000 was for schools and \$3,419.04 for the relief of sick and destitute Indians, &c.

The management of the expenditure of the Department of Public Works, 'Buildings,' has, as heretofore, been vested in the Superintendent of Public Works and myself; the expenditure was \$74,650.93.

The expenditure for the Department of Public Works, 'River Improvements Vote' was \$13,962.08, the credit being in the name of the Commissioner and myself.

The total royalty collected in the territory for the year was \$163,487.31—Dawson \$161,359.56, Whitehorse, \$2,119.12, and Fortymile, \$8.63.

The receipts from free certificates issued to exporters of American gold-dust were \$381.50. The revenue was forwarded to the credit of the Receiver General, the drafts being sent to the department weekly and statements monthly.

The revenue from law stamps, Yukon Territorial Court was \$5,517.50; from mining court stamps, \$753.25, drafts and statements being forwarded to the Department of Inland Revenue.

Monthly statements from the Gold Commissioner's and Crown Timber and Land Agent's Offices have been checked each month as heretofore and the returns forwarded to the Department of the Interior; the suspense account checked and the cheques countersigned in payment of withdrawals.

The management of the affairs of the city of Dawson has been vested in my officeduring the past year; a copy of the financial report is attached herewith.

Your obedient servant,

J. T. LITHGOW,

Comptroller.

#### No. 7.

#### REPORT OF THE DIRECTOR OF SURVEYS.

SURVEY OFFICE, YUKON TERRITORY,

Dawson, Y.T., June 27, 1906.

The Hon. W. W. B. McInnes,

Commissioner,

Yukon Territory.

SR,—I have the honour to submit the annual report of the operations of the Survey Office for the year ending June 30, 1906, as follows:—

The employees of this office during the past year were James Gibbon, D.L.S., P. T.

X. Genest, draughtsman, and myself.

Mr. Gibbon was employed during the whole of last season in making a phototopographical survey of the Klondike watershed, which he was unable to complete on account of the season closing in. I would respectfully recommend that this survey be completed during this present season. Mr. Gibbon filled the position of director during my absence last winter. In April, May and part of June he surveyed 23 miles of base line on Barker creek and its tributaries, and 40 miles of traverse of the Stewart river.

Plans of the following surveys were filed in this office during the year and include

the surveys made by the surveyors in private practice in the territory :-

Group lots 38 (including 25 quartz claims).

Advertised placer claims, 20.

Base lines, 6.

Hydraulic concessions, 3.

Auction claims, 6.

Subdivisions, 2.

Reference traverse, 1.

Two plans of 69 placer claims in Matson and Doyle concession.

Mr. Genest has been employed in general draughting work, copying and compiling plans and sketches and making blue-prints, &c., for the public for much of which charges have been made. The practice of making plans and blue-prints from the office records to bona fide prospectors and investors, free of charge has been followed more liberally this year than formerly.

Mr. H. G. Dickson, D.L.S., of Whitehorse, surveyed under contract for the department, 12 miles of reference traverse in the Windy Arm mineral belt, and 15 miles of base line on Burwash creek in the Kluane district. Returns for this last survey have not yet been received but Mr. Dickson has notified this office that the work has been completed.

I have the honour to be, sir, your obedient servant,

C. W. MACPHERSON.

Director of Surveys, Y.T.

### PART VIII

## SUPERINTENDENT OF MINES

### REPORT OF THE SUPERINTENDENT OF MINES.

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SUPERINTENDENT OF MINES,
OTTAWA, August 15, 1906.

The Hon. Frank Oliver, P.C.,
Minister of the Interior,
Ottawa.

Sir,—I have the honour to submit herewith the report of the operations and conduct of the Mines Branch for the fiscal year ended June 30, 1906.

#### MINERAL RESOURCES.

Owing to the general need of reliable information regarding the mineral resources of Canada as evidenced by the numerous applications made to this office for such information, the Mines Branch has undertaken the publication of a series of reports on the economic minerals of Canada, giving for each mineral the location, mode of occurrence, exploitation, treatment and such other information as may be of interest and value to the investor and mining engineer. The commencement of this undertaking was made with two reports:

1st. Mica, its occurrence, exploitation and uses;

2nd. Asbestos, its occurrence, exploitation and uses.

The editions of these reports, which were ready for distribution in the autumn of 1905, are now nearly exhausted.

A report on graphite, giving all available information on this mineral, is now in preparation.

#### IRON ORE DEPOSITS.

A commencement has been made of the systematic investigation of the iron ore deposits of Canada, covering for the present season the deposits of Nova Scotia, of Western Ontario and the country along the Ottawa valley.

The field party in Nova Scotia is in charge of Dr. Woodman, Professor of Geology, Dalhousie College, Halifax; that of Western Ontario is in charge of Mr. F. Hille, M.E., Port Arthur; and that along the Ottawa valley in charge of Mr. Fritz Cirkel, M.E., of Montreal.

The following are the items of information to be covered by the investigation:—

1. Localities of iron ore deposits so far discovered, with names and addresses of owners.

2nd. History of development of mines and companies, if any.

3rd. Geological features so far as necessary for comprehension of the nature of the ore deposits.

4th. Analyses of properly selected ore samples.

5th. In case of mines which have been worked, output and statistics.

6th. Transportation facilities.

7th. Water-powers in neighbourhood of ore deposits; height of fall and amount of water discharged.

8th. Limestone deposits in neighbourhood of deposits.

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9th. The character of forest in neighbourhood of deposits and amount of wood supply suitable for mining purposes and the production of charcoal in the event of the introduction of electric smelting.

10th. Maps of mines and drill holes, if any.

11th. Description of the topography of the ore fields as to suitability for magnetic surveys.

The field to be covered is extensive and, therefore, only those deposits will at present be considered which are located either in the vicinity of transportation lines, water or rail, or in localities easy of access and to which branch lines could be cheaply constructed to existing transportation lines.

This investigation undertaken in the interests of the iron industry of Canada will require many seasons' work to cover satisfactorily the more important iron are deposits. The results of the investigations will, however, be published at the rate at which the survey proceeds.

#### MAGNETIC SURVEYS.

It is the intention to make magnetic surveys of all important magnetite ore fields, the terrain of which is suitable for this class of work.

The method of delimiting magnetite deposits by magnetometric measurements, although practised for many years in Sweden, is new in this country and without special training in the use of this method by laboratory practice very erroneous conclusions are apt to be drawn from the intensity curves obtained as the result of field measurements. To furnish facilities for this needed laboratory practice for training members of the staff to apply this method successfully an experimental plant has been designed and constructed. The rooms at present occupied by the Mines Branch are, however, entirely unsuitable for this work. The many conductors running in Sparks street parallel to the rooms and carrying heavy fluctuating currents produce a rapidly varying magnetic field, which prevents the needle of the magnetometer from coming to rest. A proper room free from these magnetic disturbances is urgently needed for the setting up and use of this apparatus.\*

There are at present many and urgent applications for magnetic surveys of magnetite deposits on file in this office. The staff of the Mines Branch, consisting at present of only two persons competent to do this work, is entirely insufficient to meet this demand, more especially since even these cannot be sent into the field on account of the large amount of office work entailed by the preparation for the press of the two reports on the electric smelting experiments and the report of the Zinc Commission, which latter by your instructions was not to be delayed.

On account of the inability of owners of magnetic ore deposits to find engineers competent to apply this method, the request of private parties to have such work done for them by the government is reasonable, since it is one of the functions of the government to assist in the development of the country's resources by doing a class of work which owners of properties cannot do for themselves.

#### FIELD WORK.

This summer Mr. E. Lindeman, M.E., has been temporarily engaged to make a magnetic survey of the Glendower iron range, which is now in progress. If time permits, he will make further surveys of the iron ore deposits along the Kingston and Pembroke Railroad.

During the summer of 1905 magnetic surveys were made of the Wilbur mine and of the Belmont iron mine by Mr. B. F. Haanel, B.Sc. The following are his reports:—

<sup>\*</sup> Arrangements have since been made for the removal of the Mines Branch to the Thistle Building on Wellington street.

Dr. EUGENE HAANEL,

Superintendent of Mines,

Department of the Interior,

Ottawa.

Sir,—In accordance with your instructions I made magnetic surveys of the following properties:—

1st. Wilbur Mine.—This mine, the property of W. Caldwell, Esq., is situated on lots 3 and 4. concessions 12 and 13, township of Lavant, Lanark county, province of Ontario. and is connected with the Kingston and Pembroke Railroad by a branch line running through the mine.

A base line was cut through in the direction northeast, southwest, the approximate direction of the strike of the ore formation. This base or principal line was divided into 30-foot spaces and cross lines run at right angles from these divisions 500 feet on either side of the base line. These cross lines were in turn divided into 30-foot spaces. Thus the field was divided into squares 30 feet on the side, for a length of 2,500 feet and a width of 1,000 feet.

Magnetometric readings (both vertical and horizontal) were taken at every corner of these squares and when necessary additional readings were taken at intermediate stations.

The deposit, which is of magnetite, is a contact one, the foot wall being dolomitic limestone and the hanging wall granitic gneiss; between the ore and the hanging and foot walls is a layer of chlorite schist and other green stones.

The dip of the formation is, approximately, between 25° and 40° and is in an easterly direction. The granitic gneiss of the hanging wall rises quite rapidly towards the south, forming a hill. This considerable elevation above the actual deposit tended in some degree to distort the magnetic field.

As will be seen from the map of vertical intensity, the deposit consists of a number of pockets which for convenience of description have been designated in red letters on the map as A, B, C, &c., while the different shafts and pits have been marked Workings Nos. 1, 2, 3, &c.

Starting with the most southerly end of the property surveyed is a pocket which gives promise of containing ore. A pit filled with water and marked Working No. 1 did not admit of investigation as to the quality of ore, dip or other facts which would have been desired. However, according to the magnetic readings, there is still evidence of ore to a workable extent being present here. The blue colour denotes the influence of the upper pole, while the yellow colour denotes the influence of the lower pole.

Situated a short distance to the north of this Working No. 1 is a shaft (Working No. 2), which dips about 30° to the east, the inclination becoming less a little below, and extends for a distance of about 90 feet. This shaft was full of water and could not, therefore, be inspected.

Situated in a northerly direction from the shaft are located the shafts, or Workings 3 and 4, which lie in the area called B. These shafts are part of the principal workings on the property. Shaft or Working No. 3 extends to a depth of about 45 feet, has a dip of about 30° towards the east, and is connected by means of a drift to shaft or Working No. 4, which extends over 300 feet at a dip of about 27° to the east.\*

This shaft follows pretty closely the dip of the hanging wall. At about 90 feet from the mouth of this shaft the inclination becomes less. About 10,000 tons of good ore were taken out of this shaft and were piled up along the railroad. This caused the disturbance in the area C.

To the east of Working No. 4 is Working No. 5, an old shaft which has not been used for some time, connected to No. 4 by a drift. To the northwest of Working No. 5

<sup>\*</sup>The thickness of the ore at this shaft is proved by test drill holes to be about 28 feet and the indications are that this is the most promising deposit in this part of the field.

is Working No. 6, a shaft put down by a company some time ago, and from which considerable ore was taken. The blue area D shows the existence of some ore, although not in any workable quantity. The yellow area E is caused by the excavation in Working No. 6. To the northeast of Working No. 6 the deposit pinches out.

The blue area F and its corresponding yellow area denote the existence of a small

pocket of magnetite, but cannot be considered worth working.

At area G is a pocket of ore which has to some extent been worked. Working No. 7 is an open cut from which some ore of rather poor quality was taken out. The ore here is mixed with a soft, greenish rock (chlorite schist, epidote, &c.).

Area H is a pocket which is, no doubt, composed of the same class of ore as that at G.

The area denoted by I, J, K forms a deposit which has been broken by the ore taken out from Working No. 9.

Working No. 8 extends vertically to a depth of about 97 feet and has a width on top of about 50 to 60 feet. Both Workings Nos. 8 and 9 were full of water at the time the survey was made and consequently nothing could be definitely ascertained as to the depth of either working. However, from all appearances Working No. 9 seems to extend in an easterly direction and no doubt extends for a short distance under area J. The indications here are good that there is sufficient ore to prove workable.

The area designated by M, N, L and O is caused by the extensive dump which contains a large quantity of good ore. At P is another small pocket which has been worked to a small extent at Working No. 10. But I would not consider this pocket worth working.

Several diamond drill holes have been put down in various parts of the property, but neither the plan of these holes nor the plan of the workings was available at the mine while I was there.

Considerable important information as to the geological features and extent of the deposit might be obtained by the records of the drill cores, &c., and before locating any new holes the plan of the holes already drilled and their direction should be obtained.

The railroad facilities are excellent, since a branch line of the Kingston and Pembroke Railroad runs through the property and a siding also runs along the dumps.

The ore, the analysis of which is given below, is practically self-fluxing. It is also very low in phosphorus and sulphur.

The analysis below is from a sample taken from 30 tons sent to Sault Ste. Marie, and is as follows:—

Si O <sub>2</sub>		6.20
$\mathrm{Fe_2O_3}\dots$		55.42
${ m Fe}_2{ m O}_3$ Fe O		23·04 Fe=56-69
$Al_2O_3$	<i>.</i>	2.56
Ca O		2.00
Mg O		6·84
$M_n$ O		0.20
P		0.01
S		

2nd. Belmont Iron Mine.—Situated on lot 19, in the first concession of the town-ship of Belmont, county of Peterborough.

The conditions for making a magnetic survey were very favourable, as the terrain was comparatively level, thus permitting of an accurate interpretation of the curves of the map, which would have been more or less distorted had the terrain been uneven or hilly, and the freedom from a thick growth of trees expedited the work considerably.

The work done in the past upon the property consisted of two openings extending in a north and south direction and separated by about three hundred feet. The most southern opening is a pit of about 35 feet in width and fifty feet in length, with a depth of five or six feet. This pit is called the Nichol pit and is so marked on the map.

The largest opening is of irregular shape and has a length of about one hundred and twenty feet in an east and west direction, with a width of about sixty or seventy feet. At the northeast end of this working is a shaft said to be about fifty feet deep, but this could not be verified, nor could an examination of the deeper portions of the workings be made on account of the water which filled all the workings.

The ore which outcropped in several places or was exposed by stripping was of a rusty colour, due to the decomposition of iron pyrites, which could be seen disseminated through the ore taken out some time previously and piled around the workings.

Sand-like material, consisting of magnetite and pyrite, lies on the surface at various points and was at one time experimented with for concentration. The results of a few of these experiments will be given later.

At the time of my visit a New York firm was drilling a hole for the purpose of proving the deposit. A calyx drill was used and appeared to give good results, a core of about one and a half inches in diameter being obtained. This drill hole was put down to a depth of about three hundred feet and I had an opportunity of examining the cores taken out for this depth. The record of this drilling, which was kept by R. Tate, Esq., acting for T. D. Ledyard, Esq., will be given later in this report.

Mr. Ledyard was not satisfied that the drill holes were properly located to prove the property. He, therefore, applied to the Mines Branch of the Department of the Interior to locate a hole. Mr. Nystrom was accordingly sent to Belmont for this purpose, I being engaged at that time in making a magnetic survey of the Wilbur mine.

Mr. Nystrom located a hole on the northern side of the main working which is marked on the map, and the drill was set up over this place, but after drilling through about twenty feet of rock work was stopped.

It was our opinion at the time and this has since been confirmed by an examination of the map of the vertical intensity, that the drill hole put down in this location would have proved the thickness and angle of dip of the deposit, as the dip of the deposit, although very slight, was found to be in a northerly direction.

Before beginning my survey, a base line was laid down in a northeast and southwest direction and cross lines run perpendicular to this line at thirty foot intervals. These cross lines were then divided into thirty-foot spaces, thus dividing the field to be surveyed into thirty-foot squares. The length of the field surveyed was about one thousand feet and the width six hundred feet (three hundred feet either side of the base line).

Readings of both the horizontal and vertical intensity were taken at each corner of every square, with intermediate readings whenever necessary.

Upon the completion of the field work maps were constructed of the vertical and horizontal intensity.

It will be seen upon examining the map of the vertical intensity that the curves are very regular, thus indicating a regular deposit and that the main portion of the deposit lies within the 60° curve, or that portion of the map coloured the darkest. The negative or yellow portion of the map is the attraction of the south pole and indicates by its feeble attraction a considerable depth from the surface of the south pole of the ore body.

The stronger portion of the negative area is caused by the shaft above referred to, which is located at this corner of the main working.

While the area covered by this deposit is comparatively small, the indications are that it extends to a considerable depth and a few holes put down in different places may prove it to be of considerable magnitude.

A great many analyses made of samples from different parts of the field show the phosphorus to be exceedingly low and although the quantity of sulphur existing in the form of iron pyrites is considerable, magnetic separation experiments carried on by different parties have shown that this can be very easily separated out.

The following analyses taken from Professor W. G. Miller's report on this property to the Bureau of Mines, Toronto, January 6, 1905, were made by Mr. A. G. Burrows, Analyst to the Bureau of Mines.

No. 2. Sample taken across a width of 12 feet of the ore body is corner of the 'Big' pit (main working):	n the southwest
	Per cent.
Metallic iron	66.74
Sulphur	
Phosphorus	
<del>-</del>	
No. 3. Sample taken from ore in place in the Nichol or more sou	ıthern pit :
	Per cent.
Metallic iron	$65 \cdot 31$
Sulphur	•07
Phosphorus	·01
<del>-</del>	V-2
No. 4. Sample from the dump at Nichol pit:	_
75 . 74 .	Per cent.
Metallic iron	i i
$\operatorname{Sulphur}\ldots$	$\cdot 097$
Phosphorus	•01
37 4 0 3 6 4 3 4 3 4 4 3717 7 1	
No. 5. Sample from waste heap to the west of Nichol pit:	
	Per cent.
Metallic iron	60 :40
Sulphur	·17
Phosphorus	.016
No. 6. Ditto:	
	Per cent.
Metallic iron	$59 \cdot 14$
Sulphur	·15
Phosphorus	.016
No. 7. Sample selected on account of its high percentage of pyrites of testing it for gold:	, with the object
	Per cent.
Metallic iron	
Sulphur	
Phognhamia	18.18
Phosphorus	·007
No. 8. Ditto:	
	Per cent.
Metallic iron	60.96
Sulphur	1.40
Phosphorus	028
No. 9. North end of main working near shaft. Sample taken from of 6 feet. A little of the surface of the bottom of this pit was covered and could not be sampled:	n a space 35 x 5
	Per cent.
Metallic iron	55 .65
Sulphur	·94
Phosphorus	•02
	-UZ
No. 10. Ditto:	
	Per cent.
Metallic iron	55 .63
Sulphur	·67
Phosphorus	·018
	010

No. 11. Broken up or sandlike material, consisting of magnetite and pyrite, which lies on the surface of the deposit at various points. Separated by magnetic means, it was found that it gave approximately 89 per cent of magnetic and 11 per cent of non-magnetic material, which contained more or less pyrite. The composition of these two parts of the sample is given in the following analysis:—

#### Sample marked Magnetite:

Metallic iron Sulphur Phosphorus	 	 	 								0	·01	
Sample marked Pyrite						•		 	•	•	v	010	•
Sulphur	 	 	 	 	٠.						Per 0		

It will be seen that the metallic iron in the magnetite after concentration is only a little over one per cent below the theoretical or absolutely pure ore.

No. 12. Coarse sample of crude lump magnetite; was crushed to 10-mesh by Professor Kirkpatrick and separated magnetically. The magnetite was found to represent 87 per cent and the pyrite, together with rock matter represented 13 per cent. The composition of these two products is shown in the following:—

#### Magnetite:

	Per cent.
Metallic iron	
Sulphur	0;129
Phosphorus	0.01
Pyrite:	
Sulphur	18 .85

The following is taken from the International Separator Company's Report :-

'Ore crushed to between 10 and 20 mesh gave in the concentrate 70.9 per cent of iron and 0:1 per cent sulphur; crushed to 10 mesh it gave in one case 70:9 per cent of iron and 0.1 per cent of sulphur, and in another 71.4 per cent of iron and 0.08 per cent of sulphur.'

The above concentration experiments seem to prove conclusively that the sulphur content of the ore can be reduced to a <u>low</u> enough point to permit of its use in ordinary blast furnace work. (However, the finely divided state of the product would make it undesirable, although it could be used in the blast furnace.)

The best process for treating this ore would be the Gröndal magnetic separation and briquetting process. It may be described in part, as follows:—

The crude ore is reduced to about ½-inch cube in a suitable crusher and then introduced into a Gröndal ball mill, which consists of a horizontal cylinder built up of longitudinal steel ribs with cast-iron end plates, through one of which the ore is introduced together with water, escaping through the other end plate as pulp in a finely ground condition. No screens are required.

The mill is carried on rollers and charged with balls of chilled cast-iron ranging in size from 6 inches diameter downwards. The wear of the balls is said to be on an average about 2 lbs. of metal per ton of ore crushed. The energy required for each mill is from 20 to 25 horse-power, which produces from 50 to 100 tons of ore in twenty-four hours.

This crushed ore is then passed through a magnetic separator. Before charging into the separator proper the pulp from the ball mill is first passed through a slime box, in order to get rid of the bulk of non-magnetic slimes. The pulp now freed from slime passes into a separator proper.

The material after leaving the separator contains just enough moisture to allow of briquetting without the use of any binding material. The briquettes thus made are sufficiently firm to be removed from the press to the trucks used in the furnace, which is long and tunnel-shaped. The furnace is gas-fired, the combustion chamber being situated about the middle of the furnace.

The temperature in the combustion chamber reaches 1,300° or 1,400° C., and is sufficient to agglutinate the particles to form a firm briquette able to stand rough treatment and long transport.

The following analysis was made by Messrs. Pattinson and Stead, of Herräng ore treated by the Gröndal process. (See Journal of the Iron and Steel Institute, No. 1, for 1904.):

	Iron. Per cent.	Sulphur. Per cent.	Phosphorus. Per cent.
Crude ore	39.30	1.13	0.006
Concentrates	62.90	0.27	0.003
Refuse	11.40	1.58	0.012
Briquettes	61 · 10	0.008	0.003
Pig iron from these briquettes		0.005	0.012

The location of this property is excellent. It is on a branch of the Central Ontario Railroad and forty-five miles from water navigation at Weller's bay, on Lake Ontario.

A water-power of about 1,000 horse-power, about three miles distant from the mine, has been developed by the Belmont Gold Mine Company, and as it now stands idle power for running machinery, &c., could probably be obtained at a very reasonable figure. Another water-power owned by T. D. Ledyard, Esq., of about 200 or 300 horse-power, lies within easy distance of the mine and could provide ample power for running all machinery. I think the cost of development per horse-power would be quite low.

Note.—According to a letter received recently from T. D. Ledyard, Esq., several new drill holes have been put down in different parts of the deposit, which show good ore at considerable depth.

SESSIONAL PAPER No. 25

RECORD of Drill Hole No. 1. Marked on Map of the Vertical Intensity.

Ore fit for Concentration.

No. of Core.	Description of Core.	Depth of Hole.	Depth of Iron Ore drilled through.	Description of Core.	Depth of Hole.	Depth of Ore.
		Ft. In. Ft. In.	Ft. In.		Ft. In. Ft. In.	Ft. In.
	Good ore	,	9 0		1	2 0. 11.
$\frac{2}{3}$	Fine grained iron	32 3— 36 0	$\begin{array}{ccc} 5 & 0 \\ 3 & 9 \end{array}$	Mixed ore		7 0
	Iron and rock	36 0- 41 1	2 0	Iron and rock	36 0- 41 1	3 1
4	Good iron	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{ccc} 2 & 2 \\ 1 & 2 \end{array}$			
_	11 ,	57 0 62 9	5 9			
5 6	H	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4 7	Iron and rock	82 3— 82 11	0 8
7	. 0	91 0— 95 4 95 4— 95 10	4 4	Rock with iron	83 6— 88 9	ĭ ŏ
•	11	95 10— 97 10	2 0			
	n :	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$egin{array}{cccc} 1 & 5 \ 2 & 1 \end{array}$			
8	Fair iron	106 3—110 3	4 0	D 1 1		
0	Iron with rock	110 3—111 4	1 1	Rock and iron	115 1—116 2	1 1
8	Iron with rock	119 2-119 8	0 6	Rock with iron	117 2—118 1	0 11
	Good iron	119 8-120 7	0 11	11 11	120 7—121 2	0 7
9	Iron and rock (good).	$egin{array}{cccccccccccccccccccccccccccccccccccc$	0 8 5 6	Iron and rock	$\begin{bmatrix} 123 & 1 - 125 & 0 \\ 125 & 0 - 128 & 0 \end{bmatrix}$	$\begin{array}{cc} 1 & 11 \\ 3 & 0 \end{array}$
	and rock	134 4135 7	1 3	Iron, quartz, &c	133 6-134 4	0 10
10	ıı good	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} 3 & 7 \\ 2 & 7 \end{bmatrix}$	Rock and Iron,	135 7—136 5	0 10
	and rock	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2 0 0 6			
	" and rock	150 5—152 2	1 9	Rock and iron with S.	146 7—148 4	0 9
11	" (close grain)	157 0—162 2	5 2	Iron and rock	$egin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{smallmatrix}1&0\\2&1\end{smallmatrix}$
12	with rock	179 3—180 3	1 0		165 4-166 4	1 0
13				Rock and iron	180 3—181 11 183 6—185 0	$\begin{array}{cc}1&8\\1&6\end{array}$
	Iron (little rock)	194 5—196	1 7	0 0	185 0—191 1 1 191 3—194 5	$\begin{smallmatrix} 6 & 1 \\ 3 & 2 \end{smallmatrix}$
14	11 ore	200 0-210	10 0	Rock and iron (fine		• -
15	and rock	224 10-225 9	0 11	grain)	196 —200 0	4 0
16		230 0-231 6	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Rock and iron	<b>232</b> 9— <b>234</b> 1	1 4
	11 II	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	7 7	11 11	245 9-246 10	1 1
17		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{ccc} 0 & 7 \\ 4 & 3 \end{array}$	Rock and iron with S.	252  4-260  0	7 8
18	11 11 11 11	260 3-262 10	2 7	11 11	260 0-260 3	0.3
	и и	264 0-267 4	3 4	11 11	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c}1&2\\2&8\end{array}$
10					$272\ 10-274\ 7$	$\begin{array}{c c} 1 & 9 \\ 2 & 0 \end{array}$
19	11 11	274 7—276 2	1 7	l (1 II	,	l
	Total		115 6	l	[ . <b></b>	60 1

3rd. Lot 7a, Range V, Township of Leeds, Que.—This survey was made in May, 1905.

A base line was cut out in the approximate direction of the strike and the field divided into thirty-foot squares in the usual manner.

Magnetic measurements of the horizontal and vertical intensities were taken at the corners of every square and at intermediate stations when necessary.

Upon the completion of the field work a sketch map of the isodynamic lines showing the principal part of the deposit was made. From these isodynamic lines the posi-

tion for a drill hole was located, for the purpose of proving the depth and thickness of the ore, but no drilling up to the present time has been done.

A preliminary report of this survey was published in the Annual Report of the

Superintendent of Mines for 1906.

The ore which is magnetite occurs in schistose rock and serpentine, and in places is exposed by outcrops and in others by stripping which was done some time previous to my visit. The strike of the formation is very nearly northwest—southwest, and the dip is approximately 45°-50° to the northwest at the surface.

Some ore had been removed from these exposures and from a test pit (No. 1) shown on the map of the vertical intensity accompanying this report, but the amount removed was so small that the general readings would have remained the same had this ore been left in place.

It will be seen, on examination of the map, that the ore occurs in pockets. These pockets, to facilitate reference, are designated by the capital letters  $\Lambda$ , B, C, D and E printed on the map.

The positive areas A, B, C and D indicate the existence of ore in the form of pockets, but the indications of the amount of ore present are not sufficiently encouraging to warrant any outlay for development.

The positive area E is the most promising of these pockets and the only one where further prospecting would prove of any value, but even here the indications of the amount of ore present do not warrant any great expenditure.

It will be noted that the positive vertical intensity decreases rapidly in the direction of the dip of the formation. This may be taken as an indication that the ore body has little extension in depth.

A drill hole put down in the position previously mentioned would have pierced the ore body at a depth of 150 feet, if the dip at the surface continued to this depth. If ore does not extend to this depth the deposit is not worth working.

The ore formation continues into the next lot, which is lot 7b, range V, but, according to your instructions, I confined my survey to lot 7a.

About one day was spent in taking measurements on lots 1 and 3, range X, but no indications of iron ore other than several surface boulders were found.

The nearest railroad station is Robertson on the Quebec Central Railway, about twelve miles drive from this property.

The following analyses were made by Mr. M. F. Connor from samples taken from two outcrops and the test pit mentioned above:

	No. 1. Test Pit.	No. 2.	No. 3.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3 · 70 ,0 · 10 24 · 60 59 · 05 1 · 12 0 · 50	8 · 77 0 · 30 trace. 25 · 28 64 · 96 0 · 43 0 · 03 0 · 35	40.43 0.10 trace. 17.98 40.10 0.40 0.02 0.37
Fe SP	60·48 0·007 0·307	65 15 0 007 0 153	42 07 0 03 0 163

It will be seen from these analyses that the sulphur is very low in all three samples and that the phosphorus is high.

Your obedient servant.

#### ELECTRIC SMELTING EXPERIMENTS.

On account of the great importance of this subject for the utilization of the numerous water-powers and iron ore deposits in Canada, especially in those provinces where coal for coking purposes or coke needs to be imported, an appropriation was made to defray the expenses of erecting an experimental plant for the determination of the following important points referring to Canadian conditions:—

1. Can magnetite, which is our chief ore and which is to some extent a conductor of electricity, be successfully and economically smelted by the electric process?

2nd. Can iron ores with comparatively high sulphur content, but not containing manganese, be made into pig iron of marketable composition?

3. Can the electric process be so modified that charcoal, which can be cheaply made from mill refuse and other sources of wood supply, useless for other purposes, could

could not be secured elsewhere and the offer was, therefore, accepted.

constitute home products.

The Lake Superior Corporation offered, if the plant were erected at the works in Sault Ste. Marie, to furnish the required electric energy free of expense for four months and to place at our disposal their well equipped laboratory and facilities for crushing and briquetting at a reasonable rental. It was deemed that these advantages

be substituted for coke? This is especially important since charcoal and peat coke

Mr. Erik Nystrom, M.E., member of the staff of the Mines Branch, was detailed to proceed to Sault Ste. Marie to superintend the erection of the furnace, which had been designed for the experiments by Dr. P. Heroult, and to make all needed preparations for the commencement of the experiments at an early date.

The difficulty of obtaining the necessary electric appliances and measuring instruments and the fact that the electrodes required to be imported from Sweden greatly delayed the beginning of the experiments.

The official experiments were commenced about the middle of January, 1906, and continued, with a few intermissions for repairs, night and day until March 4.

The experiments were carried out under the directions of Dr. P. Heroult and myself. The working of the furnace, divided into three eight-hour shifts, was superintended in rotation by Messrs. E. Nystrom and B. F. Haanel (members of the staff of the Mines Branch), and by Messrs. R. Turnbull and J. Sejournet (engineers for Dr. Heroult), each being responsible for the respective shifts, notes and measurements made.

A preliminary report of these experiments was published in June, giving the principal results obtained and a full report is at present being prepared for the press.

At the request of the Faraday pociety of England a paper on the subject of the government electric smelting experiments at Sault Ste. Marie was prepared by me, which was read on July 2.

A similar paper on the same subject was, at the request of the Chemical Society of the United States, read by me on June 30, at the meeting of the Society at Ithaca, N.Y.

Previous to this an address on the subject was also given by me before the Canadian Club of Toronto on March 12.

Permission was asked by the secretary of the Franklin Institute of Philadelphia, Pa., to reproduce the report in their transactions, which was granted.

After the conclusion of the experiments, the plant was sold to the Lake Superior corporation and the furnace has since March been employed by this company for the manufacture of ferro-nickel pig.

## RESULTS OBTAINED BY THE LAKE SUPERIOR CORPORATION.

Mr. E. A. Sjöstedt, Chief Metallurgist of the Lake Superior Power Company, who has had charge of the smelting operations, reports regarding the production of ferronickel pig, as follows:—

'During the first few weeks of our experiments minor changes in the shape of the furnace were made, also in the electrode holder, the lime charges were purposely kept low (from 15 to 18 per cent of the ore charge) in order to observe the influence and efficiency of the lime in the elimination of the sulphur and silicon. During this time the furnace product averaged 2,700 lbs. per diem of ferro-nickel with 0 01 per cent S and Si contents, varying from 5 to 11 per cent.

Returning to our old practice and running on 50 per cent lime charge, the product decreased somewhat (yielding from April 4 to May 5 on an average 2,456 lbs. per diem), but the Si contents were reduced to about 3 per cent. The further increase of the lime charge tended to further decrease the Si contents, but at the sacrifice of the production. Finally we settled down to an ore charge of 400 lbs. of briquettes (carrying from 1.5 to 2.25 per cent S), 140 to 150 lbs. limestone of the composition given below and about 120 lbs. charcoal.

#### Limestone.

	Per cent.
Si O,	1.71
Fe $_{\circ}\mathring{O}_{\circ}$ + Al $_{\circ}O_{\circ}$	
$\operatorname{Ca}^{2}\operatorname{CO}_{3}$	
$\mathrm{Mg}\ \mathrm{CO}_{\mathrm{s}}$	
P	
S	0.052
	99.826

Up to August 1 about 168 short tons of ferro-nickel had thus been produced. Omitting the first few weeks and taking into consideration only the four full months, April to July, inclusive, during which time the furnace was in continuous operation, with the exception of such unavoidable interruptions as were caused at the power plant and for the changing of electrodes, the following average results were obtained:—

Total product	154 short tons.
Total working time, 114.8 days of 24 hours.	
Average product per working day	1.3415 short tons.
Mean volts on furnace	38
Mean amperes	4,800
Power factor	0.919
Mean electric horse-power on furnace, approx	225
Output of ferro-nickel pig per 1,000 E. H. P. days=	
$\frac{1.3415 \times 1,000}{925} = 5.96$ short tons.	
${295}$ = 5.96 short tons.	

During this period the following average amounts of raw material were consumed for the production of one short ton of ferro-nickel pig (of an average composition of about 2.75 per cent Si; 0.01 per cent S; 0.03 per cent P; 4 per cent Ni, and 0.8 per cent Cu):—

Roasted pyrrhotite (about 2 per cent S content)	2 tons.
Limestone	1,500 lbs.
Charcoal, 60 bushels at 20 lbs	1,200 "
Electrodes	40 "

Since the publication of the report of the commission appointed to investigate the different electro-thermic processes for the smelting of iron ores and the making of steel in operation in Europe,\* the following plants have been erected:—

<sup>\*</sup> Published by the Mines Branch, 1904.

## In United States-

By Henry Disston & Sons, at Tacony Works, near Philadelphia, Pa.

Type—Induction furnace, by E. A. Colby.

By the Halcomb Steel Company, Syracuse, N.Y.

Type—The Heroult Steel Furnace.

## In Germany—

By the Electro Stahl Gesellschft, at Remscheid, near Cologne.

Type—The Heroult Steel Furnace.

By Deutsche Electrische Stahlwerke, at Plattenberg, Westphalia.

Type—The Gin Steel Furnace.

For the Kjellin Steel Furnace contracts are said to have been made by Krupp, in Essen, Germany, and by Vickers, Sons & Maxim, and J. Pd. W. Baldwin, in England.

Since the issuance of the preliminary report on the experiments made at Sault Ste. Marie, Ont., under government auspices, in the smelting of Canadian iron ores by the electro-thermic process advices have been received at this office from Mr. R. Turnbull, representative of Dr. Heroult, that a contract has been secured for the erection of an electric smelting plant to be in operation in six months at Baird, California. The plant is at first to consist of one 2,000 H. P. Electric Furnace with a guaranteed output of 20 tons of 2,240 lbs. of pig iron per 24 hours. If successful, the plant is at once to be enlarged by the erection of additional furnaces with a capacity of 600 to 800 tons per day.

Mr. Turnbull also informs me that he has practically closed with a firm in Mexico for the erection of an electric smelting plant for the production of pig iron, the plant

to be in operation within 12 months.

Professor E. G. von Odelstierna in a paper read before the Fjärde Allmänna Svenska Tekniker Mötet,\* in Norrköping, Sweden, and published in the Teknisk Tidskrift, No. 30, for the year 1906, comments as follows regarding the consequences of the electric smelting experiments made at Sault Ste. Marie under government auspices:

'The iron industry of Canada in certain ways resembles that of Sweden, viz.:

'1st. The largest number of the iron ore deposits are magnetites, very similar to certain of our Swedish ores, as shown at the Chicago Exhibition in 1893, where we Swedish jurymen, with somewhat painful feelings, studied the Canadian iron ore exhibit. The exhibit consisted of only small samples but from 70 different localities from all parts of the country. The specimens exhibited were mostly rich crystalline magnetites.

'2nd. The large deposits of magnetite seem in general to be located at great distances from the coal deposits, but in localities where abundance of good wood for char-

coal is available.

'3rd. Canada possesses in these localities large water-powers.

'There is no doubt in my mind that Canada will develop in the near future a large iron industry, as already stated in my report on the exhibition in Chicago, and whatever doubt there was is now entirely removed when witnessing the energetic steps taken by the government of Canada in later years to reach this aim.

'I require, therefore, now to add that this expansion of the iron industry of Canada will very soon be reached to judge from the results obtained with the electric smelting

process,\*\* with which very gratifying results have lately been obtained.

'We have, therefore, to fear that the iron industry of Sweden can expect a dangerous competition from Canada, which not only can cut our market in United States of America, but also our market in England, if that country should adopt the proposed customs union with the colonies; also in regard to China and Japan, is Canada better situated, which is evident from a look on the map.

\*\* At Sault Ste. Marie, Ont.

<sup>\*</sup> General meeting of Technical Congress.

'Only in one respect, viz., the cost of labour, are we better situated than Canada, if this is to be considered as a better situation.

'The Canadian government, which already saw the importance for the country of utilizing and smelting their rich ore deposits in the country and not only export the ore, has unconsciously given our government a sharp lesson. As already known, this patriotic government appointed a commission to investigate all the inventions made in Europe for the reduction of iron ores and the making of steel by the electric processes and enabled the commission to publish a standard work on this subject.

'On account of these investigations, it was considered to be of advantage of further experimenting with Canadian raw material in Canada, and the first process employed was the one invented by Heroult. The figures hereafter given are those obtained with this method and lately published in a report by the Superintendent of mines.

'So much can be said, however, that very important experiments have been made, and even if the greater part of our labour should be continued in the direction of direct producing steel from the ore, a very important part of the practical electrometallurgy has been solved by the Canadian government and the energetic members of the commission.'

#### INVESTIGATION OF THE ZINC RESOURCES OF BRITISH COLUMBIA.

It has for a long time been known that zinc ores occurred in British Columbia associated with silver bearing lead ores. The zinc ore until very recently was, however, considered of little value and in most cases was thrown on the dumps. Lately several companies have reconstructed their plants with a view of saving the zinc concentrates as a valuable by-product. These zinc concentrates were in most cases exported to zinc smelters in the United States.

In view of these facts the Silver-lead Association and Associated Boards of Trade of British Columbia petitioned that a commission be appointed to investigate and report on the zinc ore resources and the zinc industry of British Columbia. I was directed by you to prepare a memorandum on this subject, outlining the work to be done and presenting names for your approval of the staff who were to be entrusted with this examination. On approval of this memorandum, Mr. Walter Renton Ingalls, editor of The Engineering and Mining Journal, New York city, and author of an extensive work on the 'Metallurgy of Zinc' and a treatise on the 'Occurrence and Distribution of Zinc Ores,' the commercial and technical conditions affecting the production of spelter, &c., was appointed chief of staff of the Zinc Commission.

The following is an extract from the instructions given to Mr. Ingalls regarding the work to be covered and the appointment of his assistants:—

'The examination is to cover-

'1st. Examination of the present development of the mines to determine approximately the tonnage of zinc ore immediately available, its occurrence and character and the future prospects, together with the cost of mining.

'2nd. Examination of the present methods of milling.

'3rd. Investigation of the adaptability of the ores to the new methods of concentration (magnetic, electrostatic, &c.).

'4th. Study of the conditions affecting marketing of the concentrate, including the question of smelting in the province or elsewhere in Canada.

. '5th. Investigation of the possibility of special utilization of the zinc ore of high silver content.

'Mr. Philip Argall, M.E., of Denver, Colorado, and Mr. A. C. Gardé, of Nelson, B.C., will act as your assistants, the former taking charge of the field work, the latter acting as Mr. Argall's assistant. These parties are to report to you the results of their investigations made in accordance with full instructions to them from you.

'Your recommendation that the investigation of the adaptability of the ores of British Columbia to magnetic and electrostatic concentration, &c., be undertaken by

Henry E. Wood, of Denver, Colorado, is hereby accepted.

Upon the completion of the field work, or sooner if advisable, you are directed to make a tour of the zinc districts of British Columbia to obtain such personal view of the economic conditions as will enable you to form a sound judgment regarding the establishment of zinc smelters, fuel supply and strategical railway locations and such other data as are necessary to arrive at proper conclusions affecting the development of the zinc industry of British Columbia.

'Your report dealing with the economic features of the inquiry is to contain an analysis and summary of the data collected under your direction by your assistants in the field and in the concentration laboratory. The individual reports of Messrs. Argall,

Gardé and Wood are to appear in the full report.'

The investigation of certain undeveloped deposits and prospects was assigned to Dr. A. E. Barlow, assisted by Mr. Keele, who were for this purpose detached from the Geological Survey Department.

A report from the Gold Commissioners on zinc ore occurrences in their districts was also obtained through the courtesy of the Honourable the Minister of Mines of British Columbia.

Regarding the erection of a zinc smelter at Frank, Alberta, Mr. Ingalls reports in

The Engineering and Mining Journal, of July 7, Vol. 82, No. 1, page 22:

'An interesting innovation in the metallurgical industry of Canada was the beginning of operations by the Canadian Metal Company, which has erected an expensive zinc smelting plant at Frank, Alberta, the purpose of which is to treat the zinc ores of British Columbia, especially of the Slocan district. The plant was located at Frank, on the Crow's Nest branch of the Canadian Pacific Railway, because coal is cheaply available at that point. The company, indeed, owns a coal mine, operated through an adit, the cars of which dump the fuel directly into the bunkers of the gas producers. The plant was put in operation on May 31 and on June 3 spelter was drawn from the condensers of the distillation furnaces, this being the first spelter ever produced on a commercial scale in Canada.'

The report of the commission is at present in the hands of the printer and will be ready for distribution at an early date.

#### OFFICE WORK.

Numerous requests were made during the year for information relating to mining and metallurgical matters, the occurrence of economic minerals, the mining laws of Canada, &c. The correspondence is steadily increasing and from January 12 to July 1, 1906, 1,821 letters were received.

In addition to the work necessitated in answering these requests much time was consumed in the editing and proof-reading of the different reports issued and the

drawing of necessary diagrams and illustrations.

From the City Trade Branch of London, England, and other similar associations several requests have been received for information in regard to mining properties in Canada, with a view of investment of European capital, or exportation to Europe of Canadian minerals.

I am informed by the above association that Messrs. Brandeis, Goldschmidt & Co., 18 and 19 Fenchurch street, London, England, would like to get in touch with Canadian producers, especially of copper, lead and antimony, and that under certain conditions they might be prepared to offer financial assistance.

In view of the numerous inquiries received at this office for information regarding the 'Mineral Industry of Canada,' a publication is urgently needed, which, in addition to the statistics of the mineral production of Canada, would furnish the following information regarding the different mining and metallurgical companies operating in

25-viii-2

Canada: Names and addresses of the companies; date of incorporation; location of their properties; capital invested; names of directors, managers and chief engineers; short description of their works and machinery, and number of workmen employed.

#### DOMINION OF CANADA ASSAY OFFICE.

During the fiscal year ended June 30, 1906, 21,050 80 ozs. of bullion, valued at \$337,820.59, were received and assayed. These deposits were derived from the following sources:—

	Danasita	WEIG	энтв.	Value	
	Deposits.	Before Melt.	After Melt.	v arue	·•
	No.	Oz.	Oz.	\$	cts
Yukon British Columbia Northwest Territories. Ontario. Alaska	32 294 5 10 4	4,357 13 15,476 60 92 65 994 97 129 45	4,265 · 22 15,133 · 10 77 · 64 990 · 34 125 · 15	69,388 245,360 2,161 18,725 2,184	70 40 63
	345	21,050 80	20,591 45	337,820	59

Weight before melting	Ounces. 21,050 · 80 20,591 · 45
Loss by melting	459.35

The following table shows the business done by the assay office since its establishment:

Fiscal Year.	Deposits.	Weights.	Value.
	No.	Oz.	\$ ets.
1901-1902 1902-1903 1903-1904 1904-1905 1905-1906	671 509 381 443 345	69,925 67 36,295 69 24,516 36 29,673 73 21,050 83	1,153,014 50 568,888 19 385,152 00 462,939 75 337,820 59

The following is a statement of difference in value of assays between Seattle Assay Office and Dominion of Canada Assay Office from July 1st, 1905, to June 30, 1906:

Value bars Seattle assay office	\$	338,909 05 702 78
Value bars and clippings, Dominion of Canada assay office	\$	339,611 83 337,820 59 1,111 17
Total value bars and clippings, Seattle  Total value bars and clippings and extra assay charges, Dominion of Canada Assay Office	<b>\$</b>	338,931 76 339,611 83 338,931 76
Balance in favour of Dominion of Canada Assay Office, Vancouver		680 07

STATEMENT of indebtedness of Government of Canada to Canadian Bank of Commerce for the fiscal year ended June 30, 1906.

$\it Received\ by\ Bank.$						
Extra assay charges Difference, Seattle and Vancouver assays	\$	1,111 680	17 07	<b>\$</b>	1,791	24
Due to Bank.		•			1,101	~1
Extra assay charges	\$	1,111 574	$\begin{array}{c} 17 \\ 27 \end{array}$		1 002	
				_	1,685	44
			:	\$	105	80
Jany. 17, 1906.—By cheque from Bank of Commerce, amount due by them on account, purchase of gold to December 31, 1905	S	35	15			
due by them on account, purchase of gold to June 30, 1906			<b>6</b> 5	\$	105	80
Statement of Earnings and Expendi	tur	·e.				
Deposits of gold				\$3	37,820	59
Earnings,					,	
Extra assay charges placed to credit of Receiver General  Value of sweeps and recovery of grains	\$	1,111 585	$\frac{17}{36}$	•	1 404	۲0
Expenditure			• •	Đ	1,696 9,947	
Percentage of Net Expenses to Deposits, 2:4423.			-			_

STATEMENT of extra assay charges received by Dominion of Canada Assay office from July 1, 1905, to June 30, 1906.

From.	To.	Bar N	umber.	A A	Amou	nt.
1905.		From	То		\$	cts
	July 31,		47			33
August 1	August 31	. 48	86			62
September 1	September 30	. 87	. 117	l		65
October 1	October 31	118	169	*		79
December 1	November 30 December 31	170 207	$\frac{206}{228}$	İ		l 10 9 03
1906.	ĺ					
January 1	January 31	229	250		57	83
February 1.	February 28	251	260	İ	24	1 00
March 1	March 31	. 261	282			L 29
April 1	April 30	. 283	327			3 87
May 1	May 31June 30	. 328	345	.[		3 03
	Total			-	1,111	17

STATEMENT of Expenditure made by Dominion of Canada Assay Office, Va	ancouver,
B.C., from July 1, 1905, to June 30, 1906.	

Rent	\$ 1,200	00
Power and light	114	52
Gas and fixtures	267	99
Chemicals	7	35
Repairs and alterations	50	95
Water taxes	14	40
Postage	9	00
Stationery and printing	3	80
Assayers' materials	69	05
Melters' supplies	42	10
Freight and express	49	49
Telegrams	37	89
Telephone	66	<b>3</b> 0
Office supplies	35	38
Hardware	40	85
Machinery	642	67
Premium on bond	80	00
Consular certificates	<b>2</b>	50
Thomas McCaffray	2,500	00
J. B. Farquhar	1,500	00
G. Middleton	1,500	00
D. Robinson	900	00
Miss Tierney	720	00
J. O. Sullivan	80	00
T. Fitch	13	00
-	\$ 9,947	24

The following is a statement of money received and expended by the Dominion of Canada Assay Office, Vancouver, B.C., to June 30, 1906, and shows the unexpended balance of the appropriation to be \$1,743.92:—

Appropriation	\$ 11,000	00
	580	
Difference, value, Vancouver and Seattle assays, from		
July 1, 1905, to June 30, 1906	105	80
Special assay charges	5	00
Total	\$ 11,691	16
Expenditure to June 30, 1906	9,947	24
Balance	Ф 1 <i>7</i> /9	00

INVENTORY OF PROOF GOLD AND SILVER ON HAND JUNE 30, 1906.

Proof gold Proof silver	
	Ounces.
Large disks	
Small disks	30 -87
Silver bars	133.95

Ounces

#### CHANGE IN THE CONDUCT OF THE BUSINESS OF THE ASSAY OFFICE.

Hitherto the bullion deposited in the Dominion of Canada Assay Office has been marketed for us by the Canadian Bank of Commerce, the bank receiving for these services 17 cents per \$100 to cover marketing expenses. This arrangement has been cancelled by an Order in Council, dated May 10, 1906. The Order in Council provides for the purchase by the government of the bullion deposited, the manager of the assay office being authorized to issue letter of credit cheques for the value of the deposits to the depositors, or if they are unable to present themselves personally to mail cheques to their addresses.

The following regulations regarding deposits and charges thereon have been authorized by the Order in Council of May 10, 1906:—

1st. Each parcel requiring a separate assay will be treated as a separate deposit.

2nd. All deposits will be treated in the order in which they arrive.

3rd. The gold on which royalty has been paid must be accompanied by a certificate from the Comptroller of the Yukon Territory at Dawson, that the royalty at the rate prescribed by the regulations has been paid.

4th. The charges to be made on each deposit after assays to be as follows :-

On gold on which royalty has been paid:

1st. Charge—Assaying and stamping charge, \( \frac{1}{3} \) of 1 per cent on the gross value of the gold and silver contained in the deposit.

2nd. Charge—rarting and refining charge: 4 cents per ounce on the weight after melt.

3rd. Charge—Toughening and alloy charge: 2 cents per ounce on ½1 of the standard weight of gold contained in the deposit.

In paying for silver \%0 of the standard weight of the gold to be deducted from the gross standard weight of the silver contained in the deposit. This deduction is to cover loss in converting silver from solution.

On gold on which no royalty has been paid an additional charge of one dollar on each melt is to be exacted.

# IMPROVEMENTS IN THE INTERNAL ARRANGEMENT OF THE ASSAY OFFICE AND ADDITIONS TO EQUIPMENT.

The upper back windows of the Assay Office, which had so far been left unprotected, have been ordered, for greater safety, to be provided with iron gratings.

Mr. Middleton, chief melter, having reported that the space from the melting furnace table to the partition being only 4 feet 8 inches, sufficient room was not given to handle large melts required by the provisions of the Order in Council which changed the conduct of the business of the Assay Office, it was decided, to avoid accidents, to move 12 feet of the partition opposite the large furnaces in towards the office 2 feet 6 inches, which would make the space between the large furnace table and the partition 7 feet 2 inches.

The assay weights having been in use for four years, it was found that their accuracy could no longer be depended upon. A set of standard weights of 500 oz. down to 100 of an ounce, with a certificate of the United States Standardizing Bureau, was, therefore, ordered from Henry Troemner, Philadelphia, Pa. On receipt of these standard weights by the manager of the Assay Office, he was instructed to institute a comparison of the office weights by substitution with the 'standards.' The following is his report thereon:—

## Dominion of Canada Assay Office, Vancouver, B.C., April 23, 1906.

This certifies that the office weights designated below have been compared by substitution with the 'standards' and the following corrections made, viz.:—

Designation.	Correction.	Distinguishing marks.	Sensibility of balance.
0 oz	**03/100 oz. **04/100 " None. **01/100 oz. **01/100 " **01/100 " None. " " " " " " " " "	1 dot 2 dots  1 dot 1 " 2 dots	100 mgrms. 100 " 1

A \* means that the weight was heavier than the Standard.

The necessity, according to the provisions of Order in Council of May 10, 1906, of melting all small ingots for marketing purposes into large ingots not exceeding 1,400 oz. in weight required the use of an ingot balance. This balance of 2,000 oz. capacity, sensibility ½000 oz., with beam encased, and standardized weights to accompany same, was ordered from Henry Troemner and has since been received at the Assay Office.

#### ADDITIONS TO THE STAFF OF THE ASSAY OFFICE.

On the resignation of Mr. J. Walter Wells, chief assayer, on April 30, 1904, Mr. J. B. Farquhar was appointed chief assayer on July 1, 1904, and the services of an assistant were dispensed with in the interests of economy.

The change in the conduct of the business of the Assay Office constituting it a purchasing office rendered it advisable, to insure the proper checking of the assays, to appoint an assistant. Mr. A. Kaye, who had been in the employ of the Canadian Bank of Commerce at their Atlin branch as assayer during the years 1901, 1902, 1903 and 1904, and whose work in this capacity has been vouched for as satisfactory by Mr. H. H. Morris, Inspector of the Canadian Bank of Commerce, was appointed to this position, his duties to commence July 1, 1903.

#### APPENDIX.

In the appendix a description is reproduced of the Heskett-Moore iron process, which I owe to the courtesy of the Superintendent of Commercial Agencies, Mr. F. C. T. O'Hara; also a letter received from the manufacturers in England regarding the new explosive 'Ammonal.'

I have the honour to be, sir, your obedient servant, EUGENE HAANEL,

Superintendent of Mines.

# APPENDIX.

Description of the Heskett-Moore Patented Direct and continuous process for Treating Ferruginous Ore for the Manufacture of Iron and Steel, showing the method employed and the commercial advantages arising therefrom.

The process is a method for directly converting iron ore into malleable iron or steel by a continuous system.

This process consists essentially in first reducing iron ore to a fine state of division, and separating the gangue therefrom by electro-magnetic treatment, or other approved method of concentration, leaving a pure oxide of iron, which is then treated automatically by a pure fuel, reduced to a metallic state, and finally fused and delivered from the furnace in the form of malleable (commercially pure) iron and steel as desired, by one direct and continuous process doing away with the intermediate stage of pig iron.

Any iron ore can be treated by this method, but the New Zealand iron sand, in consequence of its natural extreme fineness is particularly adapted for treatment.

In New Zealand enormous deposits of magnetic iron sand exist on the beaches of the west coast, the value of which is clearly recognized, so much so indeed, that the New Zealand government offer to take 65,000 tons of iron smelted from the sand, at English prices with carriage and expenses added, and in addition to give a bonus of £1 per ton for the first 20,000 tons to encourage the establishment of iron works there, conditionally upon a plant of a certain value being erected.

Although many processes have been tried, until now no commercially successful means of treating the sand has been proved.

Owing to the fineness of the sand some inventors who had operated on it conceived the idea that the best way of working it was to mould it into 'briquettes' and smelt them in an ordinary blast furnace, producing pig iron in the usual way. The necessity of making sand into briquettes or the production of pig iron at all, has been obviated by the introduction of this process.

In the present patented process, gaseous fuel free from impurities specially prepared in the apparatus, is used, and is perfectly under control. Instead of making the iron sand into briquettes thus adding to the cost before smelting, and also introducting impurities into the iron during the smelting and adding to the cost of subsequent treatment, the magnetic sand under the new process is treated 'automatically' and without the addition of any fluxing agent.

The trial runs of the plant constructed at South Melbourne have proved conclusively that the method and apparatus designed by the inventors have produced malleable iron and steel direct of a very high quality.

It is estimated by those competent to judge that the highest grade of tool steel can be produced for less than three farthings per pound—or for very little more than the cost by other methods of ordinary grades of steel for structural purposes; steel rails can be produced for under £4 per ton, and malleable iron for £4 10s.

One of the inventors of the new direct and continuous process, Mr. T. J. Heskett is well versed in English iron smelting methods, having been trained to the business in Middlesborough, England.

After working at Onehunga, New Zealand, on the iron sand, the result, in conjunction with Mr. Montague Moore, was the discovery of the present method of obtaining malleable iron or steel direct from the ore instead of pig iron as hitherto.

The company has obtained a lease of 320 acres at Lal Lal, near Ballarat, upon which there is an extensive and rich deposit of hematite iron ore, and has also arranged for a special concession of beach frontage from the New Zealand government at Manukau Heads, upon which there is a very large deposit of high grade magnetic iron sand sufficient for many years consumption.

The following details explain the mode of working:-

Starting with the iron sand or pulverized iron ore it is dried and separated from its gangue, by which means iron oxide separated from every impurity is obtained. The great natural fineness of the New Zealand iron sand, admits of a thorough separation of the impurities, but in Australia and other countries the ore to be smelted by the new system will first have to be reduced to a fine state of division and concentrated.

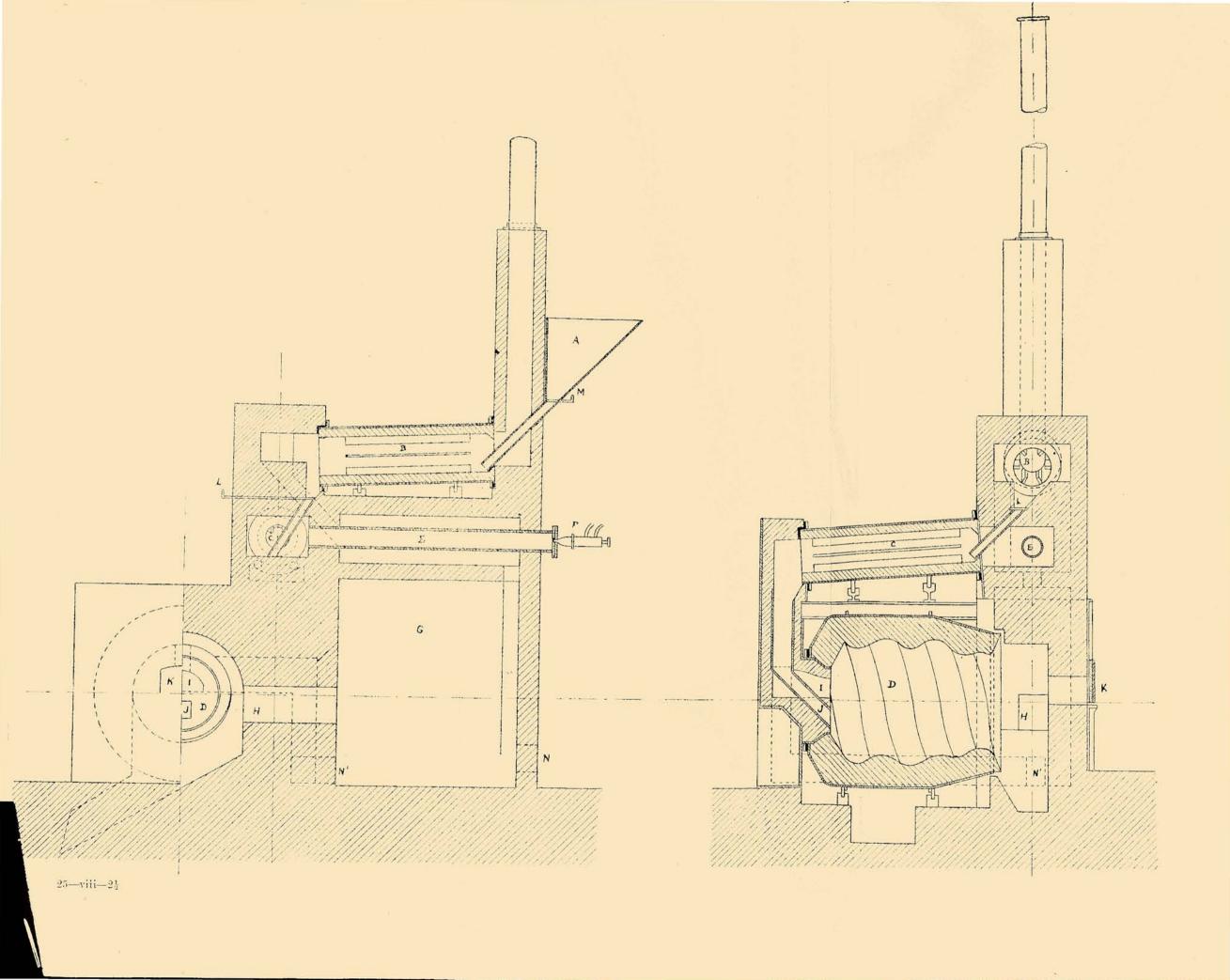
After separation, the purified iron oxide is automatically fed into the furnace.

The first portion of that furnace consists of a heating chamber, wherein by using the waste heat from subsequent operations, the iron oxide is thoroughly heated. It then mechanically passes into what is called the reducing chamber, where a jet of gaseous fuel takes up the oxygen from the oxide of iron particles, which are thus converted by deoxidation into particles of metal, which are automatically fed into the melting furnace, and converted into malleable iron or steel according to arrangements made.

The commercial advantages are:

- 1. By using a pure ore freed from foreign matter by magnetic or other separation, there is no cost for fuel to melt the gangue into slag, and afterwards disposing of that waste product. Also the much greater economy with which the fine atoms can be heated as compared with solid ore in lumps effects a large saving compared with existing methods.
- 2. Sulphur and phosphorus are usually present in both fuel and fluxes. These elements act injuriously upon iron and steel, and cause much expense in effecting their separation. By using a gaseous fuel alone these impurities are not present, or if present are easily removed before the gas is used for smelting. Also by using a purified ore, the result is the production of a very high class malleable iron or steel. There is also the advantage of having the heating quickly and certainly under control.
- 3. The arrangement of the furnace utilizes the waste heat, a thorough conversion of it being achieved throughout the whole cycle of operations, which is continuous from the sand to the finished metal.
- 4. The most important saving is effected by adopting this direct process, and the subsequent diminution of the number of operations necessary. The present commercial process, which the Heskett-Moore invention is intended to supersede, consists first in the production of pig iron, an impure type of metal requiring detailed handling, puddling, bessemerising, &c., before conversion into wrought iron or malleable iron or steel. Working by the Heskett-Moore process with a pure ore free from foreign matter and using as a fuel purified gases, the direct and continuous result is metal at once fitted for use as wrought iron or steel as may be required.
- 5. The working plant is so arranged that the process, as well as being continuous, and saving any reheating of the metals, as hitherto, is entirely automatic; as after the iron sand is fed into the magnetic separator, the pure oxide taken by mechanical conveyors and fed by them into the heating chamber, and no handling occurs until the malleable iron or steel is produced from the melting furnace, ready to be wrought under the steam hammer, and rolled into rails, plates or bars.

One of the chief impediments to the successful establishment of iron works on a large scale in Australia, has hitherto been the high price of labour as compared with other countries. By the new direct and continuous method of smelting much less manual labour is required than under the older system, and malleable iron or steel can be produced here at less cost than similar qualities of metal under present conditions in England. The invention having been proved at South Melbourne Works by the production of high quality iron and steel, very far reaching consequences will result.



In fact a revolution must be effected in iron and steel manufacture throughout the world, and, recognizing the immense benefits which will accrue, patents have been applied for in New Zealand, Great Britain, Norway, Sweden, France, Belgium, Germany, Russia, Canada, India, the United States of America, the Commonwealth of Australia, Japan and the Transvaal.

The company which has secured the invention intends to run the works at South Melbourne, to demonstrate its value to Australian capitalists able to establish works in the different states of the Commonwealth and also the representatives of ironmasters from other countries.

Excellent cutting tools of the finest quality have been made from some of the steel manufactured, and may be seen at the office of the company.

The cost of erecting a large smelting plant on this system would be less than one-fourth of the cost of a smelting plant on existing methods to produce the same quality of metal.

Finally it may be stated that the directors aim at making large profits for the shareholders, not from establishing works in the different states and countries, but from the sale of the patent rights to those able to finance and establish ironworks on an adequate scale.

#### THE MOORE-HESKEIT STEEL AND WROUGHT IRON FURNACE.

A is the ore feeding-hopper delivering a constant stream of powdered iron ore into revolving cylinder B. The cylinder is lined with fire brick and has projecting shelves for raising the ore. It passes from cylinder B into cylinder C through a small opening in damper L and from there falls into revolving furnace D.

The ore is heated in cylinder B, deoxidized in cylinder C and either balled up for

wrought iron or melted for steel in revolving furnace D.

The fuel (in this plant being crude oil) is sprayed into cast-iron retort E under pressure at F, passes through reducing cylinder C then through gas port J into revolving furnace D where it meets the hot air coming in through port I. The heated products of combustion enter the flue H and pass through regenerators G, around retort E and then through revolving cylinder B to chimney.

Cold air enters the regenerator G at N passing through flue N<sup>1</sup> to port I.

The gas and reduced particles of iron enter the furnace through the fire clay pipe J which is protected in front by the furnace lining. The furnace is lined with chrome ore in blocks made roughly in a spiral form so that the ore is gradually worked forward in the furnace and either delivered in the form of puddled ball, or melted for steel, depending upon the temperature maintained.

When the reduced ore falls into the furnace the gas plays over it, effectually preventing any possibility of reoxidation taking place before the finely divided iron parti-

cles become absorbed in the bath of metal or slag.

A tapping hole (not shown) is provided in the centre of furnace above the pit.

A small jet of compressed air is found sufficient to urge the air draught at N through regenerators which heat the air by conduction through the firebrick work.

As there is no chemical reaction taking place in the furnace a refractory basic lining should retain its form for a long time and ball its iron up and deliver it direct into a revolving squeezer or when making steel keep moving the iron forward across the bath to facilitate smelting.

In the working plant electro pyrometers are used to aid in maintaining a uniform temperature, and valves (not shown in the outline sketch) are provided for regulating the heat in the various parts of the furnace.

#### AMMONAL.

A letter of inquiry to the 'Ammonal Explosives, Limited,' of London, England, regarding the applicability of their new explosive 'Ammona' elicited the following letter of reply:—

25-viii-3

29 Great St. Helens, London, E.C., 2nd August, 1906.

EUGENE HAANEL, Ph.D.,
Superintendent of Mines,
Department of the Interior,
Ottawa, Ont.

SIR,—Mr. Harry E. Winter, who is now visiting Canada with a view to introducing our Explosive Ammonal, has asked us to write to you on the subject of this explosive and on the various important points in relation to the same.

Ammonal is composed essentially of nitrate of ammonia, charcoal and metallic aluminium, and advantage is taken in this composition of the great heat given off by the aluminium at the moment it forms into aluminium oxide in order to expand the gases formed by the explosive decomposition of the nitrate of ammonia. Thus a great volume of gas is produced, which, owing to its very high temperature, is suddenly expanded. In point of strength the various qualities of ammonal which our company produce range from that of slightly above black powder to the strength of blasting gelatine, according to the quantity of aluminium that is added, but of course there is a point above which the percentage of aluminium cannot go and that is arrived at by working out the chemical equation. The outstanding feature of this explosive is its great strength and safety. As far as the former is concerned the trials which have been carried out in Canada are ample proof and as to safety any one interested in the subject can with perfect impunity carry out any sort of trial he pleases. The explosive will not freeze and does, therefore, not require thawing. It has sprung into favour in this country ever since it has been introduced, and we are now selling large and constantly increasing quantities.

Mr. Winter has no doubt been able to show you all, or at least some, of the reports we have on the actual work of the explosive, and we may only add that for military purposes it has enjoyed great favour on the continent, as several powers have adopted it for shell filling, and the English government has also now got the question under consideration. Needless to say, His Majesty's inspectors of explosives have licensed ammonal for use in fiery and dangerous mines and for general purposes. We would suggest that if the matter is of sufficient interest to you you should request Mr. Winter to carry out a special series of experiments so as to prove to you the correctness of our statements.

We are, sir,

Yours respectfully, (Signed) AMMONAL EXPLOSIVES, LIMITED.

# PART IX.

# FORESTRY.

#### REPORT OF THE SUPERINTENDENT OF FORESTRY.

DEPARTMENT OF THE INTERIOR, FORESTRY BRANCH, OTTAWA, September 17, 1906.

W. W. CORY, Esq., Deputy Minister of the Interior, Ottawa.

Sir,—I have the honour to submit the eighth annual report on forestry, accompanied by the reports of the Assistant Superintendent, the Inspector of Forest Reserves and other officials connected with this service.

At the last session of parliament, an Act respecting forest reserves was passed which places the management of them under this branch of the department. It is to be hoped that this is only a commencement and that all timbered land which is unsuited for agriculture or grazing purposes and which is suited for growth of timber will be in time permanently set aside for that purpose.

The Act also provides that the fish and game within these reserves shall be looked

after by this branch.

As has been stated in previous reports, the two cardinal points that have been constantly kept in view since the organization of this branch have been conservation and propagation. Heretofore propagation has been principally confined to tree planting on the plains, which will be dealt with later on, but two years ago a small commencement was made in the planting of coniferous seedlings on the sandhills in the Spruce Woods reserve east of Brandon.

The first year's planting, consisting of about 10,000, was as an experiment and the result was such as to encourage further efforts in this direction, and in 1905, some 13,000 Scotch pine were planted. The percentage of loss in this case was comparatively small; and as will be seen from the report of the Assistant Superintendent herewith, some seventeen thousand were planted this season, of which practically all are now living.

As the land in question is useless for any other purpose, I think it would be wise

to greatly increase this work in the future.

By referring to Mr. Craig's report, it will be seen that the work of forest surveying begun last year on the reserves in the Turtle and Moose mountains, is being continued this year in the Riding mountains.

## REASONS FOR ESTABLISHING FOREST RESERVES.

As the object aimed at by the department in setting aside certain areas of land for forest reserves seems to be frequently misunderstood, a few words on the subject

may not be out of place.

It will be seen by reference to the map that most of the reserves so far set aside have been on land unsuited for agriculture but which will produce timber. In many cases this is owing to the high altitude; in other cases, such as in that of the Spruce Woods reserve, the soil is so poor that agriculture crops cannot be successfully grown on it. But the most important consideration that has impelled the department to take up this matter is in order to conserve water supply.

It is not too much to say that the future of the prairie regions for the growing of grain will be greatly jeopardized if the water level in the soil is decreased, and this result will certainly follow if the natural reservoirs at the sources of supply in the

hills are destroyed, as they would be if the timber thereon were removed. So important is this that even if the land in such reserves only served this simple purpose, it would be wise to keep it in forest. But while serving this purpose it is the aim of the department to utilize the land for the production of timber and to so harvest the timber crop that a permanent supply may be continuously maintained, and in order to direct what may be cut, and to what extent, a careful examination or forest survey is necessary.

Permit me to emphasize what I have said in other reports, that the products of these forests and all others on public lands are for the use of the public, and the object aimed at is to administer them so that their highest use, not only for the present, but future generations may be secured.

In any forest there will be found a certain proportion of diseased trees which are injurious. These trees are frequently valuable to the settlers for the timber they contain and they will be encouraged to remove them.

The examination of the Turtle Mountains reserve, showed also that there were 63,-710 cords of dead and down timber useful for fuel and which should be removed.

This survey also shows the quantity of growing timber, its size and rate of growth, which enables us to say what quantity can be cut each year without impairing capital, or in other words, without decreasing the annual future supply.

#### FIRE GUARDING.

The work of protecting the timber from destruction by fire has been continued this season with good results. The only serious destruction reported so far is from a fire that occurred in April at the upper waters of the Red Deer river, in Alberta, which is referred to in Mr. Stauffer's report.

The early part of the season was very dry in the prairie provinces, and the rangers were kept very busy fighting fires, and there is no question that notwithstanding the loss of valuable timber above referred to, the destruction would have been many times greater, taking the country as a whole, if no such service had been in force.

In the railway belt in British Columbia the rangers have been kept busy during the whole summer. Up to the early part of September the weather had been exceedingly dry, and fires were numerous throughout the district. In some cases the rangers were compelled to engage additional assistance and to work day and night for weeks to keep the fires from spreading into valuable timber. It is very gratifying to know that the amount of merchantable standing timber that has been lost has been very trifling, and as there have been heavy rains recently, it is not probable that there will be so much difficulty in the work of protection from now on till the close of the season.

#### TREE PLANTING ON THE PRAIRIES.

The report of the Assistant Superintendent on tree planting on the homes of settlers, deals very fully with that branch of the work. Some 7,000,000 trees have now been supplied by the department to those who have had their land properly prepared. The reports of all of the inspectors for this year have not yet been received, but as the season has been a very favourable one, it is expected that these reports will be quite as gratifying as those for any year since the work was started.

The applications so far, from settlers desiring to avail themselves of the co-operation of the department in this regard, are more numerous than they have been up to the present date in any year since the work was begun.

The trees set out in former years under this scheme are now beginning to attain such a height as to be visible for long distances across the prairie, and to furnish the much needed shelter so desirable on a prairie farm.

ix

#### FOREST NURSERY STATION.

From the commencement of the scheme which involved the furnishing of seedling trees to the settlers, this branch has been indebted to the Department of Agriculture for the use of land on the experimental farms for the growing of this stock. As the applications increased, our requirements became too large to be provided by them without interfering with their own work, and a commencement was made a few years ago on a new prairie section about a mile and a half southwest of Indian Head. As this land had to be brought into a suitable state of cultivation before it was fit for nursery purposes, we have been compelled to use the land at the experimental farms to a greater or less extent up to the present time.

The work at the Brandon experimental farm ceased with the crop of 1904, and after the present season we will be able also to discontinue the use of the land that we have occupied for several years at the Indian Head farm, and centralize the whole work at the nursery station, and in this connection I desire to bear testimony to the assistance that the Department of Agriculture has rendered this branch. The minister, the director of experimental farms and the superintendents at Indian Head and Brandon have from the start of our forestry work shown a most kindly spirit and have aided very much in the success that has attended it. The nursery station in addition to furnishing several million trees for annual distribution, which is the main object of its existence, will also, through the permanent plantations of various varieties of trees thereon, afford reliable data as to the rate of growth of each variety, and other information which is much needed by the sylviculturist in those regions.

With a view of obtaining some knowledge of the forestal conditions of our far northern districts, I have just concluded a long journey down the Mackenzie river waters as far as Fort McPherson, near the Arctic Sea, returning by way of the Porcupine and Yukon rivers. A report in detail of this interesting trip would be too lengthy to insert here. I may say, however, that in the basins of the Athabaska, the Peace, the Liard and other tributaries of the Mackenzie, as well as the valley of that great river itself, are contained vast quantities of timber. The spruce, white and black poplar, birch, tamarac and jack pine are the principal varieties, the spruce being by all odds the most valuable. Though it was impossible for me to see but a very small area of the timbered territory, there can be no question that these northern regions centain a very great quantity of spruce timber, large enough for lumber and a practically unlimited supply of pulp wood material.

#### CANADIAN FORESTRY ASSOCIATION.

This association which has done so much to awaken public interest throughout the Dominion, continues to increase its membership, which now numbers about 1,500.

In the month of January last, a great forestry convention was held at Ottawa, at the call of the Premier, the Rt. Hon. Sir Wilfrid Laurier, and under the auspices of the association. This meeting, which lasted four days, was opened by His Excellency the Governor General and presided over by the Premier, and was by all odds the most important gathering of the kind ever held in Canada, and has contributed to further arouse public attention in our great forests and the forestry problem in general.

The association was invited by Nova Scotia and also by the lumbermen of British Columbia to hold a summer session in those provinces respectively. The executive decided to accept the invitation of the latter this season, and such a meeting will take place at Vancouver on the 25th, 26th and 27th of this month. It is called by the Lieutenant Governor of the province, and promises to be a very large and influential gathering.

Your obedient servant,

E. STEWART, Superintendent of Forestry.

#### APPENDIX No. 1.

REPORT OF NORMAN M. ROSS, B.S.A., B.F., ASSISTANT SUPERINTENDENT OF FORESTRY.

INDIAN HEAD, SASK., June 26, 1906.

E. Stewart, Esq., Superintendent of Forestry, Ottawa.

6

Sir,—I have the honour to submit my sixth annual report of work carried out under your instructions, dating from August 19, 1905.

From August till December 15 I remained at the nursery station here looking after the sowing of seed, cultivation, digging and heeling in of seedlings and other necessary work. From December 20 to January 29 was spent in the office at Ottawa. On the latter date I returned to Indian Head.

On the whole the past season has been particularly favourable for tree growth, and the success of the plantations already set out under our co-operative system has done much to stimulate the general interest in tree planting which is demonstrated by the greatly increased number of applications from settlers wishing to avail themselves of our present system of planting. That there is far more activity along this line of work than there was a few years ago is shown too in the evident increase in the commercial nursery business. All the western nurseries seem to be enlarging their operations and some new companies with considerable capital have been established this year.

When the co-operative scheme was first put in force it was looked upon with considerable disfavour by the western nurserymen, as they maintained that it would affect their business unfavourably. In some instances considerable opposition was manifested. The greatly increased demand for nursery stock of late years has, however, conclusively shown that if anything the present system is of great benefit to the nurserymen, and as time goes on it will undoubtedly be found that it would almost have been impossible to undertake any work which could prove so beneficial to the nursery trade. The distribution from our nurseries is limited at present to four or five varieties, namely, native maple, ash, elm, Dakota cottonwood and willow. These are sent out only as small seedlings and according to agreement must be set out in block form or as shelter for gardens and buildings. It will be seen that in reality this encroaches but slightly on the regular nursery trade which chiefly supplies stock for ornamental planting, such as shrubs, or larger trees for avenue planting, fruit trees and bushes and perennial plants. It has now been fully demonstrated that without shelter it is not possible to grow many kinds of fruit and ornamental shrubs and that the value of the ordinary vegetable crops and hardy fruits, such as currants and raspberries, is increased at least fifty per cent when protected by suitable shelter belts. As every settler is extremely anxious to grow fruit and vegetables and to beautify his surroundings, it will be readily seen that wherever a plantation has been set out under our co-operative system the owner is practically certain to purchase nursery stock for planting on his sheltered grounds.

It is also very easily seen that in a few years the Forestry Branch will not be able to supply even a small proportion of the demand for forest seedlings which is bound to increase very rapidly. With present facilities our annual stock for distribution cannot exceed four million seedlings, which number is almost insignificant when we consider the immense territory over which they are distributed. There would be a very good market for seedlings of hardy native trees for shelter purposes provided

nurserymen grew them on a sufficiently extensive scale to permit of their being sold at a price which the ordinary farmer can afford. One year old maple and two year old ash seedlings can be grown at a very good profit if sold at from \$3 to \$4 per thousand. There seems to be a very great demand for evergreen trees, but up to the present there is only one nursery in the west where this class of stock has been grown from seed. The native spruce, native jack pine and the Scotch pine are very easily raised from seed. The native tamarac is another conifer which gives evidence of being particularly adapted to prairie planting. The raising of hardy coniferous seedlings is a work which western nurserymen would find extremely profitable, as the demand for this class of stock is practically unlimited.

Since the spring of 1901 over 7,000,000 seedlings have been distributed throughout Manitoba, Saskatchewan and Alberta. The reports sent in by the various inspectors in regard to the different plantations inspected by them are very encouraging. In one or two instances trees have been neglected, but such cases are the exception. The great majority of the plantations are in excellent condition, the reports showing that at least 85 per cent of all seedlings sent out are now living. The inspectors all report a greatly increased interest in tree planting both in the towns and country districts.

This year so far we have not received any reports, as the inspectors have only been out a few weeks. But as the season has been such an extremely favourable one, it is safe to assume that the percentage of trees set out this spring which are still alive is as high as in former years.

This spring the lists sent up from Ottawa showed 1,500 applicants in Manitoba as against 1,400 last year, and somewhat over 2,200 in Saskatchewan and Alberta as against 1,500 last season.

The inspection in Manitoba is being done by Messrs. A. P. Stevenson, A. H. D. Ross and F. W. Jacombe; in Saskatchewan by Messrs. John Caldwell and Angus Mackintosh, and in Alberta by Mr. C. Brandt. Owing to the number of new branch lines constructed during the past season and the rapidly increasing settlement, the ground which the inspectors have to cover is considerably more extended than formerly. Consequently it will be necessary to add to the staff if it is desired to continue an efficient service. The value of the inspection can hardly be overestimated, and it is practically safe to say that without it the distribution of large numbers of seedlings would be of little use. The necessity for properly preparing the ground before planting is now generally admitted, the inspectors reporting that the percentage of applicants who do not have their ground in suitable shape is decreasing each season.

#### PLANTING OF SCOTCH PINE IN SPRUCE WOODS RESERVE.

On the 15th May we commenced setting out an additional 17,000 two-year old Scotch pine seedlings alongside of the planting done last spring. The seedlings were set in the same manner as last season, namely, furrows four feet apart, running east and west were drawn out in the sod, and the seedlings placed in the bottom of the furrows close to the land side in order to shade them as much as possible from the sun. The soil was in splendid condition, being quite moist. Since planting there has been abundance of rain, so that the young plantation has had exceptionally good chances.

The planting of last season is extremely encouraging. After a very careful count I estimate that from 88 to 89 per cent of the young plants are alive now and should this season make a growth of six or more inches.

The two-year old plants set out in 1904, and which were alive in spring of 1905, last year made a good growth though the sod had again covered the small spots which had been dug when they were planted.

The soil where the planting was done is almost pure sand, the grass not forming such a thick sod as is found on the richer lands. It is possible that this method of planting might give good results on richer soils, but only when conifers are used. However, we would not recommend this method to the settler, as the growth would be

so extremely slow that it would be years before the trees could be of any value for shelter.

It is probable that in the future the planting operations on this reserve will be considerably increased. The lands at present are valueless, being unfit for agriculture and affording scarcely any pasturage for stock. The only use to which they can be profitably turned is the raising of wood and timber. At present there are scattered over the reserve isolated white spruce trees, some of which are very old. These will greatly aid in reforesting this tract as they produce a considerable quantity of seed. It is essential, however, to keep out the prairie fires, as the young seedlings starting in the grass are very easily destroyed.

#### EXHIBITS.

This season it is proposed to make a forestry exhibit at the Winnipeg Industrial Fair and also at the Brandon Fair. This exhibit will consist chiefly, as in former seasons, of specimens of native grown timber, wood grown under cultivation, boxes and pots of growing seedlings suitable for prairie planting, samples of tree seeds, pressed leaves, photographs, &c.

During recent fairs the forestry exhibit has caused considerable interest and undoubtedly does much towards the encouragement of tree planting in the west.

#### NURSERY WORK.

Last fall the digging of the stock for distribution commenced on the 27th of September.

The following numbers were tied up and heeled in for winter to

e following numbers were tied up and heeled in for winter:	_
Maple	
Ash	600,500
Elm	7,625
Cottonwood	1,854,125 150,000
- -	2,004,125

The cottonwoods were imported from North Dakota. All these seedlings were distributed this spring and with the addition of about 30,000 willow cuttings, brings this year's distribution up to 2,034,125.

Besides the seedlings about 200 pounds of ash seed was sent out. Last year it was difficult to obtain the maple seed. We were only able to get sufficient for our own planting. Consequently we were unable to send out any of this variety.

The area under nursery this summer is made up as follows:-

	<u>-</u>	
0		Acr
One year maples		1.
Two year ash		9
One year ash		1.
Two year elm		
One year elm		á
Conifers		1
Total	*** **** **** *****	
TODAL		36

It is still too early in the season to form any correct estimate of the number of seedlings which will be available for distribution next spring. The stock should, however, be exceptionally good as the season so far has been particularly favourable and the growth of the seedlings very strong.

Last year owing to the impossibility of collecting elm seed, several pounds were purchased in the eastern United States. This seed came up fairly well after sowing but the seedlings were completely killed out during the winter. This shows almost conclusively that seedlings of elm grown from seed matured in the east are not hardy enough for this country. About half an acre of seedlings from native seed came through without injury.

This spring the elms in the Qu'Appelle valley bore a good crop of seed, and we were able to collect sufficient to sow 3½ acres. As this is one of our best trees for prairie planting it is unfortunate that so much difficulty is experienced in collecting the seed in certain seasons.

#### CONIFERS.

On page 10 of last year's report is given a list of the conifers being raised from seed on the nursery.

With the exception of 1-year seedlings of *Pinus excelsa* (Himalayan pine), which were badly killed during last winter, all the varieties have come through very well. *Pinus ponderosa* did not stand the winter as well as the others but came through fairly well and may turn out better next spring.

Seedlings of Norway spruce, balsam and white spruce were not injured in the slightest.

Scotch pine, murrayana pine, cembra pine, and pinus flexilis, have all made exceptionally strong growth.

The following numbers (approximately) of two-year old seedlings were transplanted into beds and are doing well:

Scotch pine	20,000
Pinus murrayana	10,000
Pinus divaricata	
Picea pungens	30,000
Picea alba	1,500
Total	69 500

Of all the trees growing on the nursery the native larch, or tamarac, gives the greatest promise as a hardy, rapid-growing variety for general prairie planting. Our experience would show that it is an exceptionally easy tree to transplant and appears to be suitable to a great variety of soils. The seedlings planted here were obtained from the swamp in the Spruce Woods reserve. They were planted in nursery rows for two years and then set out on backsetting, absolutely without protection or shelter of any kind. The growth the first summer was about a foot. The second summer the average growth was 18 inches, many of the trees making as much as 3 feet. Of the number set out in 1904 and 1905 (approximately 6,000), we have not lost a single one from winter killing, and not 1 per cent died after transplanting. This is a much better percentage than we find in any of the native broad leaf trees. We have not yet been able to obtain seed of the native larch but hope to be able to make arrangements for the collection of some during the coming summer.

The European larch grows readily from seed. We have growing here several fouryear old plants, raised on the nursery which appear perfectly hardy. They, however, are considerably damaged by rabbits each winter, which causes a deformed misshapen growth.

#### PERMANENT PLANTATIONS.

The plantations made in 1904 and 1905 have made most satisfactory growth. The belt on the east and part of north side, consisting of five rows—two rows maple, two rows cottonwood and one row willow—already forms a good protection to the plots

which it borders. By the fall this belt should be 10 to 12 feet high. The trees now cover the ground so thoroughly that further cultivation will not be necessary.

A three-quarter acre plantation of tamarac and spruce set out in 1904 has made exceptionally good growth. An acre of tamarac, spruce and Scotch pine set out 1905 has also done very well. The Scotch pine, which were three-year old plants imported from France, suffered a little from the strong dry winds in the spring. Several that had died were taken out and replaced by others this spring.

It would seem that when first planted, a certain amount of shelter is necessary for the Scotch pine, that is, sufficient to collect snow and keep the young plants well covered. Apparently they are not injured in the winter, but as soon as the snow goes. leaving them exposed to the winds and the effects of thawing and freezing in the spring. the needles become browned and sunburned. In some cases the plants may appear absolutely dead and most of the needles drop off; but a very large number recover and send out fresh shoots as soon as growth starts. In the plantation mentioned above, when filling the blanks this spring, some rows were not disturbed at all. If a plant appeared to be dead another was set immediately beside it. We find that a great majority of those then supposed to be dead are now growing vigorously.

This year several thousand four-year transplanted spruce and Scotch pine raised from seed in our own nurseries were available for planting. An acre of permanent belt set 3 feet apart each way, was put out on the north belt. Three acres of Scotch pine planted alone, with trees 3 feet by 3 feet apart, was set out on east belt, and another acre with two rows of pine and one of spruce, to the northeast of the house. Altogether five acres of permanent evergreen plantation, or a total of about 25,000 young plants. were put in. The trees at present appear to be in splendid condition, nearly all having sent out vigorous shoots.

The plants were set in land which last year had grown a crop of seedlings. The ground was ploughed and worked up in the fall. In the spring the rows for the trees were marked out by making shallow lines with a hoe drill, some of the teeth having been removed to make the rows the necessary distance apart. The trees were set in holes dug with spades. In this manner it took five men eight hours to set out an acre. Allowing a foreman's wage of 20 cents per hour and men's wage at 16 cents per hour, marking rows 20 cents, we find the actual cost of planting to be \$6.95 per acre.

This spring plantations of the following varieties and mixtures were set out:—

No. 1. Cottonwood, 3 feet apart each way, size, 1 acre.

No. 2. Cottonwood and maple, alternate rows, 3 x 3 feet, 1 acre.

No. 3. Maple and birch, alternate rows, 3 x 4 feet, 1 acre.

No. 4. Elm and ash, alternate rows, 3 x 3 feet, ½ acre.

No. 5. Russian poplar, 1 year rooted cuttings, 4 x 4 feet, 3 acre.

The preparation of the ground was well worked backsetting, ploughed again as deeply as possible late in the fall. The cottonwoods were set in holes made with a planting iron, the other varieties being planted in deep furrows made by the plough.

The cost of planting based on the actual time of men and team employed was as follows :-

Plantation	No. 1	 	 \$ 6 05
"			8 70
"	3	 	 7 20
"			3 60
"	5		1 10

It will be noticed that plantation No. 2 cost considerably more than any of the others; the reason for this being that the maples used were very large, averaging over 4 feet high and some 6 feet. These were picked out from two-year seedlings as they were too large for shipping. It shows the extra expense entailed in handling large trees as compared with small ones of, say 18 inches to 2 feet in height. We find too that a greater proportion die after transplanting as, owing to the larger root system, they are apt to be put too shallow.

To keep these plantations cultivated will entail an additional outlay of about \$2 per acre this summer, making the original cost of planting about \$9 per acre. About \$2 per annum for the next two seasons will also be required, bringing the total cost of establishing plantation up to about \$13 per acre.

It is intended to treat these plantations as a growing crop. As soon as the wood becomes large enough for use it will be cut. Careful records will be kept of all expenditures in connection with each plot and also of the yields. In this way it can be determined what varieties and what mixtures are likely to prove the most profitable. Judging from the present rate of growth of cottonwood it is expected that thinnings will be made about six years from now, from which it is expected to obtain wood large enough for summer fuel. As the plantation grows older the wood will become larger and consequently more valuable.

It is hoped to set out several more plantations of this character in the future if a sufficient area of land on the nursery can be spared for this purpose.

The whole of the quarter section at present at our disposal has now been brought under cultivation, excepting fifteen acres which is used as a pasture.

This summer about thirty acres have been broken and will be backset later in the season. Fourteen acres have been summer-fallowed and will be divided into plots and sown with tree seeds in the fall. Twenty-five acres are under out crop, three under barley, and nine and a half under rye grass for hay.

Owing to the very favourable weather during this and the past two seasons everything planted on the nursery has made most satisfactory growth. The shrubs planted along the drives and boruering the lawns have done well, though a few of the more tender varieties, owing to the lack of protection during the winter and the absence of snow, have been considerably killed back. Those suffering no injury, although absolutely unprotected are: the lilacs, Tartarian honeysuckle, Siberian dogwood, Spirea billardii, Spirea Van Houtei, Spirea arguta, Caragana and Cinnalian maple. As the trees put out for shelter afford more protection it is hoped that some of the more tender kinds will prove more successful.

The lawns have greatly improved this summer and the drives, which have all been gravelled, are now in good condition, adding greatly to the general appearance of the nursery.

As you are aware, the small portion of land (17 acres), which was kindly put at the disposal of this branch, to be used for nursery purposes, by the experimental farm, will no longer be required after this season, as we are now in a position to grow all the stock required on our own nursery. In this connection I would like to point out the difficulty we are likely to experience in regard to the accommodation of the labourers. When working on the experimental farm it was possible to obtain men who could board in town as the farm is only distant from it a few minutes' walk. The nursery station is about two miles from the centre of town and at certain seasons the roads are extremely bad. Consequently it would not be possible, unless very high wages were paid, to get men living in town to work so far from their homes. In the spring and in the fall we find it necessary to employ as many as twenty or more hands. At present we have only accommodation on the nursery for boarding six or seven. In order to carry on the work at all satisfactorily it is absolutely necessary that additional accommodation be provided, and I would therefore recommend that a suitable house be erected on the grounds as soon as arrangements can be made to do so.

In other matters the nursery is now well equipped and in a position to raise from two and a half to three and a half million seedlings annually.

Owing to the fact that the report this year has been called for so early in the season it is not possible to furnish information as to the exact numbers of seedlings available for distribution next year, and as to the growth of seedlings and plantations, which are matters of considerable interest.

Your obedient servant,

#### APPENDIX No. 2.

REPORT OF R. D. CRAIG, F.E., INSPECTOR OF FOREST RESERVES.

OTTAWA, August 1, 1908.

E. STEWART, Esq.,

Superintendent of Forestry, Ottawa.

Sir,—I have the honour to submit herewith the third annual report of my work carried on under your direction.

Owing to the transfer of the administration of the forest and game reserves from the Timber and Mines Branch to this branch and the extension of the forest investigation work it was necessary for me to be relieved of all duties in connection with tree planting on farms and devote my entire attention to the forest reserves.

At the time of writing my last report I had just completed a forest survey in the Turtle Mountain Forest and Game reserve and was starting a similar one in the Moose mountain reserve. This season I have placed a party under Mr. Wallin to study the forestry conditions in the Riding Mountain Forest and Game reserve which is perhaps the most important Dominion reserve at present.

I may say that the method which I have followed in conducting the forestry survey is somewhat similar to that followed by the United States forestry service, which consists in measuring with calipers at  $4\frac{1}{2}$  feet from the ground, all the trees in strips 2 rods wide. The distance between the strips varies with the nature of the stand; where dense, or variable a one-eighth mile or a one-quarter mile, but where burned over or very homogeneous, one-half or one mile is sufficiently close. At the end of each one-quarter mile (or 1 acre) a description of the topography, soil, undergrowth, and general sylvicultural conditions is written on the back of the tally sheet and a new one started. Tally sheets are also changed with each change of type. From these notes and a rough sketch map we are enabled to make a map sufficiently accurate for forestry purposes. The party usually consists of four men, one who goes ahead with a hand compass and drags the chain, one caliper man on each side of the chain who measures all the trees over 3 inches diameter breast-high within 1 rod of the chain; the fourth acts as rear chainman and tallyman. The caliper men call out the number of 12-foot logs which they estimate can be cut from each tree as they give in the diameter.

In addition to the valuation survey a certain percentage of trees which appear to be average trees of each diameter class are cut down and sawn into 10-foot sections, and at each cut the rate of growth for each decade taken. In this way it is possible to determine when the tree ceased to grow at a profitable rate. We are also enabled by this means to tell how much may be harvested annually without reducing the capital stock.

Sample plots of reproduction usually \(\frac{1}{2}\)0 acre are taken here and there to determine how many young trees of each species are on the plot. The age and rate of growth of these are also taken.

The forester endeavours also to become familiar with the local economic conditions of the reserve in order that he may be able to cope with all administrative difficulties.

I spent six weeks in the Riding Mountain reserve this summer and one week in the Cooking Lake reserve, near Edmonton, and I hope before winter to be able to inspect the other reserves.

I beg to report on the condition of the reserves which I have inspected.

#### TURTLE MOUNTAIN FOREST AND GAME RESERVE.

The Turtle Mountain reserve covers only 69,920 acres, but being situated as it is in the midst of a treeless prairie country now thickly populated it is of considerable importance.

The hills rise above the surrounding prairie from 300 to 500 feet, and being full of lakes and sloughs act as an immense reservoir for water which supplies natural irrigation to the prairie below. Numerous streams flow down from the hills in all directions; some of them go to form the Pembina and the Whitemud rivers, but many of them sink into the soil after leaving the forests. Approximately 15,000 acres of the reserve is under water, leaving only 55,000 acres of timber producing land.

The soil in the reserve is mostly a clay loam with a few boulders, but the configuration is so rough and so much of the area is in muskeg and sloughs that it is unsuitable for agriculture. Attempts which I saw to produce grain were failures. There is excellent pasturage, however, especially in the brûlés where the pea-vine and vetches grow in a dense mass 4 to 5 feet deep. The grass around the edges of the sloughs is very luxuriant and makes excellent hay. Small deposits of coal have been discovered in the Turtle mountains but not in large enough quantities for commercial exploitation.

No traces of conifers were found, and if they ever did grow in these hills fires have destroyed them, leaving only those species which are able to reproduce by suckers or coppice. The mature stand is now composed of Aspen (Populus tremuloides), 43 per cent; Balm of Gilead (Populus balsamifera), 14 per cent; paper birch (Betula papyriferd), 21 per cent; bur oak (Quercus macrocarpa), 9 per cent; green ash (Fraxinus viridis), 8 per cent; elm (Ulmus americana), 5 per cent, and a few scattered Manitoba maples (Acer negundo). There was originally a much larger proportion of oak but the demand for oak logs and posts has been so great that very little now remains.

There is an extremely dense growth of underbrush, even in fairly dense stands of timber, and this makes seedling reproduction difficult and also increases the fire danger.

The underbrush is composed chiefly of the following species, named in the order of their abundance: hazel, high-bush cranberry, various species of willows, raspberry, Saskatoon berry, rose, cherry and dogwood.

Since the advent of the settler about twenty-five years ago forest fires have been so frequent and so destructive that only 1,600 acres of timber has escaped; on 6,400 acres the timber has been partially destroyed, and the remainder is entirely devoid of large timber. There is, however, an excellent reproduction on the burned over area which, if protected, will soon form as good or better stand than the original.

Owing to the greater power of reproducing by suckers the aspen forms 69 per cent of the new growth, while the balm forms 12 per cent, birch 7 per cent, ash 6 per cent, oak 4 per cent, elm 1 per cent, maple 1 per cent.

The following table shows approximately the quantity of timber at present on the reserve:—

TIMBER on the Turtle Mountain Forest and Game Reserve.

## Unburned Area, 1,611 Acres.

Species.	Trees per Acre.	Cu. ft. per Acre.	Total cords.	Saw material Ft. B. M. per acre.	Total.
Aspen Balm Birch Ash Oak Elm	31 46	1,103 390 428 59 77 33	19,825 7,007 7,695 1,068 1,379 593	134 209 74 15 4 17	215,000 337,000 20,000 4,000 7,000 28,000
Total	. 219	2,090	37,567	453	731,000

## PARTIALLY DESTROYED AREA, 6,371 ACRES.

### Living Trees.

Species.	Trees per Acre.	Cu. ft. per Acre.	Total cords.	Saw material Ft. B. M. per acre.	Total.
Aspen Balm Birch Ash	26 8 5 3	377 90 44 7	26,778 6,414 3,093 512	69 20 31	
Oak Elm	${ \begin{array}{c} 4 \\ 2 \end{array} }$	32	2,290 434	2	13,000 2,000
Total	48	556	39,520	122 4	602,000

## Standing Dead Trees.

Aspen Balm Birch Ash Oak Elm	8 10 5	211 85 68 15 15	15,010 6,044 4,828 1,088 1,074	
Total		397	28,250	 

About 10 cords per acre dead and down timber sound enough for fuel—63,710 cords. Total stock: 77,087 cords green fuel, 91,960 cords dry fuel. Saw material: 1,333,-000 feet B.M.

Several small saw-mills have operated in these forests, but at present only one is left and it takes only a small number of logs for a limited local trade.

The day of log buildings is past in that district so that now the main uses of the reserve are to supply fuel and fence material, to protect the watershed, to harbour game, to serve as a pleasure and health resort, and 'o ameliorate the climate.

Farmers living within a radius of fifty miles come to the reserve every year for their supplies of wood, and the following table shows the output in the last three years:

TIMBER taken out of Turtle Mountain Keserve under Settlers' Permits.

Year.	No. Permits.	Dry Woods.	Greenwood or for sale.	Logs.	Posts.	Roof Poles.	Rails.	Revenue.
- "			Cords.	Ft. B. M.				\$ cts.
1903	198	1939	219	35,034	2400	200	75	302 42
$\frac{1904}{1905}$	$638 \\ 444$	$6691 \\ 4549$	683 560	$\begin{array}{c} 14,768 \\ 25,200 \end{array}$	4300 3350	1950	500	542 04 353 75
Average	427	4393	487	25,001	3350	717	192	401 07

From our measurements of the rate of growth the following table gives a conservative estimate of what may be expected from the dense stands of reproduction now one to twenty years old:—

Age.	No. Trees Per Acre.	Average Diameter Breast High.	f Average $f H$ eight.	Average Vol.	Yield Per Acre.
10 20 30 40 50 60 70 80	4000 2500 1200 850 625 425 335 300	Ins. 1 · 5 3 · 2 4 · 7 6 · 0 7 · 2 8 · 7 10 · 1 11 · 1	Ft.  13.5 28.0 38.0 46.5 51.0 54.0 56.5 58.0	Cu. Ft.  1 1.8 2.4 4.3 6.8 11.1 14.0 17.4	Cords.  4 22 32 41 47 52 55 58

It will be seen that by cutting every forty years, which is a long enough rotation for fuel production, an annual cut of one cord per acre, or 55,000 cords, may be made without reducing the capital stock. This amount will supply a farming area of between two thousand and three thousand square miles with fuel and fence material, and at the low price of \$1 per cord would bring an annual revenue of \$55,000.

This supply of wood in the midst of a bare prairie country is of great value to the settlers and there is no reason why, if protected from fire and illegitimate cutting, there should not be sufficient timber produced on the area now reserved to supply the local demand for all time.

Cutting.—There has been a great deal of wasteful cutting in the Turtle mountains, and it is the common practice still to cut down a large tree and take only 8 to 12 feet of the butt and leave the rest to rot or burn. The stumps are, as a rule, inexcusably high; there is no reason for having more than a 1-foot stump for poplar. Heretofore cuttings have been made wherever convenience suggested, but if the forest is to be made productive the exploitation of the timber must be done systematically and thoroughly. Three or four cutting areas in different parts of the reserve should be laid out annually and operations restricted to these. The aspen will reproduce naturally, but it is advisable that some more valuable species be planted, and this spring an experiment with Scotch pine was started which promises to be successful.

Fire.—Fire has certainly been the greatest agent of destruction in this reserve and hardly a year pases but some part of the reserve suffers from its ravages. The fires of largest proportions occurred in 1879, 1881, 1885, 1897, 1903, 1905, and again this spring fire burned over a considerable area.

The fires of 1879, 1881 and 1885 seemed not to have done much damage but left fire scars on the trees along the south side of township 1, range 19.

The first serious fire seems to have been that of 1897, which came from the Dakota side into township 1, range 21, near Boundary lake. Some say that it was caused by the Indians who, under the Dead and Down timber law, were given the dead timber and that they set fire to the forest in order to increase the supply of this dead timber. Others say that the American farmers set it in order to clear their farms. Whatever the origin, it destroyed nearly everything in township 1, ranges 20 and 21, as is shown in the accompanying map.

The fire of 1903 burned over almost the same territory as that of 1897 and killed thousands of acres of splendid reproduction, besides much timber that had escaped previously. The first start of the fire seems to be at or across the American boundary, but it is evident that it was started in several other places later with the intention of making a clean job of removing the forest so that the land would be thrown open for settlement. This fire burned all summer and any attempts that were made to put it out seem to have been futile.

In 1904 there were a couple of small fires in township 1, ranges 20 and 21, but these

were prevented from spreading far.

In 1905, another burned about 6 townships in 1-21. The origin of this fire is not known, but it is thought that it was started by settlers burning the hay meadows which they lease within the reserve. The burning of hay meadows can be done before the snow is out of the woods and no damage will result, but later burning should be severely penalized. At present the greatest carelessness is shown by those holding hay leases and it may be necessary to cancel all leases in future unless they can be more strictly regulated.

This year, also, fires have been started by both Americans and Canadians, and the ranger had the utmost difficulty in preventing the burning of the entire reserve.

It is without question that the recurrence of these fires must be stopped if the forest reserve is to be maintained, and in order to accomplish this it is necessary to impress the public with the fact that the government is not going to throw the land open for settlement and that it is prepared to protect its property against wilful or negligent destruction.

The first step in this direction is the eviction of the squatters who in order of the government orders have settled within the reserve and are doing all in their power to rid the land of trees and to encourage other squatters. They have been immune from prosecution so long that they have grown bold in their trespass. Now that the reserves have been set aside by Act of parliament the administration will be able to act with a stronger hand.

Forest Ranger Walkinshaw is constantly employed in guarding the reserve and during the dry seasons in spring and fall is given assistance in patrolling, but owing to the lack of trails throughout a large part of the reserve and the impassability of those that have been cut it is impossible to patrol the district as it should be done, and a fire might burn for a day or more before a ranger could get at it through the fallen timber and dense undergrowth. On the accompanying map a system of trails has been laid out, the construction of which I hope will shorty be completed. This year the ranger, with the assistance of one man, is improving the main trail through range 20, and later the others will be fixed up. It is not expensive work making trails through this country and the outlay will be quickly repaid by the facility it will give the rangers in putting out incipient fires.

The ranger has a shack on section 9, 1, 20, which is well situated in order to watch the southern side of the reserve, but there should be two or three stations along the north side, and I would advise the appointment of three fire guardians whose houses are near the northern boundary and who would in event of a fire report it to the ranger and take what immediate steps are necessary to extinguish it. These stations should be supplied with telephone communication with the ranger's shack and with Boissevain. A local telephone system is about to be established in the neighbourhood, I believe, and this service can then be easily provided.

Fire fighting tools, such as shovels, axes, hoes and pails, should be kept at each of the stations ready for use.

Fungi.—A very large percentage of the old timber and much of the younger are being destroyed by fungi, chiefly polyporus ignarious. Fire scars enable the fungus to gain access to the wood of the tree and it soon permeates the whole trunk destroying the wood. Finally it fruits by means of the dark hoof-shaped brackets so often seen on trees, and the spores attack other trees. There is no practicable method of combatting this disease except by removing diseased trees and this will be done as soon as possible by directing the settlers' cutting to affected stands.

Before the fires the Turtle mountains were very much more attractive from an aesthetic standpoint, and even yet there are many picturesque little lakes whose banks are wooded. Of these, Lake Max is becoming quite a favourite summer resort, and many people take the opportunity of a change in scenery from the bare level prairie or the dusty town for the cool and refreshing woodland scene.

There are some pickerel in the lakes but the introduction of black bass would make the resort still more popular.

The reserve has the support of the best public opinion, and if a firmer hand were used in the administration the favour of even those who now would like to see it thrown open would be won.

#### MOOSE MOUNTAIN FOREST AND GAME RESERVE.

Owing to the lateness of the season before we were able to start work in the Moose mountains a reconnaissance survey was all that was possible, but as the conditions were very similar to those in the Turtle mountains, and the reserve mostly covered by reproduction which had not reached a merchantable size, it was considered that it would be all that was necessary in this reserve. Where there was large timber we ran survey lines, but for the most part cruised in parties of two and measured sample areas and made occasional stem analyses.

The Moose Mountain forest and game reserve is situated in townships 9, 10, 11, ranges 2, 3, 4, 5, west of the 2nd principal meridian, in Saskatchewan, and contains 163 square miles of rough, hilly and forested land. One peculiar feature of the Moose mountain topography is that though the lakes and sloughs cover nearly one-fifth of the area there are hardly any streams flowing out of the district. There is subterranean drainage, however, which supplies the surrounding prairie with excellent water. It is said that when the wind blows from the direction of the hills the water in the wells rises quite perceptibly.

The soil is mostly a clay loam with considerable gravel. The lake shores are nearly all of clean gravel.

Where not too rough agriculture would be possible, but attempts at wheat-growing do not seem to have been very encouraging. There is splendid grazing in the reserve and many cattle range there winter and summer. The grass around the sloughs makes excellent hay and during the summer the pea-vine provides abundance of feed. In the more open places, especially along the west side, the upland grass or 'prairie wool' is cut and makes the best of hay. The cattle which are allowed to pasture in the reserve are doing considerable damage to the reproduction and one can easily tell by the appearance of the stand whether cattle are running in it or not. The trees are more scattered, many are scarred, the growth is retarded and shrubby trees like the willows predominate where grazed. It will be necessary to restrict the grazing to within harmless limits in future.

The maple, oak and elm found in the Turtle mountains are absent here, and the mature forest is composed approximately of aspen 82 per cent, balm 8 per cent, birch 9 per cent, ash 1 per cent.

Most excellent reproduction, chiefly aspen and balm, has followed the fires of 1885 and 1897, and, if protected as it has been of late, will soon reach a merchantable size. The nine-year old trees are now eight to twelve feet high, and the 19-year old twenty-five to thirty feet, and growing densely. The trees are tall, straight and clean and will make good wood.

The area covered with merchantable timber may be roughly estimated at 4,000 acres, about 80,000 covered with reproduction and the remaining 20,320 in water or prairie.

The average yield per acre is about 23.4 cords. There is therefore about 93,600 cords of green wood, and there is at least 100,000 cords of dry wood available for fuel. Of saw material there is about 4,520,000 feet, B.M., aspen; 760,000 feet, B.M., birch, but this is so scattered that it is hardly available for milling.

Very little damage is being done by the cutting, and as Forest Ranger Rutherford is directing the removal of dead wood systematically the forest is being put in much better condition thereby.

The following table shows the amount of wood which the reserve supplies to the settlers, and I may say that nearly all of this wood was taken out under the free permits granted to homesteaders:—

Vear.	No.	Building	Roof	Fence	Fence	Cords
	Permits.	Logs.	Poles.	Rails.	Posts.	Fuel.
1903	1,402	74,528	7,750	27,735	7,488	5,308
	1,286	230,117	27,597	26,850	50,068	5,211
	813	128,230	20,901	15,264	22,865	3,909
	1,167	144,292	18,749	23,283	26,807	4,809

The surrounding country has been settled within the last few years and therefore the demand for building and fencing material has been larger than it will be after this.

Fires.—In 1885 a very serious fire, supposed to have originated from one of the numerous prairie fires, swept over almost the whole reserve and left the timber standing on only a few sections around Fish lake and some towards the northwest corner of the reserve. Even these were considerably injured by a lighter ground fire. Owing to the small number of settlers at that time, very little could be done to check the progress of the fire and it was allowed to burn itself out. Traces were found of some fire nearly every year, but no serious damage was done until 1897 when another fire ran over a large area of the same country and destroyed the reproduction which was then eleven years old.

This fire is supposed to have been set in two places in the reserve by ranchers, and the efforts to back fire, no doubt, spread the fire still more widely. The settlers fought this fire well and managed to save most of the old standing timber and also considerable of the reproduction, as is shown in the accompanying map.

In 1900 another fire destroyed a strip of reproduction about one-half mile wide, adjoining the prairie on the west side. One of the chief sources of danger to this reserve is the Canadian Pacific Railway engines which every year set numerous prairie fires along the line, and it takes the utmost vigilance of the ranger to keep them from running into the timber. Now that the land is being put under cultivation this danger will be lessened.

The devolution from forest to prairie through fire can be seen in all the stages along the edge of these mountains and the Indians tell us that the forest once extended over a large area which now through fire and grazing is a rolling prairie.

Trails.—As shown on the map a trail was built by the government almost through the mountains, in range 3, in 1900. It has been cleared of all trees for a chain wide, and if completed to the northern edge of the mountains, and one or two small bridges put in where necessary there would be sufficient travel to make the trail useful as a fire-guard and a means of patrolling the reserve. As it is now, it is growing up with dense reproduction of trees and underbrush and should be cleaned out again. One trail into the eastern end of Fish lake, one north from there to the prairie, and one from Arcola to Bennet's lake, are all the trails that are at all passable in the summer and these are very poor. It is therefore impossible for the ranger to patrol the reserve as he should.

This year we are having the road into Fish lake widened and the wet places corduroyed, and I would urge that the government road be completed, a trail made along the north side of Fish lake and west to the old Indian reserves through the centre of the Forest reserve. There are old trails running north from Bennet's lake which were passable when the water was lower and could now be altered with very little expense so as to be of service.

For the last four or five years the water has been rising in the lakes in the Moose mountains and this can, I think, be attributed largely to the growth of the trees and

the protection afforded the water by the dense young stand. Fish lake is now about 4 feet higher than formerly, and where they used to drive along the shore is now deep water the year around. The Northwest Mounted Police have rendered valuable assistance in protecting this reserve from fire and timber stealing.

There are several squatters in this reserve also, who should be removed as soon as possible. I found public opinion generally very much in favour of the forest reserve policy, and the settlers and townspeople are all anxious to have the forests protected. As a summer resort it is even more popular than the Turtle mountains, and in August there are between three and four hundred campers on Fish lake which is the largest sheet of water in the mountains. This is a beautiful lake and provides excellent fishing as well as boating and sailing facilities.

There are elk and jumping deer in the woods, and in the fall the wild duck cover the sloughs and lakes in thousands. Partridges and prairie chickens are also plentiful. The muskrats are taken out in large numbers every winter, and there is one colony of beaver near Fish lake which is being carefully protected.

These mountains are situated in the midst of one of the best wheat-growing sections of the west, and the productiveness of the surrounding prairie may be largely attributed to the shelter afforded from the wind, and the fact that the water supply is conserved by the forests in winter and supplied to the fields during the summer through underground channels.

The forests are in a most hopeful condition and with continued protection against fire, over cutting and grazing, will soon become very productive.

#### RIDING MOUNTAIN FOREST AND GAME RESERVE.

The Riding mountain, Duck mountain and Porcupine mountain reserves differ from the other reserves in the middle west in that they have in them considerable saw material of the more valuable species, such as spruce, larch, balsam and jack pine, which grow in stands yielding as much as 4,000,000 feet, B.M., per square mile. The deciduous trees are represented by the aspen, balm, birch, oak, ash, elm and maple. In the Riding mountains the coniferous species are found chiefly at the higher altitudes; the aspen, balm and birch grow everywhere, but the oak, ash, elm and maple are confined to the lower and chiefly north and east slopes. The spruce reaches a large size, frequently over 36 inches diameter, breast-high, and 90 feet in height. There is a large amount of water in the Riding mountains, but the drainage is much better than in the Moose and Turtle mountains and deep ravines with swift streams are more characteristic of the topography than sloughs. There are numerous lakes and most of them are quite large. A considerable area, especially near the height of land, is covered with spruce and larch muskeg, which makes travelling through the reserve almost impossible in summer.

As in the other reserves fire has done great damage to the forests and in some places, especially along the Strathclair trail, almost prairie conditions have been produced. Along the southern part of the reserve the fires have produced a park-like country where grassy glades run in betwen the bluffs of trees which have escaped the fire.

The soil is chiefly a clay loam with some boulders and shale. The shores of the lakes are usually quite gravelly and the beds of the streams filled with boulders.

Cutting.—There are at present nine timber berths, covering in all about 114 square miles in this reserve, but most of them have now been cut over and have ceased operations. The Shaw Bros., of Dauphin, are perhaps the largest operators in the reserve at present, and they are lumbering in a very careful and conservative manner. They have exercised the utmost care with fire and utilize as much of the merchantable timber as could be expected. This firm contemplates starting experiments in replanting cut-over areas next spring which is a good indication of their interest in forest conservation.

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A great deal of the cutting is now being done by portable saw-mills which locate along the edge of the reserve and saw wood taken out under the settlers' permits. The settlers may cut their own logs and haul them to the mill but the usual practice is for the millman to collect the permits and take out the wood himself. This system enables the farmer to obtain building material very cheaply, but it has been greatly abused and will have to be discontinued entirely unless it can be kept in better control, for annually large amounts of timber are cut illegally and since these millmen have no interest in the forest and are entirely irresponsible the most wasteful cutting is followed. On account of the growing scarcity of the coniferous species it will be necessary to discriminate against their exploitation and favour the use of poplar which grows in abundance and reproduces readily. The cutting of green coniferous species for fuel should be prohibited entirely, but the removal of dead timber and diseased timber be encouraged. There is no reason why the reserve should not produce a good revenue without causing any hardship to the settlers who are benefited by its existence.

Since the Forestry Branch has taken charge of the reserves new regulations have been made which aim at the protection of the conifers, the removal of dead and diseased timber and the restriction of cutting areas. The portable saw-mills will also be under closer supervision.

Squatters.—Perhaps the most serious administrative difficulty in the Riding mountains is the handling of squatters, of whom there are fifty, chiefly Galicians and half-breeds. These people, though warned that they could not secure their patents, have gone into the woods and cleared little patches for their homes and in doing so have systematically set fire to the surrounding forests. Under the unstable conditions of the reserve boundaries before the passing of the Forest Reserves Bill some of the squatters did receive their patents and the success of these has encouraged the rest to persist in their trespass. The class of people who are squatting are not particular what kind of land they settle on and will never farm well or extensively. As citizens they are undesirable and have very little claim to consideration. The influx, especially of Galicians, is steady and unless severe measures are taken to rid the reserves of those at present there, and to prevent further encroachments, it is useless to attempt to protect the timber.

Game.—Moose, elk and jumping deer are very plentiful in the north and eastern part of the reserve, but towards the south where the Indians and half-breeds live there are few left since these people kill them without respect to season or sex and have practically exterminated them. There is good fishing in some of the lakes, and ducks and partridges are quite plentiful.

From a Hydrographic Standpoint this reserve is probably the most useful of the Dominion forest reserves since it is situated at the headwaters of nearly half of the tributaries of the Assiniboine river and of all the streams which water the famous Dauphin plains. The value to the surrounding agricultural districts of the wood produced on this reserve can hardly be estimated, and it is satisfactory to find that locally (except for the squatters) the maintenance of the reserve is strongly upheld, and any action to futher the protection and improvement of the forest in accordance with the object of the reserve will receive the support of the communities affected.

#### COOKING LAKE FOREST AND GAME RESERVE.

The Cooking Lake reserve is situated in the Beaver hills, near Edmonton. This reserve has probably suffered more from fire than any of the other reserves, and there is at present hardly a square mile of virgin timber left. The original stand was spruce, larch, aspen, balm, birch, with some jack pine and balsam. Now the conifers have almost all disappeared and only an odd old spruce or larch which has been protected by a muskeg or a hill remains to show that there was once a coniferous forest on

these hills. Reproduction of aspen and balm is coming up thickly over almost all of the reserve, but some of it has been burned over three or four times and is now beginning to lose its vigour. In these places it will be necessary to replant if the forest is to be maintained.

The country about this reserve is new and there is a great inflow of settlers, many of whom do not know good land from bad; consequently they drop down like locusts on every bit of government land and proceed to rob it of the only asset is possesses—the timber.

The soil in the hills is almost all of a light coloured clay or gravelly, and is not fertile enough for agricultural crops even where level and free enough of muskegs and sloughs to permit cultivation. One man who was unfortunate enough to locate in these hills told me that after five years' hard work (and I could see that he had been industrious) he had not succeeded in raising enough to feed his horses. It would seem that the government would make a serious mistake to settle this poor land when there is so much excellent land available. Disappointed settlers are poor advertisements, aside from the fact that they destroy the timber which, in a very few years, when the adjacent country becomes all cleared, will be of great value to the same settlers who are now intent upon destroying it.

The boundaries might be extended to the south to include the north  $\frac{1}{2}$  of township 51, range 20, and the northwest  $\frac{1}{2}$  of township 50, range 19.

To cope with the fire danger at all efficiently the department should appoint a special ranger to guard the reserve, as the present forest ranger has much too large an area of timber land to look after to enable him to give the attention he should to the reserve.

In view of the rapid influx of settlers to the Northwest, many of whom settle in advance of the surveys, I would strongly recommend that the forested country within reach of settlement be thoroughly explored and that all land which is not suitable for agriculture, but is capable of producing forests be set aside as permanent forest reserves, within which settlers will not be allowed to locate. It is very much easier to get rid of a squatter before he has made any improvements than after he has built a home for himself. These isolated settlers in a timbered district are the greatest menace to forest protection, as they are constantly setting fire, and it would pay the government to employ a much larger number of rangers to constantly guard the forests of the Northwest from fire and prevent settlement within them.

Adequate forest protection is possible only under the reserve system, since forestry and settlement are two irreconcilable factors in a new country.

With this object in view I would suggest that as early as possible examinations be made by this branch of the following districts; the foothills of the Rocky mountains in Alberta, McLeod river, Lac la Biche, the sandhills north of Prince Albert, and the country around the west, north and east of Lake Winnipegosis.

Your obedient servant,

ROLAND D. CRAIG.

#### APPENDIX No. 3.

REPORT OF HUGO CLAUGHTON-WALLIN, F.M., ASSISTANT IN FORESTRY.

Dauphin, Man., July 28, 1906.

E. Stewart, Esq., Superintendent of Forestry, Ottawa.

SIR,—I have the honour to submit to you my report for the year ending June 30, 1906.

After July 1, 1905, I continued the inspection of tree plantations set out by the Forestry Branch, which I had started in the beginning of June the same year. The parts I visited were Western Manitoba and Eastern Saskatchewan. It was for me a very pleasant sight to see so many fine groves of trees scattered over the prairie forming excellent wind breaks and lending beauty to the otherwise rather dreary and monotonous landscape.

The plantations consisting generally of Manitoba maple, green ash, cottonwood, elm and willow, were mostly all in good shape, the percentage of dead trees being very small; I should estimate it at 10 per cent to 15 per cent. The farmers seemed well satisfied with the work of the department. Quite a number of them expressed a desire to receive some spruce or pine seedlings, and I would respectfully suggest that a few of these species should if possible be distributed to farmers who, by previous successful planting, had proven themselves well capable of giving the young trees the necessary attention.

At the end of October I finished the inspection and went to Indian Head, where, for two weeks, I assisted Mr. Ross, in the taking up and the heeling in of the seedlings for this spring's distribution. Altogether, two millions of trees were in this way prepared for the winter. They were all in excellent condition, being thoroughly ripened in spite of the fact that they had attained a very good growth.

After my two weeks' stay at Indian Head I returned to Ottawa, where I remained

in the office until spring.

On April 5 I received notice to leave for Indian Head where the shipment of trees to the applicants was to begin. The heeled-in seedlings had survived the winter splen-

didly and ought to prove excellent plant material.

When through with the packing I went down to Sewell, Manitoba, to superintend the planting of Scotch pine seedlings on the Spruce Woods Forest and Game reserve. This plantation was begun two years ago and promises to be very successful. Strong, healthy-looking pines to the number of 17,000, were set out this spring in furrows ploughed 4 feet apart and the sod always thrown so that the perpendicular side of the furrow would come on the south side to shelter the young plants from the hot noon sun. The seedlings were put close to this side and about 3:5 feet apart in the row. The cost of planting these Scotch pine was about \$15 per acre. I found the plantation of last year doing well, about 85 per cent living, which must be considered a very good result.

At present I am engaged in conducting a forest valuation survey of the Riding Mountain Forest and Game reserve in Manitoba.

The reserve as far as I have seen it has been well forested and is capable of supplying fuel and building material to a large number of settlers.

The chief species numerically is the aspen, and this makes excellent fuel and if sound, fairly good lumber. It is, however, being greatly damaged by a fungus disease (Polyporus ignarious) which threatens to spread throughout the reserve. It would be advisable to cut this diseased timber as soon as possible. The spruce is the most valuable species found on the reserve and is quite prevalent in some parts and reaches a large size, trees over 36 inches diameter, breast high, are frequently found. The other species of trees found on the reserve are larch, balsam, jack pine, balm of Gilead, white birch, elm, green ash, Manitoba maple, mountain ash, scrub oak, and several species of willow. Some large areas have been burned over, but in most places there is sufficient reproduction on the brules.

The chief source of danger to the reserve is the squatters who are encroaching on the reserve in many places, and who set fires every year in order to open up the country for settlement. The squatters are chiefly Galicians or half-breeds. If the timber on the reserve is to be protected these encroachments must be stopped.

I have at present seven foresters assisting me in the work of determining the quantity of timber on the reserve, the rate of growth of the various species and sylvicultural conditions generally.

In spite of very unfavourable weather we are making good progress and expect to complete the work by the end of September.

I have the honour to be, sir, your obedient servant,

H. CLAUGHTON-WALLIN.

## APPENDIX No. 4.

REPORT OF A. P. STEVENSON, TREE PLANTING INSPECTOR.

NELSON, MAN., July 1, 1906.

E. Stewart, Esq., Superintendent of Forestry, Ottawa.

SIR,—I have the honour to submit the following brief report on the work done by me under your instructions as tree planting inspector in connection with the work carried on in this province by the Forestry Branch of the Department of the Interior.

On June 13 I commenced inspection work, but up to the present have not covered very much ground. On June 15 I went to Winnipeg to meet Norman M. Ross, assistant superintendent of forestry, and arrange with him about inspection work for the season. Messrs. Craig and Wallin who, during the past two seasons, have been engaged on this work in Manitoba, not being available this year, two new men, Messrs. Ross and Jacombe of the Yale Forest School, New Haven, Conn., who had joined the Forestry Branch, arrived in Winnipeg to take up inspection work. These men accompanied me for a short time, then left to take up the work of inspection alone in various parts of the province; Mr. A. H. D. Ross taking the main line of the Canadian Pacific Railway from Rosser west to Kirkella; also the Miniota, Lenore and Yorkton branches. Mr. Jacombe commenced work at St. Claude on the Glenboro' branch, west to Souris, the Pipestone branch, Souris to Sinclair, Deloraine to Lyleton, Souris to Estevan, Sask. My own district will be principally in the Red River valley and on the Canadian Pacific Railway, southwestern, Winnipeg to Buissevain; Canadian Northern Railway, Morris to Elgin; also the Emerson, Ridgeville, Stonewall and Gilbert Plains branches.

The spring was an extra early one, the warm weather in the month of April brought out the buds on the trees earlier than usual, the result being rather disastrous to some varieties of ornamental trees and more especially fruit trees.

The weather continued very dry for some time with cold, frosty nights and warm days, which was very trying on the young, newly planted forest trees. But owing to the trees being well packed and arriving at their destination in fine order, where planting was done well very little injury has resulted from the dry spell. And I might further add that to the wisdom of the Forestry Branch insisting on a thorough preparation of the soil before trees are given for planting belongs a good deal of the credit for this favourable showing in tiding over a dry period. Cottonwood appears to have suffered slightly from winter killing during the past winter in some parts of the Red River valley, notably in the Sperling district. The land there is a rich black loam; on this soil the young trees make a rapid soft growth which failing to get fully ripened up by the closing in of winter the following spring will show more or less killing back of the previous year's growth. As the trees grow older and a hardier growth is made this trouble I have no doubt will disappear. With the majority of planters the green ash is very much in favour and giving increased satisfaction every year. When planted in alternate rows with Manitoba maple and set out 4 feet by 4 feet apart the growth is about equal to that of the maple.

During the whole of the month of June there has been abundance of rain; consequently the trees as a whole are looking well and making remarkable growth.

Of the trees sent out this spring, so far as inspected I would estimate that 95 per cent of the ash are living, 85 per cent of maple, and 75 per cent of cottonwood. The Russian willow is growing in favour and is frequently inquired after for the purpose of growing a snowbreak. A snowbreak is usually planted at a distance of 40 to 50 yards out, or from the trees in the regular windbreak proper, and is composed of a single row of willows. The necessity for a snowbreak gets more apparent as the trees in the windbreak increase in size, holding large snowdrifts, the trees being liable to be broken down or seriously injured in consequence. This danger is being realized by planters, and as a result the increased interest in snowbreaks.

Your obedient servant,

A. P. STEVENSON.

#### APPENDIX No. 5.

REPORT OF JOHN CALDWELL, TREE PLANTING INSPECTOR.

VIRDEN, July 3, 1906.

E. Stewart, Esq.,

Superintendent of Forestry, Ottawa.

Sir,—I beg to submit to you my report for 1906.

The territory given to me this year is the same as for 1905, namely, the Canadian Pacific Railway main line from the Manitoba western boundary to Regina, the Kirkella line to Balcarres, and the Pipestone line from Regina back to Manitoba.

Since my last report I have assigned to farmers about a quarter of a million young trees, having found land ready or being prepared for that quantity. The average to each farmer would be about 1,800 trees. I seldom give less than 1,000 to any one man and not often over 3,000. One-half acre planted 4 by 4 feet takes about 1,500 trees, and it is very desirable that all farmers who are out on the open prairies should have

plantations north, east and west of their buildings, not too close but leaving plenty of room for a good sized barn yard. Such a plantation adds greatly to the comfort, value and cheerfulness of farm life. A few years of such work will change the whole face

of the country, giving it a more homelike and prosperous appearance.

I find the farmers only too glad to avail themselves of this opportunity of getting plantations, but the inspectors can hardly be too careful in giving advice as they are so liable to make serious mistakes. One man would take 10,000 trees when he has hardly time to care for 3,000; another would plant all around the farm which would not be wise when he has no trees around his buildings; some will plant too close, some too far apart, and some too shallow. A little talk on how to plant is always in order, and how to trim roots if planting with a dibble, which is sometimes the best and quickest way, when planting one-year olds.

One great reason for the many failures in the early tree planting through Manitoba was the lack of proper instructions. There is hardly a farmer living out in the open prairie but intends to plant trees. We have a few beautiful plantations in almost every district. These are examples and an encouragement for the neighbours to do

likewise.

I find a failure here and there and some only middling, but fully 75 per cent of the plantations are quite satisfactory, probably 90 per cent of all trees planted so far are growing.

This season so far has given us a heavy rainfall, and while it is good for trees it is also good for weeds, and we should be careful not to give farmers more trees than

they can well care for.

The varieties of trees distributed in my district so far have been principally native maple, native ash and cottonwood from North Dakota, with a sprinkling of elm, willow and Russian poplar. The hardwood trees (ash and elm) are of slower growth than the rest, but in the end will be the best and for a plantation to be permanent it is very desirable to have 25 per cent of the trees hardwood. The Russian willow and Petrofsky Russian poplar, are also fast growers and very hardy; and it is good to have a mixture of them in all plantations. The poplars are better sent out as stout cuttings, and the willows would be safer if small cuttings were rooted one year old.

With good windbreaks farmers will be in a far better position to plant all kinds of nursery grown trees, shrubs, small and large fruits. Some large nurseries are being established in the west and these plantations will prove a benefit to them as well as to the whole country. I find every one in the towns as well as in the country speaking very favourably of this government tree planting among the farmers, and the work should certainly be vigorously carried on, especially in the newer districts where settlers are flocking in, often where the prairie is perfectly bare and never a tree to be seen. It is not hard to imagine how anxious these newcomers are for a little shade and shelter and how glad they seem to accept the government aid in the way of tree planting.

I have a good many foreigners on my list this year, and my past experience with them has been very satisfactory. Most of them are from countries where forestry receives a good deal of consideration, and they show quite a desire and love for tree

planting.

I am marking quite a lot of names off the list this year as being pretty well supplied. Although it would pay farmers to plant a block of trees for fuel posts, &c., few of them care for more than shelter around their buildings, as they do not wish to spend the time, there being so much other work to do in the way of improvements. No doubt planting for fuel and timber will develop later on, and in the meantime we have probably all we can do to attend to the newer settlers.

I had the pleasure of looking over the forest nursery at Indian Head with Mr. Ross a short time ago, and was delighted with the healthy growth of the plantations. I consider the forest nursery a splendid and well managed institution. Millions of healthy, well grown young trees are growing there at a very small cost.

Your obedient servant.

#### APPENDIX No. 6.

## REPORT OF ANGUS MACKINTOSH, TREE PLANTING INSPECTOR.

HANLEY, SASK., September 7, 1906.

E. Stewart, Esq., Superintendent of Forestry, Ottawa.

Sir,—I have the honour of sending you my third annual report on the tree planting done through the co-operation of the Forestry Branch and the settlers in that part of the Northwest allotted to me for inspection.

At the time of sending you, on the 20th of August, 1905, my last report I had nearly two months' work before me between the head of Last Mountain lake and Eagle creek; round Saskatoon, Rosthern and Osler; and away to the west through that newly opened up country, watered by the North Saskatchewan, from Great Bend to Lloydminster. There are quite a number of thriving shelter belts and small plantations that are a pleasure to inspect now growing in the districts that have Saskatoon, Osler and Rosthern as centres; and even out the length of Eagle creek, a district that at the time of my first visit was a solitude broken only in a few places—tree planters have been successfully at work. Out the Great Bend, Battleford and Lloydminster way also a very promising beginning has been made, and now that the Canadian Northern railway will enable settlers to get trees without having to haul them over the old trails a hundred or more miles, applicants in that quarter are sure to increase.

It is very satisfactory to find that most of the recipients of trees give them every care. Indeed one at times feels surprised that men who are still in the midst of the pressing work of making for themselves homes in a new country should be able to do so well.

Putting off applicants that have not got ground properly prepared for trees has at times to be done, and it is always necessary to give them the reasons why. They think it hard to be put off for twelve months, and it takes some talk to convince them that trees planted on well worked ground, that is, the sod well rotted, and the soil deepploughed and well broken up—grow as much in one year as trees on badly prepared ground grow in two, and that keeping the ground cultivated is easier.

My advice is often asked about pruning, especially by those who have sheltered belts so advanced that they need no further soil cultivation. I point out to those inquirers the necessity of keeping the leaf canopy unbroken that the shade may kill the weeds and help to keep the moisture in the soil, and that nature should be allowed to do

the pruning.

This season I began inspection work on the 1st of July at Lipton on the Kirkella Railway, working westward to Strassburg; then up the east side of Last mountain, and after that across the country to the Touchwood Hills. A further list of applicants with which I was supplied by Mr. Ross covered the country on each side of the Canadian Pacific Railway from Regina to Swift Current, and also the Prince Albert Branch, and the Canadian Northern Railway from Saskatoon to Lloydminster.

The plantations I have visited are on the whole in a satisfactory state, the failures not exceeding 5 per cent. The desire for trees is spreading greatly and extends into such outlaying settlements as those north of Swift Current, 80 miles from any railway.

The young trees everywhere have come through the winter unscathed and look very vigorous.

In my last report I mentioned the satisfactory growth made by coniferous trees in the neighbourhood of Pense, and my visit this season to the plantations on Mr. Spring Rice's property was one fraught with pleasure. That gentleman's plantation of tamarac is the best I have seen in the Northwest. The trees were planted three years ago, and they now stand from 7 to 8 feet in height. They are full of vigour, of very even growth, and quite overtop the other trees with which the plantation is mixed. Standing on sloping ground facing the north, on soil that is not of great value for agricultural purposes, they promise to become highly remunerative. I may mention that on somewhat different soil and in a different situation the tamarac is making equally good growth at the Forest Nursery Station, Indian Head, affording an excellent object lesson to all who visit that place, so full of interest to lovers of trees.

I have now got the length of Hanley on the Prince Albert branch, and have two

months' work before me still.

I am, sir, your obedient servant,

ANGUS MACKINTOSH.

## APPENDIX No. 7.

REPORT OF A. H. D. ROSS, M.A., F.M., TREE PLANTING INSPECTOR.

NEEPAWA, MANITOBA, September 14, 1906.

E. Stewart, Esq., Superintendent of Forestry, Ottawa.

SIR,—Following your instructions of June 15, 1906, I have inspected 186 of the tree shelter belts already established about the homes of settlers in Manitoba and Saskatchewan by the co-operation of the Forestry Branch of the Department of the Interior, and have examined the land prepared by 89 settlers who have asked for advice and assistance in the matter of growing trees for shelter purposes.

My territory included the plantations, and proposed plantations, that could best be reached by driving from suitable points on the main line of the Canadian Pacific Railway, from Winnipeg to Kirkella; the Varcoe, Lenore and Miniota branches to the north of the main line, and the Yorkton branch, from Portage la Prairie, Manitoba, to Sheho, Saskatchewan. Puring the 55 days of actual driving the distance travelled was 2,118 miles, an average of 38.5 miles per day, and the amount paid for livery hire was \$222. The average number of plantations inspected each day was only 5, and the average price paid for livery hire was 10.48 cents per mile, or 80 cents for each plantation visited. These facts show how widely scattered the plantations are, but it should be remembered that each one of them is a splendid object lesson on the possibility of growing trees on the plains.

Fourteen of the plantations inspected were started in the spring of 1902, 19 in 1903, 40 in 1904, 49 in 1905, 64 in 1906, and out of the 89 whose land I examined I have recommended 76 for trees to plant in the spring of 1907. The remaining 13 have not suitably prepared the ground for tree growth and have been advised to get it in first class condition for the spring of 1908. Thorough cultivation of the soil before planting and keep its surface frequently stirred for two or three years after planting is the key-note of the success that has been attained in the growth of trees in the prairie provinces. Where they have been properly cared for less than one per cent of them have died. As far as my observations for 1906 go, about 95 per cent of the trees set out since 1902 are alive and fully 85 per cent of them are doing well.

Your obedient servant,

A. H. D. ROSS.

#### APPENDIX No. 8.

REPORT OF F. W. H. JACOMBE, M.F., TREE PLANTING INSPECTOR.

YELLOW GRASS, SASK., September 8, 1906.

E. Stewart, Esq., Superintendent of Forestry, Ottawa.

Sir,—I received my appointment as inspector of tree plantations in the Northwest in the spring of the present year, and, as soon as I could arrange to do so, left the Yale Forest School, immediately before the close of the last term of my course, and came west to take up my duties. After some days spent in preliminary work I began my work of inspection at Elm creek, Manitoba, on June 28.

The lines first assigned to me were as follows:

(1) Elm creek to Souris and west to Antler; (2) Souris west to Estevan; (3) Deloraine to Lyleton.

The work of inspecting these three lines was finished on August 24. The great majority of those called on had their trees in good shape. A few cases of failure have occurred through the applicant having undertaken the care of too many trees. Neglect of the trees was more often traceable to the building of new houses, barns, &c. Trees on rented places were seldom or never properly cared for.

The spring of 1906 was throughout southwestern Manitoba favourable to the growth of the seedlings planted, and very few of them have died; three per cent of the whole number planted would, I think, be a liberal estimate. The ash have been especially hardy.

In a number of cases complaint was made of damage by jack rabbits which eat off the tops of the trees in their first winter. The jack rabbits prefer the ash, though they sometimes attack cottonwoods. Maples are seldom, if ever, damaged by them. The changeable weather of last winter and spring resulted in the freezing back of many maples and cottonwoods. These, however, have usually grown up from the root. Insect pests were rare. The vagabond blight of the poplar was found on a number of cottonwoods.

On finishing the above lines I was assigned (4) The 'Soo line' (from Drinkwater to North Portal) on which I am now engaged.

Along this line the spring and early summer were marked by excessive rains which on heavy soils interfered with the cultivation of the trees, and in one or two instances, in low situations, made it almost impossible to plant. The wet weather has been followed by a long and steady drought which has lasted since early in July to the present time. Growth has consequently not been as good as in more favoured places; though where the trees have been well cultivated it has been good. This section of country is, of course, much more recently settled than most of the parts of Manitoba in which I have been, and there seems to me more temptation in busy times to leave cultivation of the trees to a more convenient season.

In some sections a large proportion of the settlers have come from the western states (mainly from Minnesota, the Dakotas, Iowa and Nebraska), and these seem especially anxious to secure trees, having learned in their former homes the value of trees on the prairie.

Your obedient servant,

## APPENDIX No. 9.

# REPORT OF JAMES LEAMY, CROWN TIMBER AGENT, BRITISH COLUMBIA.

NEW WESTMINSTER, B.C., September 17, 1906.

E. Stewart, Esq., Superintendent of Forestry, Ottawa.

SIR,—I have the honour to submit the following report in connection with fire guarding the timber in the railway belt within the province of British Columbia.

As you are aware, up to the present time we had an exceedingly dry season, very little rain having fallen. Early in April last, a fire originated in the Cultus Lake district which ran over about four square miles of territory, doing considerable damage to young timber but very little harm to the large timber. This fire started at a time when least expected and made considerable headway before we could get men to work at it to prevent it spreading. However, as soon as we got the men on, they succeeded in checking it and so prevented the fire from spreading. Since April last we have had scarcely any rain and consequently I have been obliged to keep a considerable force of men constantly at work patrolling and fighting fires which have been numerous. I am pleased to be able to report that very little loss of timber has occurred within the railway belt. What fires have occurred have been caused by settlers in the clearing of their lands, by sparks from locomotives and in the upper country from lightning, in fact the majority of fires in the Upper Columbia River district can be traced to lightning.

As soon as the danger season is over I will submit a further report, giving details of each and every fire, its location, &c. I am pleased to say that rain began to fall about the sixth of the present month, and I consider the danger from further fires has been minimized considerably, but it will be necessary to watch over the various districts carefully until satisfied that all danger has passed.

In concluding this short report, I wish to add that I am of the opinion that the system of fire guarding established by you and which is carried out in the railway belt of the province of British Columbia under your supervision, has proved to be most successful; this year we have again succeeded in preventing the loss of valuable timber which was an annual occurrence prior to the inauguration of the system now prevailing.

All of which is respectfully submitted.

I have the honour to be, sir, your obedient servant,

JAMES LEAMY,

Crown Timber Agent.

### APPENDIX No. 10.

## REPORT OF JOS. E. STAUFFER, FOREST RANGER IN SOUTHERN ALBERTA.

DIDSBURY, ALTA., July 9, 1906.

E. STEWART, Esq.,

Superintendent of Forestry,

Ottawa.

Sir,—I beg to submit my report regarding forest fire ranging in Alberta, south of the Saskatchewan river, for the year ending June 30, 1906.

During the fall of 1905 we had no fires that did any harm.

The fall of snow during the winter was very light and fires began to run in the woods early in March. The woods were exceedingly dry from the 1st of March up to the 15th of May. There was no rainfall to amount to much during that period.

During the early part of April fires were set out by unknown persons in township 32, ranges 6 and 7, west of the 5th meridian. This fire spread and burnt up the area lying between Red Deer river and James river. It burnt considerable valuable timber on timber berth 253. About the same time fires set out by Indians in township 31, range 7, west of the 5th meridian, burnt over the area lying between the Red Deer river and Fallen Timber creek. This fire, after desperate fighting by all the available men we could get, got beyond control on a very windy day, and burnt about 50 million feet on timber berth 252.

There were also several fires north and south of the Raven river which burnt over a large area, but Fire Ranger Robinson reports that there was only a small quantity of valuable timber destroyed.

I would estimate that between 75 and 90 million feet of timber was burnt by these fires.

West of the 5th meridian to the base of the Foothills there are many small blocks of timber of from 250,000 feet to a million feet, and in the northern part of my district quite a few small timber berths. The settlers are taking up homesteads adjacent to and among these blocks and timber berths, and there is continually a stream of land seekers going into these districts. This makes it very difficult for a ranger to prevent fires being set out, as with the present staff of rangers it is impossible to keep track of travellers through timbered parts. In some cases I know of settlers squatting on timber berths.

I always understood that Indians would never set out fires in the forests, but this year I was convinced that they do; for hunting purposes, in season or out, in the Banff Park and out of it. They set out fires in the spring on their fishing and hunting trips in order to draw deer later for grazing.

Your obedient servant.

JOS. E. STAUFFER,

Forest Ranger.

## APPENDIX No. 11.

REPORT OF C. A. WALKINSHAW, FOREST RANGER IN THE TURTLE MOUNTAIN FOREST AND GAME RESERVE.

Boissevain, June 30, 1906.

E. STEWART, Esq.,

Superintendent of Forestry,

Ottawa.

Sir,—I beg to submit to you my report on Turtle Mountain Timber reserve for the past year.

Last year was a splendid year for young trees; as there was lots of moisture and they made great growth. This year is just as good and everything in the reserve looks The month of May was very dry and warm and gave us considerable trouble fighting fires coming from the American side in range 21. There were strips burned in this range, some of them nearly across the township. By hard work we succeeded in stopping the fires before they got into the green timber at the east end of the township. It seemed to me that the settlers along the international boundary on the American side were trying to burn up the reserve. I counted fifteen big fires burning about half a mile across the boundary. Fortunately the wind changed and blew them south; otherwise all the people in Manitoba could not have saved the reserve. When all danger from the American side was over the settlers along the edge of the reserve in township 2. range 21, started fires four or five at a time that burned over sections 12, 11, 10 and 6, in township 2, and part of section 31 in township 1, range 20. Before we got it under control another fire was started on section 29, township 2, range 20, and burned along the edge of the reserve to section 33, township 1, range 20, where it got into the reserve but did very little damage, except in small strips.

I did my best to find out who set the fires on our side but failed to get evidence to convict any one although I had strong suspicion of some parties who were seen coming from the part where the fires started. I would strongly recommend that no person be allowed in the reserve after the first day of May until the first of November unless they have a permit describing their business in the reserve, and if they do not have a permit give the ranger the power to prosecute for trespass. With the assistance of one man I am building trails where necessary in the reserve. At present we are working in range 20 bridging creeks and low places. I would have been finished in this range before this but for some tremendous rains overflowing and washing away some of our work. Later I hope to do similar work in ranges 19 and 21 which will enable me to patrol the reserve more effectually.

I am, sir, your obedient servant,

C. A. WALKINSHAW.

Forest Ranger.

#### APPENDIX No. 12.

## REPORT OF JOHN RUTHERFORD, FOREST RANGER FOR THE MOOSE MOUNTAIN TIMBER RESERVE.

Carlyle, September 3, 1906.

E. STEWART, Esq.,

Superintendent of Forestry,

Ottawa.

Sir,—I have the honour to forward you the following report of affairs in Moose Mountain Timber reserve.

The growth of young timber is good and the dry wood is nearly all cleaned up now. I think with the present condition and freedom from fire we will have good success.

I have the honour to be, sir, your obedient servant,

JOHN RUTHERFORD.