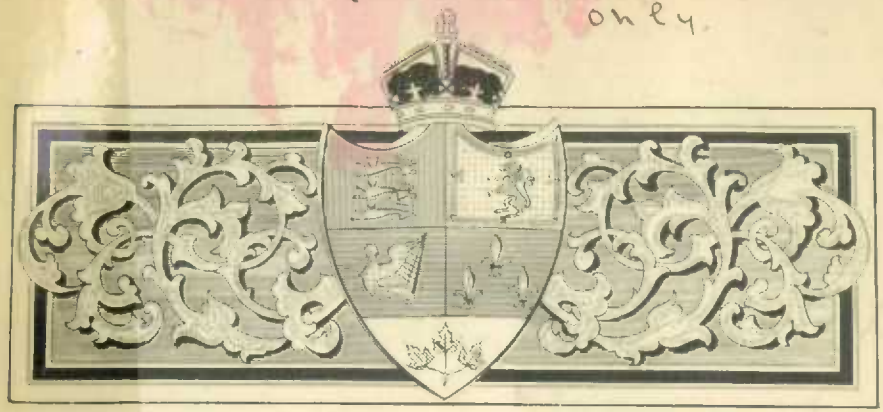
CANADA 1936

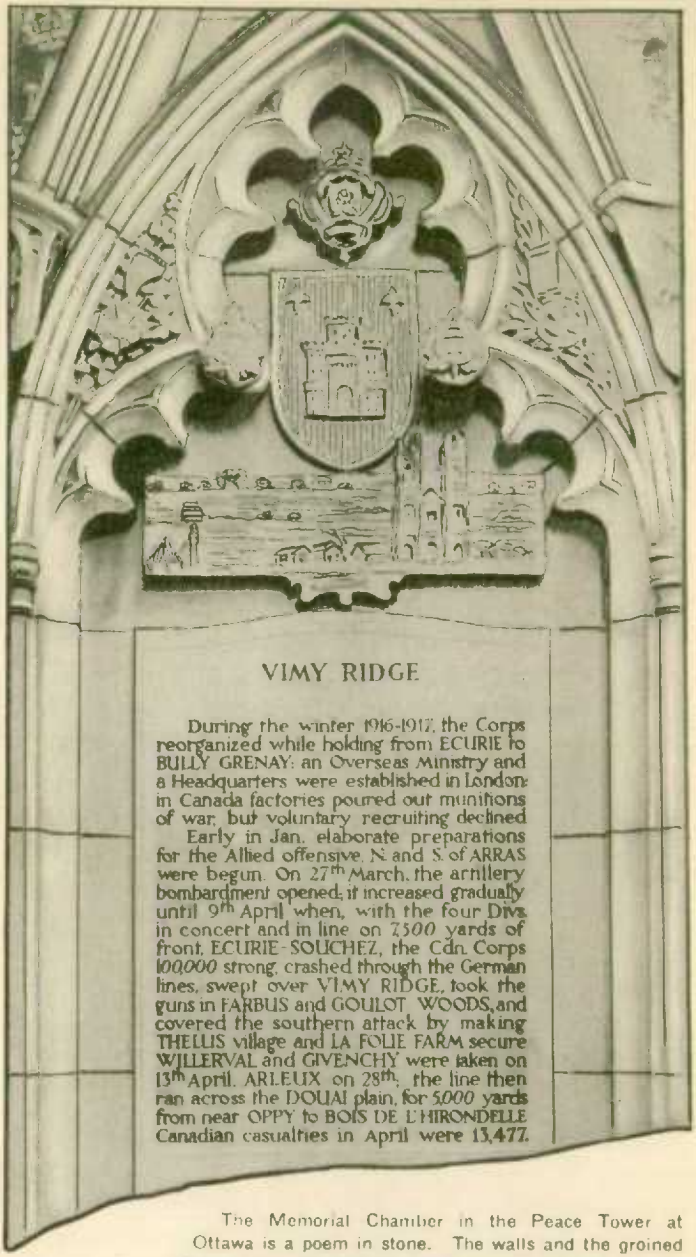
The Official Handbook of Present Conditions and Recent Progress



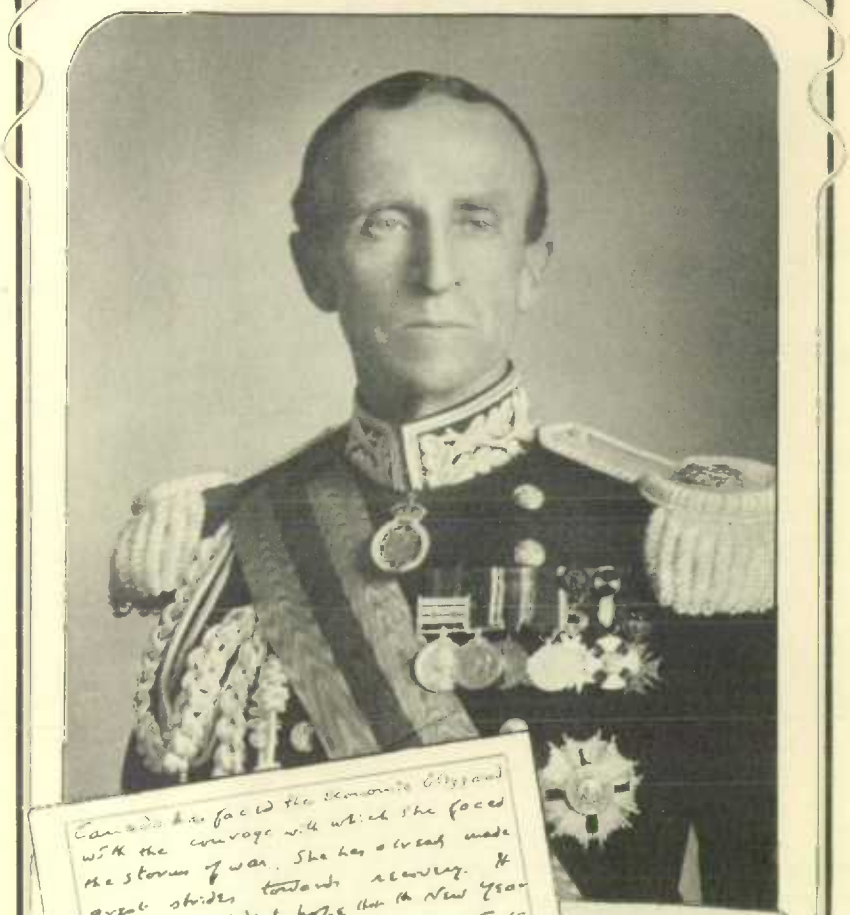
THE VIMY MEMORIAL

OFFICIAL UNVEILING

ARRANGED FOR JULY 26TH 1936



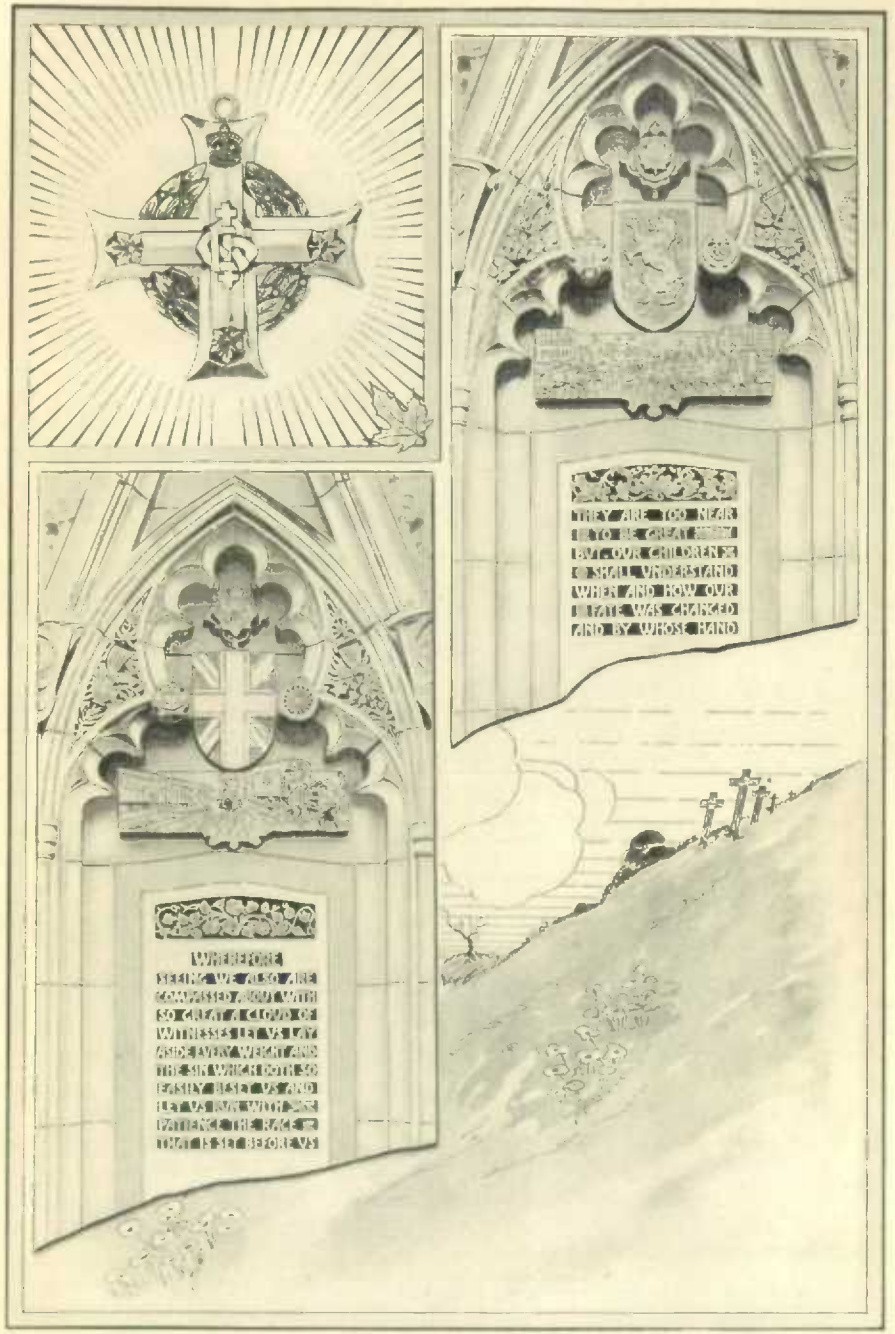
The Memorial Chamber in the Peace Tower at Ottawa is a poem in stone. The walls and the groined ceiling of the Chamber are of Chateau Gaillard stone, the gift of France. On panels of marble embraced in the mural decoration of carved regimental badges and other significant emblems, is inscribed the record of the Canadian Forces during the Great War. The reproduction on this page is from the panel succinctly describing the operation of Vimy Ridge; those on the following page are from others which, interspersed in the story, strike a note appropriate to the theme. The Memorial Cross is also shown.



Canada has faced the economic difficulties with the courage with which she faced the storms of war. She has already made great strides towards recovery. It is my confident hope that the New Year will bring still greater evidences to the Canadian people

TWEEDSMUIR

HIS EXCELLENCY
THE RIGHT HONOURABLE THE LORD TWEEDSMUIR G.C.M.G. C.H.
GOVERNOR GENERAL OF CANADA



The Vimy Memorial.—The above reproduction of the Vimy Memorial was made by courtesy of the Speaker of the House of Commons from a painting which hangs in the Committee Room of the House. Below are enlarged reproductions of the sculptured groups: (1) The Spirit of Canada; (3) Honour; (7) The Defenders and the Breaking of the Sword; (2) Justice; (6) The Sympathy of Canadians for the Helpless; (4) Peace; (5) Faith. The impressive sculptured group between, and at the base of, the pylons was not available for reproduction at the time of going to press. The main inscription on the Memorial reads: "TO THE VALOUR OF THEIR COUNTRYMEN IN THE GREAT WAR AND IN MEMORY OF THEIR SIXTY THOUSAND DEAD THIS MONUMENT IS RAISED BY THE PEOPLE OF CANADA".

CANADA 1936

The Official Handbook of Present Conditions and Recent Progress

Published by Authority of the Hon. W. D. Euler, M.P.
Minister of Trade and Commerce

DOMINION BUREAU OF STATISTICS
OTTAWA, CANADA

Price 25 cents.

FOREWORD

THE need for a publication designed to set forth in brief and readable form the recent progress and present condition of the Dominion has been demonstrated by the increasing demand for the present handbook by all sections of the public.

The current reports of the Dominion Bureau of Statistics deal in great detail with the subjects of population, production, external and internal trade, transportation, criminality, etc., but these detailed publications are intended mainly for those who are specially interested in particular phases of our national life. Again, the *Canada Year Book,* which summarizes these and other official publications, is itself of too detailed and expensive a character for wide distribution. The present publication presents the results of an effort to survey the current Canadian situation—comprehensively but at the same time succinctly—in a popular and attractive format, and at a cost which makes possible its use on a general scale.

Though it is becoming increasingly difficult to deal, in small compass, with the whole range of the Dominion's economic and social organization, the handbook continues to serve two very necessary purposes. To those outside of Canada, it will give a well-rounded picture of the current Canadian situation from Atlantic to Pacific, with such historic and descriptive information as may be needed for general background. In Canada, itself, the handbook will be of assistance in the general discussion of the economic situation incidental to our New Year national stock-taking, and will help in this way to provide a better basis of information for dealing with the problems which await solution in the coming year.

W. D. EULER,
Minister of Trade and Commerce.

OTTAWA, January 1, 1936.

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NOTE

This handbook has been prepared in the Dominion Bureau of Statistics from material which has, in the main, been obtained from the different Branches of the Bureau. In certain special fields information has been kindly contributed by other branches of the Government Service.

R. H. COATS,
Dominion Statistician.

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INTRODUCTION

The Economic Position of Canada at the Close of 1935

HON. WILLIAM D. EULER, M.P.,
Minister of Trade and Commerce

Canada's share of world trade is out of proportion to her population and it is axiomatic, therefore, that her economic well-being depends in no small degree on world prosperity. In order to meet interest obligations abroad, Canada must normally show what is called a favourable balance of commodity trade, *i.e.*, an excess of exports over imports. Canada is still essentially a primary producer with large surpluses of agricultural, mineral and forest products which must be traded off for credits, processed goods, tropical products, and raw materials, notwithstanding that strides have been made in industrial production.

Since the characteristic phase of the early stages of the depression was the rapid and universal drop in the prices of primary products as compared with manufactures (gold was the outstanding exception so far as gold-producing countries were concerned), the "buffer" of manufacturing industry was able to absorb some of the intensity of the initial shock. A major factor in bringing about the recent improvement is that prices of primary products have risen substantially more than those of manufactured goods since the low point of the depression. From February, 1933, to November, 1935, the Bureau's index of raw and partly manufactured commodities has risen from 50·6 to 67·5, whereas the index of fully and chiefly manufactured articles rose only from 66·8 to 72·9 in the same period. However, further closing of the gap is necessary to the restoration of a balanced situation.

Two events that had wide repercussions throughout the Dominion in the closing months of the year were the Dominion-Provincial Conference and the conclusion of a trade agreement with the United States.

The Dominion-Provincial Conference, 1935.—The Dominion-Provincial Conference opened in Ottawa on Dec. 9, 1935, and ended on Dec. 13. This marked the eighth time since Confederation that representatives of the Dominion and the Provinces have met to discuss their individual difficulties, and at no time has co-operation in the search for lasting solutions been more in evidence. The agenda covered such important subjects as unemployment relief, the co-ordination of social services, taxation and overlapping of administration effort, financial relations between the Dominion and the Provinces, mining development, agricultural marketing and the tourist traffic. Sub-conferences and committees were set up with the purpose of working towards definite conclusions

in the time available. Although the delegates have returned home the work of the Conference is by no means over, as many of the most important problems are to be dealt with by continuing committees.

As regards the matter of constitutional amendments, it has been agreed that Canada should have power to amend its own constitution; a continuing committee will meet later to define a method of amending the British North America Act. As regards unemployment, the Dominion has undertaken to increase relief grants to the Provincial Governments; a census of unemployed and unemployables is to be taken and a Dominion employment commission is to be established. In relation to financial matters, it was agreed that, by amendment of the British North America Act, provincial taxation fields shall be clearly defined—such matters as debt, refunding, loans, duplication of taxation, etc., are to be dealt with by a continuing committee. The Agricultural Committee recommended continuation of the Dominion farm loan service and reduction of interest on farm loans to 4 p.c., also restoration of the Dominion grant of $1,000,000 annually for agricultural education. Marketing is to be taken up later.

Other matters upon which future policy was defined were: taxation of mining companies; apportionment of cost on the trans-Canada highway and elimination of railway crossings; bus and truck transportation rates and legislation; and co-operation between the Dominion and the Provincial Governments toward the promotion of the tourist traffic.

Trade Agreement Between Canada and the United States.—A comprehensive Trade Agreement, signed at Washington on Nov. 15, 1935, opens to Canada wider markets for some sixty commodities representative of all the main fields of Canadian production. Included among the concessions to Canada are those which apply, on agricultural products, to cattle, cream, seed potatoes, clover and grass seeds, hay, turnips, and maple sugar; on fisheries products, to fresh or frozen halibut or salmon, certain fresh lake fish, pickled or salted salmon, and smoked herring; on forest products, to all lumber and timber previously subject to duty and excise; on minerals, to feldspar, talc, lime, and various ferro-alloys; and among manufactures, to acetic acid, pulpboard in rolls for wallboard, whisky, patent leather, and harness and saddlery leather. In addition, free entry to the United States market is preserved during the life of the Agreement for a score of products of which newsprint, woodpulp and pulpwood, shingles, and lobsters are especially notable.

The tariff concessions by Canada include the extension to the United States of the Intermediate Tariff in its entirety. In addition, specific reductions below existing favoured-nation rates are made in respect of 88 tariff items—this revision of Canadian duties on United States' products being especially designed to aid the Canadian consumer and the Canadian user of machinery and other implements of production. In a note accompanying the Agreement, provision is made also for the revision of customs valuation procedure.

Under Article I of the Agreement, Canada and the United States each agree to accord to the commerce of the other unconditional most-favoured-nation treatment in respect of customs duties and related matter. This means that if either country reduce any customs duty, either autonomously or in connection with a trade agreement with a third foreign country, the like article of the other country will immediately get the benefit of the reduced rate. The practical importance of this assurance is that exporters in each country will continue to be able to compete in the other country on a parity with other foreign producers and that the concessions which

each country has granted to the other will not be impaired through the granting of greater concessions to a third country.

Provision is made for bringing into effect, on Jan. 1, 1936, the reductions in duty contained in the Agreement, and for the coming into force of the whole Agreement upon the exchange at Ottawa of the ratification by His Majesty and the proclamation issued by the President under the terms of the Trade Agreements Act. The Agreement will remain in force, subject to certain contingencies provided for in Articles VII, X and XIV, until Dec. 31, 1938, and thereafter unless terminated by the Government of either country upon six months notice.

The Agreement is designed to create wider markets for Canadian producers and to lower the living costs for Canadian consumers which, combined, should lead to an increase in the purchasing power of the people of Canada. The effect desired is to show increased demands in the home markets for the products of other Canadian industries and consequent increased employment. Any improvement brought about in the position of the primary industries will logically be felt throughout the whole economic structure and particularly in the field of transportation. This objective the Agreement would attain by assuring the continuance of existing markets and the opening of new markets for the stated period.

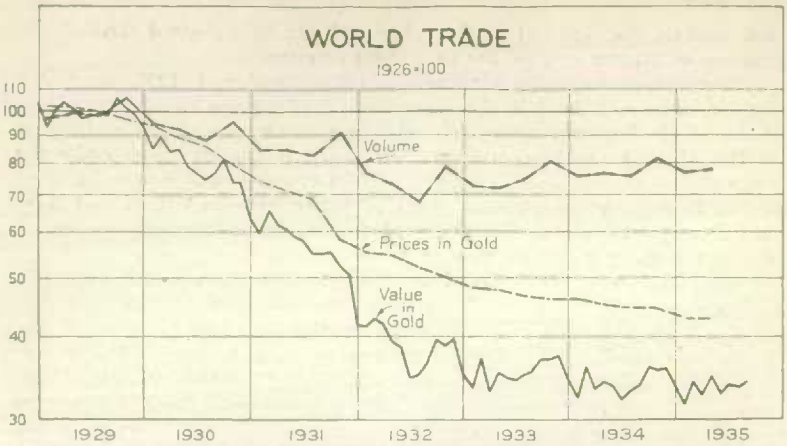
THE WORLD SITUATION AS IT AFFECTS CANADA

Turning to the economic situation in general, three important factors affecting the world situation are: international trade, the international exchange situation, and international political stability.

INTERNATIONAL TRADE

It is generally recognized that an increase in world trade together with a stabilized level or advancing trend in prices is essential to any broad betterment in general economic conditions. Viewed from this standpoint alone, the record of the past year is not too propitious. The chart on p. 10, reproduced from the November, 1935, issue of the League of Nations' Monthly Bulletin of Statistics, indicates that, while the volume of world trade has shown a gradual continuation of the improved trend evident in 1933 and 1934, the betterment is not especially marked, and is at a much lower rate than the average annual increase from 1925 to 1929. The value of world trade in gold has, on the average, been maintained, and there is a decided upward tendency shown for the latest three months. The curve of gold prices seems to have at last flattened out after the uninterrupted decline from 1929.

The present situation is, however, more full of promise than the above quoted statistics would imply. Actually, much spade work has been done, especially between the English-speaking nations, to open up the avenues of trade once more. The Agreements reached by units of the British Empire in 1932 marked the first step. Lately both the United Kingdom and the United States have completed trade agreements with several other countries. After Jan. 1, 1936, Canada and the United States, as already noted, will be trading on a basis of mutual tariff concessions. The repercussions of the latter Agreement are already to be seen in a proposed trade agreement between the United Kingdom and the United States, and trade negotiations between the latter country and the Netherlands, Spain and France are under way. Such agreements will affect a very large volume of world trade and cannot fail to serve as examples elsewhere. In any case, the leadership already given will be of substantial benefit to the countries directly concerned. Nevertheless, grave impediments to trade still exist.



Reproduced from the League of Nations Monthly Bulletin of Statistics, November, 1935.

Since the United Kingdom is the world's greatest trader and her trade is the most geographically diversified, it is logical to interpret world conditions in the light of British progress. United Kingdom export trade and the internal employment situation (chiefly as a result of building activity and marked improvement in the capital goods industries) have recently shown material improvement. It is also of interest to note that, by Sir Robert Kindersley's latest analysis of investments of the United Kingdom abroad, interest payments received by British investors (almost entirely due to improved conditions in overseas countries) increased more than 5 p.c. in 1934 compared with the previous year. They amounted to £158,000,000, which, though still much below the £231,000,000 of 1929, is regarded as proof that the tide is turning; the 1935 figures are expected to show further increase.

The Conference of Commonwealth Statisticians, 1935.—During 1935 a notable contribution to uniformity in the presentation of trade and other statistics of the Empire was made by the Second Conference of Statisticians of the British Commonwealth held in Ottawa, Sept. 13 to Oct. 9, 1935. At this Conference representatives from the United Kingdom, each of the Dominions and India were present, as well as an Observer for the Imperial Economic Committee. The agenda conformed with recommendations of the Imperial Conference of 1930 and included discussion of: international obligations regarding statistics; uniformity of statistical classification with special attention to external trade statistics; co-operation regarding the more exact determination of origins and destinations of important articles of trade; co-operation as regards the output of industries of major importance; and methods of calculating, and collaboration in estimating, "invisible" items of the balance of international payments; road transportation; and many other subjects. The statistical interpretation of these matters and the attendant discussion of mutual problems forged a further link of understanding within the British Commonwealth, and pointed the way towards wider international agreement.

INTERNATIONAL EXCHANGE

With regard to the still chaotic international exchange situation, aggravated within the past month by weakness of the franc (which is the pivot of the remaining gold-basis currencies) and the consequent heavy exports of gold to New York, the views of that well-known authority Gustav Cassel, the Swedish economist, are noteworthy. Writing in the

Skandinaviska Kreditaktiebolaget recently, Professor Cassel does not anticipate an early return to the gold standard and regards it as senseless to postpone economic restoration of the world longer on this account. He feels that, failing any deflation or violent inflation by the United Kingdom, the world monetary system is on the way towards stabilization on the basis of the British pound and he points out that confidence in the sterling bloc has grown year by year and countries which have not directly pegged their currencies to the pound are pursuing a policy of *rapprochement* thereto. He thinks that out of the confused and trying conditions of the past, another and a better monetary organization than the old gold standard is in process of evolution.

INTERNATIONAL POLITICAL STABILITY

It is not within the province of this review to analyse the world political situation except to point out that the present disturbed conditions in certain parts of Europe and the Mediterranean and in other quarters cannot be construed other than unfavourably in their repercussions on a world in the first stages of economic convalescence.

THE CANADIAN SITUATION

During 1935 further progress toward more favourable conditions has been made in Canada. Productive operations were more active, a few industries even reaching the levels of 1929, but on the whole normal conditions cannot be regarded as having yet been regained, especially if adequate allowance is made for the long-term growth. The stress of the past six years and the new conditions projected into the picture have given rise to economic and Dominion-Provincial problems of great magnitude.

The major factors in the present Canadian economic situation are summarized below. In the majority of cases it will be seen that decided progress has been made and that comparison with 1934 is favourable, all circumstances considered.

Agriculture.—The acreage of field crops in 1935 was over 600,000 acres greater than in 1934. Wheat yields per acre were again low, the principal cause being the severity of rust infestation during the early part of the summer. The gain in production of feed crops offset to a considerable extent the disappointing returns from wheat. Total volume of production in 1935 was greater than in 1934. Prices of feed crops declined during the year and the preliminary estimate of the value of field crops is $510,835,600. This figure is about $39,000,000 below the 1934 valuation, but over $57,000,000 higher than that recorded for 1933. The wheat crop is valued about $3,000,000 less than in 1934, the reduction being due to a harvest of much lower grade. Oats and barley are valued at $98,298,000 and $23,029,000 respectively. These figures represent decreases from the preceding year of about $5,000,000 in the valuation of oats and nearly $7,000,000 in the valuation of barley. The 1935 crop of potatoes sold at considerably higher prices resulting in a valuation about $6,000,000 higher than in 1934. Fodder crops, hay and clover, alfalfa, fodder corn and grain hay were valued at $148,780,000 in 1935 as compared with $176,674,000 in 1934.

In spite of the reduced valuation, Canadian agriculture is in a relatively stronger position than for the past five years. Feed supplies are plentiful and well distributed. Pastures benefited from rain during the fall of 1935. The wheat crop, after establishing a good stand in the spring, was seriously damaged by rust in July; frost injury in northern Saskatchewan and northern Alberta further lowered the yield and grade. Rust also damaged the United States crop of hard spring wheat and

demand from that country for this type is an important factor in the export of Canadian wheat.

The survey of numbers of livestock on farms at June 1, 1935, indicated declines from the previous year of 1·5 p.c. in cattle, 2·9 p.c. in hogs, and 0·6 p.c. in sheep. The horse population was practically unchanged in 1935. Market receipts of hogs in 1935 were below those of 1934. Sheep marketings were about the same as in 1934. The prices of hogs, cattle and sheep averaged higher in 1935. The rise in the price of beef cattle in the United States resulted in a heavy export movement of Canadian cattle to that country. The United Kingdom market continued as an important outlet for bacon.

During 1935, factory cheese production increased slightly. Creamery butter production was also higher. Prices of both butter and cheese averaged higher in 1935 than in 1934. The United States provided an export outlet for dairy cattle during the year. Prices for eggs and poultry were higher, but indications were that production in the poultry industry was lower than in 1934.

Wholesale prices of farm products rose about 7 p.c. during the year. A provisional index of the prices of farmer's purchases indicates an increase of about 2 p.c. Thus in terms of prices, the position of agriculture improved slightly during the year. Financial stringency continues to be a problem in many farming areas, but the amount of relief necessary in drought areas will be greatly reduced in comparison with previous years.

Mining.—General improvement in Canada's mining industry was evident in 1935. The output of several of the base metals such as copper, nickel and zinc was higher than in any preceding year and average prices showed improvement. Gold production was higher also and many new gold mines reached the production stage during the year while several new mills were constructed or planned. Coal output from the Maritime Provinces was below that of last year but the difference was balanced by the increase in output from western mines. Asbestos and several other non-metallic minerals were produced in greater quantity.

The preliminary official estimate of the value of mineral production in 1935, released as this volume is on the press, indicates a total production of $308,164,000 an increase of 11 p.c. over the preceding year. Metals increased 14 p.c. in value; fuels, 0·04 p.c.; non-metallics, other than fuels, 16 p.c.; and structural materials, 4 p.c. For details see page 70.

Forestry.—Exports of forestry products in the twelve months ended October, 1935, were valued at $171,919,622, an increase of $16,742,673 or over 10 p.c. above the previous comparable period. Exports to the United Kingdom and to the United States both increased. Exports of planks and boards amounted to 1,104,074,000 feet in the first ten months of 1935, a decrease of nearly 4 p.c. as compared with the same period of 1934. Newsprint production rose from 2,118,879 tons in the first ten months of 1934 to 2,245,703 tons in the same period of 1935, an advance of 6 p.c. Employment in the logging industry stood at 158·4 on Nov. 1, 1935.

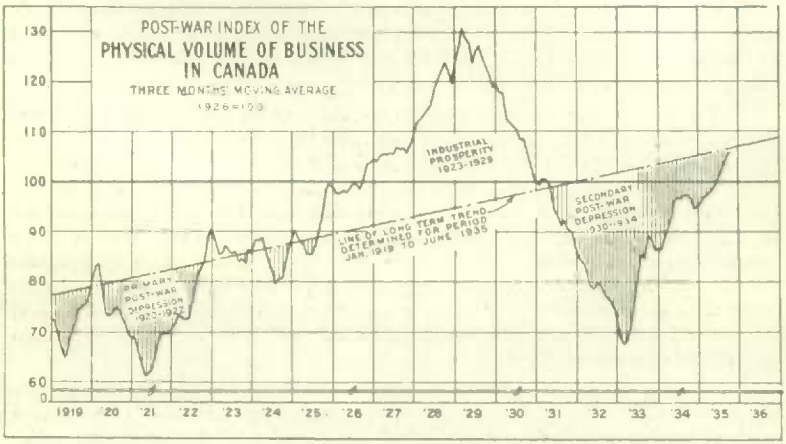
Fisheries.—The current trend of the fisheries is best shown by the amount of sea fish caught and landed in the first ten months of 1935. There was a moderate recession from the preceding year. The weight was 717,973,000,000 pounds against 737,110,000,000 pounds, and the value $13,529,000 as compared with $14,155,000. Exports in the twelve months ended October, 1935, were valued at $22,721,684, an increase of $1,240,071 or nearly 5·8 p.c. over the corresponding period of 1934.

Manufactures.—The latest figures of manufactures, relating to the year 1933, are given in Chapter X. Nevertheless, sufficient evidence is at hand from the index of employment in manufactures to indicate that the

year 1933 marked the lowest point of the depression movement. For each month of 1934, the index showed a lead over the same month in 1933; the same is true of 1935 compared with 1934. The average for 1933 was 80·88 in 1934 it was 90·25 and in 1935, 96·72 for 11 months. (1926=100.)

During available months of 1935, the output of industries engaged in the manufacture of producers goods showed a gain of 15 p.c. over the same months in 1934, while the gain in consumers goods was less than 2 p.c. This is significant of the recovery phase of the business cycle.

The iron and steel group (especially the automobile plants) and the forestry group of industries have shown gratifying progress.



The Index of Physical Volume of Business is based on 45 factors comprising: Manufacturing, Mining, Construction, Power and Distribution.

Employment.—The general improvement that characterized the employment situation during the greater part of 1934 continued during 1935, resulting in a higher level of industrial activity at the beginning of November than in any other month since Dec. 1, 1930. The index on Nov. 1, 1935, stood at 107·7, an increase of 15·3 p.c. from the year's low point in the early spring, and 7·5 over the index for Nov. 1, 1934. In the first 11 months of 1935 averages of 9,200 firms and 928,350 workers were reported, while in the same period of 1934 similar averages were 8,660 firms and 890,780 workers. The index (1926=100) averaged 99·0 as compared with 95·7 in 1934, 82·6 in 1933 and 87·9 in 1932. The index for Dec. 1, issued while this handbook was on the press, is 104·6.

The monthly surveys of employment cover manufacturing, logging, mining, transportation, communications, construction and maintenance, services and trade. Employment in most of these averaged higher during the first eleven months of 1935 than in the preceding year. The gains in manufacturing were particularly pronounced; employment increased steadily from January to November, when the index, at 103·5, was higher than in any other month since November, 1930.

Electric Power.—The production of electricity for lighting and power purposes continued well above previous records established in 1934, and, for the first ten months of 1935, indicated an output for the year of around 23·6 billion kilowatt hours, or 11·4 p.c. above the 1934 output. The rapid increase in consumption of off-peak, or surplus power, in electric boilers accounted for part of this growth. Exports to the United States which

increased by 26 p.c. in 1934 over 1933 also increased 8 p.c. in 1935 over 1934. New high records have also been established in other directions. The increased output of electricity is accounted for by greater activity in the pulp and paper industry, mining, electro-chemical, electro-metallurgical and other industries which are operated largely by electric power. Consumption of electricity for residence lighting and operation of electric appliances such as refrigerators, stoves, water heaters, etc., has increased.

Construction.—According to statistics tabulated by the MacLean Building Reports, Limited, the value of construction contracts awarded during the first eleven months of 1935 stood at $155,940,100, as compared with the total of $119,749,300 reported in the same period of 1934. This was an increase of 30·2 p.c. The 1935 aggregate also substantially exceeded the totals of $89,082,200 and $128,682,300 in same periods of 1933 and 1932, respectively; it was, however, considerably lower than normal.

Railway Traffic.—Freight traffic in 1934 was well above the 1933 level but failed to show improvement in 1935, the tonnage at the end of August being slightly less than for the same period in 1934. This was due largely to a light grain movement, particularly during the first six months. In September and October an improvement was recorded and gross revenues of the Canadian National and Canadian Pacific showed an increase for the ten months of close to $5,000,000, or 2·3 p.c. Carloadings of revenue freight for the first 46 weeks of 1935 amounted to 2,095,847 or 26,293 cars more than for the corresponding period in 1934. Grain, live stock, coke and lumber all showed lighter loadings than in 1934, but the other six commodity groups recorded increases.

Public Finance.—In the first eight months (April-November) of the current fiscal year, Canada's ordinary revenue has shown an encouraging upward tendency, totalling $258,023,000 compared with $245,063,000 for the same period of 1934—an increase of $12,960,000, or nearly 5·7 p.c. The principal gain was in income tax collections.

During the same period, ordinary expenditure has increased from $243,279,000 to $245,675,000, or by $2,396,000, mainly attributable to increased provincial grants, old age pensions and public works. This leaves an excess of ordinary revenue over expenditure of $12,744,000, which compares with $1,784,000 in the fiscal year 1934. Special expenditure, however, has increased from $31 millions to $44 millions, mainly due to the projects carried out under the Public Works Construction Act.

Loan account receipts, reflecting refinancing and refunding operations, showed an increase from $489 millions to $685 millions. The fact that the latest major financial operation—the highly successful 20-year $75,000,000 loan, which, in early November, 1935, was oversubscribed three times, at a cost to the Government of only 3·08 p.c., reaffirms the high credit standing of Canada, and at the same time is indicative of the large reserves of capital currently available for safe investment. A considerable saving in interest charges through conversion of loans to lower rates of interest has occurred and will necessarily be reflected in future interest payments.

Banking.—The salient feature of the banking situation was the considerable gain in deposit liabilities. Notice deposits alone showed a gain of nearly $73,000,000 on Oct. 31, over the same date of 1934. Current loans showed a contrary tendency, the decline having been nearly $45,000,000. The excess of notice deposits over current loans at the end of October was no less than $611,000,000—a gain of nearly 24 p.c. since October, 1934. In consequence of this situation, security holdings and readily available assets rose to new high points in the history of Canadian banking.

Sales of Life Insurance.—Sales of life insurance based on 90 p.c. of business in Canada show a drop of 3 p.c. for the first ten months of 1935 compared with the same period of 1934.

Prices.—During 1935, price levels fluctuated within narrower limits than for many years past, although the upward tendency, more clearly apparent in the preceding two years, was still discernible. The Bureau's index number of wholesale prices which mounted irregularly from 71·2 in January to 72·7 in November furnished evidence of this tapering movement. Primary products, particularly those from the farm, were mainly responsible for the advance. This was considered a favourable development tending to restore equilibrium between primary product and manufactured product price groups. Firmer prices for foods were mainly responsible for a minor increase in the cost of living index from 78·8 for January to 80·6 for November. Industrial common stocks showed pronounced gains for the year, while gold stocks declined moderately and high grade bond prices recorded losses in the closing months.

Retail and Wholesale Trade.—While definite advances in retail sales were reported by dealers in durable consumers goods, such as furniture, radios and hardware, the general index for retail trade, calculated from sales of chain and department stores, was maintained at about the same level in the first ten months of 1935 as in the preceding year. A definite upward movement, however, was noted toward the end of the year when the seasonally adjusted index for October advanced 4·8 p.c. over the average of the preceding nine months. Retail sales of new motor vehicles which had increased greatly in 1934 over the low levels of 1932 and 1933 continued to advance in the year under review. The number of new passenger cars sold in the first ten months of 1935 was 23·4 p.c. greater than in the same period of the preceding year and an increase of 47·9 p.c. was shown for commercial vehicles.

Monthly statistics on wholesale trade, secured for the last quarter of 1935, show sales of wholesale merchants in eight lines of trade during September and October ranging from 3 to 17 p.c. above 1934.

External Trade.—Merchandise exports of Canadian produce in the year ended October, 1935, reached $703,159,000, as compared with $638,226,000 in the preceding year, an increase of $64,933,000, or about 10·2 p.c. This increase was of a general character and covered practically all classes of commodities. The exports of coin and bullion, chiefly gold bullion, show a decrease amounting to $99,184,000, as compared with $104,513,000. The grand total exports of Canada, including exports of foreign products, amounted to $813,153,000 for the twelve months ended October, 1935, as compared with $749,895,000, an increase of $63,258,000.

Merchandise imports reached $544,779,000 in the twelve-month period ended October, 1935, as compared with $503,557,000 in the preceding year, imports of iron and steel products showing a particularly satisfactory increase, indicative of industrial recovery. The total favourable balance of visible trade was $267,188,000 in the twelve-month period ended October, 1935, as against $245,503,000 in the previous twelve-month period.

As to distribution of trade, in the period under review 40·7 p.c. of our merchandise exports went to the United Kingdom, compared with 42·2 p.c. one year ago, and 38·9 p.c. two years ago. Exports to Empire countries were 50·7 p.c. in the same year, as compared with 52·2 p.c. one year earlier, and 47·2 p.c. two years earlier. Canada's trade with the United States, on the other hand, showed an upward trend for the twelve months ended October, 1935. Imports were 57·2 p.c. of total imports for the year, compared with 56·8 p.c. for the preceding year and exports of Canadian merchandise were 37·3 p.c. as compared with 32·3 p.c.

CHAPTER I

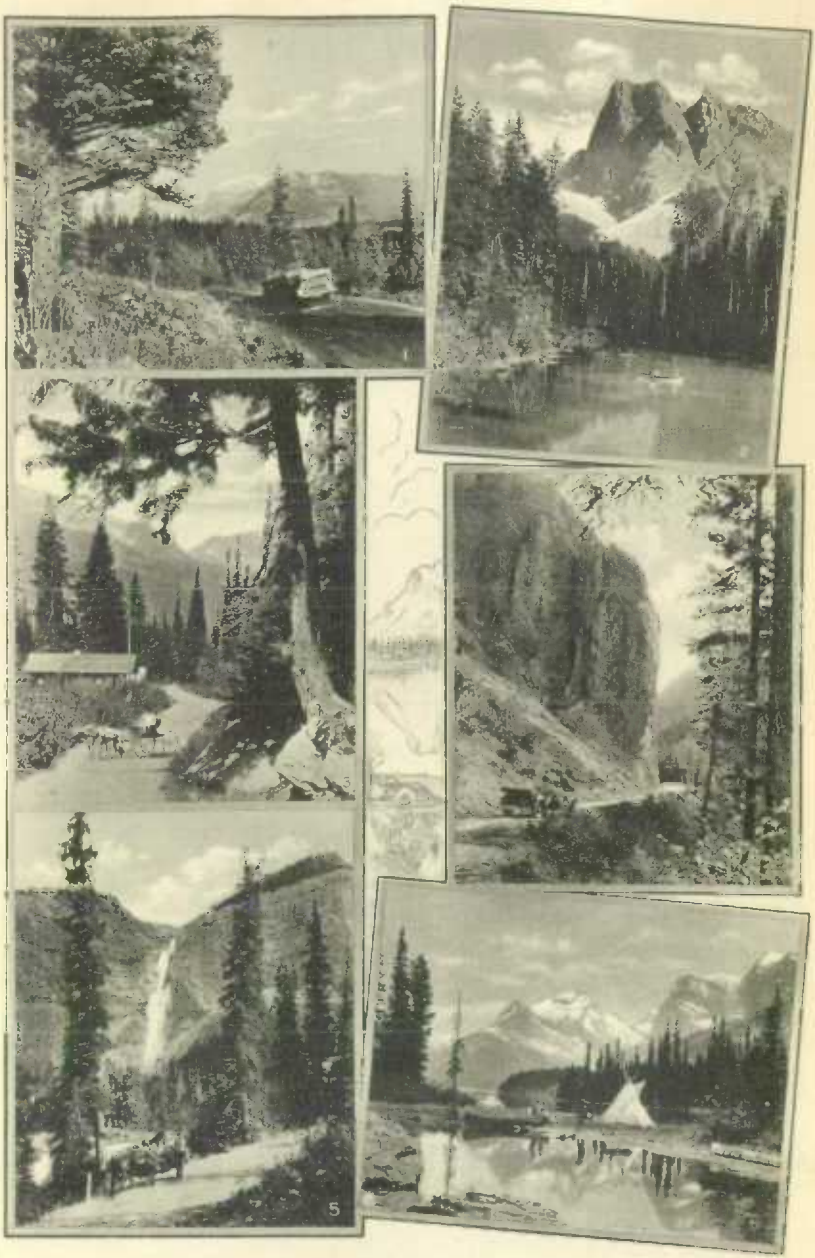
CANADA'S NATIONAL PLAYGROUNDS

Among Canada's greatest tourist attractions are her National Parks—areas set aside by Act of Parliament for the use and enjoyment of the people, and administered by the National Parks Branch of the Department of the Interior. On the North American continent, the term "national park" has gradually come to have a special significance, in spite of the fact that it is used to cover several types of reservation. In its broadest meaning, a National Park is a public reservation which, for one reason or another, is of common national interest. Such areas in Canada vary from vast regions, characterized by outstanding scenic beauty or unique phenomena of nature, to small areas preserving sites memorable in the nation's history, or possessing remarkable facilities for outdoor recreation. The establishment of National Parks also provides great outdoor museums for the study of natural history, for they conserve exhibits of the original wild life of Canada, supported under absolutely natural conditions, and they maintain the primitive wilderness as the early explorers found it many years ago. Above all, however, is the æsthetic value of the parks, which offer unequalled opportunities for exhilarating outdoor life, amid surroundings of natural beauty.

National Parks are primarily a North American institution. The National Park idea—the conservation for public use of large areas of the nation's outstanding regions as common and perpetual possessions of the people—has been one of the important social developments of the past century. Originating with the discovery of the United States Yellowstone Park in 1870, and its subsequent reservation two years later, this movement quickly spread, and has since been adopted by leading countries of the world. Canada's first National Park reservation was made just a little more than fifty years ago, for in 1885 the original portion of the present Banff Park in Alberta was set aside for posterity. The discovery of the hot mineral springs, which bubbled from the side of Sulphur mountain, was instrumental in first attracting attention to this section of the Canadian Rockies. Although probably known to the Indians of the region for many years, these springs were not actually discovered by the white man until 1883, when several workmen engaged in the construction of the transcontinental line of the Canadian Pacific Railway visited the site of the springs. Many claims were subsequently advanced as to their original discovery, and, confronted with the option of leasing the sites of the springs or controlling them itself, the Dominion Government decided on the latter course, and on Nov. 25, 1885, an area of ten square miles was set aside by Order in Council to ensure that the surroundings should be in keeping with plans to make this a first-class resort.

A short time afterwards a special party of parliamentarians went over the newly constructed railway line and were so much impressed with the beauty of the scenery that it was decided to establish the region as a National Park. With the passing in 1887 of the Rocky Mountains Park Act by Parliament the area of the Rocky Mountains (now the Banff) Park was increased to 260 sq. miles. The previous year, reserves in the Selkirk

SCENIC ATTRACTIONS OF THE NATIONAL PARKS



(1) Mt. Rundel and Sulphur Range from the Highway, Banff National Park, Alta.
(2) Emerald Lake and Mt. Burgess, Yoho National Park, B.C.
(3) Warden's Cabin and the Swiss Peaks, Glacier National Park, B.C.
(4) The Iron Gate on the Banff-Windermere Highway.
(5) Takakkaw Falls, Yoho National Park, B.C.
(6) The Narrows—Maligne Lake, Jasper National Park, Alta.

RECREATION IN THE NATIONAL PARKS

Bathing at Beausoleil Island, Georgian Bay Islands National Park, Ontario.

Trail Riding at Bow Lake and Bow Glacier on the route of the Lake Louise to Jasper Highway, Banff National Park, Alberta.

Fishing in the Rapids of Maligne River, Jasper National Park, Alberta.

Skiing near Lake Louise, Banff National Park, Alberta.

mountains and in the Yoho district of the Rockies also were set aside for park purposes and since that time other areas have been added to Canada's National Park system. In 1911 the Government of Canada created a special branch of the Department of the Interior to undertake park administration and an energetic policy of development was inaugurated. This involved the construction of motor roads and saddle-pony trails, the laying out of townsites, the construction of motor campsites, provision of added facilities for recreation, and the establishment of an adequate service for the protection of forests and game. In 1911 the number of National Parks in Canada totalled eight, having an area of 4,020 sq. miles, while to-day there are eighteen parks having a combined area of 12,059 sq. miles.

The National Parks of Canada now under the administration of the Department of the Interior may be divided, for purposes of classification, into four classes: The large scenic and recreational parks of the Rockies, Selkirks, and prairies; the so-called animal parks—enclosures for the protection and preservation of mammalian species at one time threatened with extinction; the smaller recreational areas of Eastern Canada; and the national historic parks, also small in area, which surround some of the country's most interesting sites. The total number of park reservations at the present time is eighteen. Their areas are indicated below:—

Areas of National Parks of Canada

National Park	Area	National Park	Area
Scenic Parks—	sq. miles	**Animal Parks**—concluded	sq. miles
Banff, Alta.	2,585·00	Nemiskam, Alta.	8·50
Jasper, Alta.	4,200·00	Wawaskesy, Alta.	54·00
Waterton Lakes, Alta.	220·00	**Recreational Parks—**	
Yoho, B.C.	507·00	Georgian Bay Islands, Ont.	5·37
Glacier, B.C.	521·00	St. Lawrence Islands, Ont.	185·60
Kootenay, B.C.	587·00		(acres)
Mt. Revelstoke, B.C.	100·00	Point Pelee, Ont.	6·04
Prince Albert, Sask.	1,869·00	**Historic Parks—**	
Riding Mountain, Man.	1,148·04	Fort Anne National Park, N.S.	31·00
Animal Parks—			(acres)
Buffalo, Alta.	197·50	Fort Beauséjour National Park, N.B.	59·00
Elk Island, Alta.	51·00		(acres)

Of the scenic parks, the great mountain reservations in the Canadian Rockies and Selkirks are probably the best known. These include the Banff, Jasper and Waterton Lakes National Parks in Alberta, and the Kootenay, Yoho, Glacier, and Mount Revelstoke Parks in British Columbia. With the exception of Glacier Park, these parks are all accessible by motor road. The Banff, Kootenay and Yoho Parks are linked together in such geographical relation as to be called the "Three-Park Unit", and a unique highway system provides a circle tour taking in many of their attractions.

Banff National Park, located on the eastern slope of the Rockies, is replete with superb alpine scenery and contains the two world-famous resorts, Banff and Lake Louise. The town of Banff, the park headquarters, forms the starting point for many interesting motor trips and also is the main outfitting centre for trail excursions by saddle pony into the central Rockies. Swimming in the hot sulphur pools, boating, fishing, riding, mountain climbing and golf are among the many recreations available.

Forty miles west of Banff is Lake Louise, considered by artists to be one of the most beautiful landscapes in the world. Set in a vast amphi-

theatre of encircling snow-capped peaks, the lake glistens like an irridescent jewel, while at its extreme western end, like a gigantic backdrop, is the great Victoria glacier. Accommodation to suit every purse may be had at Banff and Lake Louise, from the motor campsite or bungalow camp to the palatial hotel. Other noted points of interest in Banff Park which may be reached by motor or by trail include Moraine lake in the Valley of the Ten Peaks, and mount Assiniboine, the "Matterhorn of the Rockies". The northern section of the park is being made accessible by the construction of a new motor highway, which, when completed, will open up a region of unsurpassed scenic splendour.

Six miles west of Lake Louise, both the Canadian Pacific railway and the intermontane highway known as the Kicking Horse Trail cross the Great Divide of the Rockies and bring the traveller to Yoho National Park. From the town of Field, where the park headquarters is situated, radiate many interesting roads and trails, the most spectacular of which leads up the Yoho valley, famous for the numerous waterfalls which cascade from great heights down the rocky mountain walls. Other beautiful spots in Yoho Park are Emerald lake and lake O'Hara, the former accessible by motor road and the latter by trail. Kootenay National Park, which adjoins the Banff and Yoho Parks, may be reached by motor from Banff *via* the Banff-Windermere highway or from Field *via* Golden and the Columbia River highway. At Radium Hot Springs, the park headquarters, is a large swimming pool operated by the Government, and fed by waters which flow from one of the hottest mineral springs in Canada.

Jasper National Park, adjoining Banff Park on the eastern slope of the Rockies, is the largest unit in Canada's great system of National Parks, and contains magnificent mountain ranges, with snow-capped peaks, glaciers, fine waterfalls and remarkable canyons. Lakes of wonderful colouring provide excellent fishing and for the mountain climber there is perhaps no more interesting field for endeavour. The town of Jasper is the park headquarters and tourist centre, from which many of the outstanding points of interest may be reached. Among these are Mount Edith Cavell and Glacier, the Miette Hot Springs, and the Athabaska falls, accessible by motor road, and Maligne lake, and the Tonquin valley, by trail. Jasper Park is also one of the greatest wild-life sanctuaries on the continent, and contains superb specimens of such big game as Rocky Mountain sheep and goat, caribou, moose, elk, deer and bear.

Waterton Lakes National Park in southern Alberta adjoins the United States Glacier National Park, with which it forms the Waterton-Glacier International Peace Park. Noted for the beautiful colouring of its mountains, which rise abruptly from the plains, Waterton Lakes Park possesses many other features which make it one of Western Canada's most popular reservations. Its lakes and streams are well stocked with fish and the entire region is accessible by saddle pony over a fine system of trails. Many facilities have been provided at Waterton Park: the park townsite and headquarters includes a fine golf course and a motor campground.

Most westerly of Canada's National Parks are the Glacier Park, astride the Selkirk mountains in British Columbia, and Mount Revelstoke Park, on their western slope. Glacier Park, accessible only by the main line of the Canadian Pacific Railway, is famed for its lofty peaks, deep valleys clothed in dense forests of giant cedar and Douglas fir, and great glaciers of which the Illecillewaet is the largest. The famed Nakimu caves, and the Asulkan valley with its numerous waterfalls, are other outstanding

points of attraction. Mount Revelstoke Park, probably the highest national park in the world, is situated on the rolling plateau on the top of Mount Revelstoke. It is accessible by a motor road nineteen miles in length which winds up the side from the town of Revelstoke, providing wonderful views.

Trail-riding in Waterton National Park.

In addition to these mountain parks, beautiful areas in the prairie provinces have been set aside for park purposes. Prince Albert National Park in Saskatchewan is a typical example of the lakeland country of northwestern Canada. Its wonderfully connected waterways furnish ideal opportunities for travel by canoe, and excellent fishing may be enjoyed in the numerous lakes. An extensive summer colony has been established at Waskesiu Beach, the park headquarters, situated on lake Waskesiu. Many improvements have been carried out there for the comfort and convenience of visitors, including a motor campground, golf course, tennis courts and other facilities for recreation.

Riding Mountain National Park in Manitoba, situated about 2,200 feet above sea-level on the summit of the Riding mountain, provides a charming contrast to the surrounding prairie country. Covered with a heavy forest growth, and set with numerous small lakes, the park forms a sanctuary for many species of mammalian wild life, including one of the largest wild elk herds in Canada. On the southern shore of Clear lake, is the park townsite and headquarters, Wasagaming, where numerous facilities for recreation have been provided and an excellent motor campground constructed. The park is accessible by good roads which link up with the provincial highway system.

In the province of Ontario are three beautiful units of the National Park system; the Point Pelee, the St. Lawrence Islands, and Georgian

Bay Islands National Parks—recreational areas chosen for their attractive surroundings. Point Pelee Park, which is the most southerly mainland point in Canada, possesses fine camping and bathing facilities, and also forms a sanctuary for numerous species of migratory birds. The St. Lawrence Islands Park, consisting of a number of island park units among the "Thousand Islands", and the Georgian Bay Islands Park including Beausoleil and other islands in Georgian bay, furnish summer visitors with excellent picnic and camping grounds. Fishing, boating and swimming are among the many forms of recreation available.

Boating on Crean Lake, Prince Albert National Park, Saskatchewan.
Courtesy, National Parks Branch, Department of the Interior.

The special animal parks which now exist for the protection of such nearly extinct species as the buffalo, elk and pronghorned antelope were created in conformity with the National Parks policy of conservation. While all national parks are wild life sanctuaries, the seven great scenic reservations in the Rockies and Selkirks need only adequate patrols to achieve their ends. The buffalo and the antelope, however, had their habitat on the prairie, and now that the open prairie has practically disappeared, the home of these interesting species has also disappeared. To afford them the necessary protection large fenced enclosures had to be established, in which they might thrive and propagate under natural conditions, without encroaching on the land of settlers.

Canada's experiment with the buffalo has furnished one of the best examples of successful game conservation in the world. In 1907, the Government of Canada purchased from a Montana rancher a herd of 716 buffalo

and placed them in large fenced enclosures in Alberta. To-day there are more than 5,000 buffalo in the Buffalo National Park near Wainwright, in addition to 18,000 surplus animals which have been shipped elsewhere or otherwise disposed of. Elk Island National Park near Lamont, Alberta, contains more than 2,000 buffalo as well as large numbers of deer, elk and moose. In Nemiskam National Park, Alberta, will be found a flourishing herd of more than 325 pronghorned antelope developed from a nucleus of 42 head which in 1915 were successfully enclosed within a park area of eight and a half square miles. Wakaskesy National Park, a reserve in southern Alberta, provides sanctuary for several hundred antelope.

In addition to the maintenance and development of scenic, recreational and animal reserves, the work of the National Parks Service involves the preservation, restoration and marking of historic sites throughout the Dominion. Where title to these historic places remains in the hands of the Dominion Government the sites are usually handed over to the Parks Service for administration. Where the title is in private hands, steps are taken either to acquire the site or to mark it in a suitable manner. As this work requires expert historical knowledge covering the whole of Canada, an advisory board of eminent Canadian historians has been appointed. This board serves without remuneration and meets periodically to discuss the general aspect of the work and to advise the Department in specific cases.

Fort Anne National Park at Annapolis Royal, Nova Scotia, scene of the oldest European settlement in Canada, contains a wealth of important historical relics, housed in a fine museum. Fort Beauséjour National Park near Aulac, New Brunswick, the site of an important stronghold of early Acadian days, forms an interesting link with Canada's historic past.

The accessibility of the National Parks has been one of the most important factors in their increasing popularity. In addition to being served by the Canadian Pacific and Canadian National Railway systems, the parks are either traversed by or linked up with the main avenues of motor travel. Since the establishment of the National Parks Service in 1911, more than 500 miles of all-weather gravelled highways have been constructed in the parks, opening up many of the outstanding beauty spots to the motor tourist. The provision of campsites and equipped motor campgrounds has made it possible for tourists to visit the parks at but slight expense, thus leading to wider use each year of these great national playgrounds.

More and more as the years progress there is a growing sentiment of the populace of Canada towards the preservation of the flora and fauna of our country, toward the further development of natural recreational areas and also toward the preservation of areas of considerable historic significance. Nowhere can there be found a more striking illustration of conservation in its broadest sense than that which is reflected in the National Parks of Canada. Taking into account the scope, the variety and the steadily widening renown of the National Park reservations, there is ample ground for the view that these natural assets will prove to be one of the major forces of Canadian recreational development.

CHAPTER II

POPULATION—BIRTHS, DEATHS AND MARRIAGES—IMMIGRATION—ABORIGINAL RACES

Population

The population of the earth is estimated at approximately 2,000,000,000.* The British Empire which covers slightly less than one-quarter of the land area of the earth, has slightly less than one-quarter of the world's population, but Canada, which occupies over one-quarter of the area of the British Empire, or about one-sixteenth of the land area of the earth has only about one-forty-eighth of the population of the former or roughly one two-hundredth that of the latter. While there is no absolute standard for population density, so much depending on extent of resources, the rate of increase in productivity of land as a result of invention, etc., a certain minimum density is desirable and even necessary to effective social and political life. As far as Canada is concerned such a minimum effective density is far from having been attained in the country as a whole.

Areas and Populations of the British Empire, and its Principal Component Parts for 1931, or latest year available, Compared with 1921.

(Source, *Canada Year Book*, 1934-35)

Country	Area in Square Miles	Population, Census of 1921	Population, Census of 1931
British Empire[1]	13,318,000	445,247,860	492,621,046
United Kingdom of Great Britain and N. Ireland	93,991	47,123,000[2,3]	46,042,000[5]
Irish Free State[4]	26,601	2,971,992[4]	2,957,000[5]
Canada	3,694,900[6]	8,787,949	10,376,786
Union of South Africa	471,917	6,928,580	8,132,600[7]
Australia[8]	2,974,581	5,435,734	6,448,707[8]
New Zealand[9]	103,415	1,218,913	1,442,746[9]
Newfoundland and Labrador	275,134	263,033	281,549[5]
India	1,805,252	318,885,980	351,399,880

[1]The totals, especially for population, can only be given approximately since certain of the figures are estimates of native populations, and in other cases data are not available. [2]Inclusive of Irish Free State. [3]A census of Ireland was not taken in 1921 and 1931. The figures include the estimated population of Ireland at the middle of 1921 and of Northern Ireland at the middle of 1931. [4]The first census of the Irish Free State was taken in 1926 and the figures shown above under 1921 relate to that census. [5]Estimated figures. [6]Inclusive of 226,979 sq. miles of fresh water. [7]Estimated mean population—a census of Europeans only was taken in 1931. [8]The population is exclusive of full-blooded aborigines, of which 61,801 were enumerated at a census taken June 30, 1929. [9]The area (293 sq. miles) and population (15,204 persons in 1931) of the Cook and other annexed islands are excluded, as are also uninhabited "outlying islands" with an area of 307 sq. miles. The Maori population (69,141 persons in 1931) and the inhabitants of the Tokelau Islands Dependency (4 sq. miles—population 1,048 in 1931) are also excluded.

In addition to growth and racial composition an important consideration which should receive attention in any detailed study of population is the distribution of population as between the various age-classes, and the effects of immigration and emigration, birth rate and mortality on the

*The Statistical Year Book of the League of Nations, 1934-35, gives the population of the world as 2,057,800,000 not including estimates of certain populations, chiefly in Asia and Africa where censuses are incomplete or do not exist.

age-groups. Space, however, permits only of the broadest treatment of Canada's population as affording a measure of the general economic progress of the country.

Historical.—The credit of taking what was perhaps the first census of modern times belongs to Canada, the year being 1666 and the census that of the little colony of New France. A population of 3,215 souls was shown. By the date of the Conquest, nearly a hundred years later, this had increased to 70,000, what is now the Maritime Provinces having another 20,000. Later came the influx of the Loyalists and the gradual settlement of the country, and Canada began the nineteenth century with a population of probably 250,000 or 260,000. Fifty years later the total was about 2,400,000 for the territory now included in the Dominion of Canada. Rapid development followed and the first census after Confederation (1871) saw the Dominion launched with a population of 3,689,257.

Statistics of Population in Canada, Census Years 1871 to 1931

Province or Territory	1871	1881	1891	1901	1911	1921	1931
Ontario	1,620,851	1,926,922	2,114,321	2,182,947	2,527,292	2,933,662	3,431,683
Quebec	1,191,516	1,359,027	1,488,535	1,648,898	2,005,776	2,360,665	2,874,255
New Brunswick	285,594	321,233	321,263	331,120	351,889	387,876	408,219
Nova Scotia	387,800	440,572	450,396	459,574	492,338	523,837	512,846
British Columbia	36,247	49,459	98,173	178,657	392,480	524,582	694,263
Prince Edward Island	94,021	108,891	109,078	103,259	93,728	88,615	88,038
Manitoba	25,228	62,260	152,506	255,211	461,394	610,118	700,139
Saskatchewan	–	–	–	91,279	492,432	757,510	921,785
Alberta	–	–	–	73,022	374,295	588,454	731,605
Yukon	–	–	–	27,219	8,512	4,157	4,230
N.W.T.	48,000	56,446	98,967	20,129	6,507	7,988	9,723
Canada	**3,689,257**	**4,321,810**	**4,833,239**	**5,371,315**	**7,206,643**	**8,787,949**	**10,376,786**

[1]The decreases shown in the population of the Northwest Territories since 1891 are due to the separation therefrom of vast areas to form Alberta, Saskatchewan and Yukon and to extend the boundaries of Quebec, Ontario and Manitoba. [2]Revised in accordance with the Labrador award of the Privy Council, Mar. 1, 1927; total includes 485 members of the Royal Canadian Navy.

After 1873 and until the end of the century economic conditions within the Dominion were anything but buoyant. The censuses of 1881, 1891 and 1901 reflected this state of affairs. That of 1881 showed a gain of 635,553 or 17·23 p.c., but in neither of the next two decades was this record equalled, the gains in each being under 550,000 or 12 p.c. At the end of the century the population of Canada had reached but 5½ millions, though expectation had set a figure very much higher as the goal for 1900.

Analyses of Growth.—The general rate of population increase in Canada in the opening decade of the present century was 34 p.c., the greatest for that decade of any country in the world. In the second decade the rate was 22 p.c., again the greatest with the one exception of Australia, whose growth was greater by a fraction of 1 p.c. A century earlier the United States grew 35 p.c. decade by decade until 1860, but with this exception there has been no recorded example of more rapid national progress than that of Canada in the twentieth century. In 1871, only 2·96 p.c. of the population dwelt west of the lake of the Woods. In 1921 the proportion was 28·37 p.c. and in 1931, 29·50 p.c.—3,061,745 people compared with 110,000 at Confederation.

As between rural and urban distribution the change is perhaps more striking than in any other field. Though we are still largely agricultural, our town dwellers now, for the first time, exceed the numbers living upon the land (5,572,058 urban and 4,804,728 rural in 1931). Sixty years ago the towns and cities of Canada accounted for only 19·58 p.c. of the people (722,343 urban and 2,966,914 rural), and at the beginning of the present century the percentage was but 37. In 1871 the Dominion had 14 cities, 49 towns, and 134 villages; in 1921 there were 101 cities, 461 towns, and 881 incorporated villages; and in 1931, 112 cities, 477 towns and 1,016 incorporated villages. It is the larger cities that have grown the fastest.

Rural and Urban Population.—For the purposes of the census, the population residing in cities, towns and incorporated villages has been defined as urban, and that outside of such localities as rural. On the basis of this classification, urban communities absorbed somewhat over two-thirds of the total increase in population between 1921 and 1931, with the result that the urban population of Canada in 1931 exceeded the rural by 767,330. Out of every 1,000 persons in the country, 463 were resident, on June 1, 1931, in rural and 537 in urban communities, as compared with 505 in rural and 495 in urban communities on June 1, 1921. Details of the population of all cities and towns having 15,000 inhabitants and over, are given by censuses from 1891 to 1931 in a second table.

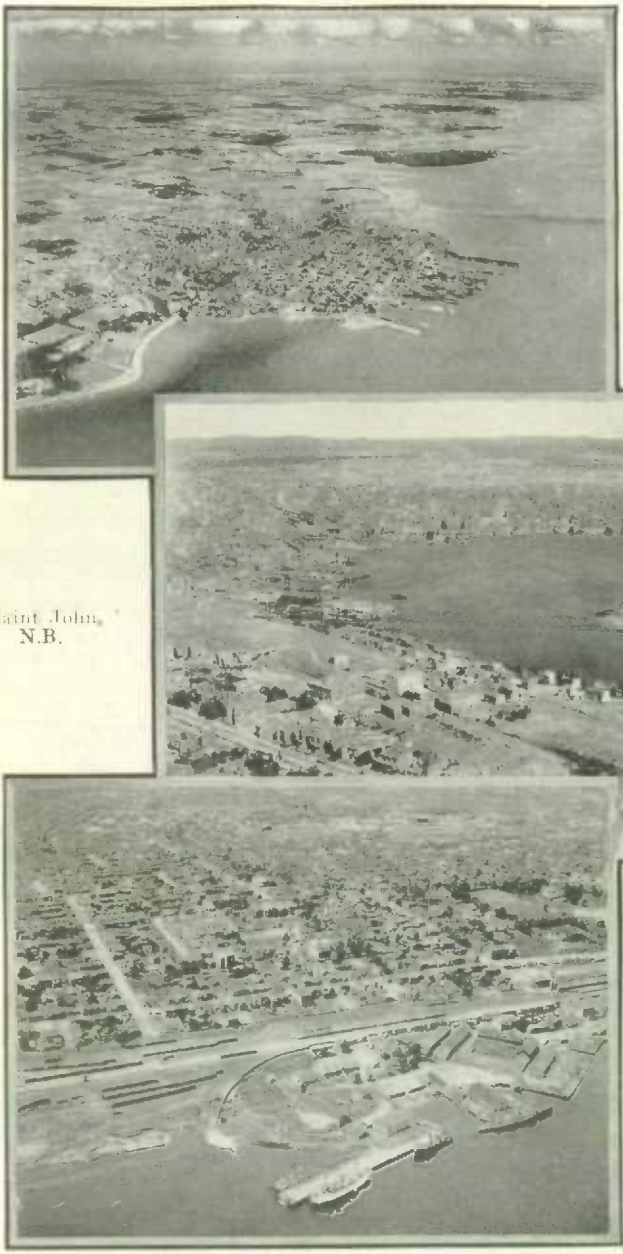
All the larger cities have in their neighbourhoods growing "satellite" towns or other densely settled areas in close economic relationship with the central municipality. Computed on this basis of "metropolitan area", the total populations of the larger cities at the Census of 1931 were as follows: "Greater Montreal", 1,000,159; "Greater Toronto", 808,864; "Greater Vancouver", 308,340; "Greater Winnipeg", 284,129; "Greater Ottawa" (including Hull), 175,988; "Greater Quebec", 166,435; "Greater Hamilton", 163,710; "Greater Windsor", 110,385; "Greater Halifax", 74,161, and "Greater Saint John", 55,611.

Rural and Urban Populations, by Provinces, 1921 and 1931

Province or Territory	1921		1931		Numerical Increase in Decade 1921-31	
	Rural	Urban	Rural	Urban	Rural	Urban
Prince Edward Island	69,522	19,093	67,653	20,385	− 1,869	1,292
Nova Scotia	290,799	227,038	281,192	231,654	−15,607	4,616
New Brunswick	263,432	124,444	279,279	128,940	15,847	4,496
Quebec	1,038,096	1,322,569	1,060,649	1,813,606	22,553	491,037
Ontario	1,227,030	1,706,632	1,335,691	2,095,992	108,661	389,360
Manitoba	348,502	261,616	384,170	315,969	35,668	54,353
Saskatchewan	538,552	218,958	630,880	290,905	92,328	71,947
Alberta	365,550	222,904	453,097	278,508	87,547	55,604
British Columbia	277,020	247,562	299,524	394,739[1]	22,504	147,177
Yukon	2,851	1,306	2,870	1,360	19	54
Northwest Territories	7,988	-	9,723	-	1,735	-
Royal Canadian Navy	485	-	[2]	-	[2]	-
Canada	**4,435,827**	**4,352,122**	**4,804,728**	**5,572,058**	**368,901**	**1,219,936**

[1]This includes South Vancouver and Point Grey, with 1921 populations of 32,267 and 13,736 respectively, which were then classified as "rural".
[2]Members of the Royal Canadian Navy were counted at their homes in the census of 1931.

CHIEF CITIES IN THE MARITIMES VIEWED FROM THE AIR



Charlottetown, P.E.I.

Saint John, N.B.

Halifax, N.S.

Royal Canadian Air Force Photograph.

Populations of Cities and Towns having over 15,000 Inhabitants in 1931, Compared with 1891, 1901, 1911 and 1921

NOTE.—The cities and towns in which a Board of Trade exists are indicated by an asterisk (*) and those in which there is a Chamber of Commerce by a dagger (†). In all cases the populations for previous censuses have been rearranged as far as possible to compare with those of the same areas in 1931.

City or Town	Province	Populations				
		1891	1901	1911	1921	1931
*†Montreal	Quebec	256,723	328,172	490,504	618,506	818,577
*Toronto	Ontario	181,215	209,892	381,833	521,893	631,207
*Vancouver	British Columbia	13,709	29,432	120,847	163,220	246,593
*Winnipeg	Manitoba	25,639	42,340	136,035	179,087	218,785
†Hamilton	Ontario	48,959	52,634	81,969	114,151	155,547
*Quebec	Quebec	63,090	68,840	78,710	95,193	130,594
*Ottawa	Ontario	44,154	59,928	87,062	107,843	126,872
*Calgary	Alberta	3,876	4,392	43,704	63,305	83,761
*†Edmonton	Alberta	–	4,176	31,064	58,821	79,197
†London	Ontario	31,977	37,976	46,300	60,959	71,148
†Windsor	Ontario	10,322	12,153	17,829	38,591	63,108
†Verdun	Quebec	296	1,898	11,629	25,001	60,745
*Halifax	Nova Scotia	38,437	40,832	46,619	58,372	59,275
*Regina	Saskatchewan	–	2,249	30,213	34,432	53,209
*Saint John	New Brunswick	39,179	40,711	42,511	47,166	47,514
*Saskatoon	Saskatchewan	–	113	12,004	25,739	43,291
†Victoria	British Columbia	16,841	20,919	31,660	38,727	39,082
†Three Rivers	Quebec	8,334	9,981	13,691	22,367	35,450
*Kitchener	Ontario	7,425	9,747	15,196	21,763	30,793
*Brantford	Ontario	12,753	16,619	23,132	29,440	30,107
†Hull	Quebec	11,264	13,993	18,222	24,117	29,433
*Sherbrooke	Quebec	10,097	11,765	16,405	23,515	28,933
Outremont	Quebec	795	1,148	4,820	13,249	28,641
*Fort William	Ontario	2,476	3,633	16,499	20,541	26,277
†St. Catharines	Ontario	9,170	9,946	12,484	19,881	24,753
Westmount	Quebec	3,076	8,856	14,579	17,593	24,235
†Kingston	Ontario	19,263	17,961	18,874	21,753	23,439
†Oshawa	Ontario	4,066	4,394	7,436	11,940	23,439
*Sydney	Nova Scotia	2,427	9,909	17,723	22,545	23,089
†Sault Ste. Marie	Ontario	2,414	7,169	14,920	21,092	23,082
†Peterborough	Ontario	9,717	12,886	18,360	20,994	22,327
*Moose Jaw	Saskatchewan	–	1,558	13,823	19,285	21,299
†Guelph	Ontario	10,537	11,496	15,175	18,128	21,075
*Glace Bay	Nova Scotia	2,459	6,945	16,562	17,007	20,706
*Moncton	New Brunswick	5,762	9,026	11,345	17,488	20,689
†Port Arthur	Ontario	2,698	3,214	11,220	14,886	19,818
†Niagara Falls	Ontario	3,349	5,702	9,248	14,764	19,046
†Lachine	Quebec	4,819	5,365	11,688	15,404	18,630
*Sudbury	Ontario	–	2,027	4,150	8,621	18,518
†Sarnia	Ontario	6,692	8,176	9,947	14,877	18,191
*Stratford	Ontario	9,500	9,959	12,946	16,094	17,742
*New Westminster	British Columbia	6,678	6,499	13,199	14,495	17,524
*Brandon	Manitoba	3,778	5,620	13,839	15,397	17,082
*St. Boniface	Manitoba	1,553	2,019	7,483	12,821	16,305
*North Bay	Ontario	1,848	2,530	7,737	10,692	15,528
†St. Thomas	Ontario	10,366	11,485	14,054	16,026	15,430
†Shawinigan Falls	Quebec	–	–	4,265	10,625	15,345

Racial Origins.—The object of securing information on racial origin at the census is to ascertain from what basic ethnic stocks the Canadian population, more particularly the recently immigrated population, is derived. The answer "Canadian" is not accepted under this heading, as the purpose of the question is to obtain, in so far as possible, a definition of "Canadian" in terms of racial derivation. It is clear that to accept the answer "Canadian" to the question on racial origin would confuse the data and defeat the purpose for which the question is asked.

Racial Distribution.—The total increase in population over the decade 1921-31 was 1,588,837. The population of English origin increased by only 196,061 compared with 722,208 in the previous decade; that of Scottish

THE TEN "GREATER CITIES"* OF CANADA WITH THEIR CONSTITUENT SATELLITE COMMUNITIES, CENSUS OF 1931

Scale of miles for base maps
0 5 10 15 20

N.B.: The areas of all circles are in proportion to the populations of the respective cities and satellite communities

MONTREAL

		POPULATION
1.	GREATER MONTREAL	1,000,159
2.	Montreal (City Proper)	818,577
	Satellite Communities—	
3.	Côte-St-Luc (Village)	490
4.	Dorval (Town)	2,052
5.	Hampstead (Town)	594
6.	Lachine (City)	18,630
7.	LaSalle (Town)	2,362
8.	Longueuil (City)	5,407
9.	Montreal East (Town)	2,242
10.	Montreal North (Town)	4,519
11.	Montreal South (Town)	1,164
12.	Montreal West (Town)	3,190
	Satellite Communities—*Continued.*	POPULATION
13.	Mont-Royal (Town)	2,174
14.	Outremont (City)	28,641
15.	Pointe-aux-Trembles (Town)	2,970
16.	St.-Jean-de-Dieu (Longue-Pointe)	4,578
17.	St.-Lambert (City)	6,075
18.	St.-Laurent (Town)	5,348
19.	St.-Léonard-de-Port-Maurice (Town)	453
20.	St.-Michel-de-Laval (Town)	1,528
21.	St.-Pierre (Town)	4,185
22.	Verdun (City)	60,745
23.	Westmount (City)	24,235

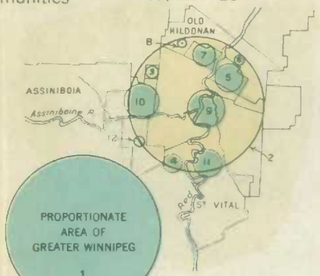
TORONTO

		POPULATION
1.	GREATER TORONTO	808,864
2.	Toronto (City Proper)	631,207
	Satellite Communities—	
3.	Etobicoke Township (Part)	12,096
4.	Forest Hill (Village)	5,207
5.	Leaside (Town)	938
6.	Long Branch (Town)	3,962
7.	Mimico (Town)	6,800
8.	New Toronto (Town)	7,146
9.	Scarborough Township (Part)	14,474
10.	Swansea (Village)	5,031
11.	Weston (Town)	4,723
12.	York Township	69,593
13.	York East Township	36,080
14.	York North Township (Part)	11,607

VANCOUVER

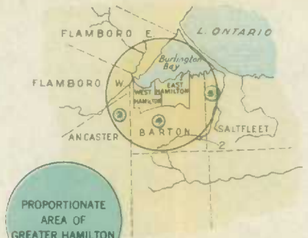
		POPULATION
1.	GREATER VANCOUVER	308,340
2.	Vancouver (City Proper)	246,593
	Satellite Communities—	
3.	Burnaby District (Mun.)	25,564
4.	New Westminster (City)	17,524
5.	North Vancouver (City)	8,510
6.	North Vancouver District (Mun.)	4,788
7.	University Endowment Area	575
8.	West Vancouver District (Mun.)	4,786

WINNIPEG



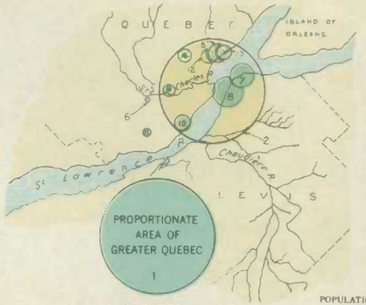
		POPULATION
1.	GREATER WINNIPEG	284,129
2.	Winnipeg (City Proper)	218,785
	Satellite Communities—	
3.	Brooklands (Village)	2,462
4.	Fort Garry (Mun.)	3,926
5.	Kildonan East (Mun.)	9,047
6.	Kildonan North (Mun.)	1,347
7.	Kildonan West (Mun.)	6,132
8.	Old Kildonan (Mun.)	647
9.	St. Boniface (City)	16,305
10.	St. James (Mun.)	13,903
11.	St. Vital (Mun.)	10,402
12.	Tuxedo (Town)	1,173

HAMILTON



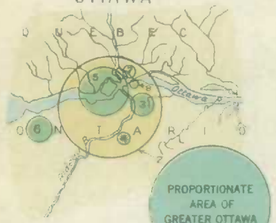
		POPULATION
1.	GREATER HAMILTON	163,710
2.	Hamilton (City Proper)	155,547
	Satellite Communities—	
3.	Ancaster Township (Part)	2,391
4.	Barton Township (Part)	2,360
5.	Saltfleet Township (Part)	3,412

QUEBEC



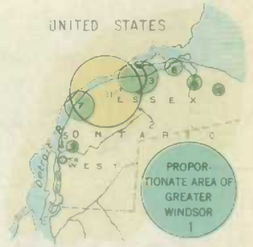
		POPULATION
1.	GREATER QUEBEC	166,435
2.	Québec (City Proper)	130,594
	Satellite Communities—	
3.	Beauport (Town)	3,242
4.	Charlesbourg (Village)	1,869
5.	Giffard (Village)	3,573
6.	La Petite-Rivière (Parish)	247
7.	Lauzon (Town)	7,084
8.	Lévis (City)	11,724
9.	Québec West (Town)	1,815
10.	St-Colomb-de-Sillery (Parish)	2,794
11.	Ste-Foy Parish (Part)	946
12.	St-Michel-Archange (Mastai)	2,549

OTTAWA



		POPULATION
1.	GREATER OTTAWA	175,988
2.	Ottawa (City Proper)	126,872
	Satellite Communities—	
3.	Eastview (Town)	6,686
4.	Gloucester Township (Part)—including Billings' Bridge; Cyrville; Overbrook and Ridgemont	1,947
5.	Hull (City)	29,433
6.	Nepean Township (Part)—including Highland Park; Westboro and Woodroffe	7,817
7.	Pointe-à-Gatineau (Village)	2,282
8.	Rockcliffe Park (Village)	951

WINDSOR



		POPULATION
1.	GREATER WINDSOR	110,385
2.	Windsor (City Proper)	63,108
	Satellite Communities—	
3.	East Windsor (City)	14,251
4.	La Salle (Town)	703
5.	Ojibway (Town)	79
6.	Riverside (Town)	4,432
7.	Sandwich (Town)	10,715
8.	Sandwich East Township (Part)	3,349
9.	Sandwich West Township (Part)	1,514
10.	Tecumseh (Town)	2,129
11.	Walkerville (Town)	10,105

HALIFAX

		POPULATION
1.	GREATER HALIFAX	74,161
2.	Halifax (City Proper)	59,275
	Satellite Communities—	
3.	Dartmouth (Town)	9,100
4.	The District including the following Polling Divisions: Bedford Basin (Part); Cole Harbour; Ferguson's Cove and Northwest Arm (Part)	5,786

SAINT JOHN

		POPULATION
1.	GREATER SAINT JOHN	55,611
2.	Saint John (City Proper)	47,514
	Satellite Communities—	
3.	Lancaster Parish (Part)—including Beaconsfield and Fairville	5,175
4.	Simonds Parish (Part)—including Brookville; Coldbrook; East St. John and Little River	2,922

*The term "Greater Cities" indicates those cities which have well defined satellite communities in close economic relationship to them. Not all of our larger cities (e.g. London, Calgary and Edmonton) are in this position.

origin by 172,725 compared with 175,745; and that of Irish origin by 123,005 compared with 57,419. The population of British origin, taken together, increased from 4,868,738 to 5,381,071, or 512,333, between 1921 and 1931. This represented 32 p.c. of the total increase as compared with 61 p.c. of the total increase for the previous decade. On the other hand, the population of French origin increased from 2,452,743 in 1921 to 2,927,990 in 1931, or by 475,247 (slightly under 30 p.c. of the total increase for the decade) and showed the greatest absolute increase for any decade since 1871. In regard to the minor racial groups which make up the population, comparison of the post-war numerical strength of certain ethnic stocks in Canada with pre-war returns cannot be made with any certainty owing to the new national and racial alignments in Central and South-Eastern Europe following the Great War.

The racial origins of the population of Canada, by provinces and territories, are given below for the census years 1901 to 1931.

Origins of the People, Census Years 1901-31

Origin	1901	1911	1921	1931
	No.	No.	No.	No.
British—				
English	1,260,899	1,823,150	2,545,358	2,741,419
Irish	988,721	1,050,384	1,107,803	1,230,808
Scottish	800,154	997,880	1,173,625	1,346,350
Other	13,421	25,571	41,952	62,494
Totals, British	*3,053,195*	*3,896,985*	*4,868,738*	*5,381,071*
French	1,649,371	2,054,890	2,452,743	2,927,990
Austrian	10,947	42,535	107,671	48,639
Belgian	2,994	9,593	20,234	27,585
Bulgarian and Roumanian	354	5,875	15,235	32,216
Chinese	17,312	27,774	39,587	46,519
Czech (Bohemian and Moravian)	–	–	8,840	30,401
Dutch	33,845	54,986	117,505	148,962
Finnish	2,502	15,497	21,494	43,885
German	310,501	393,320	294,635	473,544
Greek	291	3,594	5,740	9,444
Hebrew	16,131	75,681	126,196	156,726
Hungarian	1,549	11,605	13,181	40,582
Indian and Eskimo[1]	127,941	105,492	113,724	128,890
Italian	10,834	45,411	66,769	98,173
Japanese	4,738	9,021	15,868	23,342
Negro	17,437	16,877	18,291	19,456
Polish	6,285	33,365	53,403	145,503
Russian	19,825	43,142	100,064	88,148
Scandinavian[2]	31,042	107,535	167,359	228,049
Ukrainian	5,682	74,963	106,721	225,113
Yugoslavic	–	–	3,906	16,174
Various	7,000	31,157	28,796	27,476
Unspecified	31,539	147,345	21,249	8,898
Grand Totals	**5,371,315**	**7,206,643**	**8,787,949**	**10,376,786**

[1]Includes "half-breeds" in 1901.
[2]Includes Danish, Icelandic, Norwegian and Swedish; in 1921 they numbered respectively, 21,124, 15,876, 68,856 and 61,503; in 1931, 34,118, 19,382, 93,243 and 81,306.

Birthplaces.—In addition to, or as supplementary to, the question of racial origin, it is important to know the birthplaces of the population—how many of the population are born, for instance, in Canada. These may be of any racial origin, *e.g.*, French, English, German, etc. The following table gives the birthplaces of the population as shown in the past four decennial censuses:—

Birthplaces of the Population of Canada, 1901, 1911, 1921 and 1931

Year	Canadian Born	British Born[1]	Foreign Born		Total Population	Percentages of Total Population			
			Born in United States	Born in other Foreign Countries		Canadian Born	British Born	Foreign Born	
								United States Born	Other Foreign Born
	No.	No.	No.	No.	No.	p.c.	p.c.	p.c.	p.c.
1901	4,671,815	421,051	127,899	150,550	5,371,315	86·98	7·84	2·38	2·80
1911	5,619,682	834,229	303,680	449,052	7,206,643	77·98	11·58	4·21	6·23
1921	6,832,224	1,065,448	374,022	516,255	8,787,949	77·75	12·12	4·26	5·87
1931	8,069,261	1,184,830	344,574	778,121	10,376,786	77·76	11·42	3·32	7·50

[1]Includes some hundreds of persons born at sea.

Religions.—Of the total population in 1931 (10,376,786), 4,285,388 or 41·30 p.c. were members of the Roman Catholic faith (including 186,654 Greek Catholics).* The United Church of Canada, with 2,017,375 members, or 19·44 p.c. of the population, was second and the Anglicans, with 1,635,615 or 15·76 p.c., third. The Presbyterian was the next largest group with 870,728 members or 8·39 p.c. in 1931. According to the census returns, 0·15 p.c. did not state their religion and 0·20 p.c. gave "no religion". Statistics of religions for the past four census years follow:—

Membership of the Eight Leading Religious Denominations in Canada, 1901, 1911, 1921 and 1931

Religious Denomination	1901	1911	1921[4]	1931
Roman Catholic	2,229,600	2,833,041	3,389,636	4,285,388[1]
United Church	–	–	–	2,017,375[2]
Anglican	681,494	1,043,017	1,407,780	1,635,615
Presbyterian	842,531	1,116,071	1,409,406	870,728[2]
Baptist[3]	318,005	382,720	421,730	443,341
Lutheran	92,524	229,804	286,458	394,194
Jewish	16,401	74,564	125,197	155,614
Greek Orthodox	–	–	–	102,389

[1]Including 186,654 Greek Catholics. In earlier censuses only small numbers were involved and Greek Catholics and Greek Orthodox were included under the general term "Greek Church". A rapid increase in membership of both Greek Catholics and Greek Orthodox has been shown for recent censuses and, since the former owe obedience to the Pope in matters of faith, they have been included with the Roman Catholics for 1931. [2]Practically all Methodists and Congregationalists, and a large number of Presbyterians united to form the United Church in Canada in 1925. [3]Including Tunkers. [4]Figures adjusted according to the Labrador award of the Privy Council, Mar. 1, 1927.

Sex Distribution.—The population of Canada in 1931 was made up of 5,374,541 males and 5,002,245 females. Thus there were 518 males and 482 females per thousand. The masculinity of the population has increased in the eastern provinces and decreased in the western ones, where it was formerly greatest. A preponderance of males is common in all new countries where immigration has played an important part in building up the population. A table giving the sex distribution by provinces for the census years 1901, 1911, 1921 and 1931 follows:—

*See footnote 1 to the table in the centre of this page.

Sex Distribution, by Provinces, Census Years 1901-31

Province	1901		1911		1921		1931	
	Males	Females	Males	Females	Males	Females	Males	Females
P.E.I.	51,959	51,300	47,069	46,659	44,887	43,728	45,392	42,646
N.S.	233,642	225,932	251,019	241,319	266,472	257,365	263,104	249,742
N.B.	168,639	162,481	179,867	172,022	197,351	190,525	208,620	199,599
Que.	824,454	824,444	1,012,815	992,961	1,179,726	1,180,939	1,447,124	1,427,131
Ont.	1,096,640	1,086,307	1,301,272	1,226,020	1,481,890	1,451,772	1,748,844	1,682,839
Man.	138,504	116,707	252,954	208,440	320,567	289,551	368,065	332,074
Sask.	49,431	41,848	291,730	200,702	413,700	343,810	499,935	421,850
Alta.	41,019	32,003	223,792	150,503	324,208	264,246	400,199	331,406
B.C.	114,160	64,497	251,619	140,861	293,409	231,173	385,219	309,044
Yukon	23,084	4,135	6,508	2,004	2,819	1,338	2,825	1,405
N.W.T.	10,176	9,953	3,350	3,157	4,129	3,859	5,214	4,509
Canada	**2,751,708**	**2,619,607**	**3,821,995**	**3,384,648**	**4,529,643**[1]	**4,258,306**	**5,374,541**	**5,002,245**

[1]Includes 485, Royal Canadian Navy. The 1921 totals are revised in accordance with the Labrador award of Mar. 1, 1927.

Vital Statistics

Canada has a national system of vital statistics, under the Bureau of Statistics and the Registrars-General of the several provinces, dating from 1920. The figures of births, deaths and marriages for 1933 and 1934 are compared, by provinces, with those of 1926 in the accompanying table.

Births, Deaths and Marriages in Canada, 1926, 1933 and 1934

Province	Births			Deaths			Marriages		
	1926	1933	1934	1926	1933	1934	1926	1933	1934
	No.	No.	No.	No.	No.	No.	No.	No.	No.
P.E. Island	1,752	1,946	1,943	898	1,032	1,033	459	481	536
Nova Scotia	10,980	11,164	11,407	6,366	6,045	6,028	2,861	3,316	3,756
New Brunswick	10,340	10,037	10,164	5,002	4,908	4,665	2,938	2,517	3,045
Quebec	82,165	76,920	76,432	37,251	31,636	31,929	17,827	15,337	18,242
Ontario	67,617	63,646	62,234	35,909	35,301	35,119	23,632	22,587	25,874
Manitoba	14,661	13,304	13,310	5,335	5,455	5,169	4,537	4,819	5,296
Saskatchewan	20,716	20,145	19,764	6,060	6,024	5,924	5,483	5,371	5,519
Alberta	14,456	16,123	16,230	5,159	5,346	5,337	4,503	5,389	6,053
Br. Columbia	10,063	9,583	9,813	5,474	6,221	6,378	4,418	4,048	4,771
Canada[1]	**232,750**	**222,868**	**221,303**	**107,454**	**101,968**	**101,582**	**66,658**	**63,865**	**73,092**

[1]Exclusive of Yukon and the Northwest Territories.

Birth, Death and Marriage Rates per Thousand Population in Canada, 1926, 1933 and 1934

Province	Births			Deaths			Marriages		
	1926	1933	1934	1926	1933	1934	1926	1933	1934
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
P.E. Island	20·1	21·9	21·8	10·3	11·6	11·6	5·3	5·4	6·0
Nova Scotia	21·3	21·4	21·7	12·4	11·6	11·5	5·6	6·4	7·2
New Brunswick	26·1	23·9	23·9	12·6	11·7	11·0	7·4	6·0	7·2
Quebec	31·6	25·9	25·3	14·3	10·7	10·6	6·8	5·2	6·0
Ontario	21·4	18·1	17·5	11·3	10·0	9·9	7·5	6·4	7·3
Manitoba	22·9	18·4	18·2	8·3	7·6	7·1	7·1	6·7	7·2
Saskatchewan	25·2	21·2	20·5	7·4	6·3	6·1	6·7	5·6	5·7
Alberta	23·8	21·3	21·1	8·5	7·1	6·9	7·4	7·1	7·9
Br. Columbia	16·6	13·5	13·5	9·0	8·7	8·8	7·3	5·7	6·6
Canada[1]	**24·7**	**20·9**	**20·5**	**11·4**	**9·6**	**9·4**	**7·1**	**6·0**	**6·8**

[1]Exclusive of Yukon and the Northwest Territories.

Births.—Vital statistics for the whole of Canada on a uniform basis have been made available only since 1926 when the province of Quebec came into the Registration Area. From 1926 to 1930 the number of births, though not the rate, showed an upward trend, rising from 232,750 in the former year to 243,495 in the latter.

Since 1930, however, the movement has been reversed. The number of births has declined to 220,928 in 1934 and because of the growing population the rate shows a still more decided reduction, having fallen from 23·9 per thousand population in 1930 to 20·4 per thousand in 1934.

Multiple Births in Canada.—During the nine year period 1926-34, out of a total of 2,141,707 recorded confinements 26,060 or 1 in 82·2 were multiple confinements. Of these 25,809 were twin and 249 were triplet confinements, while one, in British Columbia in 1931, was a quadruplet confinement from which all the children died within a few hours of birth. The remaining multiple confinement resulted in the birth of the Dionne Quintuplets (May 28, 1934).

Infant Mortality.—A good measure of the efficiency of the health services of a country is provided by its infant mortality. In Canada during recent years this rate has shown a substantial reduction, falling from 102 per thousand live births in 1926 to 72 in 1934. The Canadian rate, however, ranks fairly high as compared with those of other countries, and room for improvement is still great. Among the causes in which this improvement may be hoped for are gastro-intestinal diseases and diseases of the respiratory tract.

Infant Deaths (Under One Year of Age) and Death Rates per Thousand Live Births in Canada, 1926, 1927, 1933 and 1934

Province	Deaths under One Year				Rate per 1,000 Live Births			
	1926	1927	1933	1934	1926	1927	1933	1934
Prince Edward Island	123	113	118	130	70	67	61	67
Nova Scotia	882	1,028	791	806	80	92	71	71
New Brunswick	1,095	1,006	821	875	106	96	82	86
Quebec	11,666	10,739	7,270	7,388	142	129	95	97
Ontario	5,302	4,812	3,804	3,522	78	71	60	57
Manitoba	1,122	1,021	844	734	77	72	63	55
Saskatchewan	1,681	1,575	1,231	1,090	81	75	61	55
Alberta	1,233	1,110	966	889	85	75	60	55
British Columbia	588	606	439	426	58	60	46	44
Canada[1]	**23,692**	**22,010**	**16,284**	**15,860**	**102**	**94**	**73**	**72**

[1]Exclusive of Yukon and the Northwest Territories.

Main Causes of Death in Canada.—The death rate has been declining, along with the birth rate, in Canada, but the resulting rate of natural increase has been slightly downward since 1930. Deaths in 1934 were the lowest they have been since uniform statistics for the whole of Canada were made possible in 1926, following the entry of Quebec into the Registration Area, and unquestionably lower than any which would be obtained by adding provincial records prior to that time. Diseases of the heart, considered as a group, formed the most important cause of death in 1934. Cancer stood second, and over the period 1926-34 the cancer death rate advanced in every year except the last. However, a considerable part of the increase can be accounted for by the ageing of the Canadian population. Next in importance in 1934 were "diseases of the arteries", which have also shown an apparent upward trend since 1926. Diseases of

early infancy, which stood fourth in order, showed on the other hand a well-marked downward movement over the period. Pneumonia was in fifth place in 1934, though up to and including 1932 this cause ranked before diseases of the arteries. Tuberculosis, which in all its forms stood sixth as a cause of mortality in 1934, also shows much improvement in recent years. These six causes of death accounted for well over half of the total deaths in Canada in 1934.

Marriages.—As in the neighbouring country (the U.S.A.), the recent economic depression exercised a marked influence on the number of marriages and the marriage rate in Canada. The year 1934, however, showed a very marked recovery. In 1929 marriages in Canada numbered 77,288. They declined to 71,657 in 1930, 66,591 in 1931 and 62,531 in 1932. The corresponding rates were 7·7 per thousand in 1929, 7·0 in 1930, 6·4 in 1931 and 6·0 in 1932. The year 1933 showed a slight upturn in the number of marriages, 63,865 as against 62,531 in the preceding year, though the rate remained unchanged at 6·0 per thousand. In 1934 the number of marriages increased by more than 9,000, reaching the figure of 73,074. The rate for 1934 was 6·8 per thousand.

Divorces.—Divorces granted in Canada have increased from 19 in 1901 to 51 in 1910, to 429 in 1920, to 785 in 1928, to 816 in 1929, to 875 in 1930, but decreased to 692 in 1931, owing to fewer divorces granted in Ontario as a result of the change in system and delay in dealing with applications during the transfer from Dominion to provincial jurisdiction. For the calendar year 1932 a new high total of 995 was recorded, a decrease to 923 was shown in 1933, while for 1934 the number was 1,106.

Immigration and Land Settlement

Immigration.—Total immigrants into Canada during the fiscal year 1935 numbered 12,136 as compared with 13,903 in the fiscal year 1934 and 19,782 in 1933.

The number of English, Scottish, Irish and Welsh from overseas was 2,198, as compared with 2,260 and 3,097 in 1934 and 1933 respectively; immigrants from the United States totalled 5,960 in 1935 as compared with 7,740 and 13,196 respectively for the two previous years; from other countries the number was 3,978 as compared with 3,903 and 3,489 respectively.

Land Settlement.—Settlement on the land of families with agricultural background from the cities, and the placement in farm employment of single men otherwise unemployed, have been important activities of the Department of Immigration and Colonization since the encouragement of immigration was discontinued in 1930. In the period from Oct. 1, 1930, to Sept. 30, 1935, the Department, with the active co-operation of the Canadian Pacific and Canadian National Railways, placed 17,765 families on farms and 38,885 single men in farm employment. On the basis of five persons to the family this represents a landward movement of 127,210 individuals. This settlement was effected without financial assistance from public sources. In addition, from June 1, 1932, to Sept. 30, 1935, a total of 4,226 families consisting of 22,190 persons were established on farms under the Relief Land Settlement Plan which provides for co-operation between the Dominion Government and the Provincial Government and municipality concerned in assisting, to the extent of $600 per family, in the establishment on the land of suitable families who would otherwise be on relief in the cities.

The Aboriginal Races

Indians.—The Indians of Canada are wards of the Department of Indian Affairs and number, according to the Census of 1931, 122,911 (62,943 males and 59,968 females) made up by provinces as follows: P.E.I., 233; N.S., 2,191; N.B., 1,685; Que., 12,312; Ont., 30,368; Man., 15,417; Sask., 15,268; Alta., 15,249; B.C., 24,599; Yukon, 1,543; N.W.T., 4,046. According to the departmental census taken by the Department of Indian Affairs in 1934, the total number of Indians was 112,510 but the census covered only Indians under the administration of that Department.

The Indians of Canada.—A Nascaupee Indian of Eastern Canada arriving at a trading post. The Nascaupee Indians are among the tallest of the red race. Inset: Carrier Indian of the interior of British Columbia.

Courtesy, Hudson's Bay Company and Geological Survey, Ottawa.

Indians are minors under the law and their affairs are administered by the Department under the authority of the Indian Act. The system of reserves, whereby particular areas of land have been set apart solely for the use of Indians, has been established in Canada from the earliest times. It was designed to protect the Indians from encroachment, and to provide a sort of sanctuary where they could develop unmolested until advancing civilization had made possible their absorption into the general body of the citizens. Reserves have been set aside for the various bands of Indians throughout the Dominion, and the Indians located thereon are under the supervision of the local agents of the Department. The activi-

ties of the Department, as guardian of the Indians, include the control of Indian education, the care of health, etc., the development of agriculture and other pursuits among them, the administration of their funds and legal transactions and the general supervision of their welfare. The local administration of the Indian bands on the reserves is conducted through the Department's agencies, of which there are well over 100.

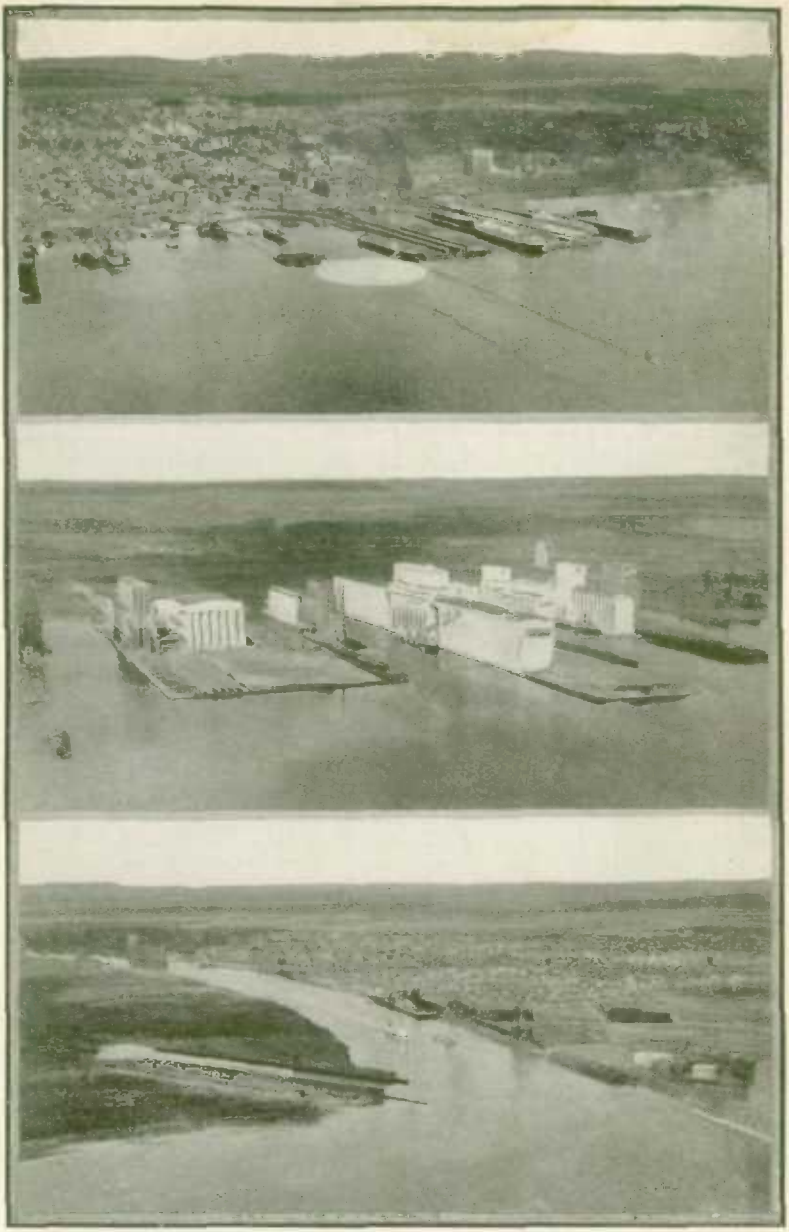
The Indian Act provides for the enfranchisement of Indians. When an Indian is enfranchised he ceases to be an Indian under the law, and acquires the full status of citizenship. In the older provinces, where the Indians have been longer in contact with civilization, many are becoming enfranchised. Great discretion, however, is exercised by the Government in dealing with this problem. Indians who became enfranchised lose the special protection attached to their wardship, so that it is necessary to guard against premature enfranchisement.

Eskimos.—The Eskimos of Canada are found principally on the northern fringe of the mainland and on islands in the Arctic Archipelago and in Hudson bay, although in the Baker Lake-Chesterfield Inlet area on the west side of Hudson bay there are bands of Eskimos who are essentially an inland people, and subsist chiefly on caribou. The diet of the coast Eskimos is largely marine mammals and fish, varied at times by caribou obtained from the interior during the seasonal migrations of these animals. The skins of the caribou are used for winter clothing.

The wandering life of the Eskimos and the vast area over which they are scattered present great difficulties in ascertaining their total numbers. The total for the entire Dominion, according to the latest returns, is about 6,000 located mainly in the Northwest Territories, with approximately 1,590 in Quebec, 85 in the Yukon Territory, 62 in Manitoba and 3 in Alberta.

The administrative care of Eskimos outside of the organized provinces devolves upon the Department of the Interior which, by regulative measures (including the setting aside of game preserves where only natives may hunt), conserves the natural resources necessary to their subsistence. To augment these resources the Department imported in 1935 a substantial herd of reindeer. Contact with the Eskimos is maintained through permanent stations in the Eastern, Central and Western Arctic, at a number of which medical officers are located, and by means of the annual Canadian Eastern Arctic Patrol by steamship. Law and order in all regions in Canada inhabited by Eskimos is maintained by the Royal Canadian Mounted Police.

Canadian Eskimos.—An excellent type of native woman of the Canadian Arctic Archipelago.
Courtesy, Department of the Interior.



The flow of grain from the Prairie Provinces to the eastern seaboard is concentrated through Port Arthur and Fort William, where excellent modern facilities exist for handling and storing the product. The upper illustration shows a part of the Port Arthur waterfront; in the centre are shown the grain elevators on the waterfront between Port Arthur and Fort William; the lower picture shows Fort William and docks.

Royal Canadian Air Force Photograph.

CHAPTER III

WEALTH, PRODUCTION AND INCOME —CAPITAL INVESTMENTS

National Wealth

"National Wealth" in this analysis is a concrete concept and includes all our farms, factories, equipment, merchandise in stock, real estate, roads, highways, developed resources and the thousand and one material things which we as a nation possess.

Great difficulty arises when we try to reduce all the things which go to make up this wealth (things which once created are not themselves subject to violent change) to a common denominator for statistical purposes. Estimates of national wealth must always be expressed in terms of the national currency and thus, normally, in terms of gold dollars. Yet the purchasing power of the currency unit is always fluctuating and since 1929 had at one point increased by more than 50 p.c. (Feb., 1933) in terms of wholesale prices. In 1930, the average index of wholesale prices was down by nearly 10 p.c. from 1929, while in December of 1930 the index was 19 p.c. lower than in December of 1929. The index continued to decline until February, 1933, and, even though there has been some improvement since then, in October, 1935, it was still more than 24 p.c. below the same month in 1929.

The effect of such drastic reductions in prices is first felt by the commodities which are being currently produced and, through these commodities, diminishes the dollar value of production and consequently the national income of a country where most people are producers. Ultimately a persistent decline of this character affects the capital values of real estate, buildings, machinery, etc., and its influence is then felt in a reduction in the national wealth as stated in dollars. The capital value of our national wealth has not yet been finally readjusted for the fluctuations in prices which have marked the past five or six years, and any attempt to estimate the wealth of Canada must be open to serious error until a fairly stable level of prices has been reached.

The 1929 estimate is considered to represent fairly well values in that year and is the latest which has been compiled by the Bureau of Statistics. This estimate placed the total national tangible wealth in that year at $30,840,210,000, of which $8,251,011,000 was given as the value of urban real property, $7,939,477,000 as agricultural wealth and $3,153,351,000 as the investment in steam railway road and equipment. Forests, mines, fisheries, central electric stations, manufacturing and trading establishments, electric railways, automobiles, telephones, highways, household furnishings, etc., made up the balance.

This estimate of the tangible wealth of Canada, apart from undeveloped natural resources, represented an increase of $8,640 million in the eight years between 1921 and 1929. There is no earlier figure that is strictly comparable, but it is fairly certain that there was a growth of

7624—3½

over four times between 1900 and 1929. Ontario owned about one-third, Quebec over one-quarter, and Saskatchewan just under one-tenth; British Columbia, Alberta and Manitoba followed closely in the order named. Details were given at pp. 34 and 35 of *Canada 1935*.

Production

Under the term "production" are usually included the activities of agriculture, fishing, mining, forestry, power development, manufactures and construction. This does not imply that many other activities, such as transportation, merchandising, professional services, etc., are not also

PRODUCTION.—A converter aisle of nickel-copper smelters, with sun-light streaming through the furnace mist and a worker raking off slag.

Courtesy, International Nickel Company of Canada, Limited.

"productive" in a broad economic sense. It is usual, however, to regard the processes involved in the creation of materials or their making over into new forms as constituting "production" in a special sense. Of this a bird's-eye view is given in the table on p. 38, which shows the gross and net value of production in each of the divisions of industry above mentioned. In a second table a summary of the value of total production in Canada is given by provinces.

A distinction is made between *gross* and *net* production. By *net* production is meant the value left in the producer's hands after the elimination of the value of the materials consumed in the process of production. This net figure is a much better criterion for measuring the value of an industry than the gross.

Despite gains in most of the main branches of production in 1933, the total net value of production was about 2 p.c. less than in the preceding year. It was, in fact, lower for 1933 than for any year since 1921 when the record was commenced, but this does not necessarily mean that the *physical volume* of production was at its lowest point in any of these years. The total *net* value of commodities produced, as completed and still in the hands of their producers, estimated by the Dominion Bureau of Statistics on the basis of data compiled by its various Branches, aggregated $2,062,000,000 in 1933 as against $2,105,000,000 in the preceding year. The further decline in manufacturing production was the main element in depressing the general total. Indeed, value added by the manufacturing process was less in 1933 than in any other year in the post-war period, although declines had been pronounced from 1930 to 1932. The resumption of operations in the latter part of 1933 was insufficient to raise the annual total above that of 1932, though the rate of decline in 1933 slackened greatly as compared with that recorded in preceding years. Declines were also shown in construction, electric power and custom and repair. The other five branches of productive industry showed gains over 1932. The net production of agriculture and of forestry showed relatively moderate gains following five years of decline. The recovery in mineral production was one of the bright spots of the year and the value of fisheries and trapping reached higher levels. Thus, all the branches of primary production except electric power showed increases, and the grand total net value of primary production also showed a moderate increase.

Manufactures now definitely takes precedence over agriculture in net value of production for the whole of Canada. This has, in fact, been the case since 1925, but owing to the rapid decline in agricultural prices in recent years the lead of manufactures over agriculture has been increased to a degree which is out of proportion to what would have been the normal trend. Agricultural production in 1933 represented 28·19 p.c. of the net output of all branches while the corresponding figure for manufactures was 54·19 p.c. These figures correspond with 26·9 p.c. and 55·6 p.c., respectively, for 1932, so that, while the lead of manufactures is still very great, the position of agriculture has been relatively improved. Mining was in second place among the primary industries in 1933 and foresty in third; the secondary industries hold the same relative positions as in 1932.

Relative Production by Provinces.—Ontario held first place among the nine provinces in the creation of wealth in 1933, producing 42·98 p.c. of the Dominion total compared with 42·04 p.c. in 1932. Quebec followed with an output of 25·76 p.c. against 26·49 p.c. in the preceding year.

British Columbia displaced Alberta for third place, the contribution of the former in 1933 being 7·71 p.c. compared with 7·06 p.c. for Alberta. Saskatchewan and Manitoba were in fifth and sixth places, respectively. Nova Scotia, New Brunswick and Prince Edward Island followed in the order named.

Summary by Industries of the Value of Production in Canada, 1932 and 1933

Industry	1932		1933	
	Gross	Net[1]	Gross	Net[1]
	$	$	$	$
Agriculture	818,549,921[4]	565,417,704	890,164,311[4]	581,316,218
Forestry	195,025,352	133,401,946	197,325,273	138,599,182
Fisheries	33,865,822	25,957,109	35,736,596	27,558,053
Trapping	7,118,021	7,118,021	7,258,527	7,258,527
Mining	228,948,172	191,228,225	264,737,816	221,405,253
Electric Power	171,630,682	128,420,233	161,411,308	117,532,081
Totals, Primary Production	1,454,937,970	1,051,543,238	1,556,633,831	1,093,750,314
Construction	132,872,400	86,367,060	97,289,800	63,238,370
Custom and Repair[2]	78,030,000	57,000,000	72,186,994	53,571,142
Manufactures[3]	2,126,194,555	1,170,225,872	2,086,847,847	1,117,659,273
Totals, Secondary Production[3]	2,337,066,955	1,313,592,932	2,256,324,641	1,234,468,785
Grand Totals[3]	**3,366,510,562**	**2,104,908,301**	**3,375,542,379**	**2,062,311,524**

[1]Gross value minus value of materials consumed in the production process.

[2]Statistics of Custom and Repair have not been collected since 1931 and the totals for 1932 and 1933 were estimated according to the percentage change in the data for manufacturing.

[3]The item "Manufactures" includes dairy factories, sawmills, pulpmills, fish canning and curing, electric power production, shipbuilding and certain mineral industries, which are also included in other headings above. This duplication, amounting in 1932 to a gross of $425,494,363 and a net of $260,227,869, and in 1933 to a gross of $437,416,093 and a net of $265,907,575, is eliminated from the grand totals.

[4]This figure includes the amount paid to patrons of dairy factories for milk and cream, and to that extent does not agree with the total gross agricultural production for this year shown on p. 50.

Summary, by Provinces, of the Value of Production in Canada, 1932 and 1933

Province	1932		1933	
	Gross	Net[1]	Gross	Net[1]
	$	$	$	$
Prince Edward Island	15,943,467	10,264,666	17,447,324	11,725,908
Nova Scotia	102,795,156	70,917,559	109,724,555	73,602,044
New Brunswick	84,667,778	54,063,723	81,942,674	50,036,128
Quebec	919,858,072	557,659,317	890,881,668	531,203,671
Ontario	1,459,572,816	884,801,710	1,491,873,834	886,521,242
Manitoba	164,911,278	100,453,108	166,727,298	98,801,770
Saskatchewan	172,862,819	117,858,748	161,805,633	102,584,743
Alberta	214,177,072	157,015,824	207,770,454	145,507,280
British Columbia	228,538,264	148,689,806	244,042,986	159,002,785
Yukon	3,183,840	3,183,840	3,325,953	3,325,953
Canada	**3,366,510,562**	**2,104,908,301**	**3,375,542,379**	**2,062,311,524**

[1]Gross value minus value of materials consumed in the production process.

National Income

The exact measurement of the national income is, of course, an impossibility. There must always be a margin of error in estimates of this kind apart from the fact that, as in the case of national wealth, (see p. 35),

values have to be measured in dollars, whereas the fluctuations in the price level change the purchasing power of those same dollars from year to year. Moreover, non-money incomes are more common in Canada than in some older countries of the white man's world and in rural areas constitute a very important part of the total income of most families.

Despite all these difficulties, the estimate of national income is one of the most important and the most comprehensive of all national statistics, and the accuracy with which it is approximated is, generally, a measure of the value of the national statistical system.

A partial total of national production is given in the general survey of production immediately preceding this section. The industries there dealt with, as was pointed out, are not inclusive of such activities as transportation, merchandising or personal or professional services, which do not produce commodities as such, but are equally productive in the broader sense of the term. According to the Census of 1931, the workers engaged in the actual production of commodities were only five-eighths of the total gainfully occupied population. If we are justified in considering the other three-eighths of the workers as equally productive in the broad sense, our problem of establishing a reasonably correct figure of national income is simplified.

An estimate of the wealth produced by those workers engaged in rendering services rather than working up commodities, that is, in the creation of "place, time and possession and service utilities" rather than "form utilities", has been facilitated by the Census of Merchandising for 1930, owing to the larger volume of statistics regarding distributive workers which is now available, and the conclusions reached from studies made* indicate that workers not connected with production as defined in the Survey of Production are in fact equally productive in the broader sense.

The total recorded estimated net production of commodities for 1933, as given on page 38, is $2,062,311,524. From this figure, however, there ought to be deducted the cost of fuel or power used in the manufacturing processes, for, so far as this fuel or power was produced in Canada, it is duplicated in primary production since it was not considered as one of the materials of industry when the net value for "manufactures" was struck. So far as it was not produced in Canada it had to be purchased with exports and should therefore be deducted in this case also. For the year 1933 such costs of fuel and power amounted to $69,399,823, which, when deducted from $2,062,311,524 leaves $1,992,911,701. By taking eight-fifths of this (or $3,188,659,000), therefore, we get the estimated total value of the production of all the gainfully occupied in Canada.

In order to arrive at an estimate of national income from these figures of total production, items such as depreciation of equipment engaged in production, the net balance of interest payments payable from outsiders to Canadians and from Canadians to outsiders, etc., must be considered.

As regards depreciation of capital equipment, this item is considered to be at least offset by the consumption of materials on maintenance, which go into production but do not show as products thereof, and by the fact that no allowance has been made in the estimate of total production for the value of garden produce, poultry, etc., raised by householders†, for

* See the bulletin "The National Income of Canada", by S. A. Cudmore, M.A., F.S.S., F.R. Econ. Soc., published by the Dominion Bureau of Statistics.

† Such produce to the value of nearly $19,000,000 was raised elsewhere than on farms in 1930 according to the Census of 1931.

casual earnings, and for other means by which national income is increased, which it is not possible to record but which must reach a substantial total in the aggregate.

The balance of interest payments due to outsiders is carefully estimated by the Bureau of Statistics each year. For 1933 the figure was $225,000,000. Subtracting this from $3,188,659,000 and allowing 4 p.c. of the remainder for income received in excess of wholesale prices by farmers, etc., who sell at retail, the 1933 income of the Canadian people may reasonably be placed at $2,925,112,640 which compares with $3,181,513,000, worked out on the same basis, for 1932.

There are ways of estimating national income on other bases than that of production which has been employed here, but there is every reason to believe that when the problem is approached from other angles, such as total earnings of the people or total purchases at retail for consumption, the estimate is not materially affected. The problem was approached from all of these avenues in the Bureau of Statistics for the year 1930 and it was found that the results checked very closely.

Incomes Assessed for Income War Tax in Canada.—In those countries of the world where an income tax has been established for a considerable time the figures of the assessed income have been generally accepted as furnishing a guide both to the amount and to the distribution of the total national income by classes. Estimates of the national income, based upon income tax statistics, have been published, for example, in the United Kingdom and in the United States.

In Canada the income tax is a newer thing than in either of the above-mentioned countries; also, in a newer country than either, incomes are to a greater extent received in kind. Both of these considerations render it improbable that so large a percentage of the total national income of Canada is brought under the notice of the income tax authorities as in the United Kingdom or the United States. Nevertheless, the data collected by the Income Tax Branch of the Department of National Revenue, in the course of its administration of the income war tax, are significant both with regard to the total income assessed and with regard to the distribution of that income among various classes of the population, as well as to size of income groups.

In the fiscal year ended 1934, individuals and corporations paid Dominion income tax on 1932 incomes aggregating $829,331,564, so that for that year slightly less than one-fourth of the national income (estimated as $3,181,513,000 in 1932) would appear to have been subject to income tax by Dominion authorities.

As regards the amount of income tax paid by various income groups, it is noteworthy that, in 1934, nearly 33 p.c. of the total gross amount ($29,000,900) collected from individuals was from those with incomes of $50,000 and over (such individuals might be considered as in the millionaire class and numbered only 307 out of a total of 203,957 individual taxpayers). The percentage of the gross total receipts contributed by this class in 1932 was slightly over 35 p.c. On the other hand, individuals with incomes under $10,000, who numbered 197,517 or about 96 p.c. of total individual taxpayers in 1934, contributed 27·6 p.c. of the total for that year as compared with 18·4 p.c. of the 1933 total. In the case of corporations, those with

incomes of over $50,000 also contributed the major part (over 82 p.c.) of the total gross receipts ($27,969,757) from all corporations, but the number of such companies was a very much higher proportion of the total than in the case of individuals.

Outside Capital Invested in Canada

A young nation like Canada is usually dependent to a considerable degree on outside capital for the development of its resources. In the opening decades of the century the marked expansion in Canada was largely based on capital imported from the United Kingdom (see table), at least $1,500 millions being imported during 1900-12. During the War the latent capital resources of Canada itself were for the first time exploited on a large scale, nearly $2,000,000,000 being raised by the Dominion Government. Between 1919 and 1931 the outstanding feature in the situation was the considerable importation of capital from the United States: in 1914 U.S. capital investments were about $904,000,000, while in 1931 they exceeded $4,000,000,000. British investments in Canada had in the meantime declined by nearly 19 p.c. Since 1931, United States investments have declined somewhat and British investments have increased to the highest level over the period (see accompanying table).

In spite of the large importation of capital from abroad, Canadian capital probably controls at least 60 p.c. of the securities of all enterprises located on Canadian soil.

Capital Investments by Other Countries in Canada, 1914, 1919, 1929, 1931-33

("000" omitted)

Country	1914[1]	1919[2]	1929[2]	1931[2]	1932[2]	1933[2]
	$	$	$	$	$	$
United States	904,455	1,800,435	3,608,521	4,107,803	4,065,783	3,983,231
United Kingdom	2,711,841	2,606,848	2,128,489	2,204,858	2,677,717	2,734,197
Other countries	177,729	173,493	155,409	165,217	95,752	95,933
Totals	**3,794,025**	**4,580,776**	**5,892,419**	**6,477,878**	**6,839,252**	**6,813,361**

[1]Estimated by various authorities. [2]Estimated by Dominion Bureau of Statistics.

It must also be borne in mind that Canadians have invested large amounts of capital abroad. The Bureau estimates that Canadian investments in other countries amounted to $2,028,787,000 at the end of 1933, or nearly 27 p.c. of the amount of outside investments in Canada. Of this $1,254,246,000 was placed in the United States, $109,997,000 in the United Kingdom and $664,544,000 in other countries.

CHAPTER IV

AGRICULTURE

The climate, soil and acquired capital facilities of Canada are such as to produce a wide variety of farm and forest products common to the temperate zone. This outstanding feature will be evident from a brief consideration of the prevailing regional types of farming in the Dominion.

The Maritime Provinces show a considerable regional difference in crop production, although fruit and potatoes are the most important cash crops, with especially favoured conditions for their production. Hay and clover command the largest proportion of the field-crop area, while oats has the largest acreage among the grain crops, followed by mixed grains and buckwheat, with small areas sown to wheat.

The province of Quebec is adapted essentially for mixed farming, with large regions specializing in dairying. The forage and coarse grains crops comprise over 90 p.c. of the total field-crop area, potatoes and buckwheat having the largest acreages among the strictly cash crops. The farming population lives 'off the farm' to the greatest possible extent, and revenues from such items as maple sugar, cordwood, and domestic work are very important. The boundaries of the farming area are gradually being pushed further north and west.

The province of Ontario shows probably the greatest regional variation in types of farming, ranging from the highly specialized fruit farms of the Niagara peninsula to the pioneer farms on the wooded lands of northern Ontario. As in Quebec, the agriculture of the whole province shows a marked predominance of forage crops and coarse grains, but the acreages of cereals are much higher than in Quebec. In some counties, such as Kent, Simcoe, Essex and Middlesex, the wheat crop is relied upon to return a fair share of the cash income. Sugar beets cover considerable acreages in Kent, Essex and Lambton, while tobacco is important in Essex, Elgin and Norfolk. Dairy farming prevails in scattered districts over the province, providing large proportions of the incomes on farms along the Ottawa and St. Lawrence valleys and in the vicinity of Toronto.

Over two-thirds of the field-crop acreage of Canada is concentrated in the three prairie provinces, and most of this area is seeded to the grain crops, with wheat predominant. Roughly speaking, the specialized wheat areas cover the southern short-grass plains from the Red River valley of Manitoba to the foothills of Alberta and attain their greatest width in central Saskatchewan. In the park belt, lying mostly north of this region, mixed farming is practised, with large acreages of coarse grains and natural hay utilized for live-stock feeding.

British Columbian agriculture is relatively intensive, dependent mainly on tree and bush fruits, berries and vegetables. Poultry and dairy farms are numerous along the southwestern coast, while ranching is confined to the interior valleys.

Canada has about 350 million acres of land suitable for farming purposes and, of this total, 163½ million acres are in occupied farms, of which nearly 86 million acres are improved land. Even at the very low valuations existing in 1934, farm land was valued at $2,226,366,000. Buildings on farms represent a further investment of $1,342,924,000 according to the Census of 1931.

Although Canada has a relatively small non-agricultural population for the absorption of surplus production, approximately 85 p.c. of our total agricultural production is consumed in Canada, with the remaining 15 p.c. finding markets abroad. Agriculture, however, provides roughly 40 p.c. of our total national export trade, the most important items being grain and grain products, cheese, live stock and live-stock products (principally meats and hides), potatoes and apples.

Again, our agriculture is so diversified that imports of agricultural products form a small proportion of our total imports. Imported agricultural commodities consist chiefly of tropical fruits and spices and processed products from other countries with temperate climates, particularly the United Kingdom. Over one-half of our agricultural imports are practically incapable of production in Canada, consisting of such items as tropical fruits, rubber, tea, vegetable oils, coffee, chicory and nuts. Among the processed products of agricultural origin, cotton and silk manufactures form the largest proportion.

Government Assistance to Agriculture

Dominion Department of Agriculture

In the 'seventies when the building of colonization roads was the government's chief policy, agriculture received scant attention, and it was not until 1884 that Canada realized her possible future depended upon her agricultural development. Actually, the Dominion Department of Agriculture is older than the Confederation of Canada. It had its origin in 1852 in the Bureau of Agriculture of the Province of Canada, and in 1867

Experimental Plots of Cereal Grains, Central Experimental Farm, Ottawa
Courtesy, Department of Agriculture, Ottawa.

its scope and jurisdiction in the Dominion were laid down by the British North America Act. Throughout the gradual growth and expansion of the Department, three epochs stand out clearly. In 1876 the health of Canadian live stock was first protected by the establishment of quarantine stations; in 1886 the Experimental Farms System was originated; and in the first decade of 1900, schemes of reorganization were set in motion, resulting in the efficient, clear-cut duties of the various Branches of the Department as they function at the present time. These comprise: Health of Animals, Experimental Farms, Dairy and Cold Storage, Live Stock, Seed, Entomology, Fruit, Economics, and Publicity and Extension. The Department has a well-organized library of about 67,000 volumes, documents and periodicals.

Health of Animals Branch.—This Branch is in reality a national veterinary organization for the purpose of protecting the agricultural interests of Canada against the introduction of serious contagious diseases of live stock, to combat those within the country, and to protect its foreign markets for live stock and live-stock products.

Experimental Farms Branch.—The most comprehensive system of its kind in the world, comprising the Central Experimental Farm at Ottawa, twenty-four branch farms and stations, eight sub-stations and several other stations for the carrying on of special work; through this Branch the farmers of the Dominion receive assistance and advice on every phase of productive agriculture. Basic agricultural problems are studied and investigated by an army of practical and scientific workers.

At the Central Farm, Ottawa, the headquarters of the system, are located the offices of the Director and his thirteen Divisional Chiefs. The Divisions comprise: Animal Husbandry, Field Husbandry, Horticulture, Cereals, Forage Plants, Poultry, Bees, Tobacco, Economic Fibre Production, Chemistry, Botany, Agricultural Bacteriology, and Illustration Stations.

In these Divisions originates the preliminary work of research and experiment, which is afterwards extended in its more practical aspects to the branch farms and stations. The results of the work throughout the system in any particular line are then collated and made public.

Dairy and Cold Storage Branch.—All the work of this Branch is designed to assist the farmer, although its activities are such that its officers are brought into contact more closely with dairy produce manufacturers and dealers. The Branch is organized into four Divisions—Administration, Dairy Markets and Cold Storage, Dairy Produce, and Dairy Research—together with two services, namely, Administration of Dairy Laws and Milk Utilization. For the administration of the various Dairy Acts a staff of inspectors is maintained throughout Canada to enforce the law and prevent fraud.

Live Stock Branch.—Production and marketing are the two main phases of the activities of the Live Stock Branch which is comprised of three distinct Divisions, known as Field Services, Market Services and Poultry Services, under the administrative authority of the Live Stock Commissioner, who also supervises the registration services, through which measures are taken to safeguard and advance the Canadian pure-bred live-stock industry and the pure-bred live-stock export trade. The necessary measures are secured under the Live Stock Pedigree Act, which provides for the examination of pedigrees, the supervision of investigations

respecting alleged irregularities or fraudulent practices, and prosecutions associated with the registration of live stock. Also, the constitution and amendments thereto of the various breed associations are reported upon by this service before approval is granted by the Department.

Seed Branch.—This Branch, established primarily to encourage the use of good and clean seed of the various farm crops, has been so extended and developed as to administer legislation for the regulation of commerce in seeds, fertilizers, feeding stuffs, pest control commodities, and binder twine. For the administration of legislation regarding these matters, the Dominion is divided into seven inspection districts, each supported by a service laboratory. The Branch supplies markets information and develops the marketing of these products, and of hay and straw, which are graded on request.

Entomological Branch.—This Branch conducts investigations on insects in relation to agriculture and forestry, encourages the use of methods of prevention and control, and administers the insects and pests section of the Destructive Insect and Pest Act. In addition to the Administrative Division, under the immediate direction of the Dominion Entomologist, the following Divisions have been established: Field Crops and Garden Insects; Forest Insects; Systematic Entomology; and Foreign Pests Suppression. Other work by this Branch includes fruit-insect, insecticide, parasite and live-stock investigations. Laboratories are maintained in Nova Scotia, Quebec, Ontario, and British Columbia.

Fruit Branch.—The activities of this Branch have relation to every line of endeavour of the fruit and vegetable industries of the Dominion in packing, marketing and transporting fresh, canned and preserved fruits and vegetables. The Branch is organized into three Divisions: Markets Extension; Canning; and Transportation and administers the Fruit Act, the Root Vegetables Act, the Meat and Canned Foods Act so far as it refers to fruit and vegetables, and the Maple Sugar Industry Act.

The Fruit Branch also maintains a voluntary shipping point and 'request inspection service' covering fruits and vegetables. The development of this inspection service has been rapid and continuous.

Economics Branch.—This Branch was established in 1929 and not only institutes research but also acts as a co-ordinating agency. Much of the work already under way is conducted on a co-operative basis, both Dominion and provincial agencies pooling forces so that there is little, if any, overlapping. Substantial progress has been made in research work concerning farm and ranch organization and management, and in marketing. The Branch disseminates economic information to the public by means of a quarterly publication the *Economic Annalist*.

Publicity and Extension Branch.—The principal function of this Branch is to make available to the farmers of Canada the vast fund of practical knowledge secured as a result of special investigations and studies conducted by the several Branches of the Department.

The Branch is responsible for the editing of all departmental publications, the maintenance of a press and radio news service, and maintains a very popular lantern slide service.

Provincial Assistance

Each of the nine provinces, under Section 95 of the B.N.A. Act, has its Department of Agriculture, and everywhere the provinces endeavour to assist their farmers by educational and extension work, and in most

cases by the organization of co-operative marketing. Agricultural colleges maintained by the provinces are the Nova Scotia Agricultural College at Truro, the Ontario Agricultural and the Ontario Veterinary Colleges at Guelph, and the Manitoba Agricultural College at Winnipeg. Three agricultural colleges in Quebec are assisted by the Provincial Government, while faculties of agriculture are found in the provincial universities of Saskatchewan, Alberta and British Columbia.

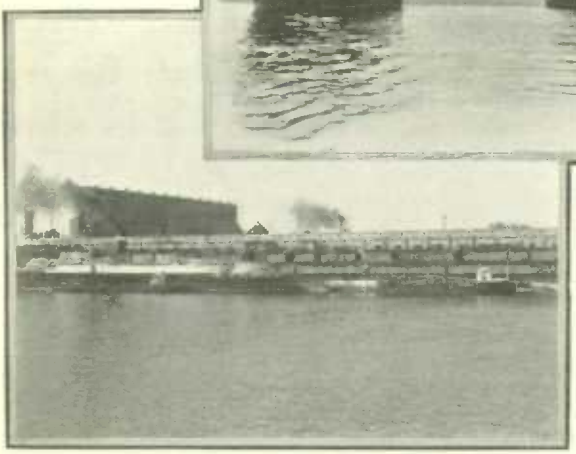
Main Building, Macdonald Agricultural College, Ste. Anne de Bellevue, Que.
Courtesy, Canadian Government Motion Picture Bureau.

The Canadian Grain Trade

The natural disadvantages involved in the wide separation of the prairie grain fields from the markets of Europe have been considerably lessened by continued efforts to improve both the marketing and the transportation facilities. The Great Lakes and St. Lawrence river have been used to good advantage ever since the inception of the movement of grain to the Eastern Canadian and United States seaboard, but during the crop year 1934-35, owing to low water in the St. Lawrence and poor export demand for grain, the quantity exported overseas through the St. Lawrence ports of Montreal, Sorel and Quebec amounted to only 37,341,195 bushels, a large reduction from the previous year. The Canadian seaboard ports of Saint John, N.B., and Halifax, N.S., show exports overseas of 8,884,646 bushels. The smaller Atlantic ports of Sydney, N.S., Charlottetown, P.E.I., and Summerside, P.E.I., forwarded 117,156 bushels overseas. The exports routed *via* United States ports were shown as 39,416,655 bushels, but in addition 28,741,094 bushels were exported from Canada to the United States for consumption. No account has been taken of re-routed grain which should be added to the Canadian port movement and deducted from export *via* United States.

The westward route through Vancouver, B.C., has been established for a number of years, but not until the crop year 1921-22 did the movement reach any appreciable volume when 18,212,826 bushels were exported. During 1934-35 exports of grain from the same port amounted to 51,201,182 bushels. Other Pacific Coast ports exporting grain are New Westminster, Victoria and Prince Rupert. These accounted for an export of 5,380,071 bushels during the 1934-35 crop year. The port of Churchill on Hudson bay initiated shipments in 1931 and in 1934-35 exported 4,053,947 bushels.

Steamers Awaiting Cargoes of Grain Outside Vancouver Harbour.



Ocean-going Vessels Loading Grain, Port of Montreal, Que.

Montreal and Vancouver are the two chief grain exporting ports of the North American continent.

Courtesy, Canadian Government Motion Picture Bureau.

The movement of grain at both interior and terminal points has been regulated by adequate elevator facilities. The volume of grain shipments has expanded greatly since the turn of the century and the necessary handling facilities have kept pace. The operation of the licensed elevators of Canada is covered by the Canada Grain Act, which was extensively revised in 1930. The number of these elevators has grown from 523 with a capacity of 18,329,352 bushels at the end of the last century to 5,880 with a capacity of 419,890,480 bushels in 1935. They are divided into three principal groups, the Western Country, the Terminal and the Eastern elevators.

The Western Country elevators are those that handle grain direct from the farmer. In 1900-01 they numbered 518 with a total capacity of 12,759,352 bushels, while in 1934-35 the number had increased to 5,737 with a capacity of 191,067,750 bushels. Some of these, however, have been closed during the recent period of light crops.

Terminal elevators (as defined by the Canada Grain Act) are located at Fort William, Port Arthur, Churchill and Vancouver. In 1900-01 there were only five licensed elevators at the head of the lakes with a total capacity of 5,570,000 bushels; the number, by 1935, had increased to thirty-three with a total capacity of 94,432,210 bushels. Vancouver is a comparatively recent elevator centre; there were two licensed elevators there in 1906-07 (the first year reported) with a joint capacity of 200,000 bushels, four in 1915-16 with a capacity of 1,631,000 bushels and 18 in 1934-35 with a total capacity of 18,541,000 bushels.

The Eastern elevators are located along the Lower Lakes, the river St. Lawrence and the Canadian seaboard. They were eighteen in number in 1908-09 and had a total capacity of 14,826,000 bushels; in 1934-35 the number was twenty-nine with a total capacity of 77,913,800 bushels.

The strictest supervision of grading is maintained in order to establish the high quality of Canadian grain abroad. Cleaning and drying facilities are available at both interior and terminal elevators, and grading is superintended by the Board of Grain Commissioners, established in 1912 for the management and control of the grain trade of Canada.

The export trade in Canadian wheat has greatly increased in the past half-century, although the actual amounts exported in recent years vary widely with growing conditions in Canada and the state of markets abroad. Record levels of wheat and wheat flour exports were reached following the bumper crop of 1928, and in the crop year 1928-29, 407,564,187 bushels of wheat and wheat flour (expressed as wheat) were exported from Canada. Although Canada stands third to the United States and Russia among the wheat-producing countries of the world, she is normally first among the wheat-exporting nations. Even with the relatively short crops of the past few years, this position has been well maintained. During the past crop year 1934-35, the exports amounted to 165,751,305 bushels, while the production of wheat was 275,849,000 bushels.

Agricultural Co-operation in Canada*

Co-operative organizations hold an integral position in the marketing of Canadian farm products and the purchase of farm supplies. The activities of the larger organizations such as the wheat pools, live-stock and fruit co-operatives have reached a high stage of development, and have received world-wide recognition. In addition to these, there are hundreds of comparatively small organizations which are working quietly and effectively serving local areas.

Available statistics show 630 farmers' co-operative associations actively engaged in business in 1933-34. Community halls, numbering approximately 100, which were reported in a former review are not included in this summary of business organizations. The 630 associations had 2,533 branches which, combined, make a total of 3,223 places of business engaged in the marketing of farm products and the purchase of supplies for farmers. The shareholders and members financially interested numbered 345,024 and patrons reported totalled 379,740. Combined assets were $104,350,702. The total actual investment of member shareholders in capital stock amounted to $8,722,451 and reserves and surplus totalled

* Statistics contained in this review are based on records received by the Economics Branch, Department of Agriculture, covering the business year of 1933.

$39,590,050. Sales of farm products for the year under review amounted to $128,909,035 and the sales value of supplies handled totalled $7,389,034 which, combined with other receipts, gave a total business of $136,411,483.

Eighty-three dairy co-operative associations, with 28,388 members, reported business amounting to $8,827,527 in 1933. Assets totalled $3,825,474 and paid-up share capital and reserves, $2,299,272. A large proportion of the Canadian fruit and vegetable crop was marketed through 102 fruit co-operatives with a combined membership of 8,875 growers. Sales of fruits and vegetables for 1933-34 returned $6,098,283. The supply business amounted to approximately 15 p.c. of the total business of the fruit co-operatives.

Within the marketing group the grain and seed co-operatives, which include the wheat pools of Western Canada, had the largest membership and investment and exceeded all other commodity groups in volume of business, which is estimated at $94,912,237 for the year under review. Membership reported by 31 associations for 1933 totalled 169,475. Mainly through deductions from the selling price of their grain, members have invested a sum of $36,186,498, which is retained in reserve funds, and in addition have contributed over three millions in share capital. Combined assets totalled $88,719,303 in 1933.

The records for 59 live stock marketing associations with 216 shipping agencies reported a combined membership of 43,149. Assets are comparatively low, amounting to $1,050,007. A business of $5,612,473 was transacted in 1933. The live-stock co-operatives in Canada undertake very little processing of their product; their main activity is the assembling of live stock in cars at producing points for shipment and sale at central markets. Poultry producers have organized in each province to sell their products co-operatively. Membership for 1933 was reported at 33,529, and sales for the year amounted to $1,809,460.

Practically all the wool marketed co-operatively in Canada is handled by the Canadian Co-operative Wool Growers, Limited. The company operates in each province through the medium of 18 sheep breeders' and wool growers' associations. The co-operative grades, stores and markets the wool received from its 6,500 patrons. During the year 1933, the company's wool sales amounted to $746,896 and the value of supplies handled for patrons was $55,409.

In Ontario and Quebec, the honey producers are organized co-operatively with a combined membership of 1,606 members. The Ontario Honey Producers' Co-operative, Limited, markets approximately four million pounds of honey annually. The Quebec Maple Sugar Producers, with a membership of 1,982, is organized on a co-operative basis. Three tobacco co-operatives in Ontario, two in the province of Quebec and one in British Columbia, reported a total membership of 1,009 and sales of $262,652 for the year 1933.

Two large provincial organizations, the United Farmers' Co-operative in Ontario and the Coopérative Fédérée de Québec, handle a variety of products and farm supplies for their farmer members through local clubs and societies. Combined membership totalled approximately 25,000 members in 1933 and business amounted to over ten million dollars.

Available statistics show 326 associations with 26,104 members organized for the purpose of purchasing farm supplies and merchandise on the co-operative plan. Assets totalled $3,011,258 in 1933. Business reported for

the year under review by associations organized exclusively for the handling of supplies amounted to $5,659,021. In five of the provinces, co-operative wholesale buying societies purchased goods for their shareholder associations.

Agricultural Wealth and Revenue

The preliminary estimate of the gross agricultural wealth of Canada, 1934, is $5,608,157,000 as compared with $5,563,790,000, the revised estimate for 1933 and $5,499,432,000, the revised estimate for 1932. The gross value of the agricultural production was $931,347,000 in 1934, an increase of $128,401,000 as compared with 1933.

The tables below give the agricultural wealth of Canada by provinces for 1934, and the agricultural revenue by items, 1929-34. Ontario had about 28 p.c. of the total wealth, Saskatchewan 22 p.c. and Quebec 17 p.c. in 1934.

Estimated Gross Agricultural Wealth of Canada, by Provinces, 1934,[1] with Totals for 1932 and 1933

("000" omitted)

Province	Lands	Buildings	Implements and Machinery	Live Stock	Poultry	Animals on Fur Farms	Agricultural Production	Total
	$	$	$	$	$	$	$	$
P.E. Island	22,299	19,687	8,116	4,505	541	1,069	12,979	69,196
Nova Scotia	34,513	43,890	10,554	9,742	740	414	26,525	126,378
New Brunswick	34,002	38,680	13,253	10,673	950	679	24,611	122,848
Quebec	347,699	257,918	97,270	75,503	5,394	1,542	180,257	965,583
Ontario	501,143	487,009	151,928	129,128	14,972	1,487	300,348	1,586,015
Manitoba	181,531	88,389	54,847	31,692	2,479	660	71,735	431,333
Saskatchewan	618,563	223,795	185,510	72,383	4,494	449	129,986	1,235,180
Alberta	410,077	137,332	116,301	65,930	3,513	979	148,593	882,725
British Columbia	76,539	46,224	12,885	14,281	2,315	342	36,313	188,899
Canada 1934	**2,226,366**	**1,342,924**	**650,664**	**413,837**	**35,398**	**7,621**	**931,347**	**5,608,157**
1933	**2,323,164**	**1,342,924**	**650,664**	**403,135**	**33,456**	**7,501**	**802,946**	**5,563,790**
1932	**2,323,164**	**1,342,924**	**650,664**	**374,999**	**34,138**	**6,749**	**766,794**	**5,499,432**

[1] Figures for 1934 are preliminary.

Gross Annual Agricultural Revenue of Canada, 1929-34[1]

("000" omitted)

Item	1929	1930	1931	1932	1933	1934
	$	$	$	$	$	$
Field crops	948,981	662,041	435,966	452,527	453,598	544,975
Farm animals	207,317	166,630	96,778	65,185	89,063	99,438
Wool	4,470	2,311	1,644	1,093	2,005	2,645
Dairy products	291,743	237,068	191,390	159,074	170,829	181,966
Fruits and vegetables	46,398	49,417	39,692	32,157	33,208	39,145
Poultry and eggs	107,664	95,227	56,298	42,078	38,060	44,267
Fur farming	6,791	4,925	3,557	3,284	4,062	4,127
Maple products	6,119	5,251	3,456	2,706	2,059	3,047
Tobacco	6,276	7,058	7,178	6,088	6,531	7,232
Flax fibre	393	371	179	170	159	250
Clover and grass seed	2,123	2,482	1,497	962	1,362	2,010
Honey	2,806	2,538	2,246	1,470	2,010	2,245
Totals	**1,631,081**	**1,235,319**	**839,881**	**766,794**	**802,946**	**931,347**

[1] Figures for 1934 are preliminary.

Estimates of the net agricultural revenue of Canada are made by deducting from the gross field-crop revenue such items as feed for farm animals and poultry, seed and unmerchantable grain, and by deducting vegetables produced on farms for home use from the gross revenue from fruits and vegetables. A preliminary estimate of the net agricultural revenue of Canada in 1934 is given as $569,015,000 compared with a revised estimate of $510,410,000 for 1933.

Another disappointing season was experienced by Canadian farmers in 1935 although there were some alleviating features. The farm revenue will probably turn out to be somewhat less than in the previous year, although the change will not be great. The value of field crops in 1935 ($510,835,600) was $38,581,000 or 7 p.c. less than in 1934, but a large part of this decline was due to the relative abundance and cheapness of feed and fodder crops. This condition is encouraging to higher profits in live stock and live-stock products in 1935-36. Total grain production in 1935 was well above that of 1934. Wheat showed a reduction due to rust, drought and frost damage. Live-stock numbers continued to decline up to June 1, 1935, although the downward tendency since June 1, 1934, has been very slight in all classes. Live-stock prices remain at fairly satisfactory levels, the United States market for cattle having brought that industry out of the doldrums. Butter production and prices are running above the 1934 levels, while cheese production has remained low. Poultry numbers have declined but the industry has had a very favourable year. In the fruit districts, excepting certain parts of British Columbia, the 1935 season was a big improvement over that of 1934. In summary, the Canadian farmer in 1935 was unable to consolidate all the gains made between 1933 and 1934.

A Three-Furrow Tractor Plough in Operation.
Courtesy, Canadian Government Motion Picture Bureau.

Field Crops

Acreages.—According to the census of 1891, the area of field crops in 1890 amounted to 15·6 million acres. This grew to about 56·0 million acres in 1934, an increase of 259 p.c. during the forty-four years. Two main factors were responsible for this extensive growth in sown acreage, firstly the opening of the Prairie Provinces, and secondly, the Great War, for, during 1913-19 alone, the area under field crops increased about 50 p.c.

Wheat.—A remarkable growth in the production of wheat is indicated by the table shown below dating back to 1870. Prior to 1905 the amount of wheat produced was less than 100 million bushels. For six years it remained steadily over this figure until 231 million bushels was reached in 1911. In only three of the next twenty years was wheat production less than 200 million bushels, *viz.*, 1914, '18 and '19. At that time the abnormally high 1915 crop of 393 million bushels set a record for a number of years until 1922, when nearly 400 million bushels was produced. New high records were attained in 1923 (474 million bushels); in 1927 (480 million bushels); and in 1928 (567 million bushels). Except for the years 1930 and 1932 when production exceeded 400 million bushels, the years from 1929 to 1935 were marked by unfavourable climatic conditions and yields remained in the neighbourhood of 300 million bushels. Rust in 1935 was a serious damaging factor and the second estimate showed a production of only 273,971,000 bushels.

Production, Imports and Exports of Wheat for Canada, 1870-1935

NOTE.—(1) In the table below, wheat flour has been converted into bushels of wheat at the uniform average rate of 4½ bushels to the barrel of 196 lb. of flour. (2) The exports and imports relate to the years ended June 30, 1871-1901, and July 31, 1911-35. (3) The asterisk (*) against the census years 1870 to 1920 indicates that the production figures for those years are from the reports of the decennial censuses.

Year	Production	Imports of Wheat and Flour	Exports of Wheat and Flour	Year	Production	Imports of Wheat and Flour	Exports of Wheat and Flour
	000 bush.	bush.	bush.		000 bush.	bush.	bush.
*1870....	16,724	4,304,405	3,127,503	1925.....	395,475	379,194	324,592,024
*1880....	32,350	965,767	4,502,449	1926.....	407,136	407,119	292,880,996
*1890....	42,223	406,222	3,443,744	1927.....	479,665	473,308	332,963,283
*1900....	55,572	314,653	14,773,908	1928.....	566,726	1,345,881	407,564,186
*1910....	132,078	407,639	62,398,113	1929.....	304,520	1,374,726	186,267,210
*1920....	226,508	454,749	166,315,443	1930.....	420,672	244,220	258,637,886
1921....	300,858	372,942	185,769,683	1931.....	321,325	216,328	207,029,555
1922....	399,786	397,519	279,364,981	1932.....	443,061	173,014	264,304,327
1923....	474,199	440,741	346,566,561	1933.....	281,892	413,165	194,779,875
1924....	262,097	619,404	192,721,772	1934.....	275,849[1]	896,674	165,751,305
				1935.....	273,971[2]	–	–

[1]Subject to revision. [2]Provisional estimate.

Other Grains.—These grains consist of oats, barley, flaxseed, rye, buckwheat, peas, mixed grain and corn. The first two have assumed real importance among the field crops of Canada. The volume of oat production has attained considerable dimensions, reaching the record total of close upon 564 million bushels in 1923. The area under crop has expanded from 3,961,356 acres in 1890 to 14,097,300 acres in 1935, when the production was estimated at 416,369,000 bushels. Barley, with a production of 11,496,000 bushels in 1870, yielded a record total of 136,391,400 bushels in 1928, while the yield for 1935 is now estimated at 87,512,000 bushels. Rye

production amounted to 1,064,358 bushels in 1870, increased to 32,373,400 bushels in 1922, and receded to 10,610,000 bushels, according to the second estimate of 1935.

Values of Field Crops.—Prices of field crops were at an unusually high level during the War and until 1919, then slumped steeply, falling to a low level in 1923, but recovered considerably in the years up to 1930, when sharp declines commenced, bringing the prices of many crops to the lowest recorded levels. The value of the field crops of Canada, which in 1910 was $384,513,795, had increased by 1914 to $638,580,000. As the effects of the War came to be felt, the maximum was reached in 1919 with a total of $1,537,170,100. This value receded to $899,226,200 in 1923; but the recovery of prices combined with excellent harvests, brought the value up to $1,173,133,600 in 1927 and $1,125,003,000 in 1928. Since then it declined to $948,981,000 in 1929, $662,040,900 in 1930 and $432,199,400 in 1931, rising again to $452,526,900 in 1932, $453,598,000 in 1933 and $549,416,600 in 1934. The preliminary estimate for 1935 itemized below shows a total value of $510,835,600, the decline from 1934 being largely due to lower unit prices.

The Field Crops of Canada, 1935

(According to estimates of Nov. 13, Nov. 18 and Dec. 12, 1935)

Field Crop	Area	Total Yield	Total Value
	acres	bush.	$
Wheat	24,119,200	273,971,000	166,693,000
Oats	14,097,300	416,369,000	98,298,000
Barley	3,885,700	87,512,000	23,029,000
Rye	769,100	10,610,000	2,746,000
Peas	93,750	1,581,000	1,770,200
Beans	64,610	1,117,000	1,629,400
Buckwheat	380,100	7,972,000	4,096,000
Mixed grains	1,152,100	39,567,000	14,526,000
Flaxseed	214,600	1,433,000	1,668,000
Corn for husking	167,700	7,765,000	3,727,000
		cwt.	
Potatoes	506,800	38,786,000	29,782,000
Turnips, mangolds, etc.	185,200	35,115,000	11,573,000
		tons	
Hay and clover	8,697,600	14,097,600	109,513,000
Alfalfa	762,300	1,961,900	15,757,000
Fodder corn	480,700	4,101,800	13,676,000
Grain hay	843,200	1,581,000	9,834,000
Sugar beets	52,600	463,000	2,518,000

The Flour-Milling Industry.—This most important manufacture connected with the field crops dates back to the settlement made by the French at Port Royal (now Annapolis, N.S.) in 1605. Milling was, of course, an absolute necessity to the first settlers. The Napoleonic wars established the export business and for the next half-century the mills were closely associated with the commercial and banking history of the country. Large scale production in milling in Canada began with the competition between the two processes, stone and roller milling. By the '80's the roller process had secured a virtual monopoly and local mills gave way to large mills served by elevators at central points. The high quality of Canadian wheat became recognized throughout the world, and Canada's huge export trade in wheat and its products developed rapidly.

In 1933, according to the preliminary estimate, there were 1,328 mills including 1,000 country mills; the capital invested was $59,054,505; while the value of products was $83,322,099. The exports of wheat flour in the fiscal year 1868-69 were 375,219 barrels valued at $1,948,696. It was not until the fiscal year 1898 that Canada reached over the million mark, when 1,249,438 barrels were exported with a value of $5,425,760. This was increased to 12,021,424 barrels, valued at $61,896,251, during the crop year ended July 31, 1923-24, which was the peak year for the exports. The exports receded to 4,750,310 barrels in 1934-35, with a value of $18,237,933. Canada ranked second among the world exporters of wheat flour in the calendar year 1934, surpassed by Australia.

The production record for the flour-milling industry in Canada, established in 1928-29 and amounting to 20,872,094 barrels, has not been maintained since that year. Wheat ground in commercial mills for the crop year ended July 31, 1934, totalled 66,655,667 bushels and flour produced amounted to 14,942,257 barrels. Preliminary figures for the crop year ended July 31, 1935, were 63,312,354 bushels of wheat and 14,119,369 barrels of flour.

The total daily capacity of flour mills in 1934-35 was approximately 105,000 barrels. Canada's largest flour mill has a daily capacity of 12,000 barrels and her largest milling company controls an active daily capacity of 18,725 barrels.

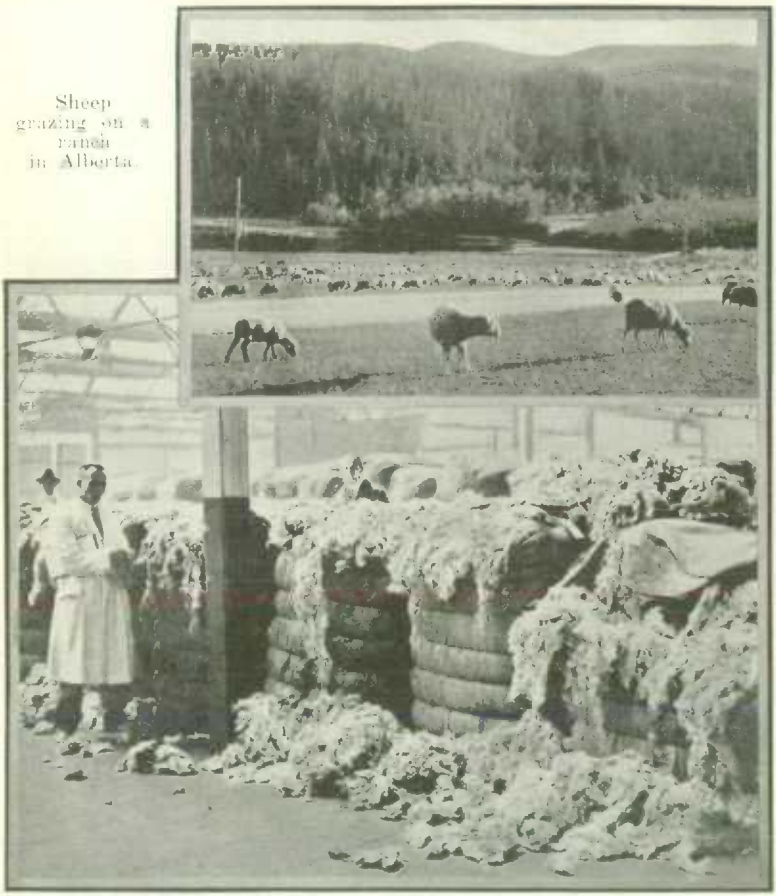
The Live-Stock Industry

Although somewhat overshadowed by the grain-growing industry, the raising of live stock has made very substantial progress, not perhaps so much in point of numbers as in the improvement of foundation stock. Fortunately, virulent animal diseases which affect the farm live stock of Europe have never obtained a footing in Canada. Cattle which numbered 7,973,031 in 1931 increased successively to 8,511,100 in 1932, 8,876,000 in 1933, 8,951,900 in 1934 and decreased slightly to 8,820,600 in 1935. Swine numbered 4,699,831 in 1931, which was fairly well maintained in 1932 but decreased to 3,800,700 in 1933, 3,654,000 in 1934 and 3,549,200 in 1935. The number of sheep fluctuated from 3,627,116 in 1931 to 3,644,500 in 1932, 3,385,800 in 1933, 3,421,100 in 1934 and 3,399,100 in 1935. Poultry on farms decreased in number from 65,152,607 in 1931 to 64,080,200 in 1932 and 59,324,400 in 1933, increased slightly to 59,798,700 in 1934 and decreased again to 56,768,800 in 1935. The wool clip showed a substantial increase from 17,959,896 pounds in 1926 to 20,518,000 pounds in 1932; the production was 19,268,000 pounds in 1933 and 19,544,000 pounds in 1934.

Slaughtering and Meat Packing.—Since 1900 the separation between the farm and the manufacture and marketing of animal products has become more and more pronounced, leading to the development of an important slaughtering and meat-packing industry. Returns for 1934 show 147 establishments engaged in slaughtering and meat packing as compared with 135 in 1933; the capital invested increased from $54,590,398 in 1933 to $56,765,624 in 1934. The number of employees in 1934 was 10,119 as compared with 9,289 in 1933, and salaries and wages increased from $10,103,744 to $11,608,338. The cost of materials used in 1934 was $98,417,162, and the value of the products $122,112,406.

Exports of cattle during the first eight months of 1935 numbered 100,662 head valued at $5,631,805, of which 6,454 head valued at $411,018 went to the United Kingdom and 91,642 head valued at $5,132,253 to the United States; during the same period in 1934 exports of cattle numbered 42,641 head valued at $2,722,586, of which 36,432 head went to the United Kingdom and 3,545 head to the United States. Exports of sheep during this period totalled 1,011 head as compared with 1,019 for the eight months of 1934, and exports of swine 5,088 head as compared with 3,948 in 1934.

Sheep grazing on a ranch in Alberta.



Bales of Canadian Fleece Wool in a Warehouse in Eastern Canada.
Courtesy, Canadian Government Motion Picture Bureau.

Exports of bacon and hams showed a very encouraging increase for the eight-month period. In 1934 total shipments to all countries amounted to 890,308 cwt. and in 1935 to 930,679 cwt. with respective values of $13,983,194 and $14,622,942. In each case the greater portion was sent to the United Kingdom, the amount for 1935 being 926,611 cwt. valued at $14,499,507. The total export value of all meats was $17,500,619 for the eight months of 1935 as compared with $15,740,620 in 1934.

Total exports of animals and animal products increased from $52,939,238 in 1934 to $60,802,374 in 1935. Of the latter amount, goods to the value of $33,649,652 went to the United Kingdom and $20,095,502 to the United States.

Special Crops

A feature of Canadian agriculture is the number of crops which are grown in localities specially suited for their production. Some of the more important of these are tobacco, sugar beets, maple syrup and sugar, and flax and hemp for fibre.

The various types of tobacco are grown in different regions of Quebec and Ontario and small amounts in British Columbia. The production for 1934 was 38,734,000 pounds from 40,963 acres. The preliminary estimate is 55,750,000 pounds in 1935.

Bee Culture.—Spring examination of the hives.
Courtesy, Dominion Experimental Farm, Ottawa, and Canadian Government Motion Picture Bureau.

The production of maple syrup and sugar in 1935 was valued at $3,522,420, as compared with $3,040,600 in 1934.

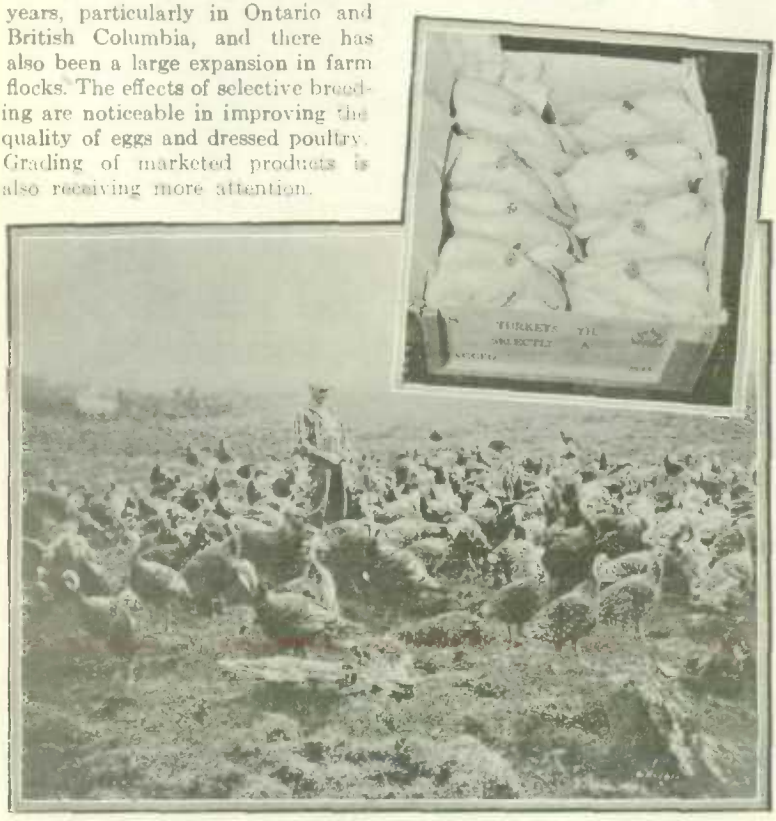
Sugar beets are grown in the neighbourhood of sugar beet factories at Chatham and Wallaceburg in Ontario, and Raymond in Alberta, and there are other areas sown to this crop in Quebec and Manitoba. The production has made its most significant increase since the early war years. In 1934, the latest year for which factory statistics are available, the output of refined beetroot sugar amounted to 114,002,950 pounds valued at $4,714,625.

Flax for fibre and fibre-seed production expanded greatly during the War, but has since declined.

Hops occupied 1,156 acres in British Columbia in 1934, the yield being 1,405,700 pounds, valued at $449,824.

Commercial gardening is an important occupation in many favoured regions throughout Canada, principally in suburban areas.

Specialized poultry farming has increased in popularity in the past ten years, particularly in Ontario and British Columbia, and there has also been a large expansion in farm flocks. The effects of selective breeding are noticeable in improving the quality of eggs and dressed poultry. Grading of marketed products is also receiving more attention.



Turkey raising is a very specialized branch of poultry farming and where conditions are suitable it is very profitable. The number of turkeys raised in Canada is increasing steadily. The illustration shows turkeys on a farm in British Columbia. Inset: Selected Canadian turkeys packed for export.

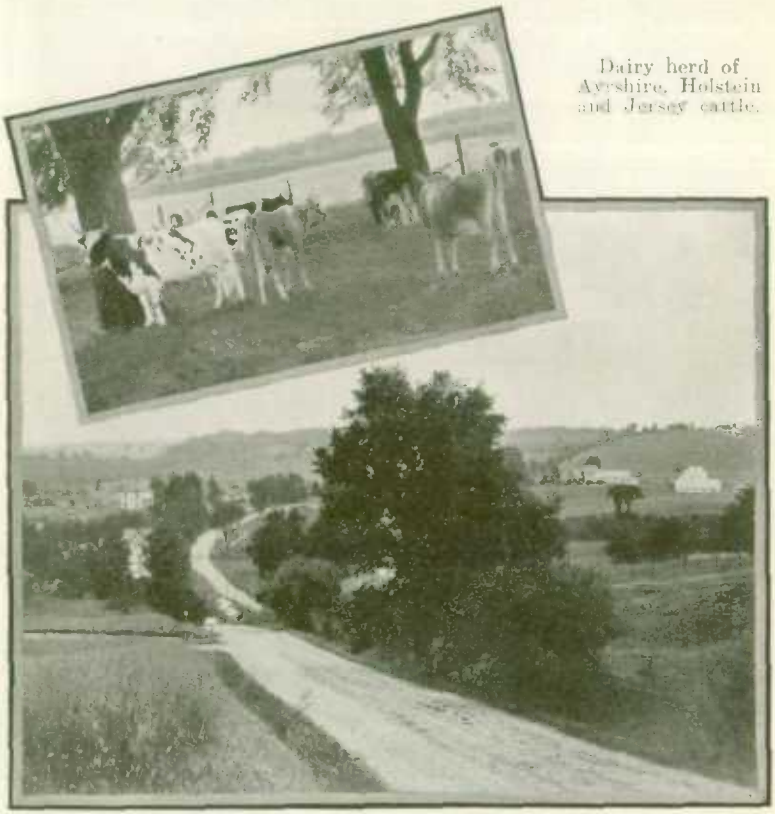
Courtesy, Canadian Government Motion Picture Bureau.

The total estimated production of honey in Canada in 1934 was 24,269,760 pounds as compared with 22,915,794 pounds in 1933. The 1934 production was valued at $2,244,814.

The production of red clover, alsike, alfalfa and sweet clover seed amounted to 7,975,000 pounds valued at $680,500 in 1934. The production of timothy seed in 1934 amounted to 5,000,000 pounds valued at $1,000,000.

Dairying

Dairying has long held an important place among Canadian industries. The early settlers produced home-made butter and cheese for consumption and for local sale. As the population increased, creameries and cheese factories were established, followed by the development of an export trade in dairy products. The export market grew; during the fiscal year ended Mar. 31, 1926, Canada exported 1,483,000 cwt. of cheese valued at nearly $34,000,000 and 233,000 cwt. of butter valued at nearly $9,000,000. Since 1926 exports of these commodities have declined, especially butter exports which dropped to 44,019 cwt. valued at $818,996 in 1934, and then to only 4,466 cwt. valued at $104,758 for the fiscal year ended Mar. 31, 1935. From April 1 to Oct. 31, 1935, with the principal movement during October, exports were 69,061 cwt. valued at $1,599,269. Cheese exports for the fiscal year ended 1933 were 857,116 cwt. valued at $8,758,415; for 1934, 747,669 cwt. valued at $8,176,271; and for 1935, 692,130 cwt. valued at



Dairy herd of Ayrshire, Holstein and Jersey cattle.

A Beautiful Scene in the County of Compton, Dairy Farming District of Quebec.

Courtesy, Canadian Government Motion Picture Bureau and Dominion Experimental Farm, Ottawa.

$6,480,947. From April 1 to Oct. 31, 1935, exports were 440,286 cwt. valued at $5,030,637.

An analysis of production figures since 1916 indicates a general tendency toward increase in the manufacture of creamery butter. In 1916 the output was 82,564,130 pounds valued at $26,966,355 which in 1924 had increased to 178,893,937 pounds valued at $60,494,826. During the next five years the production was fairly steady, but in 1931 a new high record of 225,955,246 pounds was established. Production fell in 1932 to 214,002,127 pounds valued at $40,475,479. In 1933 the creamery butter output increased to 219,232,546 pounds valued at $43,546,109, and in 1934 to 234,852,961 pounds valued at $48,168,600. For the first ten months of 1935 creamery butter shows an increase of 1·7 p.c. over the same period in 1934.

Canadian Government Inspectors Sampling Cheese in a Warehouse at Montreal.
Courtesy, Canadian Government Motion Picture Bureau.

Factory cheese production in 1917 was 194,904,336 pounds valued at $41,180,623. In 1919 the total quantity produced had fallen to 166,421,871 pounds with a total value of $44,586,168 which was the peak in values. During the next five years the production fluctuated between 136 and 162 million pounds, and again in 1925 a high production of 177,139,113 pounds valued at $36,571,556 was reached. In 1926 the production was 171,731,631 pounds valued at $28,807,841, but since that time and particularly from 1929 to 1933 there has been a very marked falling-off in production with low valuations. Quantities were as follows: 118,746,286 lb. in 1929; 119,105,203 lb. in 1930; 113,956,639 lb. in 1931; 120,524,243 lb. in 1932; 111,146,493 lb. in 1933; and 99,346,617 lb. in 1934. Values for these years are given in the table below. For the first ten months of 1935 production in five provinces totalled 92,000,000 lb.

Fundamental changes have been going on in the industry and some of the milk that formerly went into cheese appears now to be made into butter or sold in the fluid form. It will be observed from the table below that the total value of all products of the industry shows a fairly satisfactory trend over the six years 1925-30; the unusually low prices for all dairy produce prevailing during 1931, 1932 and 1933 materially reduced the values for those years. Commencing with 1933, prices began to improve and this improvement is still continuing.

Values of the Dairy Production by Provinces, 1934, with Dominion Totals for 1925-34

Province	Dairy Butter	Creamery Butter	Home-made Cheese	Factory Cheese	Miscellaneous Factory Products	Milk otherwise used	All Products[1]
	$	$	$	$	$	$	$
Prince Ed. Island	332,000	401,100	21	34,900	48,300	459,000	1,407,121
Nova Scotia	1,444,000	1,354,900	3,000	–	697,000	1,980,000	5,827,300
New Brunswick	1,342,000	702,700	1,000	38,300	161,400	1,884,000	4,487,500
Quebec	2,658,000	14,024,400	25,000	2,071,400	1,802,200	24,003,000	46,462,400
Ontario	5,166,000	17,642,000	12,000	7,220,700	9,324,700	38,139,000	80,017,500
Manitoba	1,340,000	3,974,000	18,000	108,000	401,100	2,998,000	9,847,500
Saskatchewan	2,903,000	3,879,500	16,000	79,500	374,000	4,898,000	13,102,400
Alberta	1,876,000	4,830,800	22,000	154,100	440,200	6,259,000	14,407,100
British Columbia	431,000	1,359,200	3,000	90,700	1,832,500	4,354,000	8,232,400
Canada—							
1934	17,492,000	48,168,600	100,021	9,797,600	15,081,400	84,974,000	183,791,221
1933	16,623,000	43,546,109	94,021	11,127,984	13,804,553	78,016,000	170,828,667
1932	15,311,000	40,475,479	94,120	11,379,922	13,112,612	71,627,000	159,074,133
1931	21,450,000	50,198,878	108,500	12,824,685	16,559,619	78,876,000	191,389,692
1930	27,385,000	56,670,504	115,555	18,084,870	21,074,228	101,230,000	237,068,157
1929	28,924,000	65,929,782	82,800	21,471,330	22,091,945	153,238,000	291,742,857
1928	29,103,000	64,702,538	82,000	20,424,463	20,581,490	152,661,856	287,625,347
1927	30,435,124	65,709,986	70,654	25,522,148	18,879,335	151,253,346	291,874,590
1926	28,252,777	61,753,390	89,249	23,337,841	17,767,271	143,648,460	277,304,979
1925	32,128,799	63,008,097	95,973	26,571,556	15,882,747	136,177,373	284,863,645

[1]Includes the value of skim milk and buttermilk for the years 1930-34.

The Fruit-Growing Industry

In certain sections of Canada, the climate and soil are eminently adapted to fruit growing, and the Annapolis valley, the Niagara peninsula and the Okanagan district of British Columbia are world famous centres of fruit production. Experimental shipments of apples from the Annapolis valley were first made in 1861. Up to 1890 the annual production of apples by Nova Scotia rarely exceeded 100,000 barrels; but after that date there was a pronounced increase in acreage and in production, which latter reached 1,000,000 barrels in 1909, and 1,900,000 barrels in 1911. Further high records were made in 1919 with over 2,000,000 barrels, and in 1922, when 1,891,850 barrels were packed and sold from the Annapolis valley and adjacent districts. In Ontario, where the commercial production of all varieties of fruit has reached its highest development, apples have been grown from the middle of the eighteenth century, but commercial orcharding has developed only during the past 50 or 60 years, and was only possible when the building of the railways permitted trees and fruit to be rapidly transported. In British Columbia commercial fruit growing is of comparatively recent origin, growth in production having been particularly rapid since 1910. The first apple trees were planted about 1850, but not until after completion of the C.P.R. in 1886 were many trees planted for commercial purposes. In 1934 B.C. produced 4,857,100 boxes of apples.

In 1934 the total value of Canadian commercial fruits was $15,024,000, including: apples, $8,788,000; pears, $523,000; plums and prunes, $273,000; peaches, $967,000; cherries, $467,000; strawberries, $1,986,000; raspberries, $880,000; apricots, $191,000; and grapes, $949,000.

The preliminary estimate places the 1935 apple crop for Canada at 4,069,400 barrels, as compared with 3,891,000 barrels in 1934. Other estimates for 1935, with the 1934 figures in parentheses, are: pears, 312,000 bu. (344,000 bu.); plums and prunes, 198,200 bu. (187,000 bu.); peaches, 715,000 bu. (407,000 bu.).

CHAPTER V

THE FOREST WEALTH OF CANADA—LUMBERING—PULP AND PAPER

The forests of Canada ranked third, after agriculture and mining, in 1933 among the primary industries in their contribution to the national production. It is estimated that forest products make up about 15 p.c. of all the freight hauled on Canadian railways. The large excess of exports over imports which the group "wood, wood products and paper" provides, amounting to $139,733,022 for the fiscal year ended March, 1935, constitutes an influential factor in Canada's international trade.

Log Chute on the Jordan River, Vancouver Island.
Courtesy, Canadian Government Motion Picture Bureau.

Of the total forested area of 1,254,082 square miles, about 31·6 p.c. carries merchantable timber, and 32·2 p.c. carries young growth. The remaining 36·2 p.c. is non-productive under present conditions.

The total volume of standing timber has been estimated at 273,657 million cubic feet capable of being converted into 425,250 million board feet of lumber and 1,746,639,000 cords of pulpwood, ties, poles and similar forest products. The eastern provinces are estimated to contain about 56 p.c., the Prairie Provinces about 15 p.c., and British Columbia about 29 p.c. of this total volume. The total drain on the forests, including loss by fire, etc., is estimated at 2,957 million cubic feet for 1933. But it does not follow that our capital will be exhausted in the ninety-two years which a simple calculation might imply. The rate of utilization will no doubt be reduced as the supply diminishes and losses due to fires, wasteful utilization and other preventable causes are curtailed. An annual increment of 10 cubic feet per acre, which is quite possible under forest

management, would provide in perpetuity for the needs of a population of over twenty-six millions at our present annual rate of use, which amounts to about 271 cubic feet per capita.

Represented in the three great forest divisions of Canada are approximately 160 different species of plants reaching tree size. Only 31 of these species are coniferous, but the wood of these forms 80 p.c. of our standing timber, and 95 p.c. of our sawn lumber.

Operations in the Woods

The value of forest production resulting from operations in the woods of Canada is, according to latest figures (1933) $94,000,000 annually, being made up of logs and bolts for sawmills valued at $23,000,000; pulpwood for domestic use and export valued at $31,000,000; firewood valued at $33,000,000; hewn railway ties valued at $1,370,000; poles valued at $960,000; and other primary forest products, such as square timber, fence posts and rails, and wood for distillation. The total value of forest products for 1933 shows an increase over 1932 with increases in the cases of logs, firewood, ties, mine timbers, wood for distillation and miscellaneous products, but decreases in connection with pulpwood, poles, fence posts and rails. (See table on next page.) It has been estimated that this rate of total primary

Transportation in the Forests.—Logging operations in British Columbia. *Courtesy*, "British Columbia Lumberman".

forest production involves the cutting of over 2,027,000 cubic feet of standing timber annually. In connection with operations in the woods, the forests not only provide the raw material for the sawmills, pulp-mills, wood distillation, charcoal, excelsior and other plants, but also logs, pulpwood and bolts for export in the unmanufactured state and fuel, poles, railway ties, posts and fence rails, mining timber, piling and other primary

products which are finished in the woods ready for use or exportation. There are also a number of minor forest products, such as maple sugar and syrup, balsam gum, resin, cascara, moss and tanbark, which all go to swell the total.

The following table gives the total values of the products of woods operations in Canada for the years 1929 to 1933 inclusive.

Value of the Products of Woods Operations, by Products, 1929-33

Product	1929	1930	1931	1932	1933
	$	$	$	$	$
Logs and bolts	79,278,543	75,563,041	32,889,204	18,029,759	23,158,381
Pulpwood	76,120,063	67,529,612	51,973,243	36,750,910	31,141,104
Firewood	41,764,507	43,786,064	44,237,948	30,627,632	33,213,973
Hewn railway ties	5,730,423	5,038,899	4,144,169	1,353,664	1,370,750
Square timber	4,179,077	2,945,748	151,114	99,403	[1]
Poles	6,677,559	6,733,259	3,057,546	1,411,209	963,951
Round mining timber	1,028,126	885,343	958,681	809,700	841,982
Fence posts	1,674,489	1,585,985	1,388,074	990,568	969,291
Wood for distillation	455,957	335,330	266,080	251,281	342,107
Fence rails	477,569	624,968	454,205	253,077	215,521
Miscellaneous products	2,183,816	1,825,245	1,603,666	1,529,049	1,556,082
Totals	**219,570,129**	**206,853,494**	**141,123,930**	**92,106,252**	**93,773,142**

[1]Included with "Miscellaneous Products" in 1933.

The Lumber Industry

Except in Nova Scotia, 90 p.c. of the forest land is still the property of the Crown—the lumbermen having been granted cutting rights only—and is administered by the various provincial departments.

Canada's sawmills produced, in 1933, 1,957,989 M feet board measure of sawn lumber, valued at $27,708,908. The greater part of this lumber is coniferous softwood, as the supply of the more valuable hardwoods such as hickory, oak and walnut (once plentiful in southern Ontario and Quebec) has been almost exhausted. The mills also produced 1,939,519 thousand shingles, valued at $4,448,876; 151,653 thousand lath, valued at $332,364; as well as numerous other products to the value of $6,947,909, bringing the total value of the products of the industry up to $39,438,057, an increase of 2·4 p.c. over the value of production for the previous year.

Production of Lumber and other Sawmill Products in Canada, 1933

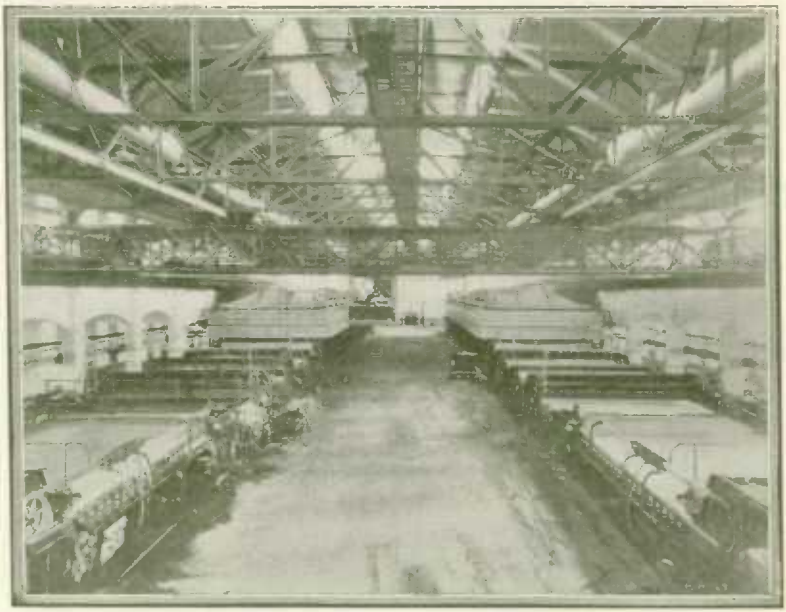
Province	Lumber Production		Other Sawmill Products	Total All Products
	M ft. b.m.	$	$	$
Prince Edward Island	4,946	84,021	21,647	105,668
Nova Scotia	101,212	1,315,925	386,985	1,702,910
New Brunswick	100,568	1,439,344	509,756	1,949,100
Quebec	275,210	4,075,215	2,496,157	6,571,372
Ontario	226,711	4,727,792	1,266,377	5,994,169
Manitoba	33,112	445,144	25,789	470,933
Saskatchewan	17,639	261,795	5,762	267,557
Alberta	65,247	736,305	47,890	784,195
British Columbia	1,133,344	14,623,367	6,968,786	21,592,153
Totals	**1,957,989**	**27,708,908**	**11,729,149**	**39,438,057**

The above table gives the production of lumber and other sawmill products, by provinces, in 1933. B.C. produced over 54 p.c. of the total value, Que., 17 p.c., Ont., 15 p.c., followed by N.B., N.S., Alta., Man., Sask., and P.E.I. in the order named.

Markets for Canadian lumber now include practically all the more important countries of the world. Canadian timbers have been given a preference in the British market.

The Pulp and Paper Industry

The pulp and paper industry ranks first among Canadian manufacturing industries in gross and net values of products, as well as in total number of employees and wages and salaries paid. Its development has taken place for the most part during the present century, and is due chiefly to the existence in Canada of abundant water powers adjacent to extensive resources of the various pulpwood species.



Newsprint Machines (Wet End) in a Canadian Pulp and Paper Mill.
Courtesy, Canadian Government Motion Picture Bureau.

The value of gross output of the industry increased rapidly and steadily until the boom years following the Great War when it jumped to a peak of over $232,000,000 in 1920. This was followed, in 1921, by a drop which was general throughout the industrial field. From that year on there was a steady recovery resulting in a total for 1929 of $243,970,761 followed by successive decreases to $123,415,492 in 1933. The large decreases of these four years were due to both lower price levels and diminished production; however, for 1933, production was substantially

greater than for the previous year although the total value was nearly 10 p.c. less. Production in 1934 shows an increase of 22 p.c. in quantity of pulp made and 27 p.c. in the quantity of paper. The gross value of production for the industry as a whole was $152,647,756, an increase of almost 24 p.c. over the figure for 1933.

The following table gives the gross and net values of production for the industry as a whole for the six years 1929 to 1934.

	Gross Production	Net Production
1929	$243,970,761	$147,096,012
1930	215,074,246	133,681,991
1931	174,733,954	110,786,276
1932	135,648,729	86,677,762
1933	123,415,492	75,782,971
1934	152,647,756	99,221,222

The net value of production, which represents the difference between the values of raw materials and the finished products, is the best indication of the relative importance of a manufacturing industry. Regarded from this viewpoint the pulp and paper industry has headed the lists of manufacturing industries since 1920, when it replaced the saw mills. The industry has also headed the lists in wages' and salaries' distribution since 1922, when it replaced the sawmills in this respect, and it has been first in gross value of products since 1925, exceeding flour-milling.

There are three classes of mills in the industry. These, in 1934, comprised 28 mills making pulp only, 43 combined pulp and paper mills, and 24 mills making paper only.

Production of Wood Pulp in the Two Principal Provinces, and in Canada, 1926-34

Year	Quebec		Ontario		Canada	
	Quantity	Value	Quantity	Value	Quantity	Value
	tons	$	tons	$	tons	$
1926	1,672,339	59,218,576	1,095,987	38,008,752	3,229,791	115,154,199
1927	1,749,965	60,884,169	1,007,118	35,034,468	3,278,978	114,442,550
1928	2,018,566	67,467,328	1,050,335	35,708,079	3,608,045	121,184,214
1929	2,174,805	69,286,498	1,255,010	39,963,767	4,021,229	129,033,154
1930	1,833,000	58,703,067	1,043,559	31,463,873	3,619,345	112,355,872
1931	1,513,658	41,884,387	958,100	22,944,943	3,167,960	84,780,819
1932	1,240,442	31,124,954	785,405	18,735,105	2,663,248	64,412,453
1933	1,360,704	29,860,706	867,417	18,644,259	2,979,562	64,114,074
1934	1,818,096	36,837,402	999,935	21,000,769	3,636,335	75,726,958

In 1934 the 71 mills making pulp produced 3,636,335 tons valued at $75,726,958, representing an increase of 22 p.c. in quantity and an increase of 18 p.c. in value from 1933, and of this about 79 p.c. by quantity was made in combined mills and used by them in paper-making. About 3 p.c. was made for sale in Canada and 18 p.c. was made for export.

Of the total pulp production in Canada in 1934, 64 p.c. was ground wood, 18 p.c. unbleached sulphite, 9 p.c. bleached sulphite, 6 p.c. sulphate and the remaining 3 p.c. screenings.

The total production of paper in 1934 was 3,069,516 tons, which, with certain unspecified products, was valued at $122,174,178. Newsprint and similar paper made up 2,604,973 tons, or 85 p.c. of the total, valued at $86,811,460, paper boards made up 9 p.c., wrapping paper 3 p.c., book

and writing paper 2 p.c., and miscellaneous papers the remainder. The Canadian production of paper increased three and three-quarter times in the period from 1917 to 1929, owing chiefly to the increase in the production of newsprint, although practically all the different kinds of paper that are used in Canada at the present time can be produced in Canadian mills.

Canada's newsprint production in 1934 was two and one-half times that of the United States, a few years ago the world's chief producer. In 1913 the production across the border was over three times as much as in Canada, but during the following 13 years, while production still increased in both countries, the gain in Canada was over 437 p.c. as compared with less than 30 p.c. for the United States. Since 1926 there has been an actual, as well as a relative, decrease in the United States' production.

The latest monthly figures of Canadian newsprint production are:—

1935—	tons	1935—	tons	1935—	tons
January	201,959	May	242,693	September	223,892
February	180,305	June	232,020	October	266,515
March	205,682	July	234,266	November	262,854
April	222,244	August	235,573	December	-

Trade in Newsprint and Other Forest Products.—A striking reflection of the increased production of newsprint between 1910 and 1934 is seen in the trade figures. The export trade in paper did not develop until the beginning of the present century. By 1910, however, the exports of newsprint paper were valued at over $2,000,000; in 1920 they were valued at over $53,000,000, and even during the subnormal fiscal year 1933-34 Canada exported 2,024,057 tons of newsprint valued at $73,238,482. For the fiscal year 1934-35 the exports were 2,392,523 tons valued at $82,147,844. This single item of export thus, at present, ranks second only to wheat. Canadian newsprint is exported to more than thirty countries and our total exports are greater than those of the rest of the world combined.

During the earlier stages of industrial development the exports of the wood and paper group were made up largely of unmanufactured products such as square timber and logs. At the time of Confederation these raw materials made up over 41 p.c. of the total export trade. To-day, while the wood and paper group forms a smaller part of the total (about 24 p.c. for the fiscal year 1933-34), its character has changed. Fully or chiefly manufactured goods now form 80 p.c. and unmanufactured or partly manufactured, 20 p.c. Raw materials form only a small part of the total.

Industries Founded on Wood and Paper.—According to the latest available statistics there were, in 1933, 4,105 establishments using lumber or paper as principal raw materials. These consisted of 1,786 depending on sawmills, and 2,319 depending on the paper-mills for their materials. They employed 63,655 workers who were paid over $65,000,000 and their products were valued at more than $179,000,000. The development of the paper-using industries in Canada was greatly accelerated by the production of cheap paper and paper-board made of wood-pulp, composition roofing, fibre wallboard and many other products which have found a definite place in modern building construction. For a further reference to industries founded on wood and paper the reader is referred to p. 96.

CHAPTER VI

MINES AND MINERALS

The mining and metallurgical industries of Canada are becoming increasingly important each year. The aeroplane has assisted greatly in the recent rapid development of the country and new camps are springing up in places heretofore considered inaccessible. Indeed, the aeroplane has played no small part in the successful discovery of many new and promising properties. To-day, Canada's mineral industry is second in importance in net value of production among the primary industries of the Dominion, being surpassed in output value only by agriculture. Rapid strides have been made since the turn of the century. Before 1900, gold and coal were the two major items of Canada's mineral production but now, among the countries of the world, Canada stands first in the production of nickel, platinum metals and asbestos, second in radium and zinc, third in gold, silver, cobalt and copper, and fourth in output of lead. In addition, there is a wide diversity of other metals and minerals which contribute considerably to the making up of a rather magnificent total.

Close-up of 'disappearing anode' of nickel being lowered into the acid bath of an electrolytic cell in an Ontario refinery. In twelve and one-half days, the worker will return to pick up a silvery cathode of pure nickel and the skeleton of the anode.

Courtesy, International Nickel Company of Canada, Limited.

Historical.—Though isolated discoveries had been frequent, systematic prospecting began only in the middle of the nineteenth century with the setting up of the Geological Survey of Canada under Sir William Logan, when the task of exploring, mapping and geologically surveying Eastern Canada was begun. With the completion of the C.P.R. in 1885, vast new territories were rendered accessible to the prospector who showed

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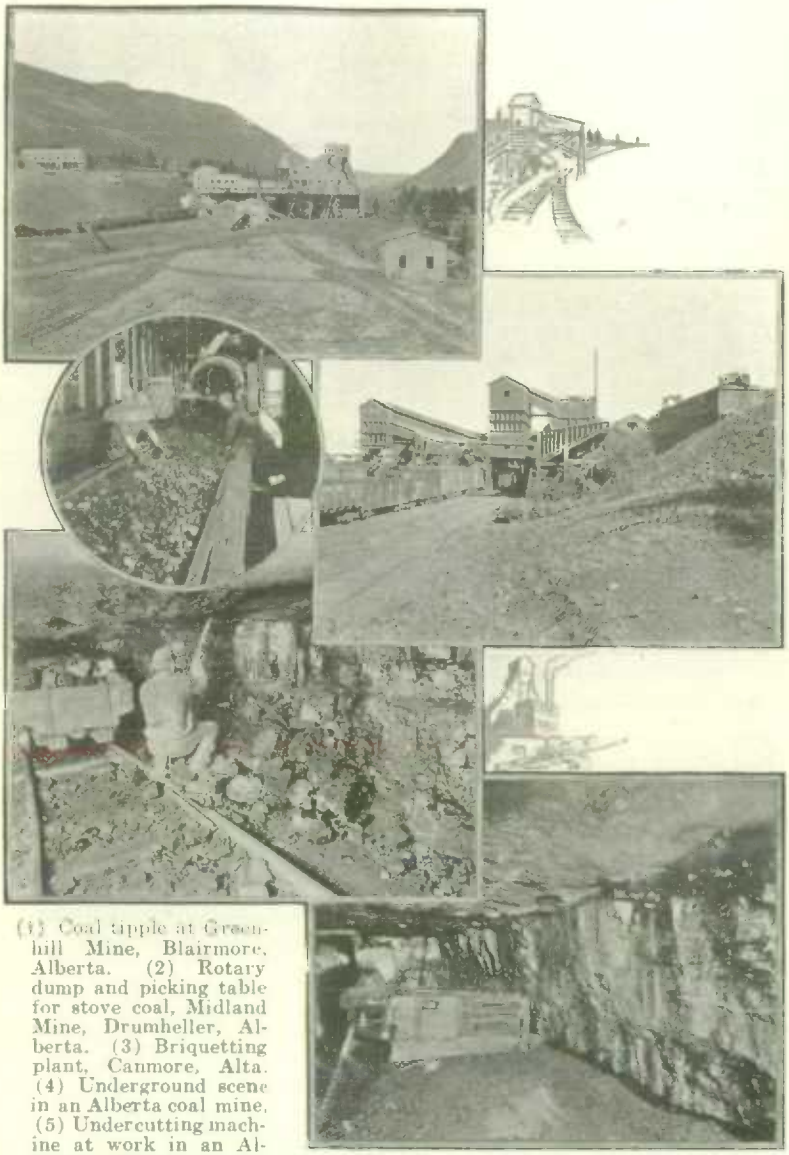
the way to other enterprise. The most important immediate find was a nickel-copper ore body near Sudbury, Ont., in 1883. Other discoveries occurred later on in British Columbia, where during the 'nineties a remarkable succession of ore-bodies, especially auriferous copper and argentiferous lead-zinc deposits, was located in the southeastern section of the province. The famous Klondyke rush of 1898 must not be omitted in this cursory enumeration. As transportation facilities were extended, other ore deposits in different regions were found, the silver of the Cobalt district, discovered in 1903 during the construction of the Temiskaming and Northern Ontario Railway, and the extraordinarily rich gold finds at Porcupine (1909) and Kirkland Lake (1912) being notable examples. More recently, copper-gold and auriferous quartz discoveries in the Rouyn section of Quebec have given rise to the Noranda smelter and several gold mines. Gold mines have also been opened up in the Red Lake, Matachewan and Michipicoten areas of Ontario, and gold, copper, zinc and other metal-bearing deposits of commercial value have been found in Manitoba, where large concentrating and smelting plants have been erected and brought into operation. Refineries for the production of electrolytic copper have been constructed and brought into operation at Copper Cliff, Ontario, and Montreal East, Quebec. In 1930, deposits of high grade silver-radium ores were discovered at Echo Bay, Great Bear Lake, N.W.T.

Statistics of the Modern Industry.—In 1886, the first year that comprehensive data were collected, the Dominion's mineral output amounted to little more than $10,000,000 in value, or about $2.23 per capita; in 1901, five years after the discovery of gold in the Yukon, production totalled nearly $66,000,000, or $12.16 per capita. Thereafter production fell off to $60,000,000 in 1904, but it moved forward rapidly again with the development of the silver properties at Cobalt and the increased production of nickel at Sudbury. From 1904 until 1918 the value of Canada's mineral production rose steadily, due partly to the gradual increase in demand for mineral products but mostly to the discovery of the Porcupine gold field in Ontario and to the general increases in prices during the war years. Production declined in 1919 because of surplus stocks but the boom year of 1920 caused prices to rise again and the output in that year reached a value of nearly $228,000,000. During the next few years conditions were less prosperous but the successful research work which was being done on the refractory lead-zinc ores of the Sullivan mine in British Columbia resulted in an enormous increase in output of lead and zinc. Kirkland Lake gold camp was becoming established and by 1926 conditions were again on the uptrend and in 1929 the value of the mineral production of the country had reached $310,000,000. About this time the Flinflon in Manitoba and the Noranda in Quebec were coming into production and although prices of the base metals have, during more recent years, reached all-time lows the quantity production has risen above previous high levels. At the present time Canada produces about 90 p.c. of the world's nickel, 60 p.c. of its asbestos, nearly 35 p.c. of its cobalt, 11 p.c. of its gold, 13 p.c. of its lead, 9 p.c. of its silver, 11 p.c. of its zinc, and 13 p.c. of its copper; the Dominion is now also one of the world's larger producers of the platinum metals, radium and uranium.

Owing to the low prices obtainable for base metals, the total value of Canada's mineral production fell to $191,228,000 in 1932, but, largely owing to the rising price of gold, in 1933 the total rose to $221,500,000; for 1934 to $278,000,000; and for 1935 it is estimated at $308,164,000.

COAL MINING IN ALBERTA



(1) Coal tipple at Greenhill Mine, Blairmore, Alberta. (2) Rotary dump and picking table for stove coal, Midland Mine, Drumheller, Alberta. (3) Briquetting plant, Canmore, Alta. (4) Underground scene in an Alberta coal mine. (5) Undercutting machine at work in an Alberta coal mine.

Courtesy, W. J. Oliver and the Canadian Government Motion Picture Bureau.

Mineral Production, Calendar Year 1934, and Official Estimate for Calendar Year 1935

Item	1934		1935[1]	
	Quantity	Value	Quantity	Value
		$		$
Metallics				
Gold ..... fine oz.	2,972,074	61,438,220	3,290,664	68,024,000
Estimated exchange on gold produced	–	41,098,333	–	47,774,000
Silver ..... fine oz.	16,415,282	7,790,840	16,413,482	10,346,000
Nickel ..... lb.	128,687,340	32,139,425	139,194,348	35,450,000
Copper ..... lb.	364,761,062	26,671,438	418,753,148	32,322,000
Lead ..... lb.	346,275,576	8,436,658	337,459,472	10,620,000
Zinc ..... lb.	298,579,683	9,087,571	316,250,769	9,825,000
Other metals	–	7,448,483	–	7,367,000
Totals	–	194,110,968	–	221,728,000
Non-Metallics				
Fuels				
Coal ..... ton	13,810,193	42,045,942	14,108,718	42,499,000
Natural gas ..... M cu. ft.	23,164,324	8,750,652	22,567,700	8,367,000
Petroleum, crude ..... brl.	1,410,895	3,449,162	1,430,200	3,406,000
Peat ..... ton	1,878	7,343	2,000	8,000
Totals	–	54,262,099	–	54,280,000
Other Non-Metallics				
Asbestos ..... ton	155,980	4,036,326	212,857	6,972,000
Feldspar ..... ton	18,302	147,281	15,934	128,000
Gypsum ..... ton	461,237	863,776	556,140	920,000
Magnesitic dolomite	–	382,927	–	474,000
Quartz ..... ton	272,563	482,365	228,488	421,000
Salt ..... ton	321,753	1,954,953	354,517	1,723,000
Sodium sulphate	–	587,986	–	341,000
Sulphur[2] ..... ton	51,537	515,502	60,466	585,000
Talc and soapstone	–	180,777	–	156,000
Other non-metallics	–	449,969	–	410,000
Totals	–	10,501,762	–	12,130,000
Clay Products and Other Structural Materials				
Clay products (brick, tile, sewer pipe, pottery, etc.)	–	2,680,410	–	2,800,000
Cement ..... brl.	3,783,226	5,667,946	3,587,913	5,583,000
Lime ..... ton	368,113	2,745,797	426,372	3,061,000
Stone, sand and gravel	–	8,192,608	–	8,582,000
Totals	–	19,286,761	–	20,026,000
Grand Totals	–	**278,161,590**	–	**308,164,000**

[1] Preliminary figures. [2] In sulphuric acid made and in pyrites shipped

Mineral Production of Canada, by Provinces 1932, 1933 and 1934

Province or Territory	1932		1933		1934	
	$	p.c. of total	$	p.c. of total	$	p.c. of total
Nova Scotia	16,201,279	8·5	16,966,183	7·7	23,310,729	8·4
New Brunswick	2,223,505	1·2	2,107,682	0·9	2,156,151	0·8
Quebec	25,638,466	13·4	28,141,482	12·7	31,269,945	11·2
Ontario	85,910,030	44·9	110,205,021	49·8	145,565,871	52·3
Manitoba	9,058,365	4·7	9,026,951	4·1	9,776,934	3·5
Saskatchewan	1,681,728	0·9	2,477,425	1·1	2,977,061	1·1
Alberta	21,183,312	11·1	19,702,953	8·9	20,228,851	7·3
British Columbia	27,326,173	14·3	30,794,504	13·9	41,206,965	14·8
Yukon	2,005,367	1·0	2,041,223	0·9	1,628,879	0·6
Northwest Territories	–	–	31,829	–	40,204	–
Totals	**191,228,225**	**100·0**	**221,495,253**	**100·0**	**278,161,590**	**100·0**

Review of Conditions in 1935

The increasing economic importance, well-being and stability of the Canadian mining industry are strongly reflected in the statistics relating to mineral production for 1935. The regular half-yearly survey of output evidenced an early and almost general upward trend in output throughout practically all major branches of the industry. Returns for the first six months of the year, as compared with those of the corresponding period of the preceding year, revealed pronounced increases in the output of arsenic, copper, gold, nickel, selenium, tellurium, zinc, asbestos, graphite and gypsum.

Base metal prices, which had remained at rather discouraging levels during the early part of 1935, experienced improvement toward the latter half of the year; the average price per lb. of copper in Canadian funds for January, 1935, was 6·8202 cents and had improved to 8·4208 cents by September; zinc was 2·6167 cents in January as compared with 3·4201 cents for September. Lead prices also improved in 1935 from 2·2517 cents in January to 3·6082 cents in September and the precious metals, gold and silver, realized substantial gains in price, silver increasing from 54·3418 cents per fine ounce in January to 65·8954 cents in September and gold averaged $35.11 per fine ounce for the nine-month period.

The increase in the value of non-ferrous metal exports during 1935 was very pronounced; this increase became apparent in the third quarter when the value of these exports for the nine months ended September approximated $82,714,000 as compared with $70,794,000 for the same period ended September, 1934. Especially noteworthy, for the nine-month period ended September, 1935, were the increases recorded in the export value of aluminium, copper, nickel and silver bullion; lesser advances were made for lead, zinc and platinum, while among the non-metal exports those of asbestos realized a substantial gain in value. The general trend in the flow of non-ferrous metals to European countries appeared to be accentuated in 1935.

Improvement in the fuel and structural material industries, while not so extensive in scope or pronounced as in some of the other branches of the mining industry, was of sufficient proportions to indicate a healthy and widespread revival in general industrial activities.

Possibly the most interesting and outstanding feature of Canadian mining operations in 1935 was the intensity of effort generally displayed in the search for and development of auriferous ore deposits; this was amply emphasized early in the year when the value of the Canadian gold production for the first six months of 1935 was the highest ever recorded for any similar period in the history of Canadian gold mining. A decided impetus was given to Canadian gold development as a result of the $1,000,000 Dominion Government program of geological field work undertaken during the 1935 season. The attention of the 180 parties placed in the field is understood to have been focused mainly on areas where the geological structures were believed to be favourable to gold deposition.

In the Budget Speech of Mar. 22, 1935, the Minister of Finance stated that the gold bullion tax would not be continued after May 31, 1935, but that important changes would be made in the depletion allowance provisions of income tax regulations for gold and silver mines. There-

after, the allowance for depletion to mining companies, the principal productuct of which is gold or silver, was to be 33⅓ p.c. instead of 50 p.c. Furthermore, dividends received by shareholders are now to be taxed on the basis of a 20 p.c. depletion allowance instead of 50 p.c. as formerly.

Nova Scotia.—Coal in Cape Breton, N.S., was referred to as early as 1672; reference to the mineral is contained in a report by Sieur Nicholas Denys who conducted exploration for minerals in New France under a patent granted by Louis XIV. The production of bituminous coal has since constituted the principal mining operation in Nova Scotia. The mines are located entirely in the northeastern part of the province and are developed to a high standard of efficiency. Assistance to the coal-mining industry in the form of a subvention paid by the Dominion Government has been responsible to considerable extent for the movement of large tonnages of Nova Scotia coal into Quebec and Ontario. During 1934, approximately 1,814,000 tons of Nova Scotia coal were moved under the government-assisted rates, and during the first nine months of the current year 1,178,885 tons were moved. Coal-mining operations throughout 1935 were maintained on a fairly steady basis although the output during the first nine months of the year of 4,248,300 short tons represented an 8·9 p.c. falling-off from the corresponding period of 1934. Interest in the exploration and development of the numerous gold deposits of Nova Scotia continued unabated and a production of over 3,141 fine ounces during the first half of 1935 as against an output of only 858 fine ounces for the same months of the preceding year reflected the effort being exerted toward the establishment of gold mining on an economic basis. Improvement in the gypsum industry was emphasized early in the year by increased shipments, while salt-mining operations at the Malagash mine and diatomite production by International Diatomite Industries, Ltd. continued as important factors in Nova Scotia's mineral industry.

New Brunswick.—In this province coal and gypsum mining continued in 1935 to comprise two of the more important branches of the mining industry. Production of bituminous coal during the first nine months of 1935 totalled 237,158 tons as compared with 228,088 tons during the corresponding period of 1934. During the first nine months of the year under review, 8,095 tons were moved under government-assisted rates. Improvement in gypsum shipments was reflected in the output of 11,550 tons during the six months ended June 30, 1935, as against a tonnage of 7,876 for the same months of 1934. An improvement in petroleum production was also recorded in the half-yearly survey of these industries. In addition to the mineral products referred to, the province continued to produce substantial quantities of natural abrasive stone, clay products, lime and other structural materials.

Quebec.—The extent and diversity of mining development and exploration conducted in 1935 throughout the mineral-bearing areas of Quebec, together with the increasing value of mineral output, confirm the status of this province as one of the major Canadian mineral-producing provinces. In the Eastern Townships, the asbestos industry had recorded by mid-year a gain of 27 p.c. in the quantity and 36 p.c. in the value of shipments over the first half of the preceding year. Metal mining for the same period of 1935 had realized a total value in output of $10,745,000 as compared with $9,532,000 for the first six months of 1934. The

copper mining and smelting operations of Noranda Mines, Ltd. at Rouyn were continued on a satisfactory basis and remain the greatest of their kind within the province. At Eustis in the southeastern part of the province, the Consolidated Copper and Sulphur Co., Ltd. maintained production of copper and sulphur concentrates, while renewal in the output and shipment of silver-lead-zinc concentrates occurred at Notre Dame des Anges, Montauban township. The electrolytic refining of copper by

Sectional Granite Pillars Quarried in Quebec and Ready for Shipment.
Courtesy, Department of the Interior, Ottawa.

Canadian Copper Refiners, at Montreal East, increased in 1935 and it is interesting to note that a very considerable increase in the production of by-product selenium occurred at this plant. Prospecting and exploration of both old and new districts for auriferous ores increased throughout the year; new mines were brought into production and development work was intensified at older properties. Some of the more outstanding events in Quebec gold mines in 1935 included the initial milling of gold ores at the Lamaque and Canadian Malartic mines in April, and the commencement of milling at the Arntfield property on July 29. New mills were also reported under construction at the Shawkey and Perron gold mines and an announcement was made that a new milling plant would also be installed at the Stadacona, located one and a half miles south of the Noranda mine.

Ontario.—The mining of gold and nickel-copper ores continued to retain a predominant position in the mining industry of the province of Ontario during the year 1935. Prospecting for, and development of, gold-bearing deposits were possibly more extensive than for any previous year in the history of the province. Considerable interest in the older camps was largely focused on structure and the extension of economic limits of ore zones. In the newer areas or camps stimulated efforts were made in the investigation of virgin ground by stripping, diamond drilling or underground exploration. Important development and exploratory programs were conducted in the district of Patricia, Lake of the Woods area,

Matachewan, Little Long Lac and Sturgeon River sections and various other areas considered to possess economic possibilities. Interesting new features of Ontario's gold-mining industry in 1935 included the bringing into production on April 17 of the 125-ton mill at the Pickle Crow mine, Patricia district; the commencement of milling on Mar. 1 at the McKenzie Red Lake mine, Red Lake district; and the turning over on April 22 of the new 50-ton mill at the Tashota mine, Thunder Bay district. An appreciation of the economic importance of Ontario gold mines in the Dominion can be better realized when it is stated that a special survey recently conducted by the Dominion Bureau of Statistics determined an expenditure by these mines in 1934 of $16,356,000 for consumable stores, equipment, insurance and freight. In the Sudbury area both the International Nickel Company of Canada, Ltd. and Falconbridge Nickel Mines, Ltd. conducted steady mining and smelting operations throughout the year and maintained their nickel output at the high levels necessary to meet the requirements of an increasing world demand. Electrolytic copper production at the Copper Cliff refinery was continuous during 1935 and a new high record was established for this plant in the production of selenium and tellurium. It is of interest to note that in August of 1935 the smelting plant of the Chromium Mining and Smelting Corporation, Ltd. was blown in at Sault Ste. Marie, Ontario. Ferro-chrome is being produced in this plant from chromite mined at the company's property located at Obonga lake, west of lake Nipigon. At Deloro, Hastings county, the Deloro Smelting and Refining Company, Ltd. continued to treat silver-cobalt ores mined in the Cobalt and Gowganda areas for the production of silver bullion, cobalt, arsenic, etc. Early statistical returns received from operators producing non-metallic minerals indicated a somewhat general improvement in these industries during 1935; this was particularly apparent for feldspar, gypsum, salt, lime and graphite.

Manitoba.—Mining, although a relatively young industry in Manitoba, has made remarkable advances throughout the past decade. Especially pronounced in 1935 was a distinct concentration of effort in the search for and development of gold-quartz properties. Prospecting and exploration in virgin areas were widespread and in both the new and older camps development programs were conducted on ore bodies of possible commercial importance. In the Rice-Long Lakes district, the San Antonio gold mine was in continuous operation throughout the year and in June the milling rate was reported at better than 300 tons daily. Central Manitoba mine in the same district was active throughout the year and completed a comprehensive campaign of diamond-drill exploration; considerable development and underground exploration work was also conducted at the Gunnar gold mine and a 150-ton capacity mill was suggested in September; milling operations at the Diana gold mine were reported as satisfactory in 1935 and at Rice Lake extensive exploration work was conducted on the Forty-Four mine. Milling was officially commenced for the first time on Sept. 15 at God's Lake gold mine, Gods Lake; other important gold-mining operations conducted within the province during the year included those of Laguna gold mines at Herb Lake and Knee Lake gold mines, at Knee Lake. At Flinflon, the mining and metallurgical operations of the Hudson Bay Mining and Smelting Co., Ltd. continued in 1935 to constitute the greatest of their kind in Manitoba; the extraction of copper-gold-silver-zinc ore from the Flinflon deposit was continuous during the year and

both the copper smelter and electrolytic zinc refinery were in steady operation. Returns from the company, received as early as mid-year, indicated a distinct increase in metal production as compared with 1934. Non-metallic minerals or their products produced in the province in 1935 included feldspar, gypsum, salt, lime, brick, cement and a relatively small output of coal.

Saskatchewan.—During recent years the only metal-mining operations of any magnitude conducted in Saskatchewan were those in the area immediately west of the Manitoba-Saskatchewan boundary where it intersects the Flinflon ore deposit; however, following recent new discoveries of gold a mining "boom" developed near lake Athabaska in the northwestern part of the province. Prospecting was very active in this area throughout the entire 1935 season and several promising gold properties are now reported under investigation. Coal mining is the predominant non-metallic mining industry in the province and production totalled 528,166 tons during the nine months ended September, 1935. Sodium sulphate or natural salt cake is another important non-metallic product, the shipments of which comprised an important part of the provincial mineral output in 1935. Salt, silica and a variety of high-grade clay products including refractories were also produced during the year.

Alberta.—The province of Alberta is essentially a producer of the non-metallic minerals, particularly coal, natural gas and petroleum. In 1935, the mining of the first-mentioned fuel was conducted in many fields throughout the province and it is interesting to record that its utilization for domestic purposes in Central Canada appeared to receive more recognition than for some years past. Production during the first nine months of 1935 amounted to 3,413,560 tons and in this province, as well as in Saskatchewan and British Columbia, the industry has been aided by the government subventions on coal. The production of petroleum came, as usual, chiefly from the Turner Valley field and was approximately normal in quantity. Near Fort McMurray, interest continued to be shown in the development of the enormous tar-sand deposits occurring in that district. A small production of alluvial gold was reported during the year and an appreciable output of clay products, lime and cement was recorded.

British Columbia.—Mining in British Columbia has constituted one of the major basic industries of the province for many years. Coal production during the first nine months of 1935 totalled 945,956 tons. Increased value of total metal output reflected progress in the metal-mining industry. At Trail, the great metallurgical plants of Consolidated Mining and Smelting Co. of Canada, Ltd. were in operation throughout the entire year, and the production of silver, lead and zinc from these works was sustained at levels commensurate with the demand of world markets; ores treated at Trail came largely from the famous Sullivan mine located at Kimberley. The production and shipment of copper and sulphur (pyrites) concentrates continued in 1935 at the Britannia mine; however, the copper-mining industry of the province suffered a severe loss during the year in the cessation of mining and smelting at Anyox by the Granby Consolidated Mining, Smelting and Power Co., Ltd. Gold mining, both lode and alluvial, were featured by the spreading prospecting activities in new districts and by concerted efforts in the older camps to increase production and establish new producers. In the Portland Canal

district, the Premier gold mine resumed milling on Mar. 14 after loss of its power plant by fire in November, 1934. In the Bridge River area, the Pioneer gold mine produced steadily during 1935, and in March, 1935, positive ore reserves of the mine were estimated at 307,400 tons averaging 0·7 oz. gold per ton. In the same area the Bralorne mine reported continuous production throughout the year and in October a merger of Bradian (adjoining) and Bralorne mines was announced. Other important gold properties in production or under development in 1935 included: the Big Missouri, in the Portland Canal area; Cariboo Gold Quartz and Island Mountain, near Barkerville; B.R.X., Bridge River area; Reno and Sheep Creek, in the Sheep Creek area; the Relief-Arlington, near Erie; the Surf Point, on Porcher island; the Wayside, in the Lillooet district; the Windgrass, in the Kamloops Division; Vidette, at Savona; the Nickel Plate, at Hedley; and the Ymir Consolidated at Ymir. Non-metallic minerals, other than coal, produced in the province in 1935 included diatomite, gypsum, magnesium sulphate, silica, sodium carbonate, mica and talc, and in addition important quantities of sulphur were recovered from the waste gases of the Trail smelter. Structural materials produced included clay products, cement, lime, stone, sand and gravel.

Yukon and N.W.T.—Alluvial gold mining was conducted on an extensive scale in the Yukon Territory during 1935, the metal being recovered both by hand and dredging. In the Carmacks area auriferous quartz veins were investigated and it was reported that British capital was entering this camp. Mining in the Mayo district was featured by the active development of silver-lead deposits and the erection of a new mill at Galena Hill by the Treadwell Yukon Company.

In the Northwest Territories, development work was continued by several companies on the silver-pitchblende deposits occurring in the Great Bear Lake district. Shipments of these ores were made by Eldorado Gold Mines, Ltd., to its refinery located at Port Hope, Ontario; this company is now an important producer of radium and uranium products, also of silver. It is interesting to note that new and promising discoveries of lode gold were reported in 1935 from the Great Slave Lake area.

Estimate for 1935.—The annual estimate of Canadian mineral production, as based on a preliminary survey conducted by the Bureau, indicates an increase of 11 p.c. over 1934. Production during the calendar year 1935 was valued at $308,164,000 as against $278,161,590 in the preceding year.

Considered by groups and compared with corresponding data for 1934, metals showed an advance of 14 p.c. to a total of $221,728,000; fuels, including coal, natural gas, crude petroleum and peat amounted to $54,280,000, a slight gain; non-metallic minerals, other than fuels, increased 16 p.c. in value to $12,130,000; and structural materials, including cement, lime, clay products, stone and sand and gravel, advanced 4 p.c. to $20,026,000.

Gold production at 3,290,664 fine ounces, worth $115,798,000, was a record. Many new mines were brought to the production stage and several new mills are being erected. Copper production at 418,753,148 pounds and nickel output totalling 139,194,348 pounds have never been exceeded in the history of mining in Canada. Zinc output was also greater than ever before. New output records for selenium, tellurium and sulphur were also made.

CHAPTER VII

THE WATER POWERS OF CANADA

Canada, rich in natural resources of field, forest and mine, possesses water powers of outstanding value to her commercial, industrial and domestic life. The seaward flow from her great freshwater areas is capable of providing for a potential hydro-electric installation, estimated in accordance with modern engineering practice, at more than 43,000,000 h.p. Development as at Jan. 1, 1936, had resulted in the installation of hydraulic turbines totalling 7,909,115 h.p. or 0·72 h.p. per capita. This installation, great as it is, represents only 18·4 p.c. of the total possible installation stated above.

Aerial View of Montmorency Falls and Surrounding District, Quebec.—The picture gives a good idea of the close relationship of the development of industry in close proximity to hydro resources. The power houses are seen on the extreme left and the large textile plant below the falls takes its power entirely from the development. This is one of the largest textile mills in Canada.

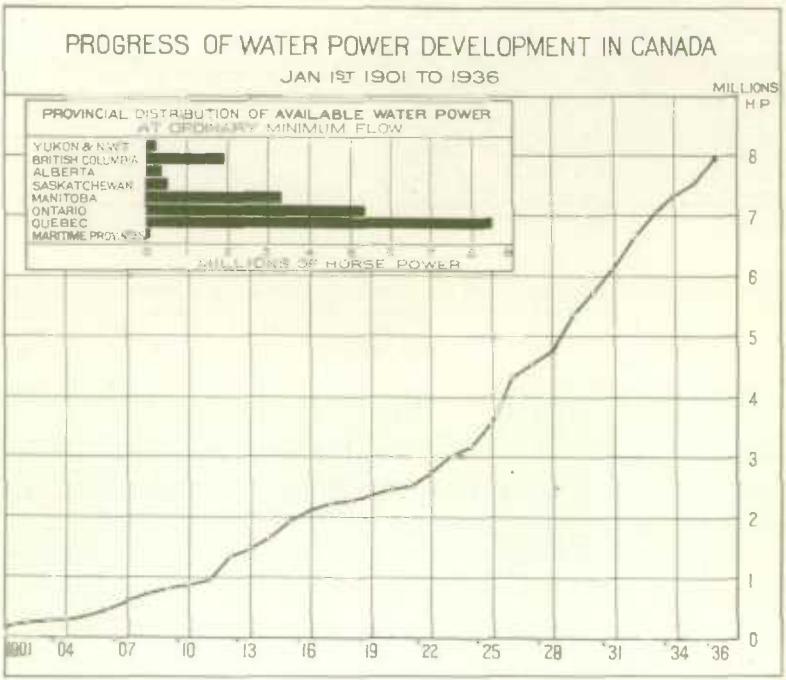
The table below shows the hydraulic turbine installation as at Jan. 1, 1936, and also the estimated potential power by provinces. These estimates include only rivers where the flows and heads have been measured; they are based on continuous power available twenty-four hours each day at 80 p.c. efficiency, *i.e.*, 80 p.c. of the theoretical power. The two estimates shown are: first, power available throughout the year based on the minimum flow or flow during the dry periods; and second, the maximum available for six months. Because power is seldom required continuously 24 hours each day to the full capacity of the generating

equipment, water can generally be stored during the hours of light demand and used during the hours of heavy demand. Consequently, whenever feasible, power plants are equipped with generating machinery having a capacity much greater than the theoretical continuous power of the waterfall.

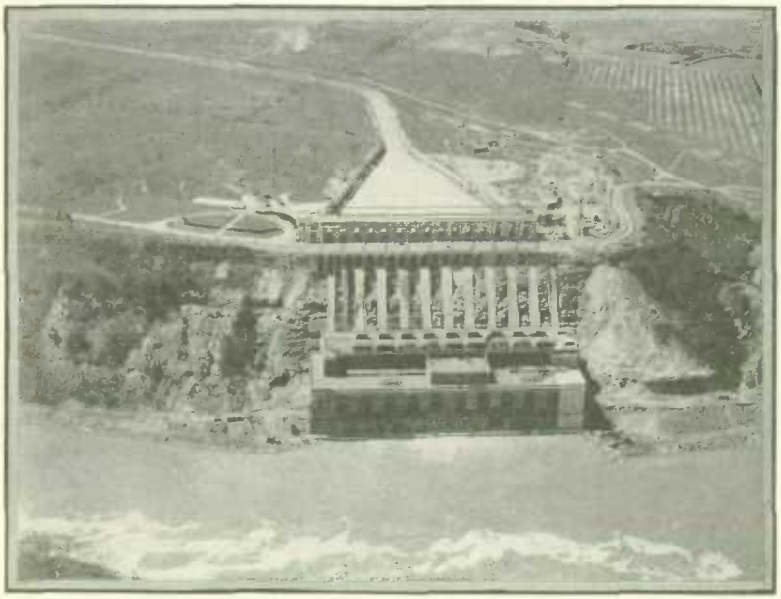
Available and Developed Water Power in Canada, by Provinces, Jan. 1, 1936

Province or Territory	Available 24-hour Power at 80 p.c. Efficiency		Turbine Installation
	At Ordinary Minimum Flow	At Ordinary Six Months' Flow	
	h.p.	h.p.	h.p.
Prince Edward Island	3,000	5,300	2,439
Nova Scotia	20,800	128,300	116,367
New Brunswick	68,600	169,100	133,681
Quebec	8,459,000	13,064,000	3,853,320
Ontario	5,330,000	6,940,000	2,560,155
Manitoba	3,309,000	5,344,500	392,825
Saskatchewan	542,000	1,082,000	42,035
Alberta	390,000	1,049,500	71,597
British Columbia	1,931,000	5,103,500	718,497
Yukon and Northwest Territories	294,000	731,000	18,199
Totals	**20,347,400**	**33,617,200**	**7,909,115**

The progress of water power development in Canada has been extremely rapid as is indicated by the diagram below, its stability has been proven during the recent years of industrial and financial depression.



Provincial Distribution of Water Power.—The water powers of the Maritime Provinces while small in comparison with the sites in the other provinces constitute a valuable economic resource, the development of which is supplemented by power from abundant indigenous coal supplies. Quebec with almost double the available water power and more than one and three-fifths times the hydraulic installation of Ontario, the province next in order, has achieved a remarkable development during the past ten years, her installation considerably more than doubling in that period. Almost eighty-five per cent of her total installation is operated by nine large joint stock company central station organizations. Ontario, like Quebec, without local coal supplies, also has abundant water power



Chippewa Plant, Queenston, Hydro-Electric Power Commission of Ontario.—Installation 560,000 h.p., average head 305 ft. The concrete embedded steel pentstocks shown running down the face of the cliff convey the water from the intake canal to the generators in the power house below. Power is distributed over the Niagara system of the Hydro-Electric Power Commission. This is one of the largest power developments in Canada.

Courtesy, Canadian Government Motion Picture Bureau.

resources. The Hydro-Electric Power Commission of Ontario, a co-operative municipally-owned enterprise, province-wide in its field, operates plants aggregating almost sixty-three per cent of the total hydraulic installation of the province and serving 760 municipalities. Of the Prairie Provinces, Manitoba has the greatest power resources and the greatest development, seventy-seven per cent of the total hydraulic development of the three provinces being installed on the Winnipeg river to serve the city of Winnipeg and adjacent municipalities and over the transmission network of the Mantioba Power Commission some sixty municipalities in Southern Manitoba. British Columbia, traversed by three distinct moun-

tain ranges, ranks fourth in available power resources and her hydraulic development is exceeded in only Quebec and Ontario. The water powers of the Yukon and Northwest Territories, while considerable, are so remote from markets as to limit their present commercial development to local mining uses.

Construction during 1935.—The Beauharnois Light, Heat and Power Co. added two units of 50,000 h.p. each to the 300,000 h.p. already installed in its plant at Beauharnois on the St. Lawrence river some 25 miles west of Montreal. Preliminary work for the installation of two more units, ten in all, has been completed while the power house as at present built provides for the ultimate installation of four additional units, a total of 700,000 h.p. The Maclaren-Quebec Power Co. added a fourth unit of 30,000 h.p. to its High Falls station on the Lièvre river.

The Hydro-Electric Power Commission of Ontario completed its Rat Rapids development at the outlet of lake St. Joseph on the Albany river, installing 1,200 h.p. to supply electrical power to the Pickle Crow and Central Patricia gold mines. The town of Orillia constructed a 4,200 h.p. development at Workman Falls on Gull river to augment the supply from its Swift Rapids plant of 6,360 h.p. on Severn river. A second plant of similar capacity utilizing the remaining head at the site will be installed when demand develops.

In northeastern Manitoba the Kanuchuan Power Co. installed a 1,900 h.p. plant on Island river to supply the God's Lake mining area.

Central Electric Stations

Over 86 p.c. of all water power developed in Canada is developed by central electric stations and, although there are a large number of stations (261) which derive their power entirely from fuels and 40 hydraulic stations which also have thermal auxiliary equipment, 98 p.c. of all electricity generated for sale is produced by water power.

The production of electric energy by central electric stations has increased at a very rapid rate since the Great War. The output in 1919, the first year for which production has been compiled, amounted to 5,497,204,000 kilowatt hours and by 1930 it had grown to 18,093,802,000 kilowatt hours, or an increase of 230 p.c. With the incidence of the industrial depression it dropped 12 p.c. in 1932, but in 1933 about half the loss was regained and the output for 1934 reached a new high record of 21,197,000,000 kilowatt hours and the output for the first eleven months of 1935 indicates a still greater output for this year of around 23,000,000,000 kilowatt hours. About a third of this increase was in electricity used in electric boilers and the other two-thirds was in lighting and power consumptions. The pulp and paper industry is the largest of all industries in respect to consumption of electric energy. During 1934, this industry purchased 8,360,000,000 kilowatt hours from central electric stations, or about 40 p.c. of the total output, and in addition the mills produced 1,184,000,000 kilowatt hours for their own use, making a total consumption in this industry of 9,545,000,000 kilowatt hours which was an increase of 24 p.c. over the 1933 total. Other large users of electric energy, such as: the primary iron and steel; non-ferrous smelting; acids, alkalies and salts plants; also showed substantial increases in the quantities of electricity

used. In 1934, approximately 8 p.c. of the total output of central electric stations was used for residence lighting and other domestic services and 5·9 p.c. was exported to the United States.

According to latest data the rated capacity of electric motors in manufacturing industries constitutes 77 p.c. of that of all power machines and in several industries, such as sugar refineries, dyeing, cleaning and laundering, bridge and structural steel, machinery, brass and copper, cement, fertilizers and artificial ice plants, the power used is almost exclusively electric. Over 84 p.c. of all electric motors in manufacturing industries are driven on power purchased from central electric stations and the remainder are driven by electricity generated within the industries.

(1) Lower Bonnington Falls, 60,000 h.p., and (2) South Slocan, 75,000 h.p. generating stations of the West Kootenay Power and Light Company, Ltd., on Kootenay river. These stations are inter-connected with two other large plants on the same river to supply the Nelson and Boundary Districts of British Columbia.

Courtesy, Dominion Water Power and Hydrometric Bureau.

The substitution of electric energy for other forms of energy for driving machines is increasing each year and also it is displacing coal in other fields; enormous quantities of electric energy are used, as mentioned above, for producing steam in electric boilers, particularly in paper mills. Most of the power used for this purpose is off-peak or surplus power, for which there is no other market at the time, and when it is withdrawn coal

is substituted, but in some cases it is purchased on contract to be delivered as required. In 1924, only 260,489,000 kilowatt hours were used in electric boilers. The consumption grew steadily and in 1934 it amounted to 5,130,700,000 kilowatt hours, or almost 20 times the 1924 consumption. New boilers are being installed in industries using steam for process purposes and for the first nine months of 1935 the total consumption was 17·4 p.c. over the 1934 figure for the same period. The growth in power production, as indicated on p. 80, has not been entirely in off-peak power, which if not sold would go over the dam, nor in exports to the United States; the total production less the exports and deliveries to electric boilers, or what may be considered as "firm" power, has grown at a rapid rate during the present year and the total for the first nine months of the year was 8·9 p.c. over the corresponding total in 1934 and 11·7 p.c. over the 1930 total, the previous peak year. Domestic use, or the consumption for residence lighting and appliances in the homes, has also grown from 1,489,575,000 kilowatt hours in 1930 to 1,650,395,000 kilowatt hours in 1933, or by 8 p.c. during what has been probably the worst three years Canada has experienced in an economic sense.

Investments in central electric stations amounted to $1,386,532,055 which was larger than for any other manufacturing industry, revenues for 1933 amounted to $117,532,081 and 1,371,806 domestic customers were served. These are approximately 60 p.c. of all families in Canada, both urban and rural. The average cost for domestic service was 2·18 cents per kilowatt hour, or considerably less than half of the average cost in the United States.

The average monthly outputs of the large central electric stations in Canada, 1926-35, are shown below.

Average Monthly Output, Central Electric Stations in Canada, 1926-35
(Thousands of kilowatt hours)

Year	From Water	From Fuel	Total
1926	991,041	16,746	1,007,787
1927	1,193,481	18,944	1,212,425
1928	1,340,292	21,192	1,361,484
1929	1,441,203	27,622	1,468,825
1930	1,463,330	25,230	1,488,560
1931	1,339,907	26,071	1,365,978
1932	1,296,360	25,845	1,322,205
1933	1,436,486	26,150	1,462,636
1934	1,733,810	29,484	1,763,294
1935 (ten months' average)	1,879,684	30,793	1,910,477

The above figures are interesting as showing the consistent progress of the industry from 1926 to 1930. Even in the worst of the depression years, 1932, the drop in output was only a little over 11 p.c. of the maximum, and, from July, 1933, onward there has been a very rapid and fairly continuous increase. The index number adjusted for seasonal variations reached an all-time high point at 202·55 in October, 1935, the average for 1926 being equal to 100.

CHAPTER VIII

THE FISHERIES OF CANADA

Fishing may be regarded as the earliest commercial industry of Canada. Cabot in 1497 discovered the cod banks of Newfoundland and reported that the sea was so covered with fish that they could be caught with baskets, "a stone being attached to make the basket sink in the water".

Voyages along the coast of what is now Canada, soon showed the cod as plentiful inshore as on the outer banks and it became common for a crew to anchor in a bay, erect a hut on shore and make daily excursions to the fishing grounds—the catch being salted and dried on land and at the end of the season shipped to France. Soon the fishermen began to stay all winter and permanent fishing settlements were thus established.

Canada's extensive fishing grounds border the Atlantic and the Pacific and also include an unrivalled inland fresh-water system of lakes and rivers. On the Atlantic, from Grand Manan to Labrador, the coast line, not including lesser bays and indentations, measures over 5,000 miles. The bay of Fundy, 8,000 square miles in extent, the gulf of St. Lawrence, fully ten times that size, and other ocean waters comprise not less than 200,000 square miles, or over four-fifths of the fishing area of the North

The Schooner *Bluenose* of the North Atlantic Fishing Fleet.—After spending the summer in British waters, and participating in the naval and marine activities connected with the observance of the King's Silver Jubilee, the *Bluenose* sailed from Plymouth in October, 1935, for her home port, Lunenburg, N.S.

Courtesy, Canadian Government Motion Picture Bureau.

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Atlantic. In addition, there are 15,000 square miles of Atlantic inshore water controlled entirely by the Dominion. Large as are these areas, they represent only a part of the fishing grounds of Canada; the Pacific coast of the Dominion measures 7,180 miles in length and is exceptionally well sheltered, while throughout the interior is a series of lakes which together contain more than half of the fresh water on the planet, Canada's share of the Great Lakes alone amounting to over 34,000 square miles—a total which does not include lake Winnipeg (9,398 square miles), lake Manitoba and others of even greater area.

Giant Tuna Fish of 680 lb. at Hubbards, N.S.
Courtesy, Canadian Government Motion Picture Bureau.

Still more important than the extent of the Canadian fishing grounds is the quality of their product. Food fish improve in proportion to the purity and coldness of the waters in which they are taken and, by this standard, the Canadian cod, halibut, herring, mackerel, whitefish and salmon are the peers of any in the world.

Statistics of the Modern Industry.—The present fishing industry of Canada is the growth of the past 60 years. In 1836 the production of fish in what are now the Maritime Provinces had an estimated value of $1,500,000, while that of Lower Canada was about $1,000,000. In 1870 total production was worth $6,500,000 and was again more than doubled by 1878. In the '90's it passed $20,000,000 and in 1912, $34,000,000. The highest value was reached in 1918 when a total of $60,259,744 was recorded. In 1934 the value was $34,022,323, this figure marking the second consecutive upturn since the low year of 1932. The totals given represent the total value of fish marketed, whether in a fresh, dried, canned or otherwise prepared state.

The tables following show the production of the industry by provinces for the years 1914, 1929 and 1934, and the production by principal kinds for the years 1933 and 1934.

Growth of the Fisheries by Provinces, 1914, 1929 and 1934

Province	Value of Production			Per cent of Total Value		
	1914	1929	1934	1914	1929	1934
	$	$	$	p.c.	p.c.	p.c.
Prince Edward Island	1,261,666	1,297,125	963,926	4·1	2·4	2·8
Nova Scotia	7,730,191	11,427,491	7,673,865	24·7	21·4	22·6
New Brunswick	4,940,083	5,935,635	3,679,970	15·8	11·1	10·8
Quebec	1,924,430	2,933,339	2,306,517	6·2	5·5	6·8
Ontario	2,755,291	3,919,144	2,218,550	8·8	7·3	6·5
Manitoba	849,422	2,745,205	1,465,358	2·7	5·1	4·3
Saskatchewan	132,017	572,871	219,772	0·4	1·1	0·7
Alberta	86,720	732,214	245,405	0·3	1·4	0·7
British Columbia	11,515,086	23,930,692	15,234,335	36·8	44·7	44·8
Yukon	69,725	24,805	14,625	0·2	0·0	0·0
Totals	**31,264,631**	**53,518,521**	**34,022,323**	**100·0**	**100·0**	**100·0**

Fisheries Production by Principal Kinds, 1933 and 1934
(Each over $1,000,000 in value and arranged by value in 1934)

Kind	1933		1934	
	Quantity Caught	Value Marketed	Quantity Caught	Value Marketed
	cwt.	$	cwt.	$
Salmon	1,456,501	9,758,346	1,696,856	12,875,257
Lobster	374,916	3,524,355	361,992	4,269,784
Cod	1,561,647	2,508,756	1,714,059	3,327,507
Herring	2,056,706	1,747,863	1,901,874	1,799,967
Whitefish	152,135	1,136,400	144,615	1,358,692
Halibut	200,824	1,694,405	123,152	1,134,307
Haddock	268,881	832,029	356,068	1,075,529

The fisheries give employment, especially during the spring, summer and autumn, to a large number of persons. The number of men employed in the primary operations of catching and landing the fish during the year 1934 was 68,634, of which 57,539 are credited to the sea fisheries and 11,095 to the inland fisheries. The fish-canning and -curing industry, which is confined to the provinces bordering on the sea, had a total of 14,802 persons working during the season—8,348 male, and 6,454 female employees.

The capital investment of the industry as a whole was $43,585,502, of which $26,212,703 represented the value of the vessels, boats, nets, traps, piers and wharves, etc. used in primary operations and $17,372,799 the capital invested in the fish-canning and -curing establishments.

Trade in Fish and Fish Products.—Although the domestic consumption of fish in Canada is increasing, the trade still sends largely to foreign markets. Perhaps 60 p.c. of the annual catch is an average export. Canada's export trade in fish and fishery products in 1934 had a total value of $22,497,135. The largest single items were canned salmon, valued at $5,906,424, canned lobster at $2,499,372, dried cod at $1,956,004, fresh lobster at $1,550,452, and fresh and frozen salmon at $1,187,727. The prin-

cipal countries of destination were the United States ($9,283,723), the United Kingdom ($5,542,276), Australia ($1,474,938), and France ($1,070,786). Altogether there were 85 countries to which Canadian fish and fishery products were exported in 1934.

Canadian imports of fish and fish products including fish oils, etc., in 1934, amounted to $2,122,748, of which about 30 p.c. came from the United States; oysters and sardines are the most important kinds, the former coming from the United States and the latter chiefly from Norway.

The expansion described above was featured by numerous changes in conditions. In early days the cod and haddock of the Atlantic were the most important items of the catch; to-day British Columbia, with her enormous salmon and halibut fisheries, takes the lead among the provinces (a leadership that in earlier times belonged to Nova Scotia), accounting for 45 p.c. of the total marketed value of the Canadian fisheries production. The lobster fishery of Eastern Canada has also become vastly more important, until it is now the largest fishery of the kind in the world. But the greatest element of change has been contributed by improvements in the methods of catching and preparing the fish, and especially by the development of the fish-canning industry. In 1870 there were but three lobster canneries on the Atlantic coast of Canada; in 1934 these canneries numbered 333 employing over 6,000 people; 30,000,000 lobsters is a normal catch. The salmon canneries of the Pacific are all large ones and numbered 49 in 1934. The salmon pack of British Columbia in that year was 1,582,926 cases of 48 lb. each, an output greater than that of each of the two preceding years.

Materials Used and Values of Products of Fish-Canning and -Curing Establishments, 1932-34

Material and Product	1932	1933	1934
	$	$	$
Material used—			
Fish	7,708,713	8,178,543	11,638,820
Salt	170,385	216,618	236,185
Containers	2,190,935	2,321,918	3,345,792
Other	193,598	243,210	346,363
Totals	**10,263,631**	**10,960,289**	**15,567,160**
Product—			
Fish marketed for consumption, fresh	4,243,614	4,337,130	4,897,000
Fish canned, cured or otherwise prepared	12,440,511	13,043,193	19,159,927
Totals	**16,684,125**	**17,380,323**	**24,056,927**

Game Fish.—The foregoing is a purely industrial and commercial survey. Fishing for sport, however, has its economic side in a country of such famous game fish as the salmon of the Restigouche and other rivers of the Maritime Provinces; the black bass and speckled trout of the Quebec and Ontario highlands; the red trout of the Nipigon and the salmon and rainbow trout of British Columbia. A considerable public revenue is derived from the leasing of waters in sparsely settled districts to clubs and individuals for sporting purposes. Several hundreds of guides find employment in this field during the summer months.

The Government and the Fisheries.—The Dominion Department of Fisheries (first established on a separate basis in 1930) controls the tidal waters of the Maritime Provinces and British Columbia, and the fisheries

Boxing Halibut for Shipment at Prince Rupert, B.C.

Unloading and Handling Halibut at Prince Rupert, B.C.

of the Magdalen islands in Quebec province. The non-tidal fisheries of the Maritime Provinces, Ontario and the Prairie Provinces, and both the tidal and non-tidal fisheries of Quebec (except the Magdalen islands) are controlled by the respective provinces, but the right of fisheries legislation for all provinces rests with the Dominion Parliament. A large staff of inspectors, officers and guardians is employed to enforce the fishery laws, and a fleet of vessels patrols the coastal and inland waters to prevent poaching and to assist in the carrying out of the regulations. The main object of legislation has been the prevention of depletion, the enforcement of close seasons, the forbidding of pollutions and obstructions, and the regulation of nets, gear, and of fishing operations generally. The Government also assists the industry by: broadcasting radio reports of weather probabilities, bait and ice supplies, ice conditions along the coast, and prevailing local market prices; instruction in improved methods of curing fish and demonstrations in the larger centres, by a fish cookery expert, of the various ways of preparing fish for the table. In addition an extensive system of fish culture has been organized, while stations for the conduct of biological research into the numerous complex problems furnished by the fisheries are established at central points.

CHAPTER IX

THE FUR TRADE

Statistics of the Modern Industry.—Fur trading is still one of the important industries of Canada, but great changes have taken place since the early days when it dominated all other pursuits. The railway revolutionized conditions throughout the country and, more recently, the advent of the motor vehicle has influenced the extension of highways to the borders of settlement and beyond. Boats now ply the larger lakes and rivers and the aeroplane is requisitioned for the transportation of furs from the more inaccessible districts.

Commencing with the year 1881, records of the value of raw fur production were obtained in the decennial censuses, but from 1920 the Dominion Bureau of Statistics has issued annual reports, prepared from statements furnished by the Provincial Game Departments, which are based on returns of royalties, export tax, etc. In 1881 the value of pelts taken was $987,555; by 1910 it had become $1,927,550; the figures for the seasons ended June 30, 1922-34 are given below. The values given are the market values of the pelts taken by trappers and those sold from fur farms. The proportion of the latter has risen from about 3·5 p.c. of the total value for earlier years of the decade to 13 p.c. in 1928-29, 26 p.c. in 1930-31, and 30 p.c. in 1933-34, thus indicating the growing importance of fur farming (see pp. 90-92).

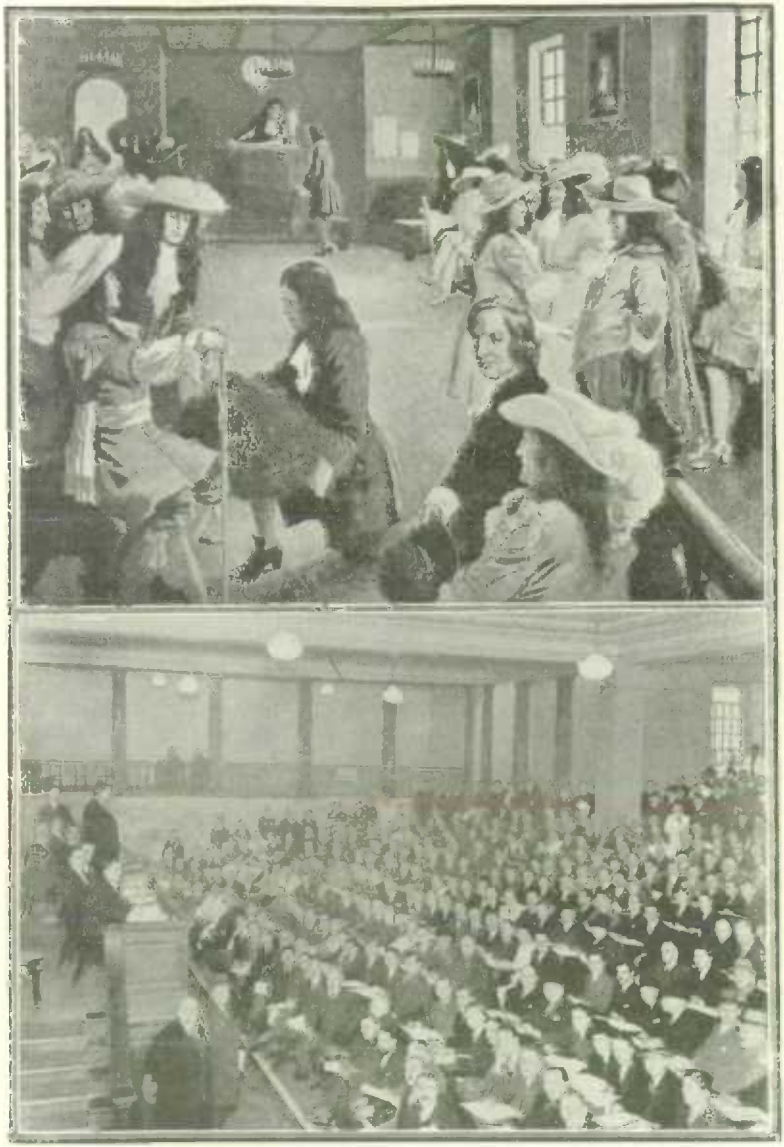
Numbers and Values of Pelts Taken, Seasons 1921-22 to 1933-34

Season	Number of Pelts Taken	Total Value	Season	Number of Pelts Taken	Total Value
		$			$
1921-22	4,366,790	17,438,867	1928-29	5,150,328	18,745,473
1922-23	4,963,996	16,761,567	1929-30	3,798,444	12,158,376
1923-24	4,207,593	15,643,817	1930-31	4,060,356	11,803,217
1924-25	3,820,326	15,421,564	1931-32	4,449,289	10,159,481
1925-26	3,686,148	15,072,244	1932-33	4,503,558	10,305,154
1926-27	4,289,233	18,854,126	1933-34	6,076,197	12,349,328
1927-28	3,601,153	18,758,177			

First among the various kinds of furs is silver fox, with a total market value in the season 1933-34 of $3,711,390, the fur-farming industry being the main source of supply for these pelts. The muskrat is second in importance with a total value of $1,863,322, and mink is third with $1,822,774. Fourth on the list is white fox, while patch or cross fox is fifth and red fox sixth. Combining the various kinds of fox (silver, patch or cross, white, red and blue) the total value for the season is shown as $6,168,457, or 50 p.c. of the total for all furs. Beaver, which led all other kinds in the early years, now stands seventh on the list, having in the season under review a total value of $476,391. Increases in value over the preceding season are shown for all of the principal kinds of furs, excepting beaver.

The total number of pelts of all kinds in the season was 6,076,197 compared with 4,503,558 in the preceding season and 4,449,289 in the season 1931-32. The large increase in total is due mainly to an increase of

THE DEVELOPMENT OF THE FUR AUCTION



The Marketing of Canadian Furs.—(1) The first sale of Hudson's Bay Company's furs at Garraway's Coffee House, London, 1671. (2) The first sale of furs in the new fur mart, Beaver House, London, 1928.

Courtesy, Hudson's Bay Company.

over a million in the number of squirrel skins. The province of Alberta supplies most of these squirrel skins, the average price of which is around 12 cents. Among the principal kinds of furs, increases in number are recorded for silver fox, mink, white fox, patch or cross fox, red fox and ermine, while decreases are shown for muskrat and beaver. The reduction in the number of beaver skins is due in part to the scarcity of the animals and in part to the restrictions placed by the provincial governments upon trapping, with a view to the conservation of this historic fur-bearer.

Average prices in 1933-34 show little change from the preceding season. Silver fox, fisher, ermine and muskrat were higher, but mink, beaver, cross fox, red fox, white fox and marten were lower. The highest average price per pelt is recorded for fisher—$53·39. Silver Fox is second with $35·83.

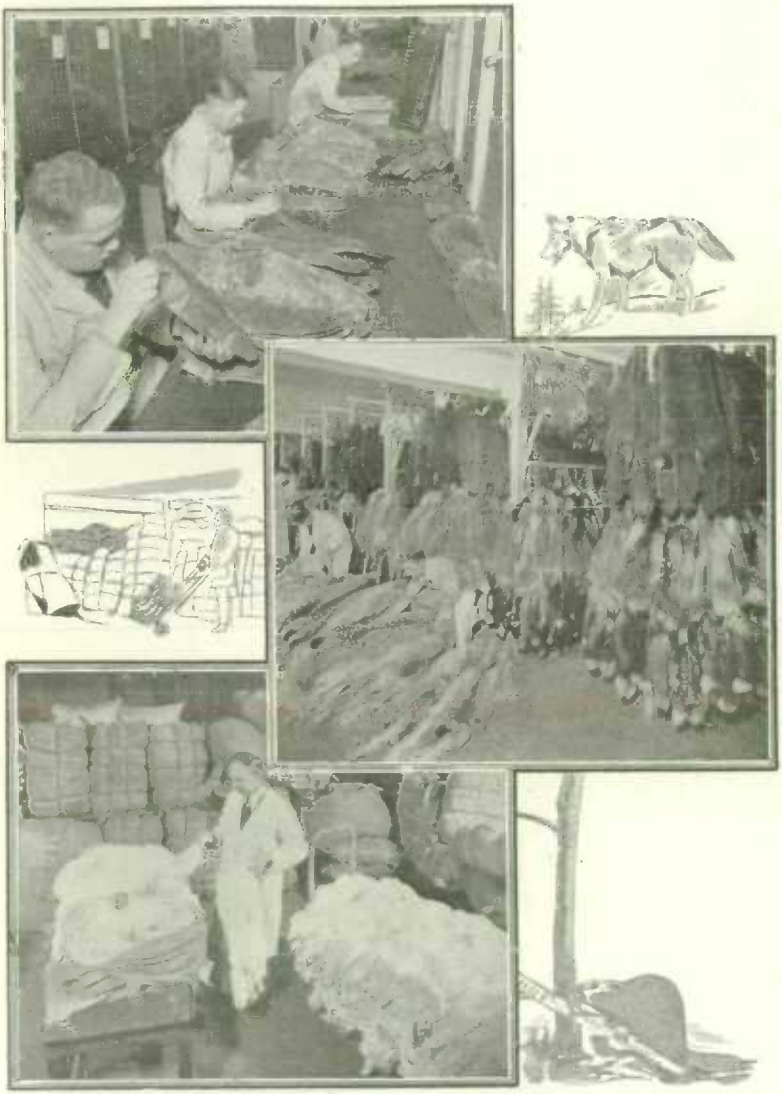
The dressing and dyeing of furs and the manufacture of fur goods are important adjuncts of the fur trade. In 1933 the value of fur goods manufactured was $11,551,695, and the amount received by the fur-dressing establishments for the treatment of fur skins was $1,449,232, both amounts showing an increase over the preceding year. This was the first year since 1928 that there has been an upturn in value, the depression years having affected purchases. Furs are regarded by many people as luxuries—although in the more northerly latitudes they are almost necessities.

Export Trade in Furs.—Prior to the War, London and Leipzig held the positions of outstanding fur markets of the world, but during 1914-18 St. Louis captured the supremacy for the United States although, since the War, London has regained her former prestige. A result of the changed situation thus brought about has been that Montreal, Winnipeg and, to a lesser extent, Edmonton have become important fur marts for buyers from the larger world centres. Montreal held the first fur auction sale to take place in Canada in 1920. Auctions are now held quarterly at Montreal, and regular sales are also held at Winnipeg and Edmonton.

In 1667 exports of furs to France and the West Indies were valued at 550,000 francs. In 1850, the first year for which trade tables of the Customs Department are available, the value of raw furs exported was £19,395 ($93,872); for the twelve months ended June 30, 1920, the value was $20,417,329; for 1925, $17,131,172; for 1930, $17,187,399; and for 1933, $11,180,052. Raw furs to the value of $13,944,821 were exported during the twelve months ended June 30, 1934, the British market absorbing $8,723,485 worth and the United States most of the rest.

Fur Farming.—In the early days of the fur trade it was the practice for trappers to keep foxes caught in warm weather alive until the fur was prime; from this has arisen the modern industry of fur farming. The industry is devoted chiefly to the raising of the silver fox, a colour phase of the common red fox established through experience in breeding. But although the fox is of chief importance, other kinds of fur-bearers are being successfully raised in captivity, among which are mink, raccoon, marten, fisher and fitch. The mink in particular is easily domesticated, and thrives in captivity if care is exercised in the selection of environment and proper attention given to its requirements in the matter of diet. The fitch, a native of Germany, was introduced into the Canadian fur-farming industry in 1929. Muskrat farming also is a branch of the industry and numerous areas of marsh land are being utilized for raising this fur-bearer. The farming of muskrat consists chiefly of making provision for an adequate food supply for the animals and in giving protec-

tion from their natural enemies, *i.e.*, hawks, owls, etc. The number of fur farms in Canada in 1933 was 6,473, compared with 6,296 in 1932. During the period 1928-33 the number increased by 50 p.c. Fox, mink and raccoon farms are the chief kinds, numbering 5,507 and 577 and 235 respectively.



The Canadian Fur Trade.—(1) Grading muskrat skins. (2) A magnificent display of silver fox and other furs in London. (3) Unpacking white fox skins.

Courtesy, Hudson's Bay Company.

There were in operation in Canada at the end of the year 1933 a total of 6,473 fur farms, an increase over the preceding year of 177. Fox farms and the fitch farms show very substantial increases —the number of fox farms increased from 5,221 in 1932 to 5,507 in 1933, and the number of fitch farms from 17 to 43. In the miscellaneous class of fur farms, mink is of first importance, with a total in 1933 of 577 farms. The value of all fur-farming property is given as $13,774,768 this total comprising $7,509,567, the value of the fur-bearing animals, and $6,265,201, the value of the land and buildings. The total value shows an increase over 1932 of $1,050,373, or 8 p.c. A considerable increase over 1932 is shown in the number of fur-bearing animals born in captivity during the year under review. The total number of all kinds born (exclusive of muskrat and beaver, for which exact particulars cannot be obtained) was 164,429, an increase over 1932 of 9,239, or 6 p.c.

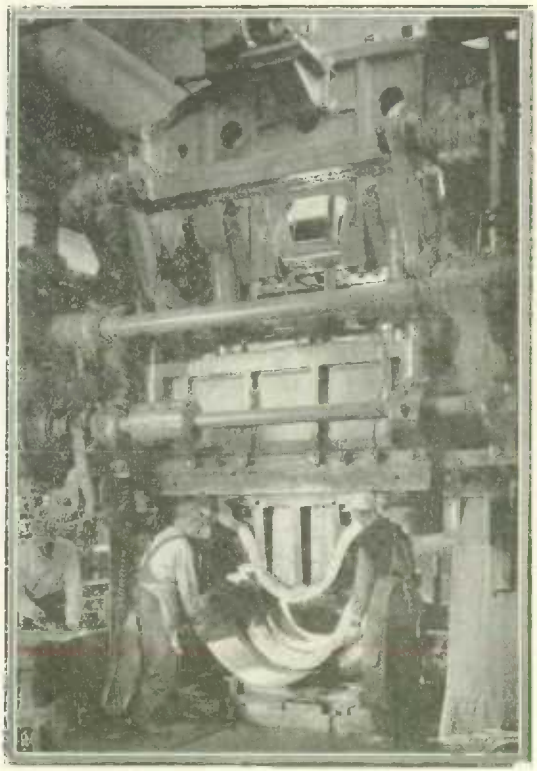
In the early days of fox farming, when there were comparatively few farms and the supply of ranch-bred animals was limited, very high prices were paid for the live animals that were required as breeding stock for new farms, both at home and abroad, in this rapidly growing industry. The price of a pair of silver foxes at that time went as high as $35,000. Now, when the fur-farming industry is firmly established, with large numbers of farms in all of the provinces, the demand for the live animals has diminished and the fur farmers have turned their attention to the matter of raising animals primarily for the sake of the pelts. In 1920 the value of pelts sold from fur farms represented only 34 p.c. of the total revenue of the farms, whereas in 1933 the value of the pelt sales was 91 p.c. of the whole. In 1933 the total value of pelts sold from fur farms was $3,712,443, an increase over the preceding year of $665,816, or 22 p.c. To the total value of sales in 1933 the silver fox contributed $3,441,020, or 93 p.c. of the whole. Mink is next in order of value, with $117,322. Average prices were generally higher than in 1932—silver fox advanced from $29 per pelt in 1932 to $36 in 1933, patch fox from $25 to $26, blue fox from $10 to $12, mink from $4 to $7, raccoon from $4 to $6, marten from $12 to $15, and fisher from $28 to $41. Fitch dropped from $2 to $1, beaver from $10 to $6, and weasel from $1 to 61 cents.

Statistics of fur farms for 1934 made available before going to press indicate that in this latest year the industry has shown further progress in recovery from the effects of the depression. The number of fur farms has increased from 6,473 in 1933 to 7,019 in 1934. While the total number of animals reported on farms has declined from 199,782 to 196,970, this decrease is more than accounted for by the reduction in the number of muskrats reported, from 65,324 in 1933 to 35,556 in 1934. The two leading kinds of fur-bearing animals cultivated on Canadian fur farms are silver fox and mink. With 125,577 silver fox and 25,435 mink reported, there were more of each of these leading kinds than in any previous year. Values of fur-bearing animals showed a most encouraging recovery, the total rising from $7,509,567 in 1933 to $8,427,567 in 1934. There was, likewise, a substantial increase in the revenue of fur farmers, the value of animals sold alive increasing from $354,462 to $573,051 and the value of pelts sold from $3,712,443 to $3,966,010.

CHAPTER X

THE MANUFACTURES OF CANADA

The present century has witnessed the chief forward movement in Canadian manufactures, mainly as the result of two great influences: firstly, the "boom" accompanying the opening up of the West, which greatly increased the demand for manufactured goods of all kinds and especially construction materials; and secondly, the War, which not only created enormous new demands but left a permanent imprint upon the variety and efficiency of Canadian plants. In 1910, when the first of these influences was but partly felt, the gross value of Canadian manufacturing production had risen to $1,166,000,000, the capital invested to $1,248,000,000, and the number of employees to 515,000; but by 1920, the gross value of Canadian manufactured products was no less than $3,772,000,000, the capital invested $3,372,000,000, and the number of employees 609,586. Hundreds of millions of capital had been attracted from outside (see p. 41) in achieving this striking result. After 1920 the figures declined, but subsequent gains brought them back, for 1929, to even higher levels than 1920, as the table on page 94 shows. As expected, the 1933 figures when compared with those for 1932 indicate a reduced gross production of 1·85 p.c., and were 48·2 p.c. lower than the high established in 1929. The net production, due to the proportionately greater reduction in the cost of materials, was down only 44·0 p.c. compared with 1929. The downward trend in manufacturing production was checked in 1933. The value of production for that year was, however, slightly lower than in 1932; the gains made during the last half of the year were not high enough to



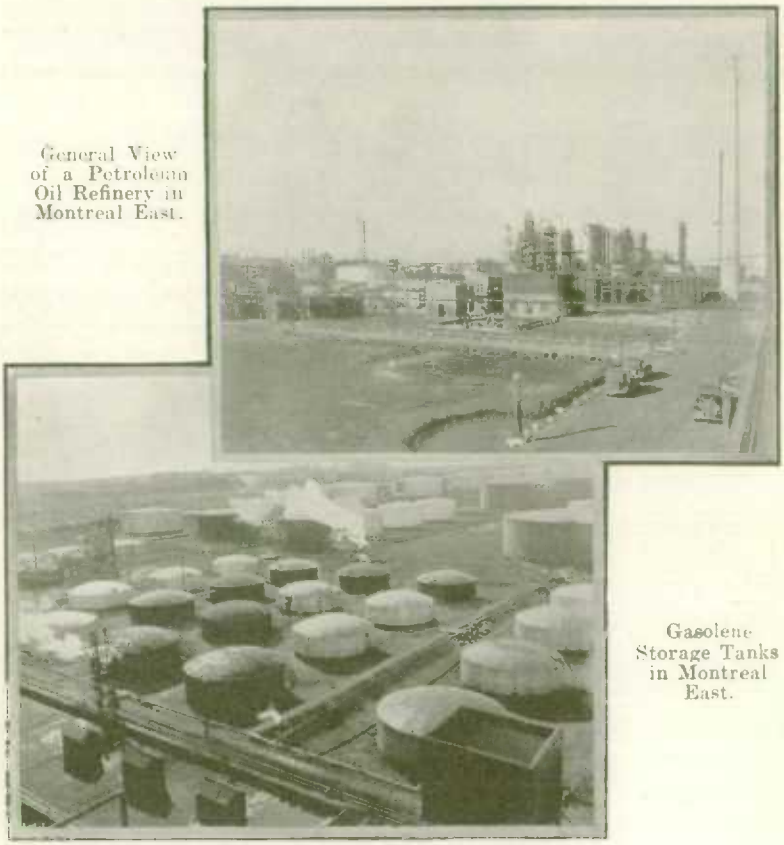
One of the Giant Presses in a Large Canadian Automobile Plant.—Fenders for cars and trucks are pressed out of flat steel in a single operation.
Courtesy, General Motors of Canada, Limited, Oshawa.

counterbalance the continued declines of the first half. The value of production in 1934 is estimated as about 12 p.c. higher than the previous year.

Historical Summary of Statistics of Manufactures, 1870–1933

Year	Establishments	Capital	Employees	Salaries and Wages	Cost of Materials	Net Value of Products[3]	Gross Value of Products
	No.	$	No.	$	$	$	$
1870.....	41,259	77,964,020	187,942	40,851,009	124,907,846	96,709,927	221,617,773
1880.....	49,722	165,302,623	254,935	59,429,002	179,918,593	129,757,475	309,676,068
1890.....	75,964	353,213,000	369,595	100,415,350	250,759,292	219,088,594	469,847,886
1900 [1].....	14,650	446,916,487	339,173	113,249,350	266,527,858	214,525,517	481,053,375
1910 [1].....	19,218	1,247,583,609	515,203	241,008,416	601,509,018	564,466,621	1,165,975,639
1920 [2].....	23,351	3,371,940,653	609,586	732,120,585	2,085,271,649	1,686,978,408	3,772,250,057
1929 [2].....	23,597	5,083,014,754	694,434	813,049,842	2,032,020,975	1,997,350,365	4,029,371,340
1930 [1].....	24,020	5,203,316,760	644,439	736,092,766	1,666,983,902	1,761,986,726	3,428,970,628
1931 [2].....	24,501	4,961,312,408	557,426	624,545,561	1,223,880,011	1,474,581,851	2,698,461,862
1932 [2].....	24,544	4,741,255,610	495,398	505,883,323	955,968,683	1,170,225,872	2,126,194,555
1933 [2].....	25,232	4,689,373,704	493,903	465,562,090	969,188,574	1,117,659,273	2,086,847,847

[1] Includes all establishments employing five hands or over. [2] Includes all establishments irrespective of the number of employees but excludes Construction and Custom and Repair Work. [3] Gross value less cost of materials.



General View of a Petroleum Oil Refinery in Montreal East.

Gasolene Storage Tanks in Montreal East.

Courtesy McColl-Frontenac Oil Company, Limited.

According to the latest census available, Canada possessed, in 1933, 25,232 manufacturing establishments with capital investment in lands, buildings, equipment, etc., amounting to $4,689,373,704, employing 493,903 persons with salaries and wages amounting to $465,562,090. They consumed $969,188,574 worth of raw materials (not including fuel) and produced goods to the value of $2,086,847,847.

Census of Manufactures, by Provinces and Industrial Groups, 1933

Province or Group	Establishments	Capital	Employees	Salaries and Wages	Cost of Materials	Net Value of Products[1]	Gross Value of Products
Province	No.	$	No.	$	$	$	$
P.E. Island	263	3,386,095	1,065	597,980	1,592,301	1,485,516	3,077,817
N.S.	1,378	123,645,961	13,260	10,701,189	25,402,432	27,499,505	52,901,937
N.B.	800	122,130,573	11,994	9,877,690	20,471,624	24,354,723	44,826,347
Quebec	8,070	1,648,872,387	163,571	141,358,231	292,950,595	360,115,939	653,066,534
Ontario	10,158	2,087,072,413	235,810	234,391,900	465,106,584	540,126,918	1,005,233,502
Manitoba	1,073	179,720,120	20,749	20,699,449	44,697,266	46,711,175	91,408,441
Saskatchewan	818	64,950,579	5,614	5,871,180	19,164,919	17,034,689	36,199,608
Alberta	975	98,345,221	10,944	10,896,132	29,505,155	25,137,551	54,642,706
B.C. and Yukon	1,697	361,250,355	30,896	31,168,339	70,297,698	75,193,257	145,490,955
Canada	**25,232**	**4,689,373,704**	**493,903**	**465,562,090**	**969,188,574**	**1,117,659,273**	**2,086,847,847**
Industrial Group							
Vegetable	5,542	509,533,005	73,095	66,137,487	224,243,088	197,606,784	421,849,872
Animal	4,496	201,993,642	53,111	46,453,188	179,429,948	91,638,262	271,068,210
Textiles	2,151	322,312,247	106,235	80,695,813	144,584,507	150,130,741	294,715,248
Wood and paper	7,917	893,309,680	105,471	102,500,377	134,979,700	207,175,377	342,155,077
Iron, etc.	1,291	580,760,379	70,947	69,482,730	97,705,853	114,256,055	211,961,908
Non-ferrous metals	478	266,266,443	25,273	28,099,026	71,990,608	92,774,996	164,765,604
Non-metallics	1,144	307,996,274	19,296	21,680,263	71,713,986	70,077,465	141,791,451
Chemicals	696	153,900,930	15,397	18,738,629	34,271,854	58,548,907	92,820,761
Miscellaneous	476	66,769,049	10,361	10,342,700	10,269,030	17,918,605	28,187,635
Central electric stations	1,041	1,386,532,055	14,717	21,431,877	–	117,532,081	117,532,081

[1] Gross value less cost of materials.

The classification of industries followed in the latter part of the above table indicates the relative positions of the groups in Canadian industry. The following groups have been selected for treatment this year:—

Animal Products.—The leading industry of this group is that of slaughtering and meat packing, while butter and cheese ranks second. These two industries produced about 64 p.c. of the production of the entire group.

The butter and cheese industry, which comprises products of farm-animal origin, has been for many years of leading importance in Canada. Originating in the agricultural districts of the Maritime Provinces, the Eastern Townships of Quebec, and the southern counties of Ontario, it is now developing rapidly in the Prairie Provinces and in the more northern settlements of Quebec and Ontario. For an industry so large in the aggregate, it is unique in having shown very little tendency toward consolidation in large units, the gross production of $80,395,887 (which compares with $78,712,905 for the previous year) coming from no fewer than 2,693 plants, mostly small and scattered at convenient points throughout the farming communities.

The leather industries have long been established on a considerable scale, mainly, of course, because the large number of cattle raised and slaughtered provides a ready supply of hides. There are large tanneries in the eastern provinces, and no fewer than 205 boot and shoe factories were in operation in 1933, chiefly in Quebec and Ontario, representing a total capital investment of nearly $23,000,000 with an annual output of over $32,000,000 and employing 14,526 men and women. The canning and preserving of fish also calls for reference. Concentrated naturally upon the Pacific and Atlantic coasts, 620 establishments were engaged in 1933 in canning, curing and packing of various kinds of fish; the product was valued at over $17,000,000.

Wood and Paper Products.—The manufacture of lumber, which depends to a large extent on building and construction operations and the export market, has shown wide fluctuations. The peak, reached in 1911 with a total cut of 4,918,000 M ft., b.m., has never been equalled. It was followed by a general decline to the 2,869,000 M ft. reported for 1921. Production subsequently increased with fair regularity to a second peak, in 1929, of 4,742,000 M ft. and then decreased to the 1,810,000 M ft. reported in 1932. Production increased to 1,958,000 M ft. in 1933.

Those manufacturing industries which draw their principal raw materials from the sawmills reached their maximum production in 1929 with a gross value of $146,950,000 which had declined to $52,289,000 in 1933.

The pulp and paper industry is a comparatively recent development. In 1881 there were only 36 paper and 5 pulp mills in operation in Canada. By 1923 the industry had displaced flour milling as Canada's most important manufacturing industry and in spite of recent vicissitudes has held that position ever since. The peak of production was reached in 1929 when 4,021,000 tons of wood pulp and 3,197,000 tons of paper were produced. In that year there were 108 pulp and paper mills in operation, consuming 5,278,000 cords of pulpwood and using hydro-electric power valued at more than $13,000,000. During 1926, Canada, for the first time, produced more newsprint paper than the United States and became the world's chief producer and exporter of that commodity. She has maintained that position ever since in spite of decreases in production. During 1933 this industry produced 2,979,000 tons of pulp and 2,419,000 tons of paper. Of this paper, 2,022,000 tons was newsprint, which exceeded the tonnage produced in the United States by over 113 p.c.

The manufacturing industries which draw their principal raw materials from the pulp and paper mills reached their maximum production of $187,882,000 in 1929. The value in 1933 for these industries was $126,808,000.

Iron and Its Products.—There has been built up a primary steel industry of considerable importance, and the secondary or fabricating industries have been expanding steadily to meet the country's increasing requirements.

Four concerns make pig iron in Canada, one being in Nova Scotia and three in Ontario. The former uses Nova Scotia coal and iron ore from the great Wabana deposits, which it controls, on Bell island, Newfoundland, while the Ontario works are dependent on foreign ore and coal, which are brought from the United States. These companies have blast furnaces with a rated capacity of 1,500,000 long tons of pig iron per annum, but the

highest tonnage yet attained was 1,080,160 long tons in 1929. Open hearth steel furnaces and rolling-mills are also operated by these companies, which produce steel ingots, blooms and billets, bars, rods, rails, structural shapes, plates, sheets, rail fastenings, etc. In 1933, the output of primary iron and steel was valued at $18,492,549.

Among the secondary industries, the production and maintenance of railway cars, locomotives and parts is of first importance. In 1933 there were 37 such plants, and 16,172 workers were employed. The value of products was $29,672,265, which was $75 millions lower than in 1930.

Automobile manufacturing is one of Canada's largest industries with 8,134 employees, products valued at $42,885,643 and a capital investment of $40,000,559 in 1933. This was not a representative year and the figures are hardly indicative of the real importance of the industry. In 1929, for instance, 16,435 people were employed in 17 plants then in operation, and cars and parts worth $177,315,593 were produced.

The export trade in automobiles and parts reached its peak in 1929, when cars and parts worth $47,005,671 were shipped to other countries. For 1933 this market had declined to $9,843,361.

There are also numerous works for the manufacture of machinery, agricultural implements, sheet metal products, foundry products and similar articles of iron and steel, and the variety of products made in these establishments is increasing yearly.

Chemicals and Allied Products.—The chemical industry in Canada, though not ranking high in gross value of products compared with other groups, has continued to expand in recent years and has added steadily to the volume and variety of chemical products manufactured in this country. Many new factories have been erected while important additions to existing works have enabled the producers to make chemicals which formerly were imported.

Among the more important establishments completed in recent years may be mentioned the huge synthetic fertilizer works at Trail, B.C., the nitre cake plant at Coniston, Ont., the cellophane factory and the hydrogen peroxide plant at Shawinigan Falls, P.Q., the caustic soda and chlorine plant at Cornwall, Ont., the sodium silicate works at New Toronto, Ont., and the fine chemical plants at Montreal, P.Q., and Toronto, Ont. Other works too numerous to mention were opened in allied fields such as medicinals, toilet preparations, paints, insecticides, etc.

A number of notable additions have been made in the past three or four years to the list of chemicals and allied products made commercially in the Dominion. Among these new products are: sodium silicate, sodium chlorate, potassium chlorate, acid calcium phosphate, tri-sodium and di-sodium phosphates, sulphur dioxide, sulphur dichloride, sulphur monochloride, hydrogen peroxide, ferric chloride, elemental sulphur, calcium chloride, synthetic ammonia, cellophane and vinyl acetate resins.

Large plants continued to produce such basic chemicals as sulphuric acid, acetic acid, nitric acid, hydrochloric acid, phosphorus, soda ash, calcium cyanamide, sodium cyanide, calcium carbide, caustic soda, liquid chlorine, ammonium sulphate, ammonium phosphate, oxygen, hydrogen, acetylene, etc.

A total of 696 establishments engaged in the manufacture of chemicals and allied products reported in 1933 a production valued at $92,820,761 including medicinals at $17,063,849, paints at $14,896,693, soaps and cleaning preparations at $14,263,234, heavy chemicals at $12,713,045, explosives, etc., at $7,378,732, toilet preparations at $5,477,324, fertilizers at $4,286,051, compressed gases at $2,490,215, inks at $2,106,436, coal tar products at $1,672,299, and other products at $10,472,883.

"Cellophane" Stored in Rolls.—This new transparent wrapping material, introduced within the past few years, has gained a wide popularity. It is manufactured in Canada.

Courtesy, Canadian Industries, Limited, Montreal.

Imports of chemicals during 1933 were valued at $24,068,278 and exports totalled $12,604,040.

Leading Individual Industries, 1933.—Compared with 1931, there have been some marked changes in the order of the ten leading industries when arranged according to the gross value of production; there have also been appreciable decreases in the values of production in every case. In 1933 pulp and paper was again in the lead, followed by central electric stations, non-ferrous metal smelting, slaughtering and meat packing, flour and feed mills, butter and cheese, etc. Some of the more important changes in the ranking of the leading industries were as follows: Cotton yarn and cloth advanced from sixteenth place in 1932 to ninth place in 1933, non-ferrous metal smelting from sixth to third place, and sawmills from seventeenth to fifteenth place, while electrical apparatus and supplies dropped from tenth to seventeenth place, breweries from eighteenth to twenty-first place and sugar refineries from fourteenth to sixteenth place.

Principal Statistics of Twenty-Five Leading Industries, 1933

Industry	Establishments	Capital	Employees	Salaries and Wages	Cost of Materials	Gross Value of Products[1]
	No.	$	No.	$	$	$
Pulp and paper	95	559,265,544	24,037	26,591,049	47,632,521	123,415,492
Central electric stations	1,041	1,386,532,055	14,717	21,431,877	–	117,532,081
Non-ferrous metal smelting	15	146,085,284	6,360	8,403,181	43,242,563	100,561,297
Slaughtering and meat packing	135	54,590,398	9,289	10,103,744	70,467,544	92,366,137
Flour and feed mills	1,328	59,054,505	5,470	5,108,137	63,297,848	83,322,099
Butter and cheese	2,693	57,849,628	13,145	12,541,035	54,482,522	80,395,887
Petroleum products	47	68,193,854	4,628	6,141,945	49,187,757	70,268,265
Bread and other bakery products	3,073	45,091,801	17,477	14,900,212	23,427,623	51,244,162
Cotton yarn and cloth	37	75,422,396	16,095	11,749,286	26,456,914	51,179,628
Printing and publishing	768	58,234,531	15,964	21,479,504	9,791,679	50,811,968
Clothing, factory, women's	540	18,132,022	15,264	11,828,978	25,885,073	44,535,823
Automobiles	22	40,000,559	8,134	8,557,331	28,730,750	42,885,643
Rubber goods, including footwear	45	65,314,472	9,758	8,910,124	12,914,680	41,511,556
Hosiery and knitted goods	170	49,485,772	17,159	12,610,093	19,473,785	40,997,210
Sawmills	3,517	74,304,090	17,779	10,040,165	22,870,710	39,438,057
Sugar refineries	8	35,758,074	2,092	3,048,817	22,846,473	37,189,960
Electrical apparatus and supplies	174	80,844,131	11,767	12,428,430	14,504,269	37,012,509
Tobacco, cigars and cigarettes	127	50,218,586	8,241	6,752,159	17,974,715	36,784,662
Biscuits, confectionery, cocoa, etc	236	41,410,901	9,891	8,114,234	15,725,547	35,176,094
Boots and shoes	205	22,963,783	14,526	10,509,461	16,347,068	32,291,092
Breweries	74	57,337,361	4,156	5,309,527	9,398,599	30,940,895
Fruit and vegetable preparations	273	37,286,824	6,530	3,842,575	16,461,755	29,981,400
Coke and gas products	42	94,225,476	3,526	4,606,308	12,729,075	29,936,975
Railway rolling stock	37	86,509,047	16,172	14,584,021	13,574,592	29,672,265
Printing and bookbinding	1,122	38,860,669	11,271	12,277,207	9,694,048	28,210,076
Totals, Twenty-Five Leading Industries	**15,824**	**3,302,971,763**	**283,448**	**271,869,460**	**647,118,110**	**1,357,661,233**
Grand Totals, All Industries	**25,232**	**4,689,373,704**	**493,903**	**465,562,030**	**969,188,574**	**2,086,847,847**
Percentages of Twenty-five Leading Industries to All Industries	62·7	70·4	57·4	58·4	66·8	65·1

[1] Net value of production can be obtained by deducting cost of materials from these figures.

Trade in Manufactures.—Canada is the second most important manufacturing country in the British Empire. The capacity of Canadian industries and the variety of products marketed are such that many classes of goods, formerly imported, are now being manufactured in the Dominion in sufficient volume not only to meet the requirements of the home market but also for export. To-day Canada sends manufactured goods to almost every country in the world. For the fiscal year 1934, these exports reached $368,000,000 in value, whereas in 1900 they were below the $100,000,000 mark and fourteen years later were but $159,000,000.

Among the industrial groups, the vegetable products group occupies an important position in trade. Wheat flour, rubber tires, canvas shoes with rubber soles, prepared cereal foods, sugar and alcoholic beverages are some of the more important articles of export.

Manufactures in Leading Cities.—Toronto proper and Montreal proper had manufactures, in 1933, of $309,000,000 and $301,000,000 respectively. Greater Montreal, however, is still ahead of Greater Toronto in the gross value of its production. After these two cities come Hamilton with $84,000,000, Winnipeg with $59,000,000, and Vancouver with $55,000,000.

There were five other places having manufactures with a gross value of production of over $20,000,000 in 1933.

Leading Manufacturing Cities of Canada, 1933

City	Establishments	Capital	Employees	Salaries and Wages	Cost of Materials	Gross Value of Products[1]
	No.	$	No.	$	$	$
Toronto	2,604	388,995,096	75,645	80,855,883	146,286,472	308,983,639
Montreal	2,226	363,342,078	80,212	74,150,933	148,504,215	300,636,197
Hamilton	469	171,625,714	21,524	21,523,337	35,672,272	83,530,255
Winnipeg	600	73,886,398	15,336	15,155,537	28,355,612	59,287,280
Vancouver	746	74,209,271	12,094	11,754,124	28,588,106	55,160,883
Montreal East	11	51,274,200	1,650	2,028,012	25,767,492	41,023,558
London	242	36,886,660	7,786	7,711,019	11,709,949	29,468,324
Kitchener	140	31,685,109	6,916	6,206,187	10,680,380	25,549,350
Quebec	301	47,499,870	8,611	7,210,205	10,889,290	25,171,550
Port Colborne	18	27,902,577	957	1,263,707	6,736,003	23,924,038
Sarnia	44	22,485,557	2,528	3,020,536	13,988,384	19,488,338
Calgary	161	29,056,410	3,897	3,869,957	12,021,721	19,338,857
Oshawa	43	19,176,879	3,837	4,106,373	11,569,913	19,211,259
Ottawa	223	36,142,891	5,941	6,388,007	6,716,333	18,247,024
Walkerville	66	28,354,058	3,040	3,299,595	10,498,518	17,808,274
Three Rivers	56	57,299,772	4,511	3,887,574	6,296,584	16,497,480
East Windsor	11	17,915,131	4,012	3,685,827	9,890,376	16,078,617
Peterborough	78	21,356,373	3,812	3,265,162	8,187,780	16,051,702
Edmonton	158	18,050,618	3,545	3,762,774	7,958,136	14,627,228
St. Boniface	42	10,152,744	1,424	1,451,807	9,609,440	14,449,005
Brantford	99	42,855,287	4,870	4,198,983	6,708,997	14,215,285
Saint John	131	21,085,447	2,553	2,691,085	7,810,492	13,712,819

[1] Net value of production can be obtained by deducting cost of materials from these figures.

Conditions During the Years 1930-35.—Perhaps the best all-round barometer of conditions is afforded by the indexes of employment maintained from month to month in the Dominion Bureau of Statistics, and based on returns received from establishments having 15 hands and over. These reporting establishments normally employ about 600,000 workpeople.

The severity of the depression which set in toward the end of 1929 is strikingly illustrated by the monthly employment indexes shown below. From a high of 121·6 attained in August, 1929, employment kept steadily decreasing until January, 1933, when the index stood at 74·4. In February of the same year, however, employment took an upward swing and, with minor interruptions in December, 1933, and January, 1934, showed steady and substantial improvement until November, 1935, when the index stood at 103·5. The index for the first eleven months of 1935 averaged 96·7, or nearly 7·3 p.c. higher than in the same period of 1934.

Indexes of Employment in Manufactures

(1926=100)

Month	1930	1931	1932	1933	1934	1935	Month	1930	1931	1932	1933	1934	1935
Jan. 1	106·5	93·7	83·9	74·4	80·0	87·4	July 1	111·3	97·2	85·4	83·0	93·8	98·5
Feb. 1	110·2	96·1	85·9	75·0	84·2	90·1	Aug. 1	110·2	94·7	82·6	85·2	94·2	99·8
Mar. 1	110·9	97·6	87·0	75·8	86·5	92·7	Sept. 1	108·2	94·7	83·1	86·8	94·3	100·8
April 1	111·3	99·7	87·3	76·0	88·1	93·9	Oct. 1	107·8	91·8	84·1	86·7	94·4	103·3
May 1	112·4	100·7	85·8	76·8	90·2	95·6	Nov. 1	104·6	88·8	81·7	86·5	92·8	103·5
June 1	113·6	99·4	86·0	80·0	93·2	98·4	Dec. 1	100·6	89·6	80·3	84·4	91·3	—

CHAPTER XI.

CONSTRUCTION

This chapter deals with construction in the engineering, public utility and transportation fields, as well as in buildings, whether such construction was undertaken by private enterprise or under public programs by Dominion or Provincial Governments or local authorities. During the last few years governmental building has constituted an especially important part in the Dominion's construction program, much of such work being in connection with the unemployment relief plans of the various public authorities. However, during 1934 and 1935 there were evidences of distinct recovery in private and commercial construction, stimulated by government assistance to the building industries, as well as by the general revival.

Running Concrete Lining in a Tunnel.—This tunnel, part of the hydro-electric power development of the Lièvre river, P.Q., is 28 ft. inside diameter and over a mile long.

Courtesy, The Foundation Company of Canada.

During 1935, there were two developments of importance in connection with the construction industries, *viz.*, the passage of legislation by the Dominion Parliament to assist in the construction of dwellings (see p. 103) and the institution of an annual census of the construction industries by the Dominion Bureau of Statistics, similar to the yearly censuses of the manufacturing industries; data collected in the first of these annual surveys (for the year 1934) are in course of preparation and will cover the

entire construction activities in the Dominion. No material is available from this source at the time of going to press but preliminary returns are expected early in 1936.

Transportation and Public Utilities.—Both steam and electric railways increased expenditures on maintenance of way and structures and equipment in 1934 over 1933, but they were still low compared with previous years. For steam railways they amounted to $107,000,000 as against $96,000,000 in 1933 and $194,000,000 in 1929, and for electric railways the total was $5,376,000 as against $5,068,000 in 1933 and $9,000,000 in 1929. Expenditures on new lines of steam railways continued to decline, the net amount being only $11,000 in 1934, whereas in 1933 the net expenditures amounted to $208,000 and averaged close to $30,000,000 for the four years, 1928-1931.

A Mine Shaft Being Put Down Through a Slime-filled Lake, Kirkland Lake District, Ont.
Courtesy, Lake Shore Mines, Limited.

Expenditures on rural highways have been a large item in the national construction bill for the past decade. They reached a peak in 1931 at $88,500,000 and were reduced to $40,500,000 in 1933, but in 1934, due to the national necessity of providing work for unemployed men, and aided by Dominion subsidies for the construction of a trans-Canada highway, expenditures on highway construction and maintenance increased to $67,000,000. The increase was largely in construction work, which advanced from $24,000,000 in 1933 to $46,000,000 in 1934. Some provinces, however, still showed reduced expenditures. British Columbia's construction expenditures amounted to only $125,182 and Manitoba's to only $215,965 for the year.

Building Operations.—Expenditures for construction and maintenance in connection with transportation and other public utilities have helped to

keep up the volume of construction in the past few years, while the governmental construction projects have been of even greater importance in the total amount of construction undertaken; many such projects have, of course, been planned for the relief of unemployment.

The Dominion Housing Act.—Administered by the Finance Department, the Dominion Housing Act, 1935, has a twofold purpose: (1) to assist in the revival of the construction industries and (2) to assist in the improvement of housing conditions where overcrowding and other undesirable features exist. The Minister of Finance is empowered to make advances and to pay expenses of administering the Act to the extent of $10,000,000. The Act provides for loans at 3 p.c. to approved lending institutions for re-loan to borrowers (including construction firms), at a rate not exceeding 5 p.c., as a first mortgage on the building to be erected. In most cases, the loans will be for 80 p.c. of the cost of construction of the dwelling or its appraised value, whichever is the lesser; of the loan of 80 p.c., the lending institution will advance 60 p.c. and the Government 20 p.c., while the remaining 20 p.c. is to be provided by the borrower. Provision is also made for loans of less than 80 p.c., where desired by the borrower or deemed advisable by the lending institution. Regulations call for the payment of principal and interest at a monthly rate over a period of 20 years, but more rapid amortization may be arranged to suit the convenience of the borrower. The Act requires sound standards of construction and contains other clauses safeguarding the mortgage. The construction of new dwellings—houses, duplexes or apartments—is to be assisted by the Act, provisions of which do not apply to the remodelling or rehabilitation of existing buildings.

Lending institutions have been approved in the various provinces, and operations in many centres are already underway; however, statistics showing transactions under the Act are not yet ready for publication.

Volume of Construction, 1935.—Data showing the total volume of construction work undertaken are difficult to obtain, owing to the widespread nature of such projects. With a view to obtaining comprehensive statistics regarding the construction industries, the Dominion Bureau of Statistics, as already stated (p. 101), has made arrangements to take a yearly census of such projects along the lines of the present annual Census of Industry. The first of such inquiries is being made in respect of the year 1934, but the results of the census are not yet available. The MacLean Building Reports, Limited, has for some years compiled monthly figures showing the value of construction contracts awarded; the totals for the latest complete years are as follows: 1934, $125,811,500; 1933, $97,289,800; 1932, $132,872,400 and 1931, $315,482,000. The value of construction contracts awarded in the first eleven months of 1934 and 1935 are shown below.

Since 1920, a record has been maintained in the Dominion Bureau of Statistics showing the value of construction represented by the building permits taken out in 58 leading Canadian municipalities; until July, 1935, the number of centres was 61, but the amalgamation of East Windsor, Sandwich and Walkerville with Windsor then reduced the number of co-operating cities, without, of course, affecting the comparability of the latest statistics with those for past years. During 1934, the value of building represented by construction permits granted by the co-operating cities was $27,457,524, as compared with $21,776,496 in 1933, $42,319,397 in 1932 and $112,222,845 in 1931. These totals are based on revised statements furnished by municipal officials. The unrevised total for the first

eleven months of 1935 was $43,846,688, as compared with $24,326,224 in the same period of the preceding year. The following table shows the value of the building authorized from January to November of 1934 and 1935.

Construction Contracts Awarded in Canada, Eleven Months, 1934 and 1935

(MacLean Building Reports, Ltd.)

Type of Construction	1934		1935	
	No.	Value	No.	Value
		$		$
Apartments	165	1,504,400	227	3,197,000
Residences	9,507	27,622,200	10,839	31,175,500
Totals, Residential	*9,672*	*29,126,600*	*11,066*	*34,372,500*
Churches	197	1,788,400	190	1,625,500
Public garages	518	2,149,500	585	2,195,200
Hospitals	67	4,956,900	67	2,951,700
Hotels and clubs	353	1,615,400	427	2,145,500
Office buildings	243	3,925,800	270	1,638,500
Public buildings	391	5,438,600	549	20,091,700
Schools	359	6,106,900	354	5,391,500
Stores	1,267	3,995,500	1,509	4,154,900
Theatres	56	575,400	75	1,390,800
Warehouses	379	4,579,900	429	5,938,500
Totals, Business	*3,830*	*35,132,300*	*4,455*	*47,523,800*
Totals, Industrial	*593*	*7,880,600*	*634*	*9,718,500*
Bridges	165	5,322,100	302	3,300,500
Dams and wharves	105	2,414,500	136	8,469,000
Sewers and watermains	296	3,703,900	239	3,512,800
Roads and streets	812	23,892,300	899	27,186,300
General engineering	452	12,277,000	438	21,856,700
Totals, Engineering	*1,830*	*47,609,800*	*2,014*	*64,325,300*
Grand Totals	**15,925**	**119,749,300**	**18,169**	**155,940,100**

Building Permits, by Cities, Eleven Months, 1934 and 1935

City	1934	1935	City	1934	1935
	$	$		$	$
Charlottetown, P.E.I.	42,500	166,635	St. Thomas, Ont.	26,311	93,370
Halifax, N.S.	708,617	1,514,214	Sarnia, Ont.	119,828	84,402
New Glasgow, N.S.	9,852	19,305	Sault Ste. Marie, Ont.	256,408	114,050
Sydney, N.S.	74,992	53,268	Toronto, Ont.	5,986,145	9,165,643
Fredericton, N.B.	42,775	19,125	York and East York Townships, Ont.	807,367	1,540,778
Moncton, N.B.	511,398	106,261	Welland, Ont.	106,476	74,549
Saint John, N.B.	237,920	140,280	Windsor, Ont.[1]	362,892	698,519
Montreal-Maisonneuve, Que.	3,928,290	6,688,621	Riverside, Ont.	3,100	10,875
Quebec, Que.	409,939	2,114,515	Woodstock, Ont.	60,750	82,534
Shawinigan Falls, Que.	129,285	51,537	Brandon, Man.	41,308	111,135
Sherbrooke, Que.	122,510	179,250	St. Boniface, Man.	54,140	101,340
Three Rivers, Que.	465,090	52,820	Winnipeg, Man.	693,300	2,690,750
Westmount, Que.	685,233	165,480	Moose Jaw, Sask.	350,337	136,165
Belleville, Ont.	76,855	144,802	Regina, Sask.	283,921	631,844
Brantford, Ont.	240,816	256,088	Saskatoon, Sask.	75,955	136,675
Chatham, Ont.	43,800	88,041	Calgary, Alta.	496,288	895,043
Fort William, Ont.	615,530	152,000	Edmonton, Alta.	471,023	665,710
Galt, Ont.	134,946	387,269	Lethbridge, Alta.	64,503	116,652
Guelph, Ont.	105,723	283,949	Medicine Hat, Alta.	24,420	17,094
Hamilton, Ont.	681,370	1,829,835	Kamloops, B.C.	34,081	66,522
Kingston, Ont.	138,198	213,034	Nanaimo, B.C.	45,544	30,781
Kitchener, Ont.	230,309	557,235	New Westminster, B.C.	75,595	190,025
London, Ont.	587,480	1,823,757	Prince Rupert, B.C.	66,520	42,884
Niagara Falls, Ont.	125,546	91,022	Vancouver, B.C.	1,333,737	3,728,880
Oshawa, Ont.	48,970	124,900	North Vancouver, B.C.	14,360	20,250
Ottawa, Ont.	1,257,325	4,066,890	Victoria, B.C.	244,303	424,593
Owen Sound, Ont.	23,085	49,052			
Peterborough, Ont.	145,030	192,953	**Totals—58 Cities**	**24,326,224**	**43,846,688**
Port Arthur, Ont.	94,617	162,921			
Stratford, Ont.	52,550	45,502			
St. Catharines, Ont.	257,061	233,264			

[1]Includes East Windsor, Sandwich and Walkerville, amalgamated with Windsor from as July 1, 1935.

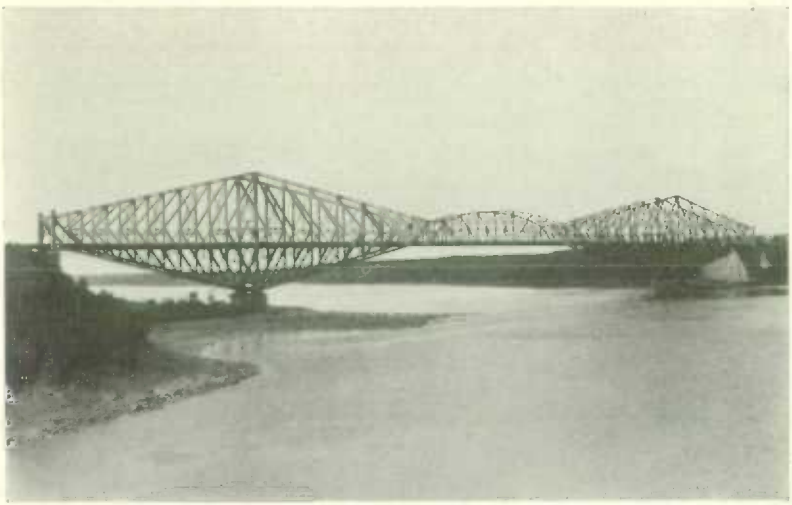
These 58 cities had, in 1931, about 36 p.c. of the population of Canada; in 1934, the latest complete year, their building permits had a value equal to nearly 22 p.c. of the total contracts awarded according to MacLean Building Reports, Ltd.; in the first eleven months of 1935, the building authorizations in the co-operating cities constituted 28·1 p.c. of the value of the contracts awarded during the same period. Official summary figures of building permits and closely related indexes in the building industry are given below for the years 1929-35

The index numbers of wages and prices of materials show the fluctuations in building costs over the period. During 1935, the wages index showed an increase of 3 p.c., standing at 159·8, as compared with 154·8 in the preceding year. The index number of wholesale costs of building materials was fairly stable; during the first eleven months of 1935 this averaged 82·1, while in the twelve months of 1934 it averaged 83·0.

Building Permits and Indexes of Factors in the Construction Industry, 1929-35

Year	Value of Building Permits Issued	Index Numbers of Value of Permits Issued (1926=100)	Average Index Numbers of Wholesale Prices of Building Materials (1926=100)	Index Numbers of Wages in the Building Trades (1913=100)	Index Numbers of Employment as Reported by Employers in the Construction Industries (average, calendar year 1926=100)
	$				
1929	234,944,549	150·2	99·0	197·5	129·7
1930	166,379,325	106·4	90·8	203·2	129·8
1931	112,222,845	71·8	81·9	195·7	131·4
1932	42,319,397	26·7	77·2	178·2	86·0
1933	21,776,496	13·9	78·3	158·0	74·6
1934	27,457,524	17·6	83·0	154·8	109·3
1935[1]	43,846,688	30·3	82·1	159·8[2]	98·0

[1]The 1935 figures are for the eleven months to Nov. 30, those for the other years are complete. [2]Preliminary figure.



The Quebec Bridge.

CHAPTER XII

TRANSPORTATION AND COMMUNICATIONS

Railways.—The distance across Canada from the Atlantic to the Pacific oceans is approximately 3,500 miles and three transcontinental railways stretch from coast to coast. These, with numerous branch lines, give Canada a railway mileage per capita second only to Australia among the nations of the world.

The peaceful rivalry between the steam railway and road transportation is suggested by this view of the Field to Golden highway where it parallels the C.P.R. track near Mount Chancellor, B.C.

Courtesy, Department of the Interior.

In 1922 the Government amalgamated the Intercolonial, Transcontinental, and other roads with the Canadian Northern, the Grand Trunk and the Grand Trunk Pacific, which it had been obliged to take over, due to failure under private operation, and placed the whole under one Board. In 1934 this great system controlled 23,735 miles of railway, being the largest single system in North America. Side by side is the Canadian Pacific with its 16,986 miles of road (exclusive of 70 miles in Canada and 3,883 miles in the United States which it controls) and its subsidiary steamship lines on the Atlantic and the Pacific. The Canadian Pacific, operating in a northern latitude, forms, with its auxiliary steamship services, a comparatively short route from Europe to the Far East.

Canada has elaborate machinery for the government control of transportation in the Board of Railway Commissioners, first organized in 1904,

which took over the functions of the Railway Committee of the Privy Council as a rate-controlling body. The Commission has jurisdiction also in matters relating to the location, construction and general operation of railways.

Conditions in 1934 and 1935.—Canada's railway situation in 1934 may be summed up as follows: a population of 10,824,000 was served with a total of 42,270 miles of single track, and an additional 14,249 miles of second and third main track, industrial track, yard and sidings. The single track mileage in Ontario was 10,842, Saskatchewan had 8,368 miles, Alberta 5,696, Quebec 4,858, Manitoba 4,459, British Columbia 4,028 and the Maritime Provinces 3,622. The investment in Canadian railways was approximately $3,379,233,796 and the gross earnings were $300,837,816. The number of employees was 127,326 and the wages bill $163,336,635. The Canadian railways carried 20,530,718 passengers and 68,036,505 tons of freight during the year and used about 24 p.c. of all the coal consumed in Canada. The railways are supplemented by efficient and adequate marine services, modern hotels in the chief cities from coast to coast, and no less than 42,012 miles of telegraphs which are under their control and operated directly by them.

The turning point for the railways was reached towards the close of 1933 and each month in 1934 showed larger revenues earned than in the previous year and the total for the year was 13 p.c. greater. The same continuous increase was not carried into 1935 but the increases were greater than the decreases and at the end of August the total was slightly above the 1934 revenues for the corresponding period and well above those of 1933 and 1932. The number of cars of revenue freight loaded on the railways during the first nine and a half months of 1935 also did not show any marked improvement over the 1934 loadings, at the middle of October being only 1·6 p.c. above the 1934 loadings. In this connection, however, freight traffic taken from the railways by motor vehicles should be taken into consideration (see pp. 110-11).

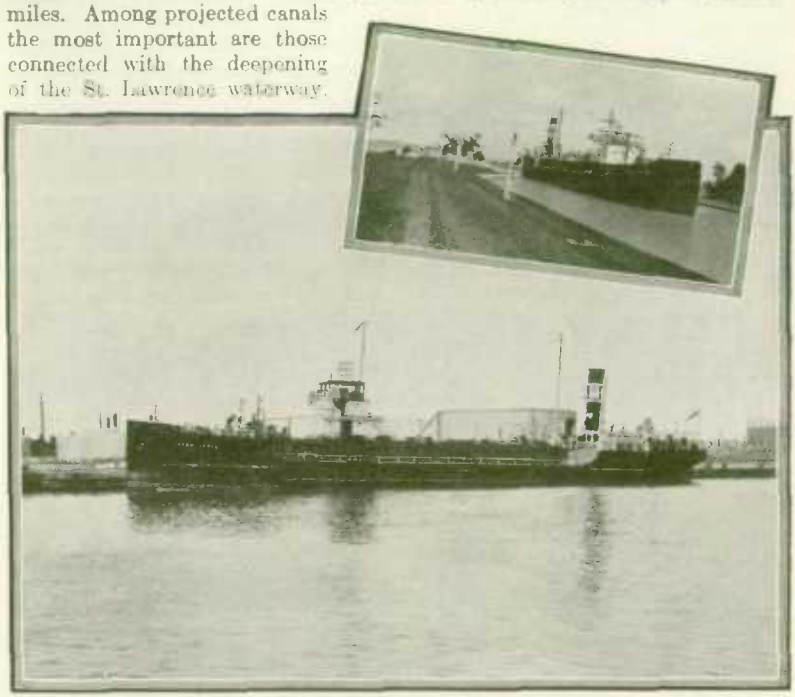
The railway gross operating revenues and revenue car loadings, by months, for 1933, 1934 and 1935 (so far as available) are shown below.

Railway Statistics, by Months, 1933-35

Month	Railway Gross Operating Revenues			Total Revenue Car Loadings		
	1933	1934	1935	1933	1934	1935
	$000	$000	$000	No. 000	No. 000	No. 000
January	17,643	21,010	20,953	134	176	182
February	16,788	20,627	21,579	133	164	180
March	20,612	24,657	23,847	157	190	187
April	19,530	23,395	24,482	138	177	185
May	21,447	26,069	24,529	161	194	188
June	24,310	24,436	24,049	176	193	186
July	23,713	25,206	26,187	163	188	195
August	23,730	25,201	25,520	186	205	197
September	25,872	27,605	29,585	202	212	221
October	27,239	29,151	—	222	243	251
November	24,176	25,702	—	201	213	214
December	22,749	24,778	—	158	172	—

Canals.—Canals were the earliest large transportation works in Canada. One of the first locks was a small one constructed by the Hudson's Bay Co. at Sault Ste. Marie which was destroyed by United States

troops in 1814. Another was built at the Lachine rapids in the St. Lawrence above Montreal in 1825, followed by the Welland Canal in 1829 to overcome the obstacle of Niagara falls. The Rideau Canal (military in primary purpose), the St. Lawrence System and the Chambly Canal followed. To-day there are seven canal systems under the Dominion Government, namely: (1) between Fort William and Montreal, (2) from Montreal to the International Boundary near lake Champlain, (3) from Montreal to Ottawa, (4) from Ottawa to Kingston, (5) from Trenton to lake Huron, (6) from the Atlantic ocean to Bras d'Or lakes in Cape Breton, and (7) from Winnipeg on the Red river to lake Winnipeg. The total length of the waterways comprised in these systems is about 1,594 statute miles. Among projected canals the most important are those connected with the deepening of the St. Lawrence waterway.



A Great Lakes Oil Tanker at a Toronto Refinery. Inset: Tanker making her way through the locks of the St. Lawrence canal system.
Courtesy, McColl-Frontenac Oil Company, Limited.

The Welland Ship Canal.—With the opening of the Welland Ship Canal, the traffic through that waterway has increased from 6,100,000 tons for 1930, to 7,300,000 tons for 1931, to 8,500,000 tons in 1932, to 9,194,130 in 1933 and to 9,280,452 in 1934. Although opened for traffic in April, 1930, the allowable draught was only 18 feet. This, however, was increased to 20 feet in April, 1932. The canal has 30 feet of water in the locks and 25 feet in the stretches between locks which may be readily increased to 30 feet by dredging. The time of transit for the 27·7 miles has been reduced from about 16 hours for the old canal to about 7½ hours and the number of locks reduced from 26 to 8. The locks are 80 feet wide

and 859 feet between inner gates and the minimum width of the canal at the bottom is 200 feet. The lift of seven locks ranges from 43 feet 8 inches to 47 feet 10¾ inches while that of the guard lock varies with the lake levels, the total difference in elevation between lake Erie and lake Ontario being about 327 feet.

Electric Railways.—There were horse-car systems in Montreal and Toronto as early as 1861, but the first electric street railway (at St. Catharines, Ont.), dates only from 1887, followed by the Vancouver Street Railway in 1890, the Ottawa Electric Railway in 1891 and the electrification of the Montreal and Toronto systems in 1892. They are to-day, of course, common to practically all the cities of Canada, while suburban and inter-urban electric lines have been extended.

Owing to the competition of the automobile, passenger traffic has decreased seriously in recent years, so that in 1933 the traffic was less than three-quarters of that in 1920. An improvement was shown in 1934 and traffic increased by 1·67 p.c. over 1933 although some systems still showed decreases. The forty systems operating in 1934 reported 1,850 miles of track, an investment of $224,398,598, gross earnings of $40,048,136, a pay roll of $18,546,750 and a total of 595,142,903 passengers carried.

Express Companies.—Express service has been defined as "an expedited freight service on passenger trains". There are now four systems in operation with a capital somewhat over $6,200,000, operating on 62,495 miles of steam and electric railways, boat lines and stage routes, and with gross receipts of $16,206,171. Money orders and travellers' cheques to the amount of $50,234,896 were issued during 1934.

Roads and Highways.—Quite as fundamental as railways and waterways, especially in these days of extensive motor traffic, is a good road system and in this regard Canada has not been backward. A rapidly increasing tourist traffic which brought into the trade channels of the nation an estimated sum of around $86,259,000 in 1934 has naturally stimulated first class road construction and Dominion and provincial engineers are devoting a great deal of thought and attention to the construction, maintenance and care of highways. (See also p. 102.) In 1934, Dominion, provincial, and municipal* expenditures on the improvement and maintenance of rural roads amounted to $60,556,652, and another $6,469,608 was spent on bridges and ferries. Construction expenditures increased by $22,289,716 or 93 p.c.

*This does not include municipal expenditures on other than provincially subsidized roads.

Mileage Open for Traffic, Jan. 1, 1935, and Expenditures on Highways, 1934

Class of Highway	Mileage	Expenditure[1]	$
Unimproved earth	142,981	For construction	46,144,295
Improved earth	172,646		
Gravel	84,948	For maintenance	19,014,588
Waterbound macadam	1,655		
Bituminous macadam	3,214	Plant and general	1,867,377
Bituminous concrete	1,821		
Cement concrete	1,906		
Other	98		
Total	**409,269**	**Total**	**67,026,260**

[1]Including bridges and ferries.

Motor Vehicles.—the motor vehicle has been the *raison d'être* of the highway development and has increased in numbers at a very rapid rate. Both private and public passenger and freight motor vehicles have taken an increasing amount of passenger and freight traffic from the railways. Several of the smaller electric railways have had to cease operations entirely and others have abandoned certain lines where the traffic had

Transportation in the Canadian North.—The motor truck has proved a boon in the development of northern Canada. The efficiency of the modern motor truck and its ability to stand up under most difficult conditions is a tribute to the automobile engineering industry. The upper picture shows a truck at work on a slag heap at a mine in Timmins, Ontario; the lower illustration shows road-construction operations at Kirkland Lake, Ontario.
Courtesy, General Motors of Canada, Limited, Oshawa.

declined until operation was unprofitable. The passenger traffic on the steam railways has shown no increase during the past ten years despite increases in population, and, in the present depression, has decreased at an alarming rate. In the past few years motor trucks have been carrying enormous quantities of freight, including lumber, hay, and similar commodities, which five years ago were considered safe from the encroachment of the motor truck. Furthermore, the automobile in recent years has seriously reduced the street and urban electric railway traffic for, despite the increase in population, the number of passengers has decreased to less than the 1920 traffic.

Number of Motor Vehicles Registered in Canada, by Provinces, Calendar Years 1920, 1925 and 1930-34

Year	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada[1]
1920....	1,418	12,450	11,121	41,562	177,561	38,257	60,325	38,015	28,000	408,790
1925....	2,947	22,745	18,863	97,418	342,174	50,884	77,940	54,538	56,427	724,048
1930....	7,376	43,029	34,699	178,548	562,506	78,850	127,193	101,119	98,938	1,232,489
1931....	7,744	43,758	33,627	177,485	562,216	75,210	107,830	94,642	97,932	1,200,668
1932....	6,982	41,013	28,041	165,730	531,597	70,840	91,275	86,781	91,042	1,113,533
1933....	6,940	40,648	26,867	160,012	520,353	68,590	84,944	86,041	88,554	1,083,178
1934....	7,206	41,932	29,094	165,526	542,245	70,430	91,461	89,369	92,021	1,129,532

[1]The figures include vehicles in the Yukon Territory.

Unfortunately, the increased use of motor vehicles has increased the number of fatalities due to motor vehicle accidents, not only in the cities and towns but also on the highways. In 1926, 606 persons were killed in motor vehicle accidents and in 1929 the number had more than doubled, being 1,300. In 1930 there was a reduction to 1,290, in 1931 the number was 1,316, in 1932 it was reduced to 1,120 and in 1933 to 955.

The annual revenue to the provinces from registration of motor vehicles was $21,567,830 in 1934, which was an increase of $991,438 over 1933. From gasolene taxes, the revenue amounted to $29,054,853. Prince Edward Island raised the gasolene tax to 8 cents per gallon in April, 1933. Nova Scotia and New Brunswick did likewise in May and April, 1934. Saskatchewan and Alberta increased their rates to 7 cents in April, 1935. Manitoba and British Columbia collect 7 cents and Quebec and Ontario 6 cents per gallon.

Air Navigation.—The relatively recent invention of the aeroplane is now of economic importance in the transportation of passengers and supplies to remote mining areas, etc. The mileage flown by aircraft increased from 185,000 in 1922 to 6,497,637 in 1934, when 105,306 passengers, 14,441,179 pounds of freight, and 625,040 pounds of mail were carried.

The aeroplane has proved a boon to Canada in developing her mining, forest, fishery, water-power and other resources. By shortening the immense distances which characterize the country and by facilitating the rapid exploration of northern areas, the heavier-than-air machine has found a permanent place in the administrative field. Aerial forest fire patrols are now carried on over large parts of almost every province; fishery patrols by aeroplane protect territorial waters and enforce fishing

regulations; and by the use of aeroplanes equipped with special cameras, preliminary surveys, which would have taken years by the older methods, are now rapidly made over large tracts of difficult and little known country. For details regarding the air mail service see p. 119.

The Ottawa Air Station at Rockcliffe Park, Ont.

Trenton Air Station, Trenton, Ont.

Cormorant Lake Air Station in Manitoba.

Air Navigation.—Construction work on air stations across Canada has been pushed forward during recent years, partly as a Government unemployment relief measure.

Royal Canadian Air Force Photograph.

PROGRESS OF AERIAL PHOTOGRAPHY IN CANADA

Progress of Aerial Photography in Canada.—The map shows areas covered by both vertical and oblique photographic operations of the Royal Canadian Air Force to Dec. 31, 1934. Inset is shown a typical multi-camera photographic aircraft unit, such as is used for this work, equipped with a standard camera.

Royal Canadian Air Force Photograph.

Shipping.—The tonnage of sea-going and inland international vessels entered and cleared at Canadian ports showed an almost continuous increase up to 1914; and again during the fiscal years ended Mar. 31, 1920 to 1929. The effects of the depression, however, are evident here also and, for 1935, the total tonnage of 86,434,819 was 8 p.c. less than the peak reached in 1929. The tonnage of coasting vessels has also grown, increasing from 10 million tons in 1876 (the first data compiled) to 86,000,000 tons in the fiscal year ended Mar. 31, 1935.

The vessels on the Canadian Shipping Registry in 1902 numbered 6,836 of 652,613 tons. Subsequently there was a fairly steady increase in the number of vessels to 8,573 in 1919, followed by a decrease to 7,482 in 1921; since 1921 there has been an increase to 8,877 representing 1,395,653 tons in 1934.

In the '70's shipbuilding was an important industry in Canada especially in the Maritime Provinces; the vessels built were mostly wooden sailing vessels. The invention of the iron steamboat greatly affected the industry in Canada, and there was a more or less steady decline in the number of vessels built and registered each year from 1885 to 1914. The War stimulated shipbuilding and there was a temporary activity assisted by the marine program of the Dominion Government. According to the figures published by the Department of Marine, the number of vessels built and registered in Canada in 1934 was 181 of 5,670 tons gross. Of this number three steam and six motor vessels were built of steel, the remainder being wooden vessels, powered as follows: sail 21; steam 1; motor 150.

Safeguards to Navigation.—A group of gas buoys at the Sorel shipyards ready to lay along the channel route of the St. Lawrence river. Inset: A large gas buoy being transported to its position.

Courtesy, Canadian Government Motion Picture Bureau.

The value of production in the shipbuilding industry in 1933, as collected by the Census of Industry, was $4,521,867, of which only $676,469 was for vessels built or under construction, while $2,860,763 was for repairs and custom work and $984,635 for other products, including aeroplanes, boilers, engines, structural steel, etc.

Telegraphs.—Canada's first telegraph line was erected in 1846-47 between Toronto, Hamilton, St. Catharines and Niagara. In 1847 also the Montreal Telegraph Co. was organized and a line built from Quebec to Toronto. Other lines rapidly followed, to be brought eventually under the single control of the Great Northwestern Telegraph Co., which remained alone in the field until the building of the Canadian Pacific railway and the Canadian Government telegraph lines. In 1934, there were 366,706 miles of telegraph wire in Canada, handling 10,526,496 messages, and the gross revenue was $9,972,627. In addition, six transoceanic cables have termini in Canada, five on the Atlantic and one on the Pacific, and handle 5·6 million cablegrams annually. There are also 30 radio stations open for commercial traffic, mostly government owned but operated in part by the Marconi Wireless Telegraph Co., in addition to stations operated in connection with shipping or private commercial stations operated by canneries, logging companies, etc. The number of wireless messages handled is increasing and is now over 300,000 a year.

Telephones.—The telephone was invented in Canada, and the first talk was conducted by Alexander Graham Bell between Brantford and Paris, a distance of eight miles, on Aug. 10, 1876. Telephone development in Canada, however, dates only from 1880. In 1883 there were only 4,400 rental-earning telephones, 44 exchanges, and 40 agencies, with 600 miles of long-distance wire. In 1933 the number of telephones was 1,192,330 with a wire mileage of 5,134,871, the investment being $330,490,876. In the three Prairie Provinces there are well-organized government systems. Next to the railways the telephone companies are probably the largest annual investors in new plant and construction in the Dominion. Canada has more telephones per capita than any other country except the United States.

National Radio.—Considerable extensions were made during the year 1935 in the service of the Canadian Radio Broadcasting Commission. In the late summer the Commission was able to extend the period of its network operation from 4½ hours to over 6 hours a day, with additional hours on Sunday. In consequence, the CRBC networks are now in operation between the hours of 5.30 p.m. in Eastern Canada and 1.30 a.m. on the Pacific coast. This enlargement in the operations of the Commission was made possible by the action of Parliament in increasing the annual appropriation for the service from $1,250,000 to $1,500,000. The increase was provided during the Parliamentary session of 1935. The extension of the Commission's time on the air naturally necessitated a considerable increase in program production, and the program production work at the various centres throughout the country was enlarged accordingly. Greater employment is now being given to Canadian radio talent throughout the country and the Commission has been in the process of developing new artists. The program exchange arrangement with United States broadcasting systems has been extended, and the Commission has also presented daily rebroadcasts of programs from Great Britain. The extension of the service has had the effect of making Canada more self-sustaining in the matter of its radio entertainment. The best of United States' programs now heard in this country are brought to the Commission's networks directly under the international program exchange system while British programs, formerly available only to users of short-wave receivers, are now being heard on the standard broadcasting band.

In addition, the Commission has succeeded in filling gaps in its coast-to-coast coverage by adding a number of stations to its networks. Notable in this connection has been the extension of the service to Western Ontario through the erection and operation of a Commission-owned station at Windsor, CRCW. Previously, a large part of the southern peninsula could not hear Commission programs as no station of sufficient power was available for the networks. The erection of this 1,000 watt station at Windsor has also enabled the program department of the Com-

These pictures show special equipment established by the Canadian Radio Broadcasting Commission for providing Canadians with broadcast programs from overseas. The building shown houses a special high-power short-wave receiving station at Ottawa which will be able to pick up short-wave programs from Great Britain and other overseas countries. The station is designed to eliminate "fading", the principal difficulty experienced by operators of ordinary short-wave receivers. The programs as they are received will be transmitted by wire to the Ottawa studios of the commission and transcribed for the network by means of the blattnerphone equipment. This equipment makes the transcription by magnetic process, a mile-long thin steel tape having the program impressed upon it as it passes between magnetic poles. The program is reproduced as the tape passes between another set of magnetic poles. The Radio Commission has the only equipment of this kind in North America but similar equipment is used extensively by the British Broadcasting Corporation in Great Britain. It is expected that overseas programs will become a regular feature of the Commission's service.

Courtesy, Canadian Radio Broadcasting Commission.

mission to introduce Western Ontario talent, some of it of first-class quality, to other parts of the country. Large gaps in northern Ontario have been filled by the erection of commercial stations at Sudbury and Kirkland Lake which have been added to the Commission's networks. The absence of the national service from these areas had previously been a source of keen public disappointment.

An important development in the national system during the year was the establishment of a powerful short-wave receiving station at Ottawa for the reception of overseas programs. The nature of its construction and its specially designed equipment have the effect of overcoming difficulties commonly encountered in ordinary short-wave reception. At this station "fading", a manifestation common in ordinary short-wave reception, is largely overcome. The antenna systems, installed on two sets of four poles, are directionally placed to tap most effectively the route travelled by short waves from Great Britain and the European continent. Reception interference from local causes, such as ignition systems on automobiles, weather conditions in the vicinity of the receiving apparatus, etc., are combated by the isolation of the station, the choice of site, and by insulation of the lead-in wires from the antenna systems. As programs from overseas are picked up at this station they are transmitted by wire to the studios in Ottawa and either placed on the networks immediately or recorded by the Commission's special blattnerphone equipment for rebroadcasting later. The addition of these overseas programs to the Commission's daily service implements one of the original purposes of the national system, which was that of effecting a regular exchange of radio entertainment between Canada and other countries.

One of the efforts of the Commission during the year was to improve the quality of Canadian announcing. Auditions for new talent also have taken place at frequent intervals at the various program production centres. A number of Canadian artists hitherto little known have received international recognition during the year in consequence of the national broadcasting service. The Commission has attempted to increase the production of programs of distinctive Canadian character. Important events in the history of Canada have been dramatized by Commission directors and artists. This policy was enlarged for the fall and winter program schedule. The technique of broadcast acting is being stressed. Special care is being exercised in the selection of subjects for short talks and addresses and in the choice of speakers to deliver them.

The Commission again participated in the Empire Christmas Day broadcast originated by the British Broadcasting Corporation. Typical Canadian Christmas Day scenes were dramatized and transmitted to the BBC and sent around the world. Broadcasts of world events of general interest were brought to Canadian listeners.

The "Northern Messenger Service", a weekly broadcast by long-wave and short-wave of personal messages and a weekly news summary especially for Canadians stationed in the Far North, was found to be greatly appreciated. Reports from the Arctic regions indicated that about 75 or 80 p.c. of the messages broadcast were received by those for whom they were intended. This service commences early in November and continues until the spring.

The Post Office.—The Post Office is under the direction of a special Department, the Dominion being divided into fifteen districts which in their entirety embrace a territory more extensive than that served

by any other system in the world except those of the United States and Russia. Rural mail delivery dates from 1908. The number of post offices has increased from about 3,470 in 1867 to over 12,000 in 1935, the postal revenue in 1935 being approximately $37,577,000. The Post Office Department issued money orders payable in Canada to the amount of $108,000,000 in 1935, and payable in other countries to the value of about $6,850,000. In addition, postal notes to the value of $10,250,000 were issued in 1935. During the War, the domestic letter rate was increased to 3 cents per ounce, but was reduced to 2 cents as from July 1, 1926. Similarly, the 2 cent (Imperial penny postage) rate to Great Britain and other parts of the Empire, established at the time of the Diamond Jubilee of Queen Victoria, instead of the older 5-cent rate, was advanced to 3 cents and then to 4 cents in the war period, but was reduced to 3 cents in 1926, and to 2 cents as from Dec. 25, 1928. In May, 1929, the 2-cent letter rate was applied to France and on Christmas Day, 1929, to correspondence for the countries of South America. On July 1, 1930, the rate of letter postage for all other countries was reduced to 5 cents for the first ounce and 3 cents for each additional ounce. On July 1, 1931, the letter rate of postage for Canada, Great Britain, the British Empire, France, the United States, and all other places in North and South America, was increased to 3 cents for the first ounce and 2 cents for each additional ounce.

The Post Office—Air mail being loaded at Montreal.
Courtesy, Canadian Government Motion Picture Bureau.

In its per capita use of the mails Canada takes a high place. In 1868, the year following Confederation, the average postal expenditure for each member of the population was less than 27 cents, whereas during 1934 each person in Canada expended approximately $3·36. This is remarkable when it is considered that rates of postage have decreased during this period.

Official air mail service was inaugurated in October, 1927. In the first year of operation, 1927-28, the mileage flown was 9,538 and the weight of mail carried, 38,484 lb.; during 1930-31, 1,747,950 miles were flown and 506,503 lb. of mail carried; during 1931-32, 1,229,021 miles were flown and 443,501 lb. of mail carried; during 1932-33, 432,378 miles were flown and 454,303 lb. of mail carried; during 1933-34, 513,690 miles were flown and 592,758 lb. of mail carried, while during the twelve-month period ended Mar. 31, 1935, the figures were 567,970 miles and 691,767 lb. respectively.

The development of gold mining has brought about the establishment of air mail services to outlying points in Canada, principally to the districts surrounding Siscoe* in the province of Quebec; those of Red Lake, Narrow Lake, Goldpines, Jackson Manion† in Ontario; Wadhope, Bissett‡ in Manitoba; Lac la Ronge, Ile a la Crosse§ in Saskatchewan; and Cameron Bay in the Great Bear Lake section of the Northwest Territories.

In addition to the above, there are many air mail services to remote and otherwise almost inaccessible areas, the most important of which is that between Fort McMurray, Alta., and Aklavik, N.W.T., a distance of approximately 1,500 miles. Others serve Coppermine on Coronation gulf; Fond du Lac on lake Athabaska; Atlin and Telegraph Creek in northern British Columbia; Berens River on lake Winnipeg; also Norway House and Cross Lake in Manitoba.

During the winter season Pelee island is served by air from Leamington, Ont.; remote settlements along the north shore of the gulf of St. Lawrence from Quebec; the Magdalen islands from Charlottetown, P.E.I.

During the season of open navigation air mail service between Montreal and Rimouski is operated to connect with the principal transatlantic steamers.

Although inter-city air mail services were seriously curtailed a few years ago, there are at present in operation the international services between Montreal and Albany and between Winnipeg and Pembina as well as those services between Moncton and Charlottetown and Vancouver and Victoria.

Gold production in Canada has undoubtedly been greatly stimulated by the efficiency of the postal service rendered and this, in turn, has assisted materially in the development of first class air transportation facilities, making the shipment of mining equipment and personnel a relatively simple matter.

The creation of a chain of landing fields across the Maritime Provinces, northern Ontario and British Columbia may be taken as indicative of the establishment of inter-city air mail services on a comprehensive scale in the not too distant future.

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*Val d'Or, Bourlamaque, Kewagama and Rouyn. †Casummit Lake and Pickle Crow
‡Beresford Lake, Diana and God's Lake. §Goldfields.

CHAPTER XIII

INTERNAL TRADE—WHOLESALE AND RETAIL TRADE —FREIGHT MOVEMENTS—STOCK MARKETS— COMMODITY PRICES—COST OF LIVING

Internal trade in Canada is of primary importance among economic activities. The home consumption of goods and services by a population of 10,800,000 requires a greater expenditure of economic activity than that required for the prosecution of external trade. Internal trade includes the transportation and distribution of goods within the country through the medium of railways, steamships, warehouses, wholesale and retail stores, and other agencies. It includes all professional services such as those carried on by doctors, theatres, hospitals, schools, banks, insurance companies, and innumerable others. All such activities, even if not productive of material goods, add substantially to the national income.

Historically, Canadian internal trade developed as a result of the fur trade, fur being the first great staple sought in Canada by Europeans in exchange for their products. This trade spread until it covered the whole area of the Dominion, forming the framework into which the economic activities of the nation were gradually built. Lumber, fisheries, agricultural, mineral and other resources were gradually exploited. As population grew local manufacturing industries supplanted certain imports. Diverse resources in various parts of the country led to a vast exchange of products, and growing wealth to increasing abundance of services.

Unfortunately, owing to the many ramifications of internal trade, its statistical measurement presents great difficulties. Nevertheless some idea of its extent may be gathered from the fact that in 1933 the grand total value of the activities of those occupied in production of all kinds as estimated under the heading National Income on p. 39, was $3,189,000,000, while the money value of exports of Canadian produce was $531,749,179.

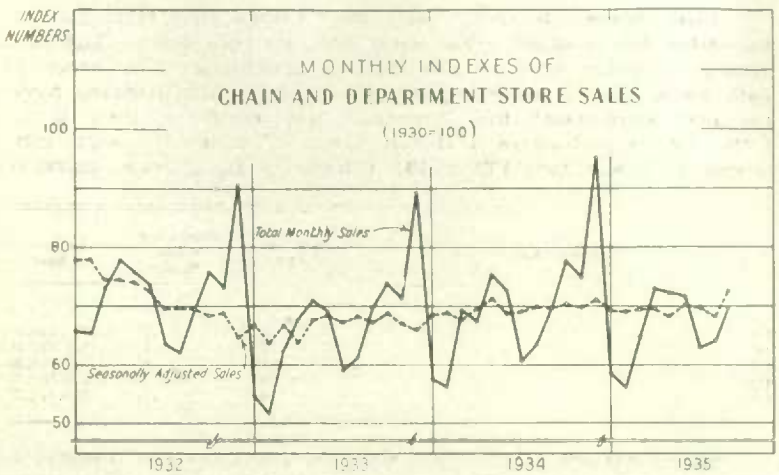
The sections which follow deal with those features of internal trade which have not received treatment elsewhere in this handbook.

Wholesale and Retail Trade

The distribution of goods and services, to meet the demands of consumers requires many types of establishments which employ hundreds of thousands of persons and use many millions of dollars of capital. The 1931 Census of Merchandising and Service Establishments showed that in 1930 there were 125,000 retail stores in Canada with sales amounting to $2,756,000,000. Including proprietors receiving a fixed salary, there were about 300,000 persons on the payrolls of these stores and approximately $300,000,000 paid out to them in salaries and wages during the year. The capital invested in these retail stores amounted to $1,200,000,000.

Wholesale Trade.—The supplying of goods for the retail trade requires a complex organization, made up of many types of wholesale establishments. The census of wholesale business showed that there were more than 5,000 wholesale houses in Canada with sales amounting to slightly more than one billion dollars and 8,000 other types of wholesalers handling sales and orders to the value of two billion dollars. The capital

invested in both types of wholesale establishments was valued at $759,000,000. Ninety thousand persons found employment in wholesale establishments and their earnings totalled $146,000,000.



Indexes of Sales of Retail and Wholesale Establishments, by Provinces, 1930-34

Province	Retail Stores					Wholesale Establishments[1]				
	1930	1931	1932	1933	1934	1930	1931	1932	1933	1934
P.E.I.	100·0	83·8	67·2	64·4	70·1					
N.S.	100·0	90·3	74·5	68·8	76·7	100·0	85·6	70·3	67·9	77·0
N.B.	100·0	85·0	67·5	61·9	68·6					
Que.	100·0	86·4	71·4	64·7	68·6	100·0	83·7	69·4	65·9	74·7
Ont.	100·0	86·4	71·5	66·9	74·2	100·0	84·4	70·9	68·9	79·4
Man.	100·0	81·4	69·2	64·1	68·7					
Sask.	100·0	70·8	59·2	54·5	59·0	100·0	73·0	65·2	60·6	67·7
Alta.	100·0	76·5	65·3	61·4	68·2					
B.C.	100·0	83·5	65·5	62·2	69·0	100·0	81·9	64·8	63·5	71·6
Y.&N.W.T.	100·0	90·5	68·3	54·9	64·9	–	–	–	–	–
Canada	**100·0**	**84·2**	**69·5**	**61·4**	**70·5**	**100·0**	**81·6**	**68·7**	**65·7**	**74·7**

[1] Regular wholesale houses. For a full description of the index see the report "Wholesale Trade in Canada, 1930-33", obtainable from the Dominion Statistician.

The trend in sales of retail stores and regular wholesale houses by provinces for the period 1930 to 1934 is shown above. No allowances have been made in the indexes for changes in retail and wholesale prices during the period. While the decline in retail trade from 1930 to 1933 was 35·6 p.c. (34·3 p.c. in wholesale trade) some kinds of business had much heavier losses than others. How much of the decrease was due to the decline in prices and how much to a reduction in physical volume of trade, it is not possible to say. Among retail stores the food and general merchandise groups suffered the least loss in dollar sales between 1930 and 1933, while the largest declines occurred with establishments specializing in building materials and furniture and household goods. Similar differ-

ences will be found among wholesale trades. The reports on retail and wholesale trade for the year 1934 indicate that those lines of trade which had the largest losses during the depression had the largest increases in sales in 1934 compared with 1933.

Chain Stores.—In recent years, great changes have taken place in the distribution of goods. The chain store has been doing a large and growing proportion of the work of retailing merchandise. The survey of chain stores, made in connection with the Census of Merchandising, shows that chain stores (other than department store chains) do about 18 p.c. of the total retail business of the Dominion. The trend in chain store business in Canada from 1930 to 1934 is shown by the following figures:—

Calender Year	Number of Chains	Number of Chain Stores	Value of Sales
			$
1930	518	8,097	487,336,000
1931	506	8,188	434,199,700
1932	486	8,066	360,806,200
1933	461	7,900	328,902,600
1934	445	7,804	348,384,200

Retail Services.—More than 40,000 establishments are engaged in supplying services of various kinds to the Canadian public. The provision of amusements and domestic and personal services forms the chief business of the service groups. In 1930, $249,000,000 were spent by consumers in such establishments which provided employment for 64,000 persons.

Internal Freight Movements

Freight Originated and Freight Terminated for Nine Months ended Sept. 30, 1935

Province	Originated at Stations in Canada	Received from Foreign Connections	Total Originated	Terminated at Stations in Canada	Delivered to Foreign Connections	Total Terminated
	000 tons	000 tons	000 tons	000 tons	000 tons	000 tons
Totals, Nine Months, 1934	**35,448**	**13,903**	**49,351**	**33,071**	**15,411**	**48,482**
1935						
Prince Ed. Island	159	—	159	203	2	205
Nova Scotia	4,605	89	4,694	4,019	437	4,456
New Brunswick	1,324	296	1,620	1,172	788	1,960
Quebec	5,737	2,140	7,877	4,641	2,597	7,238
Ontario	10,228	19,481	20,709	14,453	9,662	24,115
Manitoba	2,471	109	2,580	2,459	166	2,624
Saskatchewan	3,716	140	3,856	2,244	230	2,474
Alberta	4,606	166	4,772	1,757	—	1,757
British Columbia	2,766	221	2,987	2,029	1,695	3,724
Totals, Nine Months, 1935	**35,612**	**13,642**	**49,254**	**32,977**	**15,577**	**48,554**

An important indicator of the volume of internal trade is found in the reports of revenue freight carried by the railways. In 1934 this revenue freight totalled 67,681,499 tons, or an increase of 18·5 p.c. over 1933 traffic. The returns by provinces throw light on interprovincial trade

in Canada. For example, the four western provinces show a net export to the eastern provinces of 5,935,161 tons of freight made up largely of agricultural and animal products. The eastbound movement of wheat alone amounted to 4,806,021 tons and other grains and agricultural products brought the total net eastern movement up to 5,772,094 tons. The movement of animal products going eastward was 246,747 tons. There were cross movements of mine products, the net movement eastward of 221,597 tons consisting mostly of coal. Forest products moved eastward to the extent of 213,272 tons and manufactures and miscellaneous freight showed a westward movement amounting to 518,549 tons, fish, cement lime and plaster and fertilizers being the only commodities listed with a net movement eastward.

Stock Markets

A subject often classified under the head of finance but akin to internal trade, inasmuch as it concerns a great trading market closely linked with the business organization of the country, is that of stock markets. The principal stock exchanges in Canada are located at Montreal and Toronto, though those at other centres such as Winnipeg, Calgary and Vancouver are increasing in importance. In recent years there has been a huge increase

Trading Floor of the Montreal Stock Exchange.

Silver Trading Rang, Canadian Commodity Exchange.

The Canadian Commodity Exchange, established Oct. 22, 1934, is housed in the same building as the Montreal Stock Exchange. At first the only commodity freely traded in was silver: on Oct. 22, 1935, trading facilities were extended to butter, cheese and eggs.

Courtesy, Montreal Stock Exchange.

in the volume of business transacted on the stock exchanges, due to the widespread participation of the general public in the "bull" market which extended from 1924 to 1929. Since 1929, however, trading has fallen away considerably, due to heavy losses, business depression and caution on the part of the investing public. July, August and September, 1932, sales figures showed an advance which, however, proved but temporary. A more substantial increase both in trading and in prices occurred in the early summer months of 1933. It reached a peak in July, after which trading became gradually less active. During 1934 and 1935, security markets have handled a relatively small volume of shares, but the tendency in prices has been broadly upward.

The extent of public participation in the stock market is illustrated by the table below showing the volume of sales on the Montreal Exchange.

The record of Canadian common stock prices, extending back to 1914, is quite different from that of commodity prices. During the War and in the years immediately following, the average level of commodity prices advanced to nearly two and one-half times its height in 1914, while common stock prices averaged less than two-thirds of 1914 levels during this period. Again, during the years 1927 to 1929, the behaviour of these two price groups was very different. This time stock prices increased by approximately 100 p.c., while commodity prices drifted slowly downward. Both commodities and stocks declined subsequent to the latter part of 1929, and since the spring months of 1933 they have both moved irregularly upward.

From the extreme high of 217·1 registered in September, 1929, a general index of common stock prices dropped sharply at first, and then more gradually, until it reached 43·2 in June, 1932. Temporary recovery was followed by a secondary decline lasting until March, 1933, when the index was 48·9. Since that time, intermittent recovery has persisted as indicated by the August, 1935, number of 94·7.

Numbers of Shares Traded on the Montreal Stock Exchange, by Months, January 1932 to November 1935

Month	1932	1933	1934	1935	Month	1932	1933	1934	1935
Jan.	125,989	201,133	722,150	396,788	July	283,953	1,852,002	237,972	248,645
Feb.	136,387	281,197	681,466	220,365	Aug.	544,528	414,966	279,144	318,960
March	180,070	207,529	549,182	288,842	Sept.	505,926	433,747	185,206	273,798
April	187,313	486,726	444,367	282,672	Oct.	206,902	399,022	255,545	352,172
May	204,522	1,083,485	313,343	350,738	Nov.	193,093	370,525	385,780	809,693
June	176,041	1,570,805	244,643	228,433	Dec.	149,733	338,570	317,322	—

Security Prices, 1932 to 1935.—The Bureau of Statistics publishes several series of index numbers designed to measure the movement of security prices in general and of important groups of stocks in particular, and constituting an important barometer of business conditions. The table below shows the course of the investors' index number for representative months in the years from 1932 to 1935 inclusive. A table of the index numbers of mining stocks by months during the same years is also given.

The post-war peak in mining share prices was reached in October, 1927, two years prior to the highest levels in utilities and industrial stocks. At that time a price index for mining issues touched 143·8, considering prices in 1926 as equal to 100·0. It then declined irregularly to an all-time low of 46·8 during June, 1932. Subsequent to depreciation of the

currency in terms of gold, the mining stock index advanced again to the boom levels of 1927, registering 143·3 at the highest point of this movement in September, 1934. Subsequently a gradual reaction carried prices downward as indicated by the August, 1935, number of 115·2.

Investors' Monthly Index Numbers of Common Stocks, 1933-35

(1926 = 100)

Year and Month	Banks	Utilities	Industrials	Total
1933 (representative months)—				
January	67·8	45·9	60·7	52·9
March	62·8	39·9	59·1	48·9
June	73·4	56·4	107·1	77·4
September	74·8	53·5	119·1	81·6
December	64·7	47·8	111·4	75·3
1934 (representative months)—				
January	71·7	53·5	119·6	81·6
March	76·9	56·8	128·5	88·0
June	72·7	54·5	126·1	87·2
September	74·9	50·1	118·8	83·8
December	79·0	47·5	125·6	86·2
1935 (representative months)—				
January	80·1	50·4	129·7	88·6
March	76·8	45·1	125·6	84·4
June	72·0	45·0	145·2	93·8
September				

Index Numbers of Twenty-Three Mining Stocks, by Months, 1932-35

Month	1932	1933	1934	1935	Month	1932	1933	1934	1935
Jan	59·7	67·1	108·9	124·3	July	55·6	106·9	137·2	117·9
Feb	57·3	75·3	114·4	124·2	Aug	59·7	107·4	141·1	115·6
Mar	57·8	68·4	128·1	128·2	Sept	60·9	113·4	139·2	119·1
April	52·4	74·5	137·2	128·7	Oct	57·5	112·2	133·5	118·6
May	48·4	89·6	129·8	128·3	Nov	60·9	109·4	125·5	125·5
June	48·3	104·1	138·5	123·0	Dec	63·1	105·1	124·9	—

Prices of Commodities

Wholesale prices in 1926 were taken as the base of a new index number which in subsequent years fell to an average of 97·7 in 1927, 96·4 in 1928 and 95·6 in 1929. Thereafter in more rapid decline the index number receded to an average of 86·6 in 1930 and to 70·4 in December, 1931. The decline continued almost steadily until February, 1933, when the index was below 1913 levels at 63·5. In the next five months it rose to 70·5, but had dropped back to 69·0 in December. The average for the year at 67·1 was slightly higher than in 1932.

Index Numbers of Wholesale Prices, 1913-34[1] and, by Months, 1935

(1926 = 100)

1913	64·0	1923	98·0	1935[2]—	
1914	65·5	1924	99·4	January	71·4
1915	70·4	1925	102·6	February	71·9
1916	84·3	1926	100·0	March	72·0
1917	114·3	1927	97·7	April	72·5
1918	127·4	1928	96·4	May	72·3
1919	134·0	1929	95·6	June	71·5
1920	155·9	1930	86·6	July	71·5
1921	110·0	1931	72·1	August	71·6
1922	97·3	1932	66·7	September	72·3
		1933	67·1	October	73·1
		1934	71·6	November	72·7
				December	—

[1] 236 commodities to 1926, thereafter 502. [2] Preliminary.

During 1934 and 1935 a marked degree of stability has existed, as shown by monthly indexes for these years, which ranged between 70·7 (January 1934) and 72·5 (April 1935). The August 1935 index was 71·6.

Cost of Living

Statistics of cost of living constitute a very important phase of price statistics. Index numbers of retail prices, rents, and costs of services issued by the Bureau of Statistics are constructed from a general point of view, having for their object the measurement of the general movement of such prices and costs in the Dominion as a whole, and being so calculated as to make comparisons possible with other general index numbers constructed on similar principles, as, for example, the index of wholesale prices. Calculated as they are on the aggregative principle, *i.e.*, the total consumption of each commodity, the Bureau's index numbers afford an excellent measurement of changes in the average cost of living in the Dominion as distinguished from that of any particular class or section.

Index Numbers of Retail Prices, Rents and Costs of Services, 1929–34, and by Months, 1935

(Average prices in 1926 = 100)

Year	Total Index	Food Index	Fuel Index	Rent Index	Clothing Index	Sundries Index
1929	99·9	101·0	96·4	103·3	96·9	99·0
1930	99·2	98·6	95·7	105·9	93·9	99·4
1931	89·6	77·3	94·2	103·0	82·2	97·4
1932	81·4	64·3	91·4	94·7	72·8	94·6
1933	77·7	63·7	87·7	85·1	67·9	92·6
1934	78·7	69·4	87·7	80·1	70·5	92·1
1935[1]						
January	78·8	68·8	88·8	80·3	71·0	92·1
February	78·9	69·2	88·8	80·3	71·0	92·1
March	78·8	69·5	88·7	80·3	70·3	92·1
April	78·6	68·6	88·7	80·3	70·3	92·1
May	78·6	68·7	85·9	81·4	70·3	92·1
June	78·8	69·3	84·8	81·4	69·9	92·6
July	78·8	69·3	84·7	81·4	69·9	92·4
August	79·4	71·3	85·4	81·4	69·9	92·5
September	79·6	70·9	85·4	81·4	71·6	92·6
October	80·4	72·4	86·5	82·6	71·6	92·5
November	80·6	73·2	87·0	82·6	71·6	92·5
December	–	–	–	–	–	–

[1] Preliminary figures.

Considering 1926 as equal to 100·0, the total index was 65·4 for the year 1913, 124·2 in 1920, 98·9 in 1928, and 99·9 in 1929. The latter part of 1929 was marked by a slight increase which extended into January, 1930, when the index stood at 102·1. There followed a protracted decline which, except for a few minor interruptions extended over a period of forty-one months to June, 1933, when the index of 76·6 was the lowest recorded since 1916. Thereafter the cost of living index has fluctuated within narrow limits, but on the whole the tendency has been upward, as indicated by the August, 1935, figure of 79·4. The firmness displayed towards the latter part of 1935 was due largely to higher food prices, and to some extent to increases for fuels.

CHAPTER XIV

EXTERNAL TRADE OF CANADA—NON-COMMODITY EXCHANGES

External Trade

The steady but marked increase in Canada's foreign trade which was continued during the year ended Mar. 31, 1935, had its inception in the early months of 1933-34. The Dominion's total trade during the fiscal year 1934-35 amounted to $1,189,990,110, imports accounting for $522,431,153 of this amount; domestic exports for $659,899,994; and foreign exports for $7,658,963; the increase in the total

Loading Bananas at Jamaica, B.W.I.—Among the many tropical and semi-tropical products imported into Canada from the British West Indies are bananas, the imports in 1935 amounting to $1,177,000. Bananas now play a very important part as regards total value of imports from the British West Indies. From 1926 to 1929 only between 1 and 2 p.c. of Canada's imports of bananas came from the British West Indies, but for 1930, when bananas from foreign countries were made dutiable, and those from British countries free, the percentage increased to 69·5 of the total imports; by 1931 it had risen to 80.2; in 1932, to 84.1; in 1933, to 86·7; in 1934 it dropped to 79·6; but in 1935 it rose again to 87·4.

Courtesy, Canadian Government Motion Picture Bureau.

trade, 1934-35 compared with 1933-34, amounted to $170,537,016, or 16·7 p.c.—in imports to $88,632,528, or 20·4 p.c., in domestic exports to $80,556,849, or 13·9 p.c., and in foreign exports to $1,347,639, or 21·4 p.c. The total trade of Canada for the fiscal year 1934-35 compared with 1933-34 shows an increase of 16·7 p.c. on a value basis, and 11·1 p.c. on a volume basis; imports show an increase of 20·4 p.c. on a value basis, and 13·8 p.c. on a volume basis; while the Dominion's domestic exports show an increase of 13·9 p.c. on a value basis, and 8·9 p.c. on a volume basis. Empire countries accounted for 46·5 p.c. of the increase in Canada's total trade from 1933-34 to 1934-35, and foreign countries for 53·5 p.c.; the increase in imports from Empire countries accounted for 17·8 p.c. of the total increase, and from foreign countries for 82·2 p.c., while the Empire's share in the increase of total exports was 77·7 p.c., and foreign countries, 22·3 p.c. In spite of the large decrease in recent years in the Dominion's total trade, it is still more than nine times that at Confederation.

Canada, in the production and exports of many staple products, ranks high among the leading nations of the world. In comparison with the trade of principal world countries, Canada in percentage of increase in her trade in 1934 compared with 1933, among thirty-five leading countries, occupied eleventh position in both imports and exports, but in 1933 compared with 1932 she occupied only thirtieth position in imports, and twenty-third position in exports. In percentage of exports over imports Canada, in 1933, occupied seventh place, and in 1934 ninth place. The Dominion occupied eighth place in total world trade in 1934, compared with ninth in 1933; fifth place in exports, compared with sixth in 1933; and ninth in imports, compared with eleventh in 1933. The Dominion's total trade with the United Kingdom in 1934-35 amounted to $386,688,613, showing an increase compared with 1933-34 of 16·0 p.c., and with 1932-33 of 42·4 p.c. Total trade with the United States in 1934-35 was $534,522,082, an increase of 22·2 p.c. compared with 1933-34, and compared with 1932-33, an increase of 40·3 p.c. The above figures of total trade include exports of foreign produce from Canada, as well as domestic exports.

Over the past few years the tendency has been towards a greater exchange of commodities with Empire countries. The following percentage figures of imports and exports clearly bring out this tendency:—

Fiscal Year	Empire Countries		Foreign Countries		United Kingdom		United States	
	Imports from	Exports to	Imports from	Exports to	Imports from	Exports to	Imports from	Exports to
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1930.....	20·3	34·0	79·7	66·0	15·2	25·2	67·9	46·0
1931.....	22·6	36·6	77·4	63·4	16·5	27·4	64·5	43·7
1932.....	25·6	38·0	74·4	62·0	18·4	30·2	60·8	40·8
1933.....	29·6	46·9	70·4	53·1	21·3	38·9	57·2	30·2
1934.....	32·4	48·0	67·6	52·0	24·2	39·3	54·9	33·6
1935.....	29·9	51·7	70·1	48·3	21·4	41·5	58·1	34·1

The following table gives the figures of total Canadian trade, that is, excluding the small percentages of foreign merchandise exported, for 1914, 1929, and annually thereafter:—

Total Canadian Trade[1] with British Empire and Foreign Countries

Fiscal Year	Canadian Trade with—				Total Canadian Trade
	United Kingdom	Other British Empire	United States	Other Foreign Countries	
	$	$	$	$	$
1914	347,324,375	45,844,988	559,674,963	97,938,111	1,050,782,437
1929	623,771,866	169,605,632	1,367,624,374	468,388,891	2,629,388,763
1930	470,925,703	161,320,037	1,362,491,800	373,794,344	2,368,531,884
1931	368,743,891	129,018,931	934,067,581	274,524,959	1,706,355,362
1932	280,415,504	86,352,876	586,873,449	201,206,377	1,154,848,206
1933	270,827,074	71,676,177	375,708,455	161,971,993	880,183,699
1934	332,702,175	85,726,845	432,630,820	162,081,930	1,013,141,770
1935	385,865,227	111,818,222	528,337,895	156,309,803	1,182,331,147

[1]These figures do not include exports of foreign merchandise.

The following résumé of total trade for the years 1926-35 shows that for only two of the ten years did imports exceed exports. The year of highest per capita trade was 1929; the year of lowest per capita trade in the period was 1933.

Ratio of Exports to Imports and Value per capita of Exports, Imports and Total Trade, fiscal years 1926-35

Fiscal Year	Excess of Imports Entered for Consumption over Exports	Excess of Exports over Imports Entered for Consumption	Rate p.c. of Exports to Imports Entered for Consumption	Estimated Population	Values per capita of—		
					Exports, Canadian Produce	Total Imports	Total Trade[1]
	$	$	p.c.	No.	$	$	$
1926	-	401,371,405	143·28	9,451,000	139·10	98·13	237·32
1927	-	236,680,637	122·92	9,636,000	129·96	106·99	236·95
1928	-	141,641,568	112·76	9,835,000	124·92	112·78	237·70
1929	-	123,216,984	109·72	10,029,000	136·00	126·23	262·23
1930	103,335,512	-	91·72	10,208,000	117·83	122·31	240·14
1931	89,584,647	-	90·12	10,376,786	77·09	87·39	164·48
1932	-	9,061,613	101·57	10,506,000	54·86	55·06	109·92
1933	-	74,330,053	118·29	10,681,000	44·36	38·05	82·41
1934	-	151,855,844	135·01	10,824,000	53·52	40·07	93·60
1935	-	145,127,804	127·78	10,949,000	60·27	47·71	107·99

[1]Not including exports of foreign produce.

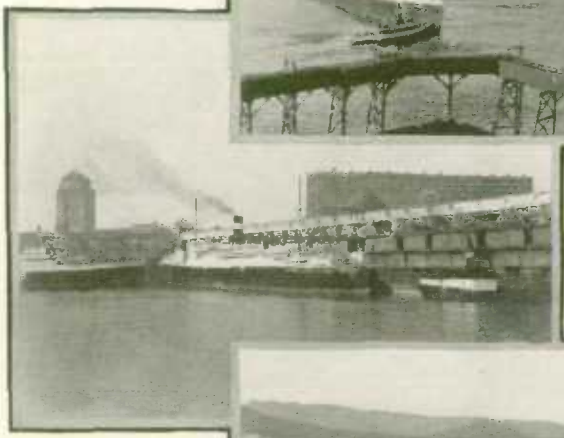
IMPORTS

Canada's total imports for the fiscal year ended Mar. 31, 1935, were valued at $522,431,153, and in 1934 at $433,798,625, the increase in 1935 amounting to $88,632,528, or 20·4 p.c. Imports from Empire countries in 1935 amounted to $156,186,471, an increase over the previous fiscal year of $15,782,585, or 11·2 p.c.; while imports from foreign countries in 1935 totalled $366,244,682, an increase in 1935 of $72,849,943, or 24·8 p.c. During the same period imports from the United Kingdom increased from $105,100,764 to $111,682,490, or 6·3 p.c., while imports from the United States increased from $238,187,681 to $303,639,972, or 27·4 p.c. Of the total increase in 1935 compared with 1934, 17·8 p.c. was with Empire countries, and 82·2 p.c. with foreign countries. The percentages of imports from the United States and other Empire countries to total imports,

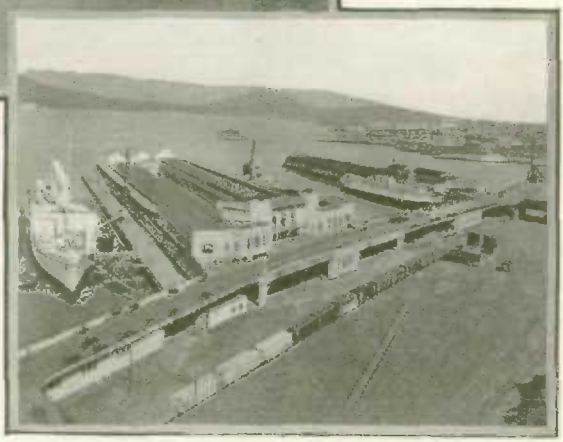
TYPICAL CANADIAN PORTS

Halifax, N.S.—Various types of ocean-going craft in the harbour.

The Harbour, Saint John, N.B.



Montreal, Que., showing Grain Elevator.



The Harbour and Docks, Vancouver, B.C.

Courtesy, Canadian Government Motion Picture Bureau.

show increases; while those from the United Kingdom, and other foreign countries, show decreases.

Imports from British and Foreign Countries

Fiscal Year	Canadian Imports from—				Total Imports
	United Kingdom	Other British Empire	United States	Other Foreign Countries	
	$	$	$	$	$
1914	132,070,406	22,456,440	396,302,138	68,365,014	619,193,998
1929	194,041,381	63,346,829	868,012,229	140,278,652	1,265,679,091
1930	189,179,738	63,494,864	847,442,037	148,156,943	1,248,273,582
1931	149,497,392	55,401,034	584,407,018	117,307,251	906,612,695
1932	106,371,779	41,440,214	351,686,775	79,005,136	578,503,904
1933	86,466,055	33,918,269	232,548,055	53,451,365	406,383,744
1934	105,100,764	35,303,122	238,187,681	55,207,058	433,798,625
1935	111,682,490	44,503,981	303,639,972	62,604,710	522,431,153

A classification of imports from the United Kingdom by dutiable and free under the preferential and the general tariff for the years 1925-35, indicates a marked increase in those entering Canada from that source free under the preferential tariff. This is shown in the following table:—

Dutiable and Free Imports from the United Kingdom, fiscal years, 1925-35

($000 omitted)

Fiscal Year	Total Imports	Dutiable Imports		Free Imports					
				Total Free		Free under Preferential Tariff		Free under General Tariff	
	$000	$000	p.c. of Total	$000	p.c. of Total	$000	p.c. of Total	$000	p.c. of Total
1925	151,084	124,666	82·5	26,418	17·5	938	0·6	25,480	16·9
1926	163,731	133,125	81·3	30,606	18·7	1,242	0·8	29,364	17·9
1927	163,939	134,971	82·4	28,968	17·6	3,563	2·2	25,405	15·4
1928	186,436	150,054	80·5	36,382	19·5	4,656	2·5	31,726	17·0
1929	194,041	154,457	79·6	39,584	20·4	10,865	5·6	28,719	14·8
1930	189,180	148,643	78·6	40,537	21·4	10,668	5·6	29,869	15·8
1931	149,497	108,570	72·6	40,927	27·4	18,288	12·2	22,639	15·2
1932	106,372	79,694	74·9	26,678	25·1	12,316	11·6	14,362	13·5
1933	86,466	55,691	64·4	30,775	35·6	22,015	25·4	8,760	10·2
1934	105,101	57,038	54·3	48,063	45·7	39,666	37·7	8,397	8·0
1935	111,682	58,836	52·6	52,846	47·4	41,469	37·1	11,377	10·3

It is an interesting study to note the changing relations over a number of years between the commodities listed by rank. Coal, now in first place, has been among the first three commodities since 1890, but machinery, which is now in fourth place, headed the list in 1930, with imports valued at $69,000,000, and was in sixth place thirteen years ago, when its imports were valued at $37,000,000, being then outranked by: sugar and products, coal, cotton goods, woollen goods, and rolling-mill products. Crude petroleum has risen to prominence rapidly since 1920, when it was in eleventh place. Sugar for refining, which was in third place in 1933, and fifth place in 1932, is now in seventh place. The most outstanding change is in the case of raw cotton, which from eleventh place in 1933, and fourteenth place in 1932, has now attained fifth place, thereby reflecting the relative improvement in the Canadian textile industry.

Twenty Chief Commodities Imported, fiscal years 1934 and 1935

Rank		Commodity (In order of value, 1935)	Imports, Fiscal Year 1935		Increase (+) or Decrease (−) 1935 compared with 1934	
1934	1935		Quantity	Value	Quantity	Value
				$		$
1	1	Coal..... ton	12,827,068	35,618,429	+ 1,171,675	+ 6,416,970
2	2	Crude petroleum..... gal.	1,091,352,582	32,500,727	+ 27,722,885	+ 7,490,064
6	3	Automobile parts.....	—	22,178,231	—	+ 8,417,989
5	4	Machinery.....	—	19,127,704	—	+ 5,280,378
3	5	Raw cotton..... lb.	138,025,066	18,111,446	+ 5,568,142	+ 3,767,829
7	6	Plates and sheets, iron.. cwt.	5,124,952	15,963,502	+ 880,555	+ 2,855,388
8	7	Sugar for refining..... cwt.	8,753,474	14,478,586	+ 1,821,495	+ 2,817,998
4	8	Spirits and wines.....	—	14,350,828	—	+ 126,929
9	9	Fresh fruits.....	—	12,586,403	—	+ 2,010,370
10	10	Books and printed matter.....	—	9,034,343	—	+ 661,716
25	11	Rubber, crude..... lb.	63,618,101	7,958,308	+ 12,469,554	+ 4,037,110
13	12	Electrical apparatus.....	—	7,943,639	—	+ 2,028,615
14	13	Engines and boilers.....	—	7,781,902	—	+ 2,364,820
12	14	Vegetable oils..... gal.	15,422,486	7,425,906	+ 2,108,650	+ 1,297,595
11	15	Tea..... lb.	30,370,010	7,107,322	− 5,822,217	− 282,395
17	16	Clay and its products.....	—	6,094,940	—	+ 916,004
16	17	Paper.....	—	5,600,024	—	+ 357,856
22	18	Dried fruits..... lb.	86,963,464	5,517,990	+ 15,421,224	+ 1,192,067
21	19	Glass and glassware.....	—	5,341,828	—	+ 976,579
34	20	Corn..... bush.	7,957,211	4,988,051	+ 2,287,840	+ 2,249,450

Commodities are classified by the Bureau of Statistics into nine main groups, as follows: Agricultural and Vegetable Products; Animals and Animal Products; Fibres, Textiles, and Textile Products; Wood, Wood Products and Paper; Iron and Its Products; Non-Ferrous Metals and Their Products; Non-Metallic Minerals and Their Products; Chemicals and Allied Products; and Miscellaneous Commodities. Imports under the nine main groups in 1935 compared with 1934 show increases. The greatest absolute increases in 1935 were experienced by Iron and Its Products; Non-Metallic Minerals and Their Products; and Agricultural and Vegetable Products, in the order given; but the greatest percentage increases were shown by Iron and Its Products (44·7 p.c.); Non-Ferrous Metals and Their Products (41·3 p.c.); and Non-Metallic Minerals and Their Products (22·8 p.c.).

The most important group, from the standpoint of imports, was Agricultural and Vegetable Products, under which classification imports reached $109,418,595, by far the most important items being sugar, alcoholic beverages, and fresh fruits. This group showed an increase of 20·5 p.c. from the 1934 figures. The other chief groups in order of value of importance were: Non-Metallic Minerals and Their Products ($102,428,037—chiefly coal and petroleum); Iron and Its Products ($100,056,145—chiefly automobile parts, machinery, and plates and sheets); Fibres, Textiles and Textile Products ($81,798,280—chiefly raw cotton, and cotton products, and wool and woollen products).

EXPORTS

The Dominion leads the world in exports of asbestos, nickel, and newsprint paper; occupies second place in the exports of wheat and wheat flour; third place in the exports of automobiles; and fourth place in the exports of rubber tires and wood pulp. The exports of these staple

products from Canada make up about 58 p.c. of the Dominion's total domestic exports. Canada also ranks high in the world's exports of many other staple products such as lumber and timber, fish, copper, barley, cheese, raw furs, etc.

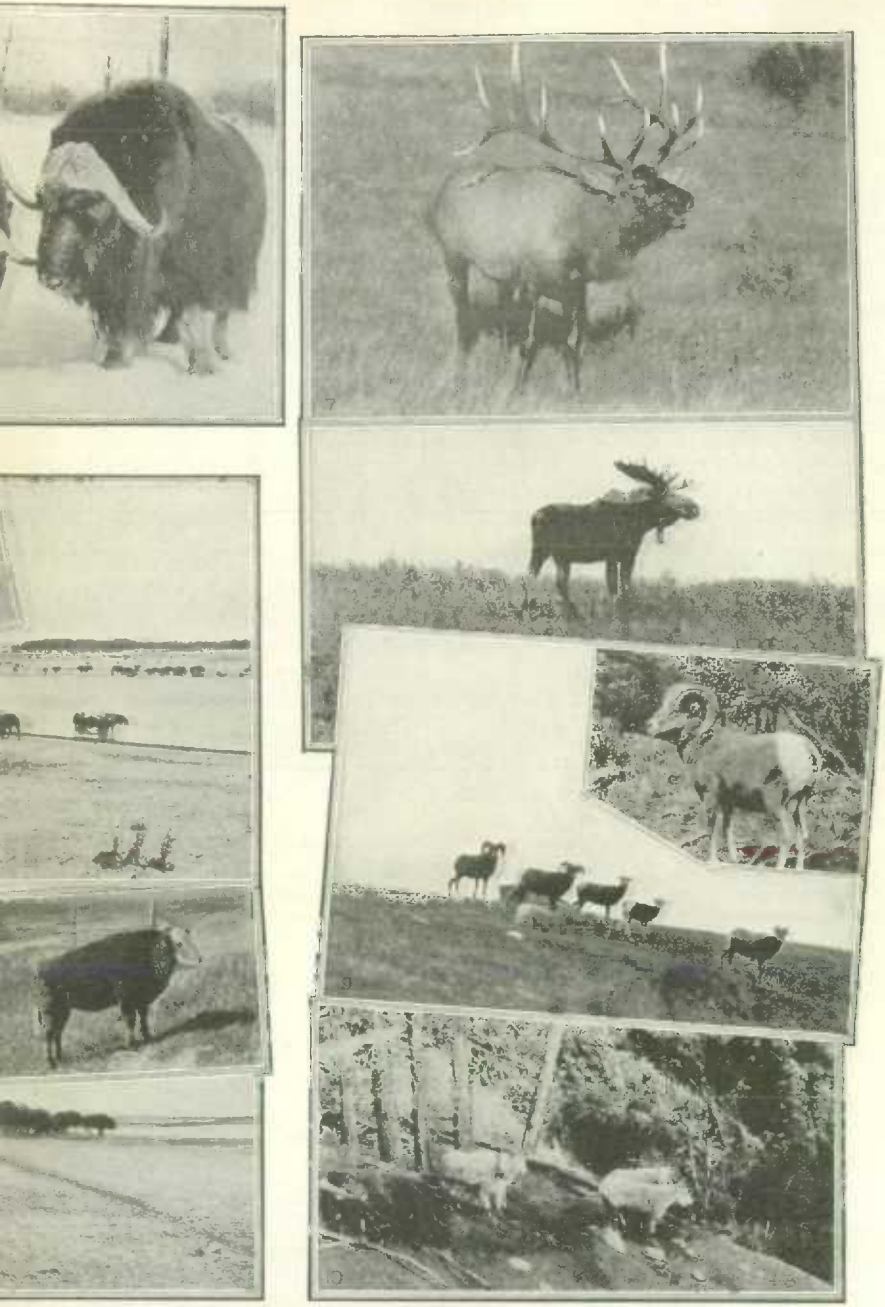
Unloading Canadian Timber at London, England.
Courtesy, "British Columbia Lumberman".

The total exports of Canada for the fiscal year 1935, were valued at $667,558,957, of which amount $7,658,963 were exports of foreign produce. The domestic exports were, therefore, $659,899,994, and showed an increase of $80,556,849, or 13·9 p.c., compared with the year 1934; 78·8 p.c. of this increase being with Empire countries, and 21·2 p.c. with foreign countries. Of these domestic exports in 1935, 41·5 p.c. went to the United Kingdom, 34·0 p.c. to the United States, 10·2 p.c. to other British countries and 14·3 p.c. to other foreign countries. In 1934 the proportions were: to the United Kingdom, 39·3 p.c.; to the United States, 33·5 p.c.; to other British countries, 8·7 p.c.; and to other foreign countries, 18·5 p.c.

Canadian Exports to British and Foreign Countries

Fiscal Year	Canadian Exports to—				Total Domestic Exports
	United Kingdom	Other British Empire	United States	Other Foreign Countries	
	$	$	$	$	$
1914	215,253,969	23,388,548	163,372,825	29,573,097	431,588,439
1929	429,730,485	106,258,803	499,612,145	328,108,239	1,363,709,672
1930	281,745,965	97,825,173	515,049,763	225,637,401	1,120,258,302
1931	219,246,499	73,617,897	349,660,563	157,217,708	799,742,667
1932	174,043,725	44,912,662	235,186,674	122,201,241	576,344,302
1933	184,361,019	37,757,908	143,160,400	108,520,628	473,799,955
1934	227,601,411	50,423,723	194,443,139	106,874,872	579,343,145
1935	274,182,737	67,314,241	224,697,923	93,705,093	659,899,994

The National Parks and Animal Reserves, the Provincial Parks and the Game Preserves
Antelope in an Alberta National Park; (3) A large Brown Bear in Jasper Nation
to be found in the wild state only in certain parts of the Northwest Territories;
bred for a number of years from a herd purchased by the Canadian Government. T
Fort Smith, N.W.T. Inset in (5) is a close-up view of a Buffalo bull and inset in (
with Buffalo and domestic cattle; (7) an Elk; (8) Moose; (9) and (10) Rock



Northwest Territories abound in wild life. The lay-out shows (1) a Red Deer; (2) k; (4) Musk Oxen—remaining specimens of this characteristically Canadian species are d (6) Buffalo in the Buffalo National Park, Alberta, where they have been carefully Buffalo in the wild state in Canada are the Wood Buffalo of Wood Buffalo Park, near ich shows Buffalo fording a lake, is a Cattalo, a product of hybridization experiments ntain Sheep and Rocky Mountain Goat.

Courtesy, National Parks Branch, Department of the Interior.

REVIEW OF TRADE BY MONTHS IN LATEST YEARS

The monthly trade figures as available when going to press as compared with 1932, 1933 and 1934 were as follows ($000 omitted):—

Imports and Exports, by Months, January 1932 to November 1935

Month	Imports				Exports of Canadian Produce			
	1932	1933	1934	1935	1932	1933	1934	1935
	$ 000	$ 000	$ 000	$ 000	$ 000	$ 000	$ 000	$ 000
January	34,115	24,441	32,391	37,229	38,367	31,562	46,652	43,902
February	35,586	23,514	33,592	37,044	36,431	26,398	37,842	46,719
March	57,448	32,851	47,519	48,191	39,749	36,579	57,638	58,099
April	29,794	20,457	34,814	36,637	26,976	20,012	31,582	37,575
May	44,361	32,927	52,887	54,540	40,504	45,576	57,900	62,101
June	40,743	33,619	46,186	46,732	40,945	45,968	58,046	51,869
July	35,711	35,738	44,145	48,414	42,321	51,345	56,121	56,239
August	36,527	38,747	43,507	49,560	41,314	44,723	55,249	70,738
September	34,504	38,698	42,208	44,689	42,187	57,785	58,135	64,565
October	37,095	41,070	47,229	52,751	58,626	60,214	67,748	84,952
November	37,769	43,712	49,881	55,958	45,945	60,385	65,125	84,115
December	28,961	35,368	39,107	—	42,616	50,929	61,275	—

THE CANADIAN TRADE BALANCE

From Confederation to 1935, exports of all produce from Canada to all countries exceeded imports in thirty years, while imports exceeded exports in thirty-eight years. The largest excess of exports in a single fiscal year was in 1918, a "war year", when it amounted to $622,637,000; while the largest excess of imports, amounting to $294,139,000 occurred in 1913. The "unfavourable" balances occurred chiefly in 1903-13, years of heavy capital imports. Canada's balance of trade with the United Kingdom has been favourable since 1889. With the United States it is usually unfavourable.

Trade Balances of the Principal Countries of the World, calendar years, 1933 and 1934

Credit balances marked (+) Debit balances marked (−)

Rank		Country	1933		1934	
1933	1934		Amount	Per Capita	Amount	Per Capita
			Million $	$	Million $	$
1	1	United States	+ 234·4	+ 1·88	+ 457·7	+ 3·62
4	2	Canada	+ 136·6	+ 13·00	+ 146·4	+ 13·52
5	3	British India	+ 103·2	+ 0·29	+ 86·7	+ 0·25
7	4	Argentina	+ 77·1	+ 6·49	+ 85·5	+ 7·22
8	5	Brazil	+ 57·7	+ 1·39	+ 82·6	+ 1·88
6	6	Union of South Africa	+ 200·6	+ 24·30	+ 66·2	+ 7·81
9	7	New Zealand	+ 55·1	+ 36·50	+ 62·2	+ 40·18
3	8	Australia	+ 162·0	+ 24·48	+ 60·9	+ 9·11
10	9	Sweden	− 4·1	− 0·66	− 1·5	− 0·25
15	10	Belgium	− 30·4	− 3·71	− 11·9	− 1·45
11	11	Denmark	− 12·8	− 3·56	− 28·6	− 7·89
12	12	Japan	− 15·7	− 0·24	− 32·7	− 0·50
13	13	Spain	− 19·3	− 0·82	− 33·6	− 1·40
14	14	Norway	− 24·4	− 8·57	− 39·2	− 13·70
2	15	Germany	+ 219·1	+ 3·31	− 110·8	− 1·68
17	16	Switzerland	− 197·9	− 48·23	− 189·1	− 45·84
16	17	Italy	− 103·8	− 2·51	− 207·0	− 4·90
18	18	Netherlands	− 268·6	− 32·82	− 217·6	− 26·60
19	19	France	− 537·9	− 12·80	− 340·5	− 8·13
20	20	United Kingdom	− 1,177·2	− 25·29	− 1,422·1	− 30·46

Non-Commodity Items of Foreign Exchange

A nation's commodity trade alone cannot be taken as a complete index of its prosperity, for there are many other exchanges besides those of goods, all of which must be taken into account in order to find out the basic state of affairs in regard to total international transactions.

The Tourist Trade.—An item in the above which deserves special mention is the tourist trade. For the year 1934 the tourist trade was calculated to have brought $129,974,000 into the country, and after the deduction of $60,905,000 spent by Canadian tourists abroad, the favourable balance was estimated at $69,069,000. By far the most important factor is the automobile traffic between Canada and the United States, it being estimated that such United States tourists spent $86,259,000 in Canada in 1934, while Canadian automobile tourists spent about $32,645,000 in the United States. Tourist expenditures are, in part, the return which Canada derives from her picturesque scenery, fish and game, winter sports, etc.

Tourist Expenditures, 1926-34

Year	Expenditures of Outside Tourists in Canada (1)	Expenditures of Canadian Tourists in Other Countries (2)	Excess of (1) over (2)
	$	$	$
1926	201,167,000	98,747,000	102,420,000
1927	238,477,000	108,750,000	129,727,000
1928	275,230,000	107,522,000	167,708,000
1929	309,379,000	121,645,000	187,734,000
1930	279,238,000	100,389,000	178,849,000
1931	250,776,000	76,452,000	174,324,000
1932	212,448,000[1]	57,403,000	155,045,000
1933	117,121,000[1]	50,860,000	66,264,000
1934	129,974,000	60,905,000	69,069,000

[1] Canadian funds. No adjustment for exchange was considered necessary in 1934.

Canada-United States tourist traffic is greater than that between any other two countries in the world. The high per capita wealth in both countries, the similarity of language and customs, the ease of communication and the close interlocking of business interests promote travel. For the United States family of moderate income the relative cheapness of an automobile holiday in Canada is attractive.

Apart from the revenue which Canada derives directly from the tourist trade there are many other important results. First-hand knowledge of the country, its products and resources serves to stimulate the demand for Canadian products and increases the supplies of new capital for investment here. There is, too, a value derived from neighbours becoming better acquainted and through the exchange of ideas that cannot be measured in dollars and cents. A more widely diffused knowledge of the culture, interests and difficulties of other nations leads to a richer social and intellectual life for all and the mutual understanding which springs from such contacts is an invaluable source of international good will.

The growing realization that Canada's tourist business is "a national asset worthy of the most intelligent cultivation" led to the appointment, on April 26, 1934, of a special Senate Committee to consider the possibilities of the tourist traffic and the means to be adopted by the Government

for its encouragement and expansion. Following a recommendation of this Committee, the "Canadian Travel Bureau" was established in the summer of 1934 as a branch of the Department of Railways and Canals and charged with the duty of launching an aggressive campaign of tourist travel promotion as a national effort in co-operation with other tourist travel and publicity agencies, public and private, throughout the Dominion. The Bureau is assisted by an Advisory Council consisting of the Directors of Information of the various Provincial Governments, representatives of the Dominion Departments and Services interested in tourist travel promotion, and members of the Executive Committee of the Canadian Association of Tourist and Publicity Bureaus.

Balance of International Payments.—Among other more or less "invisible" exchanges may be mentioned interest and freight payments, financial services, insurance premiums, advertising payments, royalties, cash contributions to various objects, the money movement which accompanies immigration and emigration, etc. If all the visible and invisible items which make up a country's dealings were set down and totalled, the debit or credit balance would be a final invisible item representing an export or import of capital. The accompanying table shows debit and credit items of Canada's exchanges with other countries as a whole for 1933 and 1934.

Estimated Balance of International Payments, 1933 and 1934

NOTE.—Figures for both years are preliminary.

Item	1933		1934	
	Exports, Visible and Invisible	Imports, Visible and Invisible	Exports, Visible and Invisible	Imports, Visible and Invisible
	$ 000	$ 000	$ 000	$ 000
Commodity Trade (corrected by deduction of non-commercial items, overvaluations, etc.)	535,000	389,250	645,000	500,000
Exports and imports of gold coin and bullion	66,000	850	95,000	800
Correction for gold movements to convert to Canadian currency	27,000	350	–	–
Freight payments and receipts, n.o.p.	40,000	55,000	47,000	68,000
Tourist expenditures	110,000	50,000	138,000	54,000
Interest payments and receipts	50,000	275,000	60,000	290,000
Immigrant remittances	5,000	6,000	6,000	7,500
Government expenditures and receipts	6,500	9,500	8,000	9,250
Charitable and missionary contributions	1,000	1,000	2,000	1,200
Insurance transactions	15,000	11,000	16,000	12,000
Advertising transactions	1,500	3,000	2,000	1,500
Motion picture earnings	–	4,000	–	2,750
Capital of immigrants and emigrants	4,000	3,250	4,000	3,250
Earnings of Canadian residents employed in U.S.A.	700	–	500	–
Exchange, London and New York, on interest and maturity payments and receipts	3,000	12,000	–	–
Miscellaneous items such as direct magazine subscriptions, artists' and entertainers' receipts, radio programs, etc.	–	4,000	–	4,500
Capital movement (see statement below)	61,500	–	–	20,000
Balancing item (net errors and omissions)	–	102,000	–	48,750
Totals	**926,200**	**926,200**	**1,023,500**	**1,023,500**
CAPITAL MOVEMENT				
Sale and purchase of securities	350,000	250,000	350,000	300,000
Maturities	–	40,000	–	75,000
Direct investments	1,500	–	5,000	–
Net inflow or outflow of capital	–	61,500	20,000	–
Totals	351,500	351,500	375,000	375,000

CHAPTER XV

PUBLIC FINANCE

Dominion Finance

Among the powers conferred on the Dominion Government by the British North America Act were: the right to deal with the public debt and property; the right to raise money by any system of taxation (the provinces were limited to direct taxation); and the borrowing of money on the credit of the Dominion. The Department of Finance was established in 1869 to have "supervision, control and direction of all matters relating to financial affairs, public accounts, and revenue and expenditure of the Dominion".

Architect's Drawing of the Additions to the Royal Canadian Mint, now under construction, Ottawa, Ont.

At Confederation the revenues, notably the customs and excise duties which had previously accrued to the treasuries of the provinces, were transferred to the Dominion and combined into a consolidated revenue fund against which certain specific charges such as cost of collection, interest on public debt, and salary of the Governor General were made. The remainder of the fund was appropriated by Parliament. The public works, cash assets and other property of the provinces, except lands, mines, minerals and royalties, also became Dominion property. In its turn the Dominion became responsible for the pre-existing debts of the provinces.

Since the main source of the revenues of the provinces was now taken over the Dominion undertook to pay annual subsidies to the provinces for the support of their governments and legislatures. With the growth of the

Dominion, the principle of subsidy payments has been extended to the western provinces and from time to time adjustments have been made in the moneys so paid.

Pouring a gold bar in a precious metals refinery, Ontario, where gold, like platinum and silver, is a by-product of nickel. Note melting furnace, with cover raised, in background.

Courtesy, International Nickel Company of Canada, Limited.

At the time of the formation of the Dominion, the revenue collections were comparatively small but obligations shouldered by the central government provided for completion of the Intercolonial Railway, and, with the entry of British Columbia, for the construction of the Canadian Pacific Railway; early in the present century the National Transcontinental was undertaken. Indeed, the single item of railways and canals accounted for almost the entire increase in the net direct debt of from $76,000,000 in 1868 to $336,000,000 in 1914. To a very great extent, therefore, the national debt down to the Great War represented expenditures for productive purposes and tangible assets were acquired by the Dominion therefor. Moreover, this debt was largely held outside Canada. The next decade witnessed the tremendous increase in the direct debt from $336,000,000 to a maximum of $2,453,777,000 in 1923—an increase of over two billions of dollars not represented, in the main, by corresponding assets and upon which interest charges were relatively high. One redeeming feature was that the major portion of this debt was held within the country, for the abnormal prosperity induced by the War provided Canadians with the funds to invest in Government issues and the added desire of the Government to tap the rapidly accumulating resources of the masses was instrumental in instructing the man-in-the-street how to invest his money in bonds. Following 1923 there was a steady fall in the net direct debt to $2,177,764,000 in 1930, but the depression, with accompanying railway deficits and large necessary expenditures for unemployment relief, has established a new high level of indebtedness of $2,846,111,000 as at Mar.

31, 1935. This equivalent of $259.94 net debt per capita was exceeded by the per capita figures between 1920 and 1925. The maximum of per capita debt, *viz.*, $272.31, was reached in 1923.

The growth of the Dominion revenue, the Dominion expenditure, and the net public debt is briefly outlined in the following table:—

Dominion Finances, 1868-1935

Fiscal Year	Revenue Receipts	Per Capita Receipts[2]	Total Expenditure	Per Capita Expenditure[2]	Net Debt at End of Year	Net Debt per Capita[2]
	$	$	$	$	$	$
1868	13,687,928	3·90	14,071,689	4·01	75,757,135	21·58
1871	19,375,037	5·25	19,293,478	5·23	77,706,518	21·06
1881	29,635,298	6·85	33,796,643	7·82	155,395,780	35·93
1891	38,579,311	7·98	40,793,208	8·44	237,809,031	49·21
1901	52,516,333	9·78	57,982,866	10·80	268,480,094	49·99
1911	117,884,328	16·36	122,861,250	17·05	340,012,052	47·18
1921	436,292,184	49·65	528,302,513[1]	60·12	2,340,878,984	266·37
1926	382,893,009	40·51	355,186,423[1]	37·58	2,389,731,099	252·85
1927	400,452,480	41·56	358,555,751[1]	37·21	2,347,834,370	243·65
1928	429,642,577	43·69	378,658,440[1]	38·50	2,296,850,233	233·54
1929	460,151,481	45·88	388,805,953[1]	38·77	2,225,504,705	221·91
1930	445,916,992	43·68	398,176,246[1]	39·01	2,177,763,959	213·34
1931	356,160,876	34·32	440,008,854[1]	42·40	2,261,611,937	217·94
1932	336,721,305	32·05	450,955,541[1]	42·92	2,375,846,172	226·14
1933	311,126,329	29·13	531,760,983[1]	49·79	2,596,480,826	243·09
1934	324,471,271	29·95	457,968,585[1]	42·27	2,729,978,140	251·96
1935	361,871,929	33·05	478,004,748[1]	43·66	2,846,110,958	259·94

[1] Includes advances to railways and transfers from active to non-active assets. [2] Per capita figures for census years are based upon census populations and for intervening years on revised official estimates.

Fiscal Year 1934-35.—The Minister of Finance, the Hon. E. N. Rhodes, in his Budget Speech of Mar. 22, 1935, outlined the financial position of Canada and estimated the 1935-36 income and expenditure of the Government. Provision was made by certain taxation changes, detailed in the Budget and summarized on p. 145, for the necessary funds to meet estimated ordinary expenditures and provide for an estimated surplus on ordinary account of $21,500,000.

The Minister outlined the recovery that had been made in many economic factors from the low point of the depression. While observing that agriculture had recovered to some extent, it, along with other primary industries, suffered by the severe decline in world trade and world prices. He described the program of trade agreements that had been signed with a view to improving conditions throughout Canada, especially in the primary industries.

He then summarized the efforts that the Government had made to lower interest rates on government securities and expressed the opinion that this reduction would later permeate the whole interest structure, resulting in lower interest charges to all worthy borrowers.

The Public Accounts.—In the Public Accounts receipts are classified under two headings—receipts from taxation, and non-tax revenue resulting from public services maintained by the Government. Expenditures are classified under four headings: (1) Ordinary expenditures, which include the costs of government, pensions, subsidies to the provinces, etc.; (2) Capital expenditures on account of railways, canals and public works, for

which corresponding assets are acquired; (3) Special expenditures including unemployment relief, Canadian National Railways deficit, etc.; and (4) Non-active loans and advances which are not interest-producing but are required in part to meet deficits of services for which the Government accepts responsibility.

The public revenues were increased in 1934-35 as compared with the previous year, increases being registered in customs and excise duties, income tax and sales tax.

Total receipts from taxation for the year 1934-35 amounted to $304,444,000 as compared with $271,851,000 in the previous year, $254,320,000 in 1932-33 and $275,053,000 for 1931-32. Summary figures of receipts and expenditures follow:—

Summary of Total Receipts, fiscal years 1932-35

Item	1931-32	1932-33	1933-34	1934-35
	$000	$000	$000	$000
Customs Import Duties	104,133	70,073	66,305	76,562
Excise Duties	48,655	37,834	35,494	43,190
War Tax Revenue—				
Banks	1,390	1,328	1,336	1,368
Insurance co's	12	826	742	750
Business profits	3	–	–	–
Income tax	61,254	62,067	61,399	65,808
Sales tax	42,393	57,978	61,391	72,447
Tax on cheques, transportation tax, etc.	17,213	24,214	45,184	39,745
Tax on gold	–	–	–	3,574
Totals, Receipts from Taxation	275,053	254,320	271,851	304,444
Non-tax Revenues	54,656	52,317	52,211	54,031
Total Consolidated Fund Receipts	329,709	306,637	324,062	358,475
Special Receipts	7,012	4,489	409	3,397
Grand Totals	**336,721**	**311,126**	**324,471**	**361,872**

Summary of Total Expenditures, fiscal years 1932-35

Item	1931-32	1932-33	1933-34	1934-35
	$000	$000	$000	$000
Ordinary Expenditure	375,403	358,528	346,648	354,368
Capital Expenditure	16,980	8,548	6,490	7,027
Special Expenditure	55,460[1]	96,784[2]	101,734[3]	114,869[4]
Loans and Advances (non-active)	3,113	67,901	3,096	1,740
Grand Totals	**450,956**	**531,761**	**457,968**	**478,004**

[1]Includes $38,296,000 for unemployment relief.
[2]Includes $53,423,000 income deficit of the Canadian National Railways (excluding Eastern Lines deficit) incurred in the calendar year 1932, and $36,721,000 for unemployment relief.
[3]Includes $58,955,000 income deficit of the Canadian National Railways (including Eastern Lines deficit) incurred in the calendar year 1933 and $35,808,000 for unemployment relief.
[4]Includes $48,408,000 income deficit of the Canadian National Railways (including Eastern Lines deficit) incurred in the calendar year 1934 and $51,987,000 for unemployment relief.

It will be seen from the above tables that, for the fiscal year ended Mar. 31, 1935, total receipts of $361,872,000 compared with total expenditures of $478,004,000 (including income deficit of $48,408,000 of the

Canadian National Railways [including Eastern Lines deficit] and $51,987,000 for unemployment relief). Thus the total deficit for that year was $116,132,000, which compares with a deficit of $133,497,000 for the fiscal year ended 1934, a deficit of $220,635,000 for the year ended 1933, and a deficit of $114,235,000 for 1932. However, in the fiscal year 1935 there was a surplus on ordinary account of $4,107,000 against a deficit on the same account in 1934 of $22,587,000. This is the first surplus on ordinary account since 1930.

Changes in Taxation in 1935.—In the Budget delivered in March, 1935, certain important changes were made in the taxation system. In addition to the existing income tax, provision was made for the imposition of a surtax on investment income, *i.e.*, interest, dividends, rents, royalties and like returns. All income in excess of $14,000 is considered investment income. A specific exemption of $5,000 is allowed. The rates of surtax are from 2 p.c. to 10 p.c. The gold tax which, according to the 1934 amendments to the Special War Revenue Act, was to expire on May 31, 1935, was not extended. Certain changes, however, were made in the regulations respecting depletion allowances for income tax purposes. The allowance for depletion to mining companies, the principal product of which is gold or silver, is to be 33⅓ p.c. instead of 50 p.c. In addition, dividends received by shareholders are to be taxed on the basis of a 20 p.c. depletion allowance instead of 50 p.c. as formerly. The corporation income tax was raised from 12½ p.c. to 13½ p.c. and consolidated returns, where allowed, are to be taxed at the rate of 15 p.c. instead of 13½ p.c. A new innovation in the taxation system was the imposition of a gift tax, ranging from 2 p.c. in the case of gifts up to $25,000 to 10 p.c. on gifts exceeding $1,000,000. The tax is not to apply to gifts between husband and wife or to minors already provided for under the Income War Tax Act, or gifts of a charitable nature.

The rate of sales tax remained at 6 p.c. Casein, grain separators pit props and packwood for use exclusively in mines, and advertising samples were placed on the exempt list.

Imports under the British preferential tariff were exempted from the special excise tax of 1½ p.c.

The excise duty of $7 per proof gallon on spirits was reduced to $4 in order to protect the revenues of the Dominion from the competition of illicit sales.

The following is a partial list of articles placed on the free list under the British preferential customs tariff: aircraft, unbound and paper-bound books, chassis for motor cars for use on railways, diesel and semi-diesel engines, mining locomotives and advertising matter descriptive of Empire products.

Reductions were also made in the British preferential tariff. These are in part as follows: certain woollen and worsted cloths; carpets of various grades; and certain glass products. The British preferential duty on spirituous liquors was reduced from $8 to $5 per proof gallon and provision was made to exclude United Kingdom excise duties from the value-for-duty of spirits imported into Canada.

Provision was made for intra-Empire extension, by Order in Council, of the most-favoured tariff treatment accorded to any foreign country, paving the way for the removal of existing anomalies and materially widening the scope and benefits of the preferential principle.

Provincial and Municipal Finance

Provincial Finance

Provincial Governments in Canada are in the position, under Section 118 of the British North America Act, 1867 (30 and 31 Vict., c. 3), and the British North America Act, 1907 (7 Edw. VII, c. 11), of having a considerable assured income in subsidies from the Dominion Treasury. In addition, through the ownership of their lands, minerals and other natural resources, the provinces are in a position to raise considerable revenues through land sales, sales of timber, mining royalties, leases of waterpowers, etc. Further, under Section 92 of the British North America Act, Provincial Legislatures are given authority to impose direct taxation within the province for provincial purposes and to borrow money on the sole credit of the province.

Among the chief methods of taxation to be employed has been the taxation of corporations and estates. Prominent among the objects of increased expenditure are education, public buildings, public works (especially roads and highways), labour protection, charities, hospitals and places of correction.

The Growth of Provincial Taxation.—Whereas in earlier years the Dominion subsidies, together with the revenues arising out of the natural resources of the provinces and from fees for specific services rendered to the citizens, nearly sufficed to cover the whole expense of government and rendered a resort to taxation for provincial purposes practically unnecessary in most of the provinces, the great increase in the functions of government since the commencement of the present century has put an end to this state of affairs. Ordinary provincial taxation (covering taxation of corporations, lands, succession duties and amusements) has increased from $12,575,159 in 1916 to $42,593,417 in 1929, to $51,621,242 in 1930, but there was a reduction to $48,738,796 in 1931, $44,313,514 in 1932, and $48,383,044 in 1933. In addition to this ordinary taxation, provincial revenues have been augmented by the control of the liquor traffic, the issuance of licences and permits for motor vehicles and by the imposition of taxes on gasolene sales. In recent years the revenues collected from these sources alone have far exceeded those from ordinary taxation, the figures being: liquor traffic control, 1929, $27,599,687; 1930, $33,248,056; 1931, $32,128,693; 1932, $24,832,427; 1933, $16,160,980. Motor vehicles (including licences and permits), 1929, $21,735,827; 1930, $20,321,307; 1931, $19,952,575; 1932, $20,164,291; 1933, $20,050,667. Gasolene tax, 1929, $17,237,017; 1930, $20,956,590; 1931, $23,859,067; 1932, $24,987,273; 1933, $25,931,480.

The increasing use of automobiles for both commercial purposes and pleasure is clearly demonstrated by the revenue figures for motor vehicles and gasolene taxes shown above. The fact that the gasolene tax revenue increased in 1931 whereas the figures for motor vehicle licences and permits showed a decline from the previous year, is not altogether attributable to a greater average mileage run per car but largely to an increased use of the gasolene tax as a source of provincial revenue.

Bonded Indebtedness of the Provinces.—The bonded indebtedness of the provinces amounts to about four-fifths of their total direct liabilities. In recent years, the aggregate bonded indebtedness of the provinces has steadily increased. The total for the nine provinces was $704,225,134 in

1925, $708,677,426 in 1926, $742,388,684 in 1927, $769,260,373 in 1928, $817,940,202 in 1929, $919,142,905 in 1930, $1,016,647,165 in 1931, $1,148,323,084 in 1932, $1,224,372,822 in 1933 and $1,329,684,651 in 1934. This bonded indebtedness for 1934 was divided by provinces as follows: P.E.I., $4,554,000; N.S., $73,476,013; N.B., $63,570,920; Que., $126,518,007; Ont., $600,454,102; Man., $90,024,906; Sask., $112,868,207; Alta., $129,055,260; B.C., $129,163,236. The development of the principle of public ownership is largely responsible for the high bonded indebtedness in certain provinces, particularly in Ontario where the hydro-electric system and the provincially-owned Temiskaming and Northern Ontario Railway largely account for the bonded indebtedness of the province. The larger of these public utilities, the hydro-electric system is, however, meeting from its revenues the interest on the indebtedness incurred in its construction.

The expansion in the ordinary revenues and expenditures and the increases in direct liabilities of all Provincial Governments are shown for certain years 1873-1933 and of individual provinces for 1933 below:—

Aggregate Provincial Revenues and Expenditures, 1873-1933,[1] and by Provinces, 1933

Fiscal Year Ended—	Ordinary Revenue	Ordinary Expenditure	Direct Liabilities
	$	$	$
1873	6,960,922	6,868,884	-
1881	7,858,698	8,119,701	-
1891	10,693,815	11,628,353	-
1901	14,074,991	14,146,059	-
1911	40,706,948	38,144,511	138,662,442
1921	102,030,458	102,569,515	565,470,552
1926	146,450,904	144,183,178	893,499,812
1928	168,109,505	165,538,910	963,138,740
1929	183,598,024	177,542,192	1,034,071,264
1930	188,154,910	184,804,203	1,140,953,696
1931	179,143,480	190,754,202	1,276,629,288
1932	193,081,576	214,389,153	1,360,904,138[2]
1933	184,868,471	200,527,219	1,440,317,863[2]
Prince Edward Island	1,263,063	1,392,276	4,670,334
Nova Scotia	8,013,464	9,632,348	73,003,728
New Brunswick	5,691,138	5,770,207	85,725,655
Quebec	33,324,760	40,165,668	125,515,210
Ontario	67,800,543	67,324,117	598,895,562
Manitoba	13,838,339	15,782,904	119,716,644
Saskatchewan	16,177,784	16,756,421	145,338,416
Alberta	15,426,265	17,533,786	157,939,027
British Columbia	23,333,115	26,169,492	149,513,287

[1]Preliminary figures for 1934 are: ordinary revenue, $175,618,620; ordinary expenditure, $219,089,300; and direct liabilities, $1,541,469,837.

[2]In addition there were trust account liabilities amounting to $41,204,982 in 1932 and $41,946,386 in 1933, with offsetting assets of $37,129,630 in 1932 and $37,684,406 in 1933.

Municipal Finance

Under the provisions of the British North America Act, the municipalities are the creations of the Provincial Governments. Their organization and their powers differ in different provinces, but almost everywhere they have very considerable powers of local self-government. If we include the local government districts of Saskatchewan and Alberta, there are over 4,290 municipal governments in Canada. These 4,290 municipal governments have together probably 20,000 members described as mayors, reeves, controllers, councillors, etc., the experience training them for the wider duties of public life in the Dominion and in the provinces. Certain

of the larger municipalities, indeed, are larger spenders of public money than are some of the provinces.

The cost of municipal government, like the cost of provincial and Dominion government, has greatly increased since the pre-war period, principally due to the increased services demanded from municipal bodies. Among such public services which play a large part in municipal expenditures may be mentioned education, roads and highways, sanitation, fire and police protection, and charities and social relief. Thus the aggregate taxes imposed by the municipalities of Ontario increased from $34,231,214 in 1913 to $120,431,558 in 1933. In Quebec the aggregate ordinary expenditures of the municipalities increased from $37,838,379 in 1915 to $69,395,344 in 1933. In Manitoba, again, municipal taxation has increased from $9,449,000 in 1914 to $18,944,496 in 1933, in Saskatchewan from $13,359,000 in 1914 to $20,963,223 in 1933, in Alberta from $8,598,000 in 1915 to $14,228,666 in 1933, and in British Columbia the tax receipts amounted to $8,698,820 in 1914, while the tax levy amounted to $19,681,459 in 1933. The tax receipts of the municipalities of Nova Scotia were $6,440,471 in 1933 as compared with $3,443,681 as recently as 1919.

Municipal System of Taxation.—Throughout the Dominion, the chief basis of municipal tax revenue is the real estate within the limits of the municipalities; though in certain provinces personal property, income, and business carried on are also taxed. General taxes are normally assessed at the rate of so many mills on the dollar of the assessed valuations. In the Prairie Provinces the values of improvements made to real property are often rated at a very low figure, *e.g.*, in Saskatchewan, where the taxable valuations of buildings are about 12 p.c. of the taxable valuations of lands, and in Alberta, where they are about 28 p.c. of the taxable valuations of lands. Land valuations in the West, which in earlier years were somewhat inflated, have of late been assessed on a sounder basis, and in some provinces the Equalization Boards have placed a more equitable valuation on lands as among the various rural municipalities.

The period of depression was responsible for a very considerable delinquency in tax payments, while the heavy and increasing burden of unemployment relief since 1930, which has been carried by the municipalities with help from the Provincial and Dominion Governments, has caused many of them to search for increased revenues in all possible directions. In some cases the general municipal rates have been increased, in others the water rates have been advanced and the various forms of municipal licensing have contributed in increasing measure, during the emergency.

Bonded Indebtedness of Municipalities.—Like other Canadian governing bodies, the municipalities of the greater part of Canada borrowed rather too freely during the years between 1917 and 1930. The bonded indebtedness of Ontario municipalities rose from $153,568,409 in 1913 to $494,433,956 in 1933, while that of Quebec municipalities increased from $173,400,168 in 1915 to $479,608,472 in 1933, and a proportionate increase took place in other provinces. The provinces of New Brunswick, Ontario, Saskatchewan, Alberta and British Columbia showed decreases comparing 1933 with 1932. Total bonded indebtedness for all municipalities throughout Canada equalled $1,385,938,395 for 1933 as compared with $1,384,792,777 in 1932. British Columbia ranks third after Ontario and Quebec with $128,094,159, and these three provinces have about 80 p.c. of the municipal bonded debt of Canada.

CHAPTER XVI

CURRENCY AND BANKING—INSURANCE—LOAN AND TRUST COMPANIES—MISCELLANEOUS

Currency

Currency.—Early trade in Canada was carried on by barter. Beads, blankets, beaver and other furs, tobacco and wheat have been at various times used for currency. Further, under the French *régime* playing cards stamped with a value and redeemable yearly on the receipt of bills of exchange on Paris, came into circulation. In the early years of the British period, the Spanish dollar and the English shilling were the chief mediums of exchange, together with such paper money as the army bills issued by the Government for supplies during the War of 1812. In 1853 a measure was passed providing for the adoption of decimal currency with a dollar equivalent to the American dollar, and from Jan. 1, 1858, the accounts of the Province of Canada were kept in terms of dollars. The use of the dollar as a monetary unit was extended throughout the Dominion by the Uniform Currency Act of 1871.

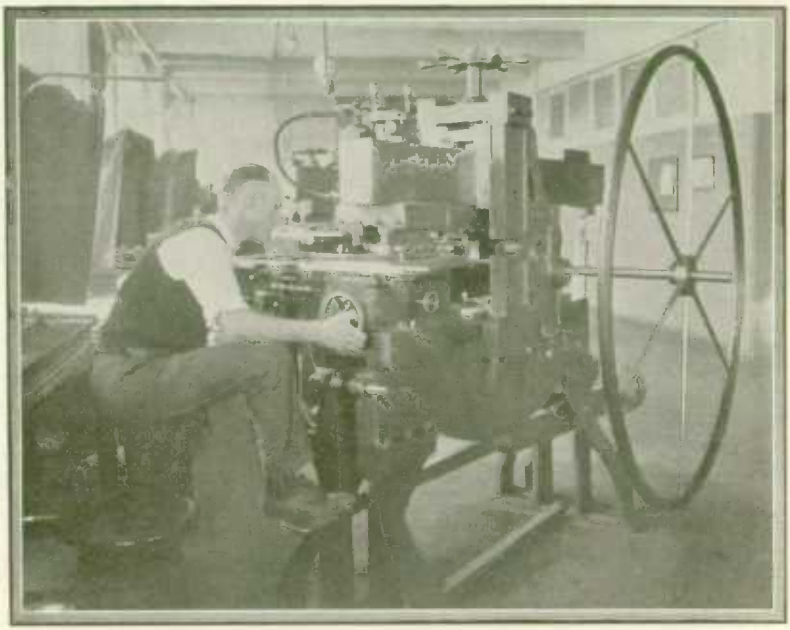
The Canadian gold dollar weighs 25·8 grains, nine-tenths fine gold, and thus contains 23·22 grains of gold. Five-dollar and ten-dollar Canadian gold pieces have been coined at the Royal Canadian Mint,* at Ottawa, to a limited extent but, in the main, the currency of Canada is in the form of silver, nickel and bronze token currency for fractional parts of a dollar and Bank of Canada and chartered bank notes for multiples of a dollar.

After the sympathetic decline of the Canadian dollar on the gold exchanges, following the suspension of gold payment by the United Kingdom on Sept. 21, 1931, the Government permitted the export of gold only under licences issued by the Department of Finance, thus conserving the gold resources of the nation for meeting external obligations. The effect of this was to cause Canadian mines to dispose of their gold through the Royal Canadian Mint and conditions of purchase had to be laid down. At present these conditions of purchase are: such deposits of newly mined gold containing not less than 50 ounces fine are paid for, on completion of assay, at the market price of gold in the country to which the Government is at the time of the receipt of the deposit exporting gold, converted into the Canadian equivalent at the average rate of exchange between Canada and such country for the week in which the gold is deposited with the Mint. The average rate of exchange for this purpose is based on the buying rates for such exchange reported to the Department of Finance at 11.00 a.m. daily. An additional deduction of 35 cents per ounce fine is made as a handling charge on newly mined gold. Provision is also made for receiving deposits of scrap and other gold for which the handling charge is $1 the ounce fine.

*The administration of the Mint, formerly known as the Canadian Branch of the Royal Mint, London, was taken over by the Canadian Government, as from Dec. 1, 1931.

Bank Notes.—Canadians early became accustomed to the free circulation of paper money, either in the form of notes of the chartered banks or of notes issued by the Government.

Under the Bank Act the chartered banks may issue notes of the denominations of $5 and multiples thereof to the amount of their paid-up capital. This amount is to be reduced by 5 p.c. per annum for a period of five years from Jan. 1, 1936, and by 10 p.c. per annum for a period of five years from Jan. 1, 1941. In case of insolvency, bank notes are a first lien on assets and for over forty years no note holder has lost a dollar.



Steel Plate Transferrer Making Steel-engraved Intaglio Plates Used for Printing Notes of the Canadian Chartered Banks.

Courtesy, Canadian Bank Note Company, Limited.

In addition to notes of the chartered banks, there are also now in circulation notes of the Bank of Canada. These notes may be issued to any amount as long as the Bank maintains a reserve in gold equal to at least 25 p.c. of its note and deposit liabilities. Prior to the establishment of the Bank of Canada, the Government issued notes under certain statutory authorities and backed in part by gold and securities. The Dominion's liability in respect of these notes was assumed by the Bank of Canada on Mar. 11, 1935. The following statement shows the average amount of bank notes and Dominion (or Bank of Canada) notes outstanding in various years.

Notes Outstanding, 1870-1935

Year	Dominion Notes Outstanding (averages for the year)	Bank Notes Outstanding (averages for the year)	Year	Dominion Notes Outstanding (averages for the year)	Bank Notes Outstanding (averages for the year)
	$	$		$	$
1870	7,294,103[1]	15,149,031	1929	204,381,409	178,291,030
1880	13,403,958[1]	22,529,623	1930	174,616,019	159,341,085
1890	15,501,360	32,834,511	1931	153,079,362	141,969,350
1900	26,550,465	46,574,780	1932	165,878,510	132,165,942
1910	89,628,569	82,120,303	1933	179,217,446	130,362,488
1915	159,080,607	105,137,092	1934	190,261,981	135,537,793
1920	305,806,288	288,800,379	1935[2]	110,993,920[3]	125,827,381
1928	201,171,816	176,716,979			

[1] Circulation on June 30. [2] Averages for ten months. [3] Since March 11, 1935, the figures used represent Bank of Canada notes and Dominion notes assumed by the Bank of Canada.

St. James St., Montreal.—The financial district of Montreal, showing the Bank of Montreal on the left.

Courtesy, Canadian Government Motion Picture Bureau.

Banking

The Canadian Banking System has, in the past, been frequently described as "a decentralized system of relatively large joint stock, commercial and industrial banks, privately owned and managed, but working under a uniform law and subject to the supervision of the Dominion Government, with the banks kept in competition with each other by the power to organize branches freely". Until the recent establishment of the Bank of Canada (see p. 153), the Canadian system was quite unlike

Architect's Drawing of the New Head Office of the Imperial Bank of Canada, Toronto.
Courtesy, The Imperial Bank of Canada.

that existing in England and most European countries, where a strong central bank stands in close relation to the Government Treasury, and unlike that of the United States where a system of regional centralization prevails. The Canadian Banking System is a product of evolution, having grown up gradually with changes made from time to time as experience directed. Its most distinctive feature, the branch bank system, is well adapted to the needs of a country of wide area and small population, especially to the requirements of the grain and cattle trade of the West, since it forms within itself a ready method of shifting funds from one part of the country to another and from one industry to another as the occasion may demand and ensures fairly uniform rates over wide areas. The number of chartered banks, which was 36 in 1881, and 34 in 1901, decreased to 25 in 1913, and is now only 10. This lessening of the number of banks has been accompanied by a great increase in the number of branches. In 1868 there were only 123 branch banks in Canada. By 1902 the number had grown to 747, by 1916 to 3,198, and by 1929 to 4,069. At the beginning of 1935 the number had again decreased to 3,065 branches in Canada. From 1867 to October, 1935, the total assets have grown from $78,000,000 to $3,059,000,000.

In recent years the banks of Canada have extended their business outside of the country itself and at the beginning of 1935 had among them 148 branches, not including sub-agencies, in foreign countries, mainly in Newfoundland, the British and foreign West Indies, Central and South America, and in the great centres of international finance, London, Paris and New York.

The number of branches, assets, liabilities, loans and deposits of the Canadian chartered banks as at Oct. 31, 1935, by banks, together with totals (yearly averages) for 1900, 1910, 1920, 1930, 1931, 1932, 1933, 1934 and 1935 are shown in the following table.

Statistics of Individual Chartered Banks as at Oct. 31, 1935, with Totals 1900-35

Bank	Branches in Canada and Abroad	Total Assets	Liabilities to Shareholders	Liabilities to the Public	Total Liabilities	Loans and Discounts	Deposits by the Public
	No.	$ 000,000	$ 000,000	$ 000,000	$ 000,000	$ 000,000	$ 000,000
Bank of Montreal	526[1]	793	74	717	791	257	666
Bank of Nova Scotia	310[1]	283	36	246	282	110	224
Bank of Toronto	170[1]	126	15	110	125	53	101
Banque Provinciale du Canada	136[1]	50	5	44	49	19	40
Canadian Bank of Commerce	601[1]	802	50	549	599	247	495
Royal Bank of Canada	754[1]	786	55	728	783	386	667
Dominion Bank	133[1]	130	14	115	129	64	102
Banque Canadienne Nationale	238[1]	133	12	120	132	59	111
Imperial Bank of Canada	195[1]	142	15	127	142	78	115
Barclay's Bank (Canada)[2]	2[1]	14	2	12	14	2	6
Totals, Oct., 1935	—	**3,059**	**278**	**2,768**	**3,046**	**1,275**	**2,527**
Totals, 1934[4]	**3,065**	**2,838**	**276**	**2,549**	**2,826**	**1,374**	**2,275**
Totals, 1933[4]	**3,198**	**2,831**	**302**	**2,518**	**2,820**	**1,401**	**2,237**
Totals, 1932[4]	**3,319**	**2,869**	**307**	**2,546**	**2,853**	**1,583**	**2,257**
Totals, 1931[4]	**3,508**	**3,066**	**307**	**2,741**	**3,048**	**1,764**	**2,423**
Totals, 1930[4]	**3,598**	**3,237**	**305**	**2,910**	**3,215**	**2,065**	**2,517**
Totals, 1920[4]	**4,876**	**3,064**	**252**	**2,784**	**3,036**	**1,935**	**2,438**
Totals, 1919[4]	**2,621**[3]	**1,211**	**179**	**1,019**	**1,198**	**870**	**910**
Totals, 1900[4]	**641**	**460**	**98**	**356**	**454**	**279**	**305**

[1]As at Jan. 1, 1935. Does not include sub-agencies. [2]Barclay's Bank commenced operations in Canada in September, 1929. [3]1911. [4]Totals are averages from the respective monthly statements, except in the case of the numbers of branches in Canada and abroad which are as at Dec. 31.

The Bank of Canada.—The Bank of Canada, the central bank of the Dominion, commenced operations on Mar. 11, 1935. The bank is a privately-owned institution with a paid-up capital of $5,000,000, divided into shares of $50 par value. The shareholders must be British subjects ordinarily resident in Canada or corporations controlled by British subjects ordinarily resident in Canada. Directors, officers, or clerks of the chartered banks may not hold shares of the Bank.

On commencement of business, the Bank assumed the liability of the Dominion notes then in circulation in return for the gold and silver held by the Government as security for Dominion notes and 3 p.c. five-year Dominion of Canada bonds. The chartered banks also surrendered to the Bank of Canada the gold held by them in Canada at the currency value ($20.67 per fine ounce). An allowance was made to the banks in respect of 40 p.c. of the gold held by them, which proportion of their gold was considered as being held against foreign liabilities. For this gold they received the market price.

The Bank is authorized to pay cumulative dividends from its profits after provision for expenses, depreciation and pension funds, at the rate of 4½ p.c. per annum. Surplus profits are to be applied to the rest fund of the Bank and paid into the Consolidated Fund of Canada in certain stipulated proportions.

The Bank is empowered to buy and sell securities in the open market; to discount securities and commercial bills; to fix minimum rates at which it will discount; to buy and sell bullion and foreign exchange. It is the intention that the Bank ultimately will become the sole issuer of paper

money in Canada. The chartered banks will gradually lose the right to issue bank notes (see p. 150). The Bank may issue notes to any amount so long as it maintains a reserve of gold coin and bullion equal to not less than 25 p.c. of its note and deposit liability in Canada. The reserve in addition to the gold coin and bullion may include silver bullion, foreign exchange, securities of the United Kingdom and the United States having a maturity not exceeding three months and bills of exchange having a maturity not exceeding ninety days, payable in the United Kingdom, the United States or a gold standard country. Provision is made for the suspension of the 25 p.c. gold reserve requirements by the Governor in Council on the request of the Board of Directors for a period of one year.

The chartered banks are required to maintain a reserve by way of deposit with the Bank and Bank of Canada notes of not less than 5 p.c. of their deposit liabilities in Canada.

The Bank acts as the fiscal agent of the Dominion of Canada and may, by agreement, act as banker or fiscal agent for any province. The Bank does not accept deposits from individuals and thus does not compete with the chartered banks in the commercial banking field.

The Governor of the Bank is its chief executive officer, assisted by a Deputy Governor, and an Assistant Deputy Governor. These officers, in the first instance were appointed by the Government; subsequent appointments are to be made by the Board of Directors of the Bank, subject to the approval of the Governor in Council.

At the first general meeting of the shareholders, directors were elected for terms to run as follows: one until the third annual general meeting, two until the fourth, two until the fifth and two until the sixth annual general meeting. In future, the directors are to be elected by the shareholders for terms of five years. Directors must hold at least ten shares of the capital stock of the Bank and must not be employed in a position for which the salary or other remuneration is payable out of public funds. There is also an executive committee of the Board of Directors consisting of the Governor, Deputy Governor and one member of the Board. The Executive Committee shall be competent to deal with any matter within the competence of the Board, but every decision of the Committee shall be submitted to the Board of Directors at its next meeting.

The Deputy Minister of Finance is an *ex officio* member of the Board of Directors and of the Executive Committee, but has not the right to vote.

The following statement gives the main items of assets and liabilities of the Bank of Canada at Oct. 31, 1935.

STATEMENT OF ASSETS AND LIABILITIES OF THE BANK OF CANADA AT OCT. 31, 1935.

Notes in circulation	$ 96,057,613
Dominion Government deposits	18,254,756
Chartered banks' deposits	190,854,380
Gold coin and bullion	181,492,522
Investments	106,791,092
Total assets and liabilities	311,853,487

Bank Clearings and Bank Debits.—Through the clearing houses, inter-bank transactions have been recorded since 1889; they form a valu-

able indication of the trend of business. Clearings at Montreal, the commercial metropolis of Canada, were $454 millions in 1889, reached $1,098 millions in 1902, $2,088 millions in 1910, $7,109 millions in 1920, $8,279 millions in 1929 but dropped to $3,972 millions for 1932. From this low level a rather substantial recovery to $4,653 millions was made by 1934. This, however, does not tell the whole story, since numerous transactions between persons who carry their accounts in the same bank are not recorded in bank clearings; also, every amalgamation of banks lessens, in so far, the volume of clearings. Accordingly, a record of cheques debited to accounts at all branches at clearing-house centres was instituted in 1924; between that date and 1929 Montreal bank debits increased from $7,502 millions to $15,558 millions, and the grand total of bank debits for Canada from $27,157 millions to $46,670 millions. Since 1929 there was a steady decline to the 1932 levels of $7,136 millions for Montreal and $25,844 millions for Canada, but since then the movement was again upward being $8,835 millions for Montreal and $32,867 millions for Canada in 1934.

Bank Clearings[1] and Bank Debits, 1925-34, and, by Months, October, 1934, to November, 1935

Year	Exchanges of the Clearing Houses of Chartered Banks in Canada	Bank Debits to Individual Accounts	Year	Exchanges of the Clearing Houses of Chartered Banks in Canada	Bank Debits to Individual Accounts
	$000,000	$000,000		$000,000	$000,000
1925	16,762	28,126	1935—		
1926	17,715	30,358	January	1,310	2,682
1927	20,568	36,094	February	1,038	2,089
1928	24,555	43,477	March[1]	1,230	2,236
1929	25,105	46,670	April	1,252	2,367
1930	20,092	37,491	May	1,654	3,132
1931	16,828	31,586	June	1,561	2,710
1932	12,914	25,844	July	1,380	2,545
1933	14,721	29,981	August	1,376	2,498
1934	15,964	32,867	September	1,334	2,426
October	1,541	3,410	October	1,583	2,908
November	1,432	3,092	November	1,695	3,022
December	1,475	3,040	December	—	—

[1] Head-office clearings have been effected through the Bank of Canada since Mar. 11, 1935.

Insurance

Life Insurance.—The life insurance business was introduced into Canada by companies from the British Isles and the United States about the middle of the nineteenth century. By 1875 there were at least 26 companies and possibly several more, competing for the available business in Canada, as against 41 active companies registered by the Dominion and a few provincial companies in 1934. Of the 41 companies registered by the Dominion 27 were Canadian, 6 British and 8 foreign.

The development of life insurance in Canada, as in other English-speaking countries at least, has been marked by an increased service to the individual policyholder. The benefits which may now be obtained under a life insurance policy are calculated to meet the needs of the policyholder and of his dependants, whether in event of old age or in event of death or of disability. In 1919 there was introduced what is known as "group insurance", a plan whereby a group of persons, usually employees, are insured by their employer, for a uniform amount or a varying amount determined by a formula, under one policy, generally on the term plan,

the employer paying the premium or a substantial part thereof. Each employee usually has the right to obtain an individual policy at ordinary normal rates, without medical examination, on termination of employment.

As a result of the adaptation of life insurance policies to the needs of the public, and of the growing wealth of the community, the increase in the amount of life insurance in force has been remarkable. In 1869 the total life insurance in force in Canada, by Dominion companies, was only $35,680,000 as compared with $6,220,000,000 approximately at the end of 1934. This latter figure was equal to $574 per head of population. In addition there was $168,000,000 of fraternal insurance in force by Dominion licensees and $164,000,000 of insurance in force by provincial licensees. Thus the total life insurance in force in the Dominion at the end of 1934 was $6,552,000,000 approximately. The premium income from Canadian business of all Dominion registered companies (not including fraternal benefit societies) increased from $90,000,000 in 1920 to $221,000,000 in 1930 but decreased to $207,000,000 in 1933 and to $203,000,000 in 1934.

The table below shows the sales of life insurance month by month in recent years. The statistics are not complete but represent approximately 85 p.c. of the total business transacted in Canada.

Sales of Life Insurance in Canada by Months, 1933-35

NOTE.—The figures in this table are those published by the Hartford Research Bureau except that the totals for Newfoundland, included therein, have been deducted.

Month	1933	1934	1935	Month	1933	1934	1935
	$000	$000	$000		$000	$000	$000
January	30,918	27,726	32,716	July	32,748	33,538	31,832
February	28,533	29,268	28,476	August	30,657	26,359	26,639
March	31,804	32,764	31,167	September	28,088	25,833	26,442
April	31,502	33,013	28,649	October	34,302	31,074	30,184
May	32,647	32,970	27,141	November	36,768	35,530	34,767
June	34,943	32,055	31,810	December	41,127	37,353	—

Fire Insurance.—Fire insurance in Canada began with the establishment by British fire insurance companies of agencies, usually situated in the sea ports and operated by local merchants. The oldest existing agency of a British company is that of the Phœnix Fire Office of London, now the Phœnix Assurance Co., Ltd., which commenced business in Montreal in 1804.

The Halifax Fire Insurance Co. is the first purely Canadian company of which any record is obtainable. Founded in 1809 as the Nova Scotia Fire Association, it was chartered in 1819 and operated in the province of Nova Scotia until 1919, when it was granted a Dominion licence.

The report of the Superintendent of Insurance for the year ended Dec. 31, 1934, shows that at that date there were 235 fire insurance companies doing business in Canada under Dominion licences, of which 50 were Canadian, 67 were British and 118 were foreign companies, whereas in 1875, the first year for which authentic records were collected by the Insurance Department, 27 companies operated in Canada—11 Canadian, 13 British and 3 United States. The proportionate increase in the number of British and foreign companies from 59 to 79 p.c. of the total number is a very marked point of difference between the fire and life insurance business in Canada, the latter being carried on very largely by Canadian companies.

The enormous increase since 1869 (the earliest year for which statistics are available) in the fire insurance in force, is no doubt partly due to the growth of the practice of insurance; but it is also important as an indication of the growth of the value of insurable property in the country, and thus throws light upon the expansion of the national wealth of Canada. By 1880 companies with Dominion licences had fire insurance in force totalling $411,563,271; by 1900 the one billion dollar mark had about been reached and by 1930 the total stood at $9,672,997,000. At the end of 1934, besides $8,804,840,676 of fire insurance in force in companies with Dominion licences, there was also $1,240,396,613 in force in companies with provincial licences, or about $10,045,237,289 in force with companies, associations, or underwriters licensed to transact business in Canada.

Miscellaneous Insurance.—Miscellaneous insurance now includes among other classes in Canada: accident, sickness, automobile, burglary, explosion, forgery, credit, guarantee, hail, inland transportation, employers' liability, aviation, plate plass, sprinkler-leakage, steam boiler, title, tornado, and livestock insurance, etc. Whereas, in 1880, 18 companies were licensed for business of this kind, such insurance was sold in 1934 by 240 companies, of which 51 were Canadian, 64 British and 125 foreign.

The total net premium income for 1934 was $25,858,270 and the most important class of miscellaneous insurance, according to the amount of premiums received, was automobile insurance, which has greatly increased during the past twenty years, although a decrease has been shown in recent years. As recently as 1910, the premium income of companies doing an automobile insurance business was only $80,446; in 1915 it was $636,085, and in 1934, $11,925,811. The premium income of personal accident insurance came second with $2,743,568. Combined accident and sickness insurance was third in 1934 with a premium income of $1,617,464. The premium income of all accident and sickness insurance combined totalled $7,526,593 in 1934.

Loan, Small Loan and Trust Companies

The principal function of loan companies is the lending of funds on first mortgages on real estate, the money thus made available for development purposes being secured mainly by the sale of debentures to the investing public and by savings department deposits. Of the loan companies operating under provincial charters, the majority conduct loan, savings and mortgage business, generally in the more prosperous farming communities.

The number of loan and savings societies in operation and making returns to the Government at Confederation was 19, with an aggregate paid-up capital of $2,110,403 and deposits of $577,299. Rapid increases in the number of companies and total volume of business resulted from subsequent legislation. In 1899, 102 companies made returns showing capital stock paid up of $47,337,544, reserve funds of $9,923,728 and deposits of $19,466,676; total liabilities had increased from $3,233,985 to $148,143,496 between 1867 and 1899. After slight decreases in the number of loan companies in operation through amalgamations and absorptions, shortly after the turn of the century, further growth was recorded. As a result of the revision of the laws relating to loan and trust companies in 1914, statistics of provincially incorporated loan and trust companies ceased to be collected, but of late years these have made voluntary returns so that all-Canadian totals are again available.

There have been incorporated in recent years by the Parliament of Canada a number of companies which make small loans, usually not exceeding five hundred dollars each, on the promissory notes of the borrowers additionally secured in most cases by endorsements or chattel mortgages. The figures relating to the three companies of this class which have commenced operations are shown separately below. Heretofore they have been combined with those of the other loan companies.

The paid capital stock of all real estate mortgage loan companies at the end of 1934 was $42,113,617 (Dominion companies, $19,373,841 and provincial companies, $22,739,776); reserve funds, $28,216,497 (Dominion companies, $15,800,582 and provincial companies, $12,415,915); liabilities to the public, $134,376,870 (Dominion companies, $103,536,768 and provincial companies, $30,840,102); and liabilities to shareholders, $72,458,861 (Dominion companies, $36,599,186 and provincial companies, $35,859,675).

The paid capital of Dominion small loan companies at the end of 1934 was $976,750; reserve funds, $65,559; liabilities to the public, $1,519,795; liabilities to shareholders, $1,118,827.

Trust companies act as executors, trustees and administrators under wills or by appointment, as trustees under marriage or other settlements, as agents or attorneys in the management of the estates of the living, as guardians of minors or incapable persons, as financial agents for municipalities and companies and, where so appointed, as authorized trustees in bankruptcy. Some companies receive deposits but the lending of actual trust funds is restricted by law.

Trust companies are principally provincial institutions, since their original main functions were connected with probate, which lies within the sole jurisdiction of the provinces.

The aggregate total assets of the trust companies of Canada at the end of 1934 were $2,664,448,085 as compared with $805,000,000 in 1922 (the earliest year for which figures are available). The bulk of these assets ($2,436,101,468 in 1934) was represented by estates, trusts and agency funds. The assets of Dominion companies in 1934 amounted to $277,782,559 and of provincial companies to $2,386,665,526.

Miscellaneous

Canadian Bond Financing.—The declining trend in sales of railway and corporation bond issues, so clearly in evidence for 1933, was reversed in 1934, although the total was still low.

In the latter year, sales under this head were valued at $73,402,696. Corporation bond financing accounted for $40,902,696 of this, so that $32,500,000 remained for railway issues. As a result of the Dominion Government refunding operations and the increase in railway and corporation issues, the total of bond sales during 1934 was about $68,000,000 over that of 1933.

Canadian investors purchased over 83 p.c. of the total offerings, while in 1933 the corresponding proportion was 76 p.c. The figures show very strikingly that the United Kingdom is again taking interest in Canadian issues; the London market handled 9·14 p.c. of the 1934 offerings as compared with 7·84 p.c. for the New York—the first time the United Kingdom has exceeded New York in this connection since the War. Since 1914 more than 60 p.c. of the total new issues of Canadian bonds have been sold within Canada. This is attributable to two main reasons: (1) the

education of the Canadian public in the investment of funds in Government issues, brought about by the War, and the needs of the Government; (2) the ability of the Canadian public as a result of immediate war and post-war prosperity to purchase their own issues in greater volume than formerly.

Sales of Canadian Bonds, 1926-34

Year	Class of Bonds		Distribution of Sales			Total
	Government and Municipal	Railway and Corporation	Sold in Canada	Sold in the United States	Sold in the United Kingdom	
	$	$	$	$	$	$
1926	246,653,461	285,419,200	263,862,718	259,209,943	9,000,000	532,072,661
1927	232,537,614	369,680,067	373,637,014	223,714,000	4,866,667	602,217,681
1928	120,113,088	333,479,000	278,080,088	159,512,000	16,000,000	453,592,088
1929	218,628,309	442,530,600	378,395,909	263,654,000	19,109,000	661,158,909
1930	409,652,063	357,573,000	368,868,063	393,632,000	4,745,000	767,225,063
1931	1,069,638,571	181,182,000	1,090,800,571	155,920,000	4,100,000	1,250,820,571
1932	450,067,632	23,050,000	377,752,632	81,015,000	14,350,000	473,117,632
1933	564,171,513	5,385,000	434,556,513	60,000,000	75,000,000	569,556,513
1934	564,558,132	73,402,696	529,630,828	50,000,000	58,330,000	637,960,828

Interest Rates.—There does not exist in Canada as yet a market for money in the same sense as in great financial centres such as London and New York. Nevertheless the trend of money rates in the Dominion can be measured. Since about the beginning of the century the province of Ontario, the wealthiest and most populous of the provinces of the Dominion, has done its financing largely in Canada, hence the fluctuation in the rate of yield of Province of Ontario bonds is an excellent long-term indicator of net interest rates in the Dominion. Fluctuations in the yield of Ontario bonds for the past eight years are shown as follows:—

Yield of Province of Ontario Bonds by Months, 1928-35

Month	1928	1929	1930	1931	1932	1933	1934	1935
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
January	4·30	4·65	4·90	4·55	5·74	4·75	4·66	3·65
February	4·20	4·70	4·90	4·55	5·55	4·73	4·60	3·75
March	4·25	4·85	4·85	4·45	5·30	4·79	4·32	3·81
April	4·25	4·95	4·85	4·45	5·33	4·85	4·20	3·87
May	4·35	5·00	4·85	4·40	5·42	4·70	4·06	3·76
June	4·40	4·95	4·83	4·40	5·48	4·65	4·09	3·85
July	4·50	4·95	4·80	4·45	5·30	4·63	3·98	3·84
August	4·60	4·90	4·60	4·40	4·95	4·55	3·94	3·82
September	4·60	5·00	4·45	4·65	4·88	4·59	3·93	3·96
October	4·55	4·95	4·50	4·95	4·70	4·53	3·97	3·54
November	4·55	4·95	4·50	5·05	4·90	4·66	3·88	3·47
December	4·60	4·90	4·50	5·20	4·92	4·72	3·65	–

Commercial Failures.—The total of commercial failures in Canada for 1935 (ten months) as reported to the Dominion Bureau of Statistics under the provisions of the Bankruptcy and Winding-up Acts was 1,085, as compared with 1,289 for the same ten months in 1934, 1,729 in 1933, 1,995 in 1932, 1,807 in 1931, 1,941 in 1930, 1,766 in 1929.

The following tables give, for the above seven years, the distribution of failures, by provinces and by industrial and commercial groups:—

Number of Commercial Failures, by Provinces, 1929-35

Year	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total
1935[1]	3	22	35	519	333	43	53	55	22	1,085
1934	8	42	38	779	474	56	36	42	57	1,532
1933	10	55	42	935	730	67	59	88	58	2,044
1932	9	62	80	968	889	86	91	131	104	2,420
1931	7	51	74	795	793	109	152	131	104	2,216
1930	3	61	45	1,011	776	113	146	152	95	2,402
1929	1	71	61	927	762	91	84	101	69	2,167

[1] Ten months January to October inclusive.

Number of Commercial Failures, by Groups, 1929-35

Year	Trade	Manufactures	Agriculture	Logging, Fishing	Mining	Construction	Transportation and Public Utilities	Finance	Service	Not Classified	Total
1935[1]	499	150	128	2	9	50	9	14	157	67	1,085
1934	799	217	82	3	2	59	20	16	217	117	1,532
1933	1,089	357	92	1	5	57	28	12	246	159	2,044
1932	1,171	468	190	9	6	83	43	7	290	153	2,420
1931	1,102	464	125	5	7	61	42	21	255	134	2,216
1930	1,204	488	115	12	9	55	48	29	283	159	2,402
1929	1,100	443	125	4	11	61	21	5	239	158	2,167

[1] Ten months January to October inclusive.

The chief branches of business to be affected by failure are trade, manufacturing, and service and for the first ten months of 1935 these three groups accounted for 74 p.c. of all failures. In that period the estimated grand total of assets of all concerns which failed was $10,244,499 against estimated liabilities of $14,715,155. Thus, average assets for each failure were $9,442, against average liabilities of $13,562.

Comparable figures for the two previous years show that for the same ten months of 1934, there were 1,289 failures, and the estimated total assets were $16,796,330, against estimated liabilities of $20,075,961, while in 1933, there were 1,729 failures with total assets of $23,755,399 and total liabilities of $28,669,253. Average assets and liabilities for each failure were therefore $13,031 and $15,808 for 1934 and $13,739 and $16,581 for 1933. Thus, while average liabilities of failures in 1935 were smaller than in either of the two previous years, the difference between average assets and liabilities was greater.

The total commercial failures in the ten months of 1935 showed a decrease of 204 or 16 p.c. compared with the same months of 1934 and 37 p.c. compared with the same period of 1933. They were at a lower level in 1935 than they have been for the same ten months in any year since 1922, when the record was commenced, although the number of commercial concerns has increased materially in the interval.

CHAPTER XVII

LABOUR

Dominion Department of Labour.—Accompanying the steady progress of labour organization, Canada has provided, on an increasing scale, for governmental consideration of labour problems. The Dominion Department of Labour was established in 1900. Its duties are to aid in the prevention and settlement of labour disputes, to collect and disseminate information relative to labour conditions, to administer the Government's fair wages policy and, in general, to deal with problems involving the interests of workers. Under the first mentioned of these functions, the Industrial Disputes Investigation Act, originated in 1907 for the settlement of disputes in mines and public utility industries, has attracted favourable comment throughout the world; up to Mar. 31, 1935, 538 threatened disputes had been referred to Boards of Conciliation and Investigation established under its provisions and, in all but 38 cases, open breaks were averted. Under a separate Statute entitled "The Conciliation and Labour Act", conciliation officers are available to assist in the settlement of labour disputes arising from time to time, and their services have been widely utilized to this end. The administration of the fair wages policy as respects building and construction works is carried out under an Act of Parliament entitled the Fair Wages and Eight Hour Day Act, 1930, and as respects contracts for various classes of supplies and equipment, under the provisions of an Order in Council. The monthly *Labour Gazette* has, since

Ballasting a Section of Railway Roadbed.
Courtesy, Canadian Government Motion Picture Bureau.

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1900, provided a comprehensive survey of labour conditions in Canada, and is supplemented by various special publications dealing with wages, labour organizations, labour laws, etc. The Department also administers the Employment Offices Co-ordination Act, the Technical Education Act, the Government Annuities Act, the Minimum Wages Act, and the relief legislation. In addition, the Department is charged with certain duties arising out of the relations of Canada with the International Labour Organization of the League of Nations. Canada as one of the eight states of "chief industrial importance" retains a place on the Governing Body of that organization.

Provincial Departments and Bureaus of Labour.—In all the provinces but New Brunswick and Prince Edward Island Departments or Bureaus of Labour have been set up to administer legislation dealing with the health and safety of all persons employed in industry. Laws regulating employment offices, the payment of wages, and the protection of labour generally, are administered by these Departments. Legislation providing for minimum wages for female workers in effect in all provinces but New Brunswick and Prince Edward Island is under the jurisdiction of special boards, which, in several provinces, are linked with the Labour Departments. Workmen's compensation laws are administered by independent bodies and in New Brunswick the Workmen's Compensation Board administers the Factory Act. In recent wages legislation the tendency is towards a regulation of wages of men as well as of women. In British Columbia and Manitoba, minimum wages for male workers may be established, and in other provinces minimum wages for women affect men's wages in the same employment. In Quebec, Ontario and Alberta, under recent statutes, legal force may be given to any agreement as to wages and hours of labour between a representative number of employers and one or more trade unions, and the terms of the agreement may be extended to the whole industry within the district concerned. Legislation dealing with collective agreements is administered by the provincial Departments of Labour.

The Labour Movement

In Canada, trade unionism has been an outgrowth of the last half century, resulting from the increase in urban population and the development of a diversified industrial life. The principal labour organizations are those in the International, Canadian and National Catholic groups.

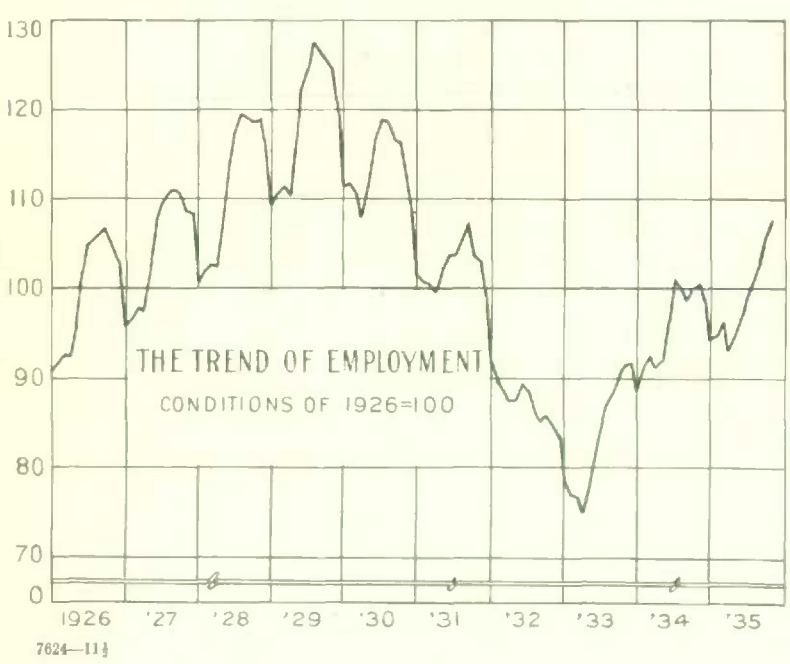
During 1934, there were in existence in Canada 1,809 international locals having 161,404 members, and 931 non-international unions with a membership of 120,370. The total number of organized workers reported to the Department of Labour was therefore 281,774, compared with 286,220 in 1933. The oldest federated labour organization in the Dominion is the Trades and Labour Congress, established in 1883, which is the recognized head of the internationally organized workers in Canada, and their representative in dealing with legislative matters. The All-Canadian Congress of Labour came into existence at a meeting of national union representatives held in Montreal in 1927. The object of the Congress is to promote the interests of its affiliated organizations and to strive to improve the economic and social conditions of the workers. The National Catholic Union movement in Canada dates from 1901, when it had its inception in Quebec city. Subsequently, other National Catholic Unions were formed in the province of Quebec and, with this steady growth, there

developed the desire for a central organization to direct and co-ordinate the activities of the various units, which resulted, during 1921, in the formation of the Confederation of Catholic Workers of Canada. The plan of organization adopted is similar to the non-sectarian trade unions. Although this movement was originally designed exclusively for Roman Catholics, provision has been made for the admission of non-Catholics as associate members, who may vote but cannot hold office.

Industrial Disputes.—During 1934, the loss to industry and to workers through strikes and lock-outs was greater than in 1933 or 1932 and the number of workers involved was also greater. There were 191 disputes, involving 45,800 workers and a time loss of 574,519 working days, compared with 125 disputes involving 26,558 workers and 317,547 working days in 1933. The minimum loss in working days since the record was commenced in 1901 was in 1930, when 91,797 working days were lost in 67 disputes involving 13,768 workers. The maximum loss was in 1919, when 336 disputes involved 148,915 workers and caused a time loss of 3,400,942 working days.

Employment, 1934 and 1935

The existing need for frequent measurement of the variation in the volume of industrial employment has, since 1920, been met by the Government's monthly record of the fluctuations in the numbers on the payrolls of leading employers throughout the Dominion. These monthly surveys, based upon returns from firms each having a staff of fifteen persons or more, extend to all lines of industry except agriculture, fishing, hunting, professional and specialized business, such as banking, insurance, etc.



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During the twelve months, Jan. 1-Dec. 1, 1935, the Dominion Bureau of Statistics tabulated data from an average of 9,248 firms, with an average working force of 933,085, as compared with the monthly average of 893,653 reported by the 8,690 employers furnishing statistics for the preceding year. The index, based on the 1926 average as 100 p.c., rose from 96·0 in the period Jan. 1-Dec. 1, 1934, to 99·4 in the same months of 1935; this was an increase of 3·5 p.c. During the preceding four years, the annual average indexes of employment were as follows:—1933, 83·4; 1932, 87·5; 1931, 102·5; 1930, 113·4.

The upward movement in industrial employment evident during most of 1933 and 1934 continued during 1935. From the beginning of April to Nov. 1, 1935, there was uninterrupted expansion, which resulted in a higher level of employment at the latter date than in any other month since Dec. 1, 1930. While seasonal losses were indicated at the beginning of December, the situation continued more favourable than in any month of 1934, 1933 or 1932. All five economic areas and most of the main industrial groups shared in the improvement shown during 1935 while considerable recovery was also reported in each of the eight cities for which statistics are segregated.

Index Numbers of Employment as Reported by Employers, by Economic Areas, as at the first of each month, November, 1934, to December, 1935, with Yearly Averages since 1921.

NOTE.—These indexes are calculated upon the average for the calendar year 1926 as 100. The relative weight shows the proportion of employees reported in the indicated economic area to the total reported by all employers making returns in Canada on Dec. 1, 1935.

Year and Month	Maritime Provinces	Quebec	Ontario	Prairie Provinces	British Columbia	Canada
1921—Averages	**102·4**	**82·2**	**90·6**	**94·0**	**81·1**	**88·8**
1922—Averages	**97·3**	**81·4**	**92·8**	**92·6**	**82·8**	**89·0**
1923—Averages	**105·7**	**90·7**	**99·5**	**94·8**	**87·4**	**95·8**
1924—Averages	**96·6**	**91·3**	**95·5**	**92·1**	**89·4**	**93·4**
1925—Averages	**97·0**	**91·7**	**95·8**	**92·0**	**93·7**	**93·6**
1926—Averages	**99·4**	**99·4**	**99·6**	**99·5**	**100·2**	**99·6**
1927—Averages	**103·7**	**104·0**	**105·6**	**105·3**	**101·1**	**101·6**
1928—Averages	**106·6**	**108·3**	**113·5**	**117·9**	**106·4**	**111·6**
1929—Averages	**114·8**	**113·4**	**123·1**	**126·3**	**111·5**	**119·0**
1930—Averages	**118·3**	**110·3**	**114·6**	**117·1**	**107·9**	**113·1**
1931—Averages	**108·1**	**100·9**	**101·2**	**111·5**	**95·5**	**102·5**
1932—Averages	**92·2**	**85·5**	**88·7**	**90·0**	**80·5**	**87·5**
1933—Averages	**85·3**	**82·0**	**84·2**	**86·2**	**78·0**	**83·4**
1934—						
Nov. 1	104·9	98·0	103·6	96·5	94·1	100·2
Dec. 1	106·9	96·4	101·7	94·3	92·9	98·9
Averages, 12 mos.	**101·0**	**91·7**	**101·3**	**90·0**	**90·4**	**96·0**
1935—						
Jan. 1	99·0	91·3	98·0	91·2	88·8	94·4
Feb. 1	100·1	89·5	100·2	89·2	89·6	94·6
Mar. 1	98·6	91·3	103·5	87·2	91·9	96·4
April 1	95·8	85·9	100·7	86·9	91·8	93·4
May 1	97·4	89·7	101·7	87·9	92·6	95·2
June 1	101·6	93·8	101·6	92·2	96·6	97·6
July 1	106·7	94·8	102·7	96·3	99·5	99·5
Aug. 1	106·7	97·2	102·4	98·7	106·8	101·1
Sept. 1	107·0	99·3	103·9	100·5	108·0	102·7
Oct. 1	112·9	103·1	108·1	102·7	106·0	106·1
Nov. 1	111·1	105·0	110·0	108·1	101·8	107·7
Dec. 1	107·5	103·8	107·0	101·3	99·3	104·6
Averages, 12 mos.	**103·7**	**95·4**	**103·3**	**95·2**	**97·3**	**99·4**
Relative Weight by Economic Areas as at Dec. 1, 1935	7·8	29·1	41·6	13·0	8·5	100·0

[1] The average for the calendar year 1926, including figures up to Dec. 31, 1926, being the base used in computing these indexes, the average index here given for the 12 months Jan. 1-Dec. 1, 1926, generally shows a slight variation from 100.

Employment by Economic Areas.—The fluctuations in employment in the five economic areas are indicated in the indexes given in the accompanying table. The situation as reported by employers was generally more favourable during 1935 in each of these areas than it was in 1934. The most marked improvement was in the Maritime Provinces, where the index at 112·9 on Oct. 1, 1935, was higher than in any other month since Nov. 1, 1931.

Employment in Leading Cities.—Employment data are segregated for eight of the principal industrial centres—Montreal, Quebec, Toronto, Ottawa, Hamilton, Windsor, Winnipeg and Vancouver, in all of which heightened activity was noted during 1935. Each month from Feb. 1, the percentage increase over the same month in 1934 was greater in these eight centres, taken as a unit, than that indicated in the same comparison in the Dominion as a whole.

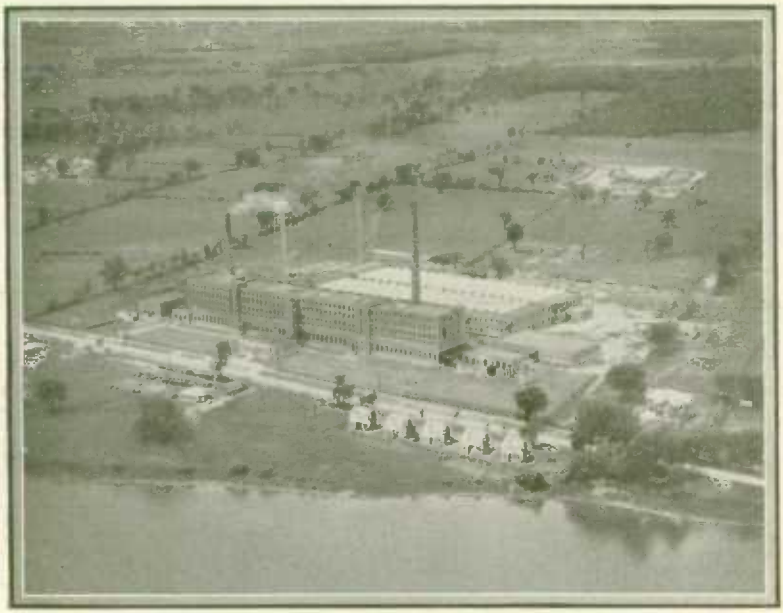
Employment by Industries.—The recovery indicated during 1935 extended to most of the industries surveyed; the outstanding exception was highway construction and maintenance, in which activity was not so great as in the preceding year, partly as a result of changes in the unemployment relief plans of the various Governments.

Index Numbers of Employment as Reported by Employers, by Industries, as at the first of each month, November, 1934, to December, 1935, with Yearly Averages since 1921.

Year and Month	Manufacturing	Logging	Mining	Communications	Transportation	Construction and Maintenance	Service	Trade	All Industries
1921—Averages	**87·7**	**103·0**	**98·0**	**90·2**	**94·1**	**71·1**	**83·6**	**92·7**	**88·8**
1922—Averages	**88·3**	**85·1**	**99·5**	**86·4**	**87·8**	**76·7**	**81·9**	**90·8**	**89·0**
1923—Averages	**96·6**	**114·2**	**106·2**	**87·6**	**100·3**	**80·9**	**87·9**	**92·1**	**95·8**
1924—Averages	**92·4**	**116·7**	**105·3**	**93·7**	**99·1**	**80·3**	**93·8**	**92·5**	**93·4**
1925—Averages	**93·0**	**105·4**	**99·8**	**95·5**	**96·6**	**84·9**	**95·4**	**95·1**	**93·6**
1926—Averages[1]	**99·6**	**99·5**	**99·7**	**99·6**	**99·7**	**99·2**	**99·5**	**99·2**	**99·6**
1927—Averages	**103·4**	**109·3**	**107·0**	**103·8**	**102·5**	**109·0**	**106·2**	**107·4**	**104·6**
1928—Averages	**110·1**	**114·5**	**114·4**	**108·2**	**105·9**	**118·8**	**118·1**	**116·1**	**111·6**
1929—Averages	**117·1**	**125·8**	**120·1**	**120·6**	**109·7**	**129·7**	**130·3**	**126·2**	**119·0**
1930—Averages	**108·9**	**108·0**	**117·8**	**119·8**	**104·6**	**129·8**	**131·6**	**127·7**	**113·4**
1931—Averages	**95·3**	**60·1**	**107·7**	**104·7**	**95·8**	**131·4**	**124·7**	**123·6**	**102·5**
1932—Averages	**84·4**	**42·6**	**99·2**	**93·5**	**84·7**	**86·0**	**113·6**	**110·1**	**87·5**
1933—Averages	**80·9**	**66·5**	**97·5**	**83·9**	**70·0**	**74·6**	**106·7**	**112·1**	**83·4**
1934—									
Nov. 1	92·8	171·9	121·2	80·7	83·9	111·0	114·9	121·3	100·2
Dec. 1	91·3	198·6	122·9	79·8	80·1	100·3	115·2	126·0	98·9
Averages—									
12 months	**90·2**	**124·7**	**110·8**	**38·1**	**80·3**	**109·3**	**115·1**	**117·9**	**96·0**
1935—									
Jan. 1	87·4	181·3	119·1	78·6	76·2	87·9	115·2	130·6	94·4
Feb. 1	90·1	183·4	120·3	77·8	76·2	87·2	111·9	116·6	94·6
Mar. 1	92·7	166·9	118·8	77·5	76·5	94·2	111·7	116·7	96·4
April 1	93·9	101·3	117·7	77·7	76·3	80·2	111·4	117·4	93·4
May 1	95·6	93·9	116·2	77·5	80·1	84·7	116·4	119·3	95·2
June 1	98·4	96·0	119·2	79·2	79·9	80·5	118·5	119·9	97·6
July 1	98·5	82·2	121·5	80·8	82·7	101·1	123·6	122·1	99·5
Aug. 1	99·8	79·0	125·2	81·6	85·4	104·7	127·9	120·7	101·1
Sept. 1	100·8	77·7	128·6	82·1	85·8	110·9	127·8	121·8	102·7
Oct. 1	103·3	115·8	129·5	82·1	86·4	117·4	120·5	123·8	106·1
Nov. 1	103·5	158·4	132·5	81·4	84·5	119·9	117·1	124·6	107·7
Dec. 1	101·4	183·5	131·1	81·0	84·0	95·9	116·3	131·1	104·6
Averages—									
12 months	**97·1**	**126·9**	**123·3**	**79·8**	**81·2**	**97·8**	**118·2**	**122·1**	**99·4**
Relative Weight by Industries as at Dec. 1, 1935	51·8	5·2	6·1	2·2	10·2	11·4	2·6	10·5	100·0

[1]See footnote to table on p. 164; also headnote.

Building and railway construction were both brisker, the improvement in the former resulting, in part, from the public works program passed in the Parliamentary Session of 1935, while industrial, residential and other non-governmental building was also brisker. Manufacturing showed a substantial gain over 1934, in which most lines of factory employment shared. Notable increases were made in the iron and steel, non-ferrous metal, textile, lumber, pulp and paper and food industries. The pronounced expansion indicated in mining during 1935 took place to a considerable extent in the extraction of metallic ores, principally of the precious metals, demand for which has been greatly stimulated by world monetary conditions. Employment in services and trade was also more active than in 1934—partly a reflection of a better tourist season.



An Up-to-date Artificial Silk Plant in Ontario.
Courtesy, The Foundation Company of Canada.

Unemployment in Trade Unions.—Monthly statistics are tabulated in the Department of Labour from trade unions showing the unemployment existing among their members. In the first ten months of 1935, 1,740 organizations reported an average membership of 163,882, of whom 25,658 were, on the average, unemployed; this was a percentage of 15·7, compared with 18·3 p.c. in 1934 and 22·6 in the same period of 1933.

Applications, Vacancies and Placements of the Employment Service of Canada.—Under the provisions of the Employment Offices Co-ordination Act, 1918, the Dominion Department of Labour, in co-operation with the provinces, has since then maintained local employment offices in a number of centres throughout the Dominion; the volume of business transacted by these bureaus is regarded as indicative of current labour

conditions. Up to Nov. 30, 1935, 604,438 applications for work and 346,861 vacancies were registered at the 64 existing offices, while the placements effected numbered 325,658. In the same period of 1934, the registers showed 676,621 applications for work, 395,627 vacancies and 375,578 placements. The Employment and Social Insurance Act, passed by the Dominion Government in 1935, makes provision for the repeal of the Employment Offices Co-ordination Act on proclamation, and the assumption of its functions by the Commission appointed under the 1935 Act. Among other benefits to labour and industry, the latter Act provides for the establishment of a National Employment Service, whose administration and organization will differ in certain respects from that of the present Dominion-Provincial service.

Dominion Unemployment Relief Measures, 1935

At the sixth session of the 17th Parliament the Relief Act, 1935, which received Royal Assent on April 4, 1935, was enacted.

The administration of the Act was, by Order of His Excellency the Governor in Council, vested in the Minister of Labour.

Under this Statute the Dominion is continuing to pay to the provinces monthly grants-in-aid to assist the provinces in discharging their responsibilities connected with the relief of necessitous persons within ther respective boundaries. The amounts of the monthly grants-in-aid, which were determined on the basis of need, are as follows:—

Prince Edward Island, $1,250; Nova Scotia, $40,000; New Brunswick, $25,000; Quebec, $500,000; Ontario, $600,000; Manitoba, $135,000; Saskatchewan, $200,000; Alberta, $100,000; British Columbia, $150,000.

In addition to payment of the monthly grants-in-aid above referred to, agreements entered into under the provisions of the Relief Act, 1935, with the provinces of Prince Edward Island, New Brunswick, Ontario, Manitoba, Saskatchewan and Alberta, provide for Dominion assistance toward the cost of the following relief measures:—

Prince Edward Island.—Trans-Canada Highway and provincial highways.

New Brunswick.—Trans-Canada Highway, provincial highways and aid to colonization settlers on location.

Ontario.—Trans-Canada Highway, completion of certain municipal and provincial relief projects commenced under previous relief legislation.

Manitoba.—Trans-Canada Highway, provincial highways, one provincial public works project and the Winnipeg sewage disposal plant, the total estimated cost of which is $2,000,000 to Mar. 31, 1936, and toward the cost of which the Dominion has agreed to contribute 40 p.c.

Saskatchewan.—Trans-Canada Highway.

Alberta.—Trans-Canada Highway.

Under the provisions of the Relief Act, 1932, agreements were completed with all the provinces, except Prince Edward Island, providing for a non-recoverable expenditure of one-third of an amount not to exceed $600 per family for the purpose of providing a measure of self-sustaining relief to families, who would otherwise be in receipt of direct relief, by placing such families on the land. It was provided that the remaining

two-thirds of the expenditure should be contributed by the province and the municipality concerned. The agreements covered a period of two years and expired on Mar. 31, 1934. (See also p. 31.)

Under the provisions of the Relief Act, 1934, agreements, effective from April 1, 1934 to Mar. 31, 1936, providing continuity of settlement with the agreements which expired Mar. 31, 1934, were entered into with all the provinces excepting Prince Edward Island and British Columbia. Provision is made in the 1934 agreements for an additional non-recoverable contribution by the Dominion, on the recommendation of the province and with the approval of the Governor in Council, of one-third of an amount not exceeding $100 in the case of a settler who may not be self-supporting at the end of the two-year period, and for whom subsistence expenditure during the third year of settlement is deemed necessary. This additional amount for subsistence during the third year, where necessary, applies both to those settled under the 1932 agreement and those settled under the 1934 agreement.

Under authority of the present legislation (the Relief Act, 1935), an agreement respecting relief settlement has been entered into between the Dominion and the province of British Columbia, leaving Prince Edward Island the only province not participating in the plan.

Reports received from the provinces in regard to the number of settler families and the total number of individuals approved and settled under the agreements as at Oct. 31, 1935, are as follows:—

Number of Settler Families and Individuals Approved and Settled under the Relief Acts' Agreements to Oct. 31, 1935

Province	Settler Families	Total Individuals	Province	Settler Families	Total Individuals
	No.	No.		No.	No.
Nova Scotia	341	2,140	Saskatchewan	939	4,604
Quebec	976	6,005	Alberta	641	3,021
Ontario	606	2,990	British Columbia	52	285
Manitoba	765	3,647			
			Totals	**4,320**	**22,692**

Toward the cost of relief in the dried-out areas of the three Prairie Provinces, the Dominion continued to contribute during the months of April, May, June and July, 50 p.c. of:—

(1) Movement of settlers with their effects and stock from the dried-out areas to such locations as deemed suitable by the province concerned;
(2) Movement of cattle from the dried-out areas to such locations as deemed suitable by the province concerned, together with any equipment required in connection therewith, and return of said cattle and equipment upon completion of feeding season;
(3) Movement of necessary feed and fodder into the dried-out areas, together with the movement of any equipment required in connection therewith, and return thereof.

In the provinces of Manitoba and Alberta, the Dominion has undertaken to provide for the placement of single homeless unemployed persons on farms from Nov. 1, 1935, to Mar. 31, 1936, on a similar basis to that

obtaining under previous relief legislation, namely, payment of $5 per month to each person so placed, the Dominion contributing 100 p.c. of expenditures incurred in this connection exclusive of the costs of administration. Up to Oct. 31, 1935, there had been no request from the province of Saskatchewan for Dominion assistance with respect to farm placements.

Under the 1935 Act, the Dominion is continuing to operate the camps established under the provisions of the Relief Act, 1932, at various points throughout Canada; also the special relief works carried out in the National Parks for the care of single homeless unemployed men and unemployed residents of the parks.

The following statement sets forth the Dominion's disbursements under relief legislation since 1930 to Oct. 31, 1935, namely: the Unemployment Relief Act, 1930; the Unemployment and Farm Relief Act, 1931; the Relief Act, 1932; the Relief Act, 1933; the Relief Act, 1934; and the Relief Act, 1935.

A summary of the loans and advances outstanding as at the same date is also shown.

Total Dominion Expenditures under Relief Legislation, 1930-35

(In Thousands of Dollars)

Item	1930 Act	1931 Act	1932 Act	1933 Act	1934 Act	1935 Act	Total
	$	$	$	$	$	$	$
Disbursements to Provinces—							
P.E. Island	95	129	25	87	159	124	619
Nova Scotia	836	1,079	572	1,184	642	280	4,593
New Brunswick	504	764	222	511	414	188	2,633
Quebec	3,321	5,440	4,231	3,627	10,984	3,500	31,103
Ontario	4,693	11,101	7,985	9,875	14,038	7,118	54,809
Manitoba	1,630	3,351	1,747	2,182	2,278	1,023	12,211
Saskatchewan	1,918	3,008	1,155	807	2,329	1,400	10,617
Alberta	1,282	3,043	1,306	1,264	1,759	727	9,381
British Columbia	1,376	3,954	3,228	2,577	3,172	1,050	15,358
Yukon and N.W.T	20	10	3	5	–	10	49
Disbursements through Dominion Government Departments	37	4,596	1,033	7,565	8,393	3,188	24,813
Other Disbursements—							
Saskatchewan Relief Commission	–	5,373	4,456	1,314	747	–	11,889
Board of Railway Commissioners	500	500	–	–	–	–	1,000
Canadian Pacific Railway	864	209	–	–	–	–	1,073
Canadian National Railway	882	–	–	–	–	–	882
Administration Expenses	43	85	68	85	89	77	446
Miscellaneous	–	2	3	–	5	1	11
Totals	**18,001**	**42,644**	**26,034**	**31,083**	**45,039**[1]	**18,686**	**181,187**

[1] Includes $11,413 incurred under the provisions of the 1933 Act, and authorized by Sec. 10 of the Relief Act, 1934.

SUMMARY OF LOANS AND ADVANCES OUTSTANDING

Manitoba	13,482,000
Saskatchewan (including the Saskatchewan Relief Commission)	47,720,000
Alberta	19,402,000
British Columbia	20,958,000
Canadian Pacific Railway Company	2,447,000
Advance to Dominion's representative in Saskatchewan re Farm Placement Bonus	7,000
Advance for unemployed homeless men in Regina	21,000
Total	**104,037,000**

Old Age Pensions

The Old Age Pensions Act, 1927.—The Act provides for a Dominion-Provincial system of non-contributory old age pensions in such provinces as have enacted and given effect to special legislation for this purpose. The provinces are charged with the payment of pensions, the Dominion reimbursing each province, quarterly, to the extent of 75 p.c.* of the net cost of its payments on account of old age pensions. The provinces now operating under such agreements are: B.C., Alta., Sask., Man., Ont., N.S., and P.E.I. Old age pensions are also payable in the Northwest Territories. The following table gives the payments under the Act and the numbers of pensioners as at Sept. 30, 1935.

Summary of Old Age Pensions in Canada, as at Sept. 30, 1935, by Provinces, with Effective date of Legislation in each Case [1]

Item	Alta., Aug. 1, 1929	B.C., Sept. 1, 1927	Man., Sept. 1, 1928	N.S., Mar. 1, 1934	P.E.I., July 1, 1933	Ont., Nov. 1, 1929	Sask., May 1, 1928	N.W.T. Jan. 25, 1929	Total
Total numbers of pensioners as at Sept. 30, 1935	7,730	9,594	10,547	12,671	1,587	52,641	10,588	7	105,365
Averages of monthly pension.....$	17.72	19.55	18.63	14.22	10.40	17.86	16.32	18.98	-
Total amounts of pensions paid Jan. 1, 1935—Sept. 30, 1935 ..$	1,165	1,614	(Thousands of Dollars) 1,750	1,612	140	7,425	1,540	1	15,248
Dominion Government's shares.....$	873	1,204	1,309	1,209	105	5,519	1,155	1	11,376
Total amounts of pensions paid since inception of Act to Sept. 30, 1935.....$	6,424	11,084	11,794	3,151	366	52,788	10,735	9	96,351
Dominion Government's shares.....$	4,455	7,276	7,868	2,363	274	35,580	7,176	9	65,001

[1] The figures are approximate and are in course of revision.

In accordance with an agreement consummated between the Dominion and the province of Nova Scotia, the payment of old age pensions commenced in that province on Mar. 1, 1934. While the New Brunswick Legislature at its 1930 Session passed an Old Age Pensions Act to come into force on a date to be fixed by proclamation, the Act has not yet been proclaimed. Authority was given the Gold Commissioner of the Yukon in 1927 to enter into an agreement with the Dominion Government for the purpose of obtaining the benefit of the Old Age Pensions Act, but no scheme has yet been formulated. The Social Insurance Commission created by the Quebec Government submitted its findings on the subject of old age insurance in November, 1932, the majority report declaring "in favour of a contributory and obligatory system".

* The proportion paid by the Dominion as set in the Act of 1927 was one-half, but this was increased at the Second Session of the Seventeenth Parliament to 75 p.c., which increase was made effective from Nov. 1, 1931.

CHAPTER XVIII

EDUCATION AND RECREATION

Schooling in Canada comes each year to be a more important undertaking. The youth of to-day attend school for ten years of their lives on the average, or nearly half as long again as their fathers and mothers. Though the mistake should not be made of regarding schooling as synonymous with education, that broader and continuous process of forming the lives of individual citizens, in which the home and occupation take such an important part, the weight of the schools in relation to other educational influences must be high; for from the time that the child starts to school, to the end of a normal lifetime, he may spend an hour and a half weekly in another pursuit, and still spend less time at it than he now spends at school. Some of these other influences may be the church, theatre, athletic field, public library, the home, the daily press, the radio, etc., and they should properly be considered as fellow members of the educational organization, although they can not all be reviewed here.

A sewing class in Kamloops Residential School.

The typewriting room, Caughnawaga Reserve Senior School.

Vocational Training in the Indian Residential Schools.
Courtesy, Department of Indian Affairs.

Schools and Universities

Nearly one-fourth of the Canadian population attend school in the capacity of either student or teacher. Below the college level the cost is largely met out of public funds, and over 40 p.c. of the expenditure on

higher education is made by provincial governments. Considering all schools and universities together, the cost is proportioned as follows: Dominion Government, 1·8 p.c.; provincial governments, 20·8 p.c.; counties, 2·1 p.c.; school administrative units, ranging in size from large cities to communities of a few farms, 61·8 p.c.; students' fees, mainly in private schools and at the university level, 8·0 p.c.; endowments, also mainly university, 1·7 p.c.; other sources, including churches, 3·8 p.c. Perhaps the most striking feature of this financial provision is the high proportion of costs for which each school district is individually responsible. There are about 24,000 administrative districts or sections, each self dependent for more than three-fifths of the cost of its schools. Fewer than 1,000 of these areas have populations in excess of 500 persons, and the remaining 23,000 do not average as many as 250. Among such a large number of small communities there are naturally very wide differences in ability to support schools with accompanying variation in the quality of schooling, and since these differences have been emphasized in depression years, educators across Canada are giving attention to methods of equalizing more of the cost over larger sections, such as counties or over entire provinces. The Governments of British Columbia and Ontario have announced their intention of so doing, and commissions of investigation in several of the other provinces have put recommendations of this kind before the legislatures within the last few years.

Expenditures for schools, like all public expenditures, have received close attention in recent years, and for this reason it is of interest to note their place in the national and family economy. It appears that about 15 p.c. of the aggregate income of Canadians is normally taken in taxation, and that a sum equal to rather more than one-fifth of this (3·5 p.c. of the total) is spent on schools and universities. About $750 is spent on each child's schooling, on the average, and the other costs involved in raising him to maturity are in the neighbourhood of $5,000.

Current problems in connection with the schools are by no means all financial. In all of the provinces the enrolment in elementary schools has either begun to decline, or is likely to decline very shortly, owing in part to less retardation of pupils and in part to a reduced number of births; but in the secondary schools the attendance still continues to increase at a rapid pace. Overcrowded secondary schools and empty seats in the elementary schools are helping to bring about a reconsideration of the traditional eight-four division between the two types of school. There is a tendency to remove the abrupt break at the end of the eighth year and attach one or two years of the high school more closely to the two upper elementary years, thereby making an intermediate period of gradual transition between primary schooling, and secondary schooling or occupation. In smaller schools the changes must be confined mainly to curriculum rather than organization, and a majority of the provinces have recently given their entire curriculum a thorough revision or are in the act of doing so, partly to make this intermediate period one of more gradual transition, and partly to make it suit better the changed conditions of the post-war world. Health, citizenship and social studies generally are given greater place.

Universities are carrying on with greatly reduced revenues from provincial treasuries and endowment investments, compensating for these in some measure by increases in students' fees. While the rapid increase in

attendance, characteristic of the preceding decade, has come to an end in the latest two or three years, the total enrolment can scarcely be said to have declined. Employment for their graduates, as also for those of the schools, has been a serious problem.

Special educational provision for unemployed persons and their adult dependants has not been made in Canada, except in scattered instances, and then largely by voluntary effort. The children, of course, attend school, but the older members of the family are in the main left on their own responsibility in the matter of using their unoccupied time constructively. In the cities there are at their disposal the public libraries, the work of which is reviewed biennially.

Civic Playgrounds

Organized playgrounds, apart from school grounds, are supported out of city funds by at least 46 of the 70 Canadian cities which at the Census of 1931 had populations over 10,000. In most of these the playgrounds are conducted by a city department, but in some cases by an independent organization with financial assistance from the city; in a few cases there are organizations of both kinds. Thirteen cities do not support playgrounds but activities are conducted by service clubs or other organizations in four of these. From the remaining eleven cities no information has been received.

A minority of the 46 cities do more than provide or equip the grounds. Twenty of them employ professional recreation leaders to direct or supervise the use of the grounds at least part of the year, while ten of them employ such leaders the year round. Playing fields for baseball, softball and football, rinks for pleasure skating and hockey, are most frequently provided. Curling and ski-ing are two other winter pastimes widely followed.

Motion Pictures

Another popular instrument of recreation and education in Canada is the motion picture. There are over 900 motion picture houses. A record of attendance at them is not available but a conception of it may be formed from the fact that Canadians spent $2.40 apiece, on the average, in attending the movies in 1933; in 1930 they spent $3.71. City and town folk would spend above the average. The total cost of admissions in 1933 was about $25 million, in 1930 about $38½ million. A further $3 million or thereabouts is required to pay the amusement taxes on admissions. British Columbia, Ontario and Manitoba people spend most per capita on motion pictures, Prince Edward Island and Saskatchewan people least.

The source of films exhibited in Canada has been changing considerably in the last few years, a much higher proportion of European pictures now being included. Last year the United Kingdom and France provided one-third of all the films imported, and there were a few from Germany. French pictures have been received in considerable number only since 1930. Pictures from both the United Kingdom and France have increased consistently since 1930—in spite of the fact that total imports last year were only one-third of what they were then—all of the loss having been in the films from the United States.

The organization of a National Film Institute, which will encourage the use of motion pictures as an educational force, was announced in the summer of 1935.

Arts and Crafts

Recent years have witnessed a tremendous growth of interest in certain leisure time pursuits of a cultural character that cannot be more than mentioned here. The "Little Theatre" or amateur drama movement has experienced a remarkable development from coast to coast under the patronage of Lord and Lady Bessborough. For three years the season has been climaxed by a national competition in Ottawa among winning regional groups. The University of Alberta has inaugurated a Summer School of Drama at Banff, and reports students from all over Canada.

Music festivals, comparable to those of the drama, earlier reached the stage of popularity necessary for provincial competitions, and have continued throughout the depression years to hold the interest of the people. In the Prairie Provinces the University of Saskatchewan has responded to this interest by the establishment of a chair in music.

A spinning wheel in rural Quebec.

Making snowshoes, Lorettville, Que.

Handicrafts.—Home handicrafts contribute to the old-world atmosphere of the province of Quebec.

Courtesy, Provincial Tourist Bureau, Quebec.

Lecturer and Truck of the University of Alberta Extension Service.—This truck carried a lantern lecture set and 320 pieces of Canadian handicrafts on a circuit of southern towns last winter. Another truck has, for three winters, been driven about the province with exhibitions of the fine arts.

Courtesy, Donald Cameron, University of Alberta Extension Department.

In the revival of handicrafts the French - Canadian population of Quebec has led the way, but the movement is now in evidence in all sections of the Dominion. The headquarters of the Canadian Handicrafts Guild is in Montreal. A natural accompaniment of the revival has been renewed interest in the folkways, music and language of racial elements in the population.

Interest in the fine arts, too, has shown an unusual appreciation in the recent difficult years. The last annual report of the National Gallery states that the year under review has been by far the busiest in its history, and that art interest in Canada has probably never been at such height. The accompanying comment is doubtless as applicable to drama, music and handicrafts as to the fine arts: "One of the few valuable fruits of the recent restriction of material things, disorganization of customary interests and pleasures, has been to turn the public mind toward the more enduring interests of life". A step forward in the teaching of art is to be noted in the establishment last year of a chair in art in the University of Toronto.

Adult Study

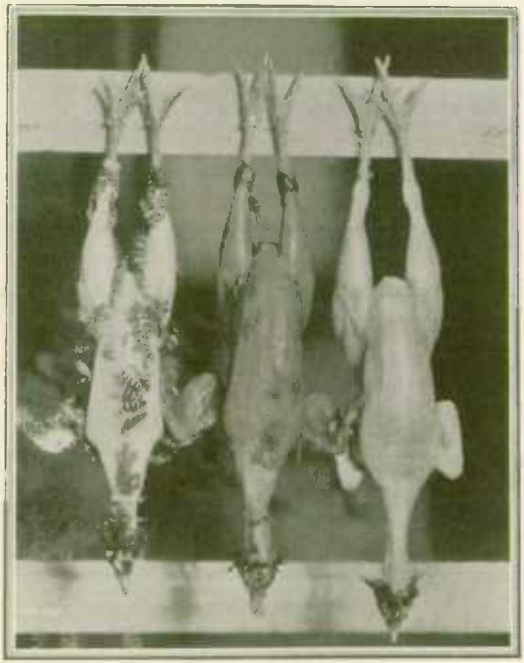
Similarly, a remarkable increase in after-school study, especially study of social and economic problems, is distinctly in evidence. New organizations of many varieties have arisen, each with the study circle as a major activity. These are the people whose interest has been directed into studying the difficulties with which the community has been beset, while the above-mentioned have turned their thoughts away from such difficulties to find refuge in the arts and crafts. Some of the universities have given direction to the interest in economic matters, notably St. Francis Xavier University in Nova Scotia, where study groups have been organized throughout the entire eastern section of the province. The Ontario universities have co-operated with the Workers' Educational Association in organizing classes that have had a steady increase in enrolment since 1930. There is extension work of related kinds from several of the other universities. In 1934 the extension directors and others interested in adult education met in a Dominion-wide convention and after a year spent in studying the situation, decided to set up a Canadian Association for Adult Education.

CHAPTER XIX

MISCELLANEOUS STATISTICS

The National Research Council

The National Research Council of Canada maintains well equipped laboratories at Ottawa, in which scientific problems of national importance are investigated and research work in the several branches of pure science is carried on with a view to keeping Canada abreast of the times in the newer knowledge. The laboratories are organized in four divisions —biology and agriculture, chemistry, physics and engineering including aeronautics, and research information. A library service is maintained.



Perfecting the wax plucking of poultry, considered one of the most important forward steps accomplished recently in the market poultry industry, is an example of the close co-operation between the National Research Council and the Dominion Department of Agriculture. Left, rough plucked bird; centre, waxed bird; right, finished bird, wax removed.

Courtesy, Department of Agriculture, Ottawa.

Co-operation with industry is obtained through associate committees on various subjects such as asbestos, coal classification, chemical and engineering standards, field crop diseases, gas, grain, laundry work, leather, magnesian products, parasitology, radio, radiology, tuberculosis, weed control and wool. There are also advisory committees whose members are drawn from the universities and industries to aid the Council in the formulation of policy in special fields of study.

Assistance to Canadian universities is afforded through grants in aid of research work carried on in their laboratories. A system of post-graduate scholarships enables the Council to afford wider opportunities for research to students who have demonstrated their ability to do advanced work.

In the seventeenth annual report of the Council, the President states that 87 researches were under way in the National Research Laboratories in the year under review. Of these, 34 were completed and reported; substantial progress was made in 16 others; the remainder, mainly new undertakings, were in the early stages of their developments. Some of these researches, completed or in progress, have a direct bearing on the utilization, commercially, of certain Canadian natural resources; others apply to the perfection of processes already in use; while some deal with problems of agriculture or of the industries related thereto.

From the completed researches, the following have been selected as examples of the projects investigated: use of Canadian clays in oil refining; bonding of rubber to metal; chemical investigation of weeds poisonous to live stock; suitability of Canadian wools for the manufacture of cloth; determination of more efficient and economical procedure for power laundries in the washing of cotton fabrics; development of a refractory lining for steel furnaces and the production of a new refractory brick for use under severe metallurgical conditions; a stream-lined locomotive; stability of air-craft floats; mechanization and standardization of baking tests; and the premature seed-setting in turnips.

The Canadian Journal of Research is published monthly by the Council. It appears in four sections, (a) physical sciences, (b) chemical sciences, (c) botanical sciences, (d) zoological sciences, and affords an outlet for meritorious papers by Canadian research workers.

Public Health, Hospitals and Charitable Institutions

In Canada, generally speaking, the administration of public health activities and the establishment and maintenance of such institutions is in the hands of the various provincial governments, under the powers given them in Sec. 92 of the British North America Act of 1867.

Exercising particular jurisdiction over some phases of the general health of the people of the Dominion is the Department of Pensions and National Health of the Dominion Government, while the Dominion Council of Health acts as a clearing house on many important questions. This Council consists of the Deputy Minister of the Dominion Department of Pensions and National Health as Chairman, together with such other persons as may be appointed by the Governor in Council, and who hold office for three years. The public health activities of the Dominion Government include the following divisions: Quarantine, Immigration, Leprosy, Marine Hospitals, Sanitary Engineering, Proprietary or Patent Medicine, Laboratory of Hygiene, Food and Drugs.

In classifying the various types of social service in Canada certain broad and well-established groups manifest themselves. These divisions are: (1) Hospitals, Dispensaries and Out-patient Departments; (2) Mental Hospitals and Institutions for the Feeble-minded and Epileptic; (3) Institutions for the Blind, Deaf and Dumb; (4) Homes for Adults and Homes for Adults and Children; (5) Orphanages, Child-caring Institutions, Day Nurseries, Child-placing Agencies and voluntary organizations.

The most familiar of all public institutions established to administer and foster the general health of the community is the general public hospital common to all cities and towns and prosperous rural communities. Where hospitals cannot be maintained in remote districts, Red Cross out-

posts or rural clinics in charge of district nurses are established. There were in operation in Canada on Jan. 1, 1934, 876 hospitals for the care of the sick, of which 606 were public, 238 private and 32 Dominion. The total bed capacity of all these hospitals was 58,822. The staffs included 709 salaried physicians, 656 internes, 5,643 graduate nurses and 8,044 nurses in training. Total personnel was 34,802. The average days' stay of patients was 20·5 days and the percentage of bed occupancy 62·7. In-patients treated during 1933 numbered 700,284 and the collective days' stay of all patients 14,354,320 days. Of 119 out-patient departments, 62

(1) Canadian Red Cross railway hospital car. (2) Enlarged view of operating room. (3) Interior accommodation.

Courtesy, Canadian Red Cross Society.

reported 256,959 patients and 1,427,284 treatments; 29 reported 77,818 patients but not treatments; and 28 reported 1,266,268 visits only.

Numbers and Bed Capacities of Hospitals and Charitable Institutions in Canada, by Provinces, at Jan. 1, 1934

Type of Institution		P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada[1]
Population (000's omitted)		89	525	425	3,018	3,562	731	965	769	725	10,823
Public Hospitals.—											
General	No.	3	23	17	55	111	28	71	74	*68	457
	Beds	232	1,362	1,276	9,250	11,263	2,273	3,071	3,469	4,326	36,734
Women's (only)	No.	–	2	1	5	5	1	2	3	1	20
	Beds	–	77	33	792	248	142	70	127	70	1,559
Pædiatric	No.	–	1	–	4	2	1	1	1	–	10
	Beds	–	80	–	1,865	455	135	28	50	–	2,613
Orthopædic	No.	–	–	–	1	–	–	–	–	2	3
	Beds	–	–	–	60	–	–	–	–	95	155
Isolation	No.	–	1	–	4	3	2	1	3	–	14
	Beds	–	50	–	426	584	330	8	98	–	1,496
Convalescent	No.	–	–	–	4	1	1	–	–	–	6
	Beds	–	–	–	255	35	50	–	–	–	340
Tuberculosis	No.	1	2	3	7	12	4	3	1	1	34
	Beds	54	413	404	1,263	3,163	674	713	210	336	7,230
Red Cross	No.	–	–	–	–	24	–	10	–	2	36
	Beds	–	–	–	–	269	–	91	–	26	386
Incurable	No.	–	–	1	6	7	1	2	5	1	23
	Beds	–	–	34	1,001	970	330	172	253	180	2,940
Other	No.	–	–	–	2	1	–	–	–	–	3
	Beds	–	–	–	69	22	–	–	–	–	91
Totals, Public	No.	4	29	22	88	166	38	90	87	75	606
	Beds	286	1,982	1,747	14,981	17,009	3,934	4,153	4,207	5,033	53,544
Private Hospitals	No.	–	3	4	23	83	7	49	43	26	238
	Beds	–	224	44	542	1,029	53	238	271	339	2,740
Dominion Hospitals	No.	–	4	3	5	7	3	1	5	4	32
	Beds	–	394	159	448	756	256	33	228	264	2,538
Mental Hospitals	No.	1	16	1	9	16	4	2	4	5	58
	Beds	280	2,084	900	9,850	12,694	2,234	2,450	1,985	2,441	34,918
Totals, All Hospitals.	**No.**	5	52	30	125	272	52	142	139	110	934
	Beds	566	4,684	2,850	25,821	31,488	6,477	6,874	6,691	8,077	93,740
Charitable and Benevolent Institutions.	No.	5	43	30	128	180	28	10	9	23	456
	Beds	309	1,755	1,743	19,292	11,890	2,210	536	747	1,532	40,014

[1]Includes Yukon and Northwest Territories.

Second only in importance to the general hospitals are the institutions for mental diseases. The public hospitals for the insane, feeble-minded and epileptic are assisted in their care of indigent patients by provincial and municipal grants. In addition there are county and municipal institutions, psychopathic hospitals and a few Dominion and private institutions. The 58 mental hospitals have a normal capacity of 34,918 beds. On Jan. 1, 1935, 56 of these institutions, with 99·8 p.c. of total bed capacity of all mental institutions, reported 36,571 inmates. The total receipts for 1934, including government grants and fees from patients, were $13,720,558 and the total expenditures $13,691,288.

Homes or hospitals for incurables provide maintenance, nursing medical and surgical aid to persons suffering from chronic and incurable diseases and the nature of the services given is such as to call for special reference. Many hospitals for incurables care not only for those suffering from incurable diseases but also for the aged, indigent, feeble-minded and

epileptic. There are 23 of these institutions in operation. The average number of patients per day during 1933 was 2,454, the bed capacity 2,940 and the total number under treatment 3,498.

War Pensions and Welfare of Veterans

The Pensions Section of the Department of Pensions and National Health is responsible for certain matters affecting war veterans' welfare. Its chief functions consist in the granting of medical and dental treatment to former members of the Forces who are suffering from disabilities, the result of injury or disease contracted or aggravated during military service. At the same time, many other activities are carried on such as the manufacture of artificial limbs and other prosthetic appliances, the issue of unemployment relief to unemployed pensioners and the operation of Vetcraft Shops.

Ten District Offices are maintained in the following centres: Halifax, Saint John, Montreal, Ottawa, Toronto, London, Winnipeg, Regina, Calgary and Vancouver. Sub-District Offices are situated at Quebec, Kingston, Hamilton, Windsor, Port Arthur, Saskatoon, Edmonton and Victoria. There is also an overseas office in London, England. Eight hospitals are operated at Halifax, Saint John, Ste. Anne de Bellevue, Toronto, London, Winnipeg, Calgary and Vancouver, respectively. In addition to these institutions, the Department has agreements with many civilian hospitals across Canada and in some cases special wards are set aside for the treatment of its patients. The medical service is conducted by physicians and surgeons on the staff of the Department and outside specialists in various branches of medicine and surgery. No expense is spared to give to the returned soldier the most modern treatment known to medical science. On Mar. 31, 1935, there were 1,617 patients in departmental hospitals, 694 in other institutions in Canada, 66 in Great Britain and 39 in the United States, making a total of 2,416 of whom 69 had served in other than the Canadian Forces during the Great War.

Among those in departmental institutions are some who have small pensions, but are unable to maintain themselves, owing in many cases to the presence of non-service disabilities, and who do not require active remedial treatment for their pensionable disabilities. These receive what is known as veterans' care. On Mar. 31, 1935, there were 235 of these men on the strength of the Department.

The issue of unemployment assistance to disability pensioners who are out of employment has been continued. While the Department has established basic rates for single men and for men with families in accordance with the number of dependent children in respect to whom additional pension is paid, in the larger centres the relief issued to non-pensioners by the municipalities in which they reside is on a higher scale than the applicable basic rate of the Department. In any such case, the Department's policy is to augment the pension by issues of unemployment assistance covering food, fuel and shelter to an amount not less than issuable to the non-pensioned veterans and other civilians for these items. The number of men who benefited during the fiscal year 1934-35 was 11,541 and the expenditure amounted to $2,042,354.

A somewhat unique feature of the departmental activities is in relation to the employment in industry of pensioners in receipt of pension of 25 p.c. and upwards. Should such a pensioner meet with an accident or

contract an industrial disease, the Department will reimburse the employer, or the Workmen's Compensation Board dealing with the case, to the extent of the cost incurred.

Canadian Pension Commission and Pension Appeal Court.—By legislation in 1933, the duties of the Board of Pension Commissioners for Canada and the Pension Tribunal were merged and a body known as the Canadian Pension Commission was created. The Commission maintains a staff of medical advisers at its head office and medical examiners in the field. It is responsible for the award and adjudication of Great War pensions. Quorums of the Commission sit from time to time in various parts of Canada for the purpose of hearing claims by applicants. On an award being authorized, payment is made by the Comptroller of the Treasury through his representative attached to the Department. Appeals from decisions of the Commission can be carried to the Pension Appeal Court which consists of three members and sits continuously in Ottawa.

The number of pensions in force on Mar. 31, 1935, was 96,645—78,404 of this number being disability and 18,241 dependent pensions. The annual liability in respect of these pensions is $40,779,021.

In connection with the preparation of claims for submission to the Commission and the Pension Appeal Court, the Department maintains a branch known as the Veterans Bureau which has representatives in all the principal centres in Canada who assist applicants in the preparation and presentation of their claims.

Returned Soldiers' Insurance.—Applications under the Returned Soldiers' Insurance Act were limited to Aug. 31, 1933. After that date no new applications could be received. The number of policies in force on Mar. 31, 1935, was 26,933 representing insurance of $57,903,583. All claims are dealt with by the members of the Canadian Pension Commission who have been appointed Commissioners under the Returned Soldiers' Insurance Act.

War Veterans' Allowance Committee.—The War Veterans' Allowance Act, which was passed in 1930, has proved of great benefit. It is in charge of a committee which operates independently of the Department, although the Department carries out the decisions of the committee, makes all investigations required by it, furnishes the necessary staff and maintains the records. Under this legislation, an ex-member of the Forces who is 60 years of age may, if he is a pensioner or saw service in a theatre of actual war, be granted an allowance in an amount depending on his financial circumstances, but not exceeding $20 per month if single or $40 per month if married. Payments are made by the Comptroller of the Treasury through his representative. Provision is also made for similar benefits to be afforded to those under 60 years of age who are found to be permanently unemployable. The total number of allowances in force on Mar. 31, 1935, was 7,186, involving an annual liability of $2,283,825. There are 5,061 recipients of 60 years and over and 2,125 under 60. The average age is 60·17 years. There are 25 recipients of 80 years and over.

There is every indication that the work of the Department will continue for many years to come. The increasing age of the beneficiaries of the Department continues to create new problems both in the medical and in the administrative fields so that the service branches are constantly called upon to give advice and assistance along various lines.

Judicial Statistics

The collection and publication of criminal statistics was first authorized by an Act of 1876 (39 Vict., c. 13), and the results have been published upon a comparable basis from that time to the present, and are now collected and published by the Dominion Bureau of Statistics under the Statistics Act (8-9 Geo. V, c. 43). It should be remembered that while the criminal code undergoes little change over periods of time, the figures of summary convictions depend very much upon the changes in the customs of the people, and are apt to increase with the increasing urbanization of the population.

Convictions for Criminal Offences, by Groups, and Total Convictions for Minor Offences, years ended Sept. 30, 1921-34, with Proportions to Population

Year	Criminal Offences							Minor Offences		
	Offences against—			Other Felonies and Misdemeanours	Total of Criminal Offences					
	The Person	Property with Violence	Property without Violence							
	No.	No.	No.	No.	No.	P.C. of all Offences	Per 100,000 Pop.	No.	P.C. of all Offences	Per 100,000 Pop.
1921...	8,197	2,609	12,059	2,081	24,946	14·2	284	152,227	85·9	1,731
1922...	7,291	2,783	11,607	2,610	24,291	15·3	271	134,049	84·7	1,498
1923...	7,550	2,076	11,482	3,075	24,183	15·1	266	135,069	84·8	1,487
1924...	7,595	2,536	12,790	2,635	25,556	15·3	277	141,663	84·7	1,535
1925...	7,826	2,749	13,892	2,644	27,111	15·3	289	150,672	84·7	1,610
1926...	7,799	2,296	14,262	2,679	27,036	13·8	287	169,171	86·2	1,803
1927...	8,343	2,671	15,154	2,809	28,977	13·1	304	191,285	86·9	2,009
1928...	9,140	2,991	16,072	3,856	32,059	11·6	332	243,123	88·4	2,517
1929...	10,392	3,529	17,271	4,001	35,193	10·9	359	286,773	89·1	2,927
1930...	11,052	4,647	18,498	6,584	40,781	11·8	410	304,860	88·2	3,068
1931...	11,773	5,288	21,528	5,475	44,064	12·0	424	323,024	88·0	3,113
1932...	10,327	5,194	20,766	5,510	41,797	12·4	402	294,858	87·6	2,841
1933...	9,603	5,319	21,575	6,096	42,593	12·8	411	290,475	87·2	2,799
1934...	9,284	5,310	21,071	6,330	41,995	11·4	404	326,239	88·6	3,145

The most significant column of the above table of total convictions is the figure of criminal offences per 100,000 of population. Attention may be drawn to the increase in the proportion of both criminal offences and minor offences to population between 1924 and 1931, convictions for criminal offences rose from 277 per 100,000 population in 1924 to 424 per 100,000 population in 1931 and convictions for minor offences from 1,535 per 100,000 in 1924 to 3,113 per 100,000 in 1931. For 1932 and 1933 some improvement was shown in each of these classes, but for 1934 the proportion of minor offences to population reached a maximum.

Of the total convictions for criminal and minor offences for 1934, *viz.*, 368,234, the sentences imposed were: gaol or fine, 286,358; penitentiary, 2,260; reformatory, 967; death, 19; and other sentences, 78,630.

Death sentences have fluctuated over the past ten years between a minimum of 12 in 1927 and a maximum of 26 in 1929. For 1932 they were 23, for 1933, 24 and for 1934, 19.

Police

Police statistics are collected by the Bureau of Statistics from cities and towns having populations of 4,000 and over. In 1934 there were 164 such municipalities from which returns were received.

Police Statistics, by Provinces, calendar year 1934

Province	Number of—					Average Number of Stated Population to each Policeman	Average Number of Arrests per Policeman
	Cities and Towns	Population	Police	Arrests	Summonses		
Prince Edward Island	1	12,361	9	439	304	1,373	49
Nova Scotia	13	176,444	138	4,403	803	1,278	32
New Brunswick	6	94,005	86	2,963	759	1,093	34
Quebec	43	1,435,110	1,996	48,985	58,203	719	25
Ontario	72	1,756,865	1,860	29,693	100,651	939	16
Manitoba	7	273,012	315	4,373	16,633	867	14
Saskatchewan	8	149,015	125	2,194	2,371	1,192	18
Alberta	4	186,747	195	3,618	4,777	957	18
British Columbia	10	349,191	433	7,628	14,491	806	34
Canada	**164**	**4,432,750**	**5,157**	**104,296**	**198,992**	**860**	**20**

Offences reported to the police numbered 388,585; there were 296,321 prosecutions, resulting in 247,242 convictions. The number of automobiles reported stolen was 7,936; 7,895 were recovered. The value of other goods stolen was $2,105,934, and of goods recovered $1,001,765.

Royal Canadian Mounted Police.—The Royal Canadian Mounted Police is a constabulary maintained by the Dominion Government. It was organized in 1873, and it was then known as the North West Mounted Police, whose duties were confined to what was then known as the Northwest Territories. In 1904 its name was changed to Royal North West Mounted Police.

In 1905, when Alberta and Saskatchewan were constituted provinces, an arrangement was made whereby the Force continued to discharge its former functions, each province making a contribution towards defraying the cost. This was continued until 1917.

Soon after the close of the Great War an extension of governmental activities made it obvious that the enforcement of Dominion statutes was assuming increasing proportions, and that it would soon be necessary to have a police force responsible therefor. In 1918, Royal North West Mounted Police were assigned the duty of the enforcement of Dominion legislation for the whole of Western Canada, west of Port Arthur and Fort William, and in 1920 for the whole of Canada.

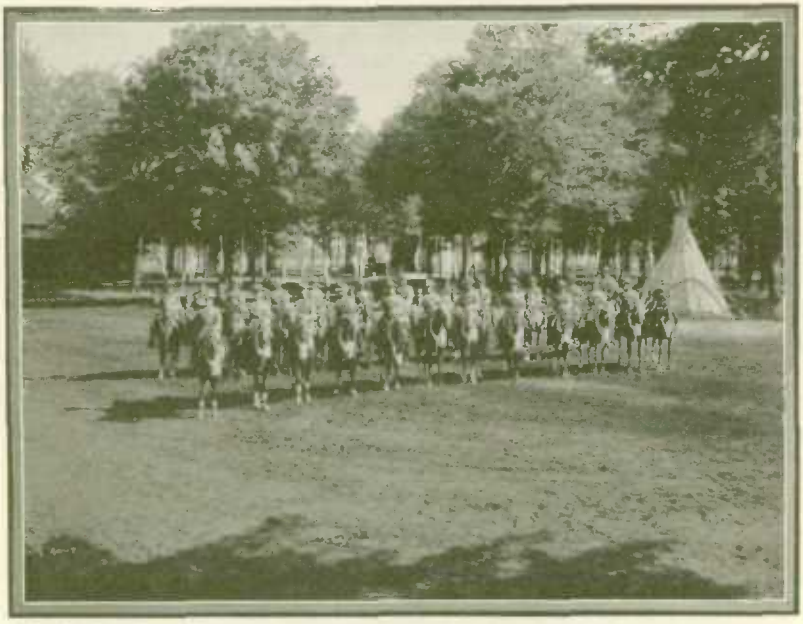
In 1920, the name of the Force was changed to the Royal Canadian Mounted Police. and the former Dominion Police with headquarters at Ottawa, whose duties were largely connected with guarding public buildings in that city and the Canadian Government dockyards at Halifax, N.S., and Esquimalt, B.C., were absorbed by the Royal Canadian Mounted Police.

At the present time, the R.C.M. Police are responsible throughout Canada for the enforcement of the laws against smuggling by land, sea and air. It enforces the provisions of the Excise Act, is responsible for

the suppression of the traffic in narcotic drugs, enforcement of the Migratory Birds Convention Act, and assists the Indian, Immigration, Fisheries and numerous other Dominion Departments in executing the provisions of their respective Acts, and in some cases in administrative duties. It is responsible for the protection of government buildings and dockyards. It is the sole police force operating in Yukon and the Northwest Territories.

The Marine Section of the Force on Mar. 31, 1935, had a strength of 219 officers and men, distributed among nineteen cruisers and patrol boats on the Atlantic and Pacific coasts and inland waters.

The Force is controlled and administered by a Minister of the Crown (at present the Minister of Justice), and it may be employed anywhere in Canada. From a Force of 300 in 1873, it had a strength on Mar. 31, 1935, of 2,573. Means of transport at the latter date consisted of 277 horses, 464 motor vehicles and 413 sleigh dogs.



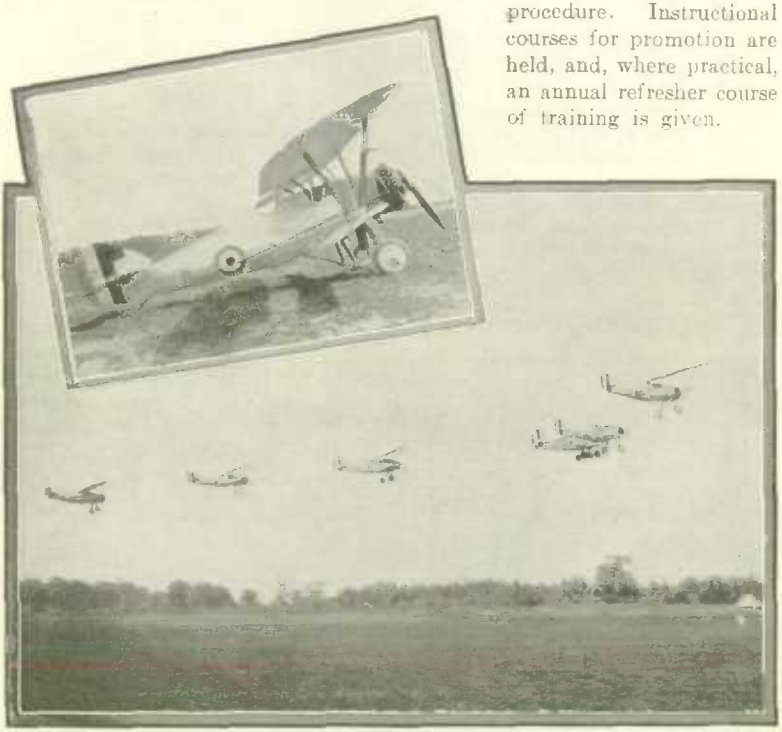
Royal Canadian Mounted Police.—Mounted Police in training for ceremonial drill at Rockcliffe Park, Ottawa.

Courtesy, Canadian Government Motion Picture Bureau.

Under the R.C.M. Police Act any province may enter into an agreement with the Dominion Government for the services of the Royal Canadian Mounted Police to enforce provincial laws and the Criminal Code upon payment for its services, and at the present time such agreements are in force with the provinces of Prince Edward Island, Nova Scotia, New Brunswick, Manitoba, Saskatchewan and Alberta.

The Force is divided into 14 Divisions of varying strength distributed over the entire country. The term of engagement is five years for recruits,

with re-enlistment for one year or three years. The officers are commissioned by the Crown. Recruits are trained at Regina, Saskatchewan. The course of training is six months, and consists of drill, both mounted and on foot, physical training, including instruction in wrestling, boxing and jiu-jitsu. Special attention is paid to police duties, both Dominion and provincial, and detailed lectures are given in these, including court procedure. Instructional courses for promotion are held, and, where practical, an annual refresher course of training is given.



A Formation of Siskin Single-Seater Fighter and Atlas Army Co-operation Aircraft of the Royal Canadian Air Force at R.C.A.F. Station, Ottawa. Inset: A Siskin Single-Seater Fighter.

Royal Canadian Air Force Photograph.

National Defence

Militia.—Canada is organized in 11 military districts, each under a Commander and his District Staff.

The Militia of Canada is classified as active and reserve, and the active is subdivided into permanent and non-permanent forces. The Permanent Force consists of 14 regiments and corps of all arms of the service, with an authorized establishment limited to 10,000, but at present the strength is about 3,800. The Non-Permanent Active Militia is made up of cavalry, artillery, engineer, machine-gun, signalling, infantry and other corps. The total establishment of the Canadian Non-Permanent Active Militia totals 9,057 officers and 126,127 other ranks.

The Reserve Militia consists of such units as are named by the Governor in Council and of all able-bodied citizens between the ages of 18 and 60, with certain exemptions. The reserve of the Active Militia consists of: (1) reserve units of city and rural corps, (2) reserve depots, (3) reserve of officers.

The appropriation for the Militia for the year ended Mar. 31, 1936, is $10,651,000, as compared with an expenditure of $8,852,631 for 1934-35.

Air Force.—The Air Force in Canada consists of the Royal Canadian Air Force, classified as Active and Reserve. The Active Air Force consists of the Permanent Active Air Force and the Non-Permanent Active Air Force.

The Royal Canadian Air Force controls and administers all Air Force training and operations, and carries out operations on behalf of other Government Departments. In addition, the Aeronautical Engineering Division of the Air Force acts in an advisory capacity on technical matters to the Controller of Civil Aviation organizations.

Air Craft at Lac-du-Bonnet, Manitoba. Inset: A flying boat of the Royal Canadian Air Force. Photograph taken near Vancouver, B.C.
Royal Canadian Air Force Photograph.

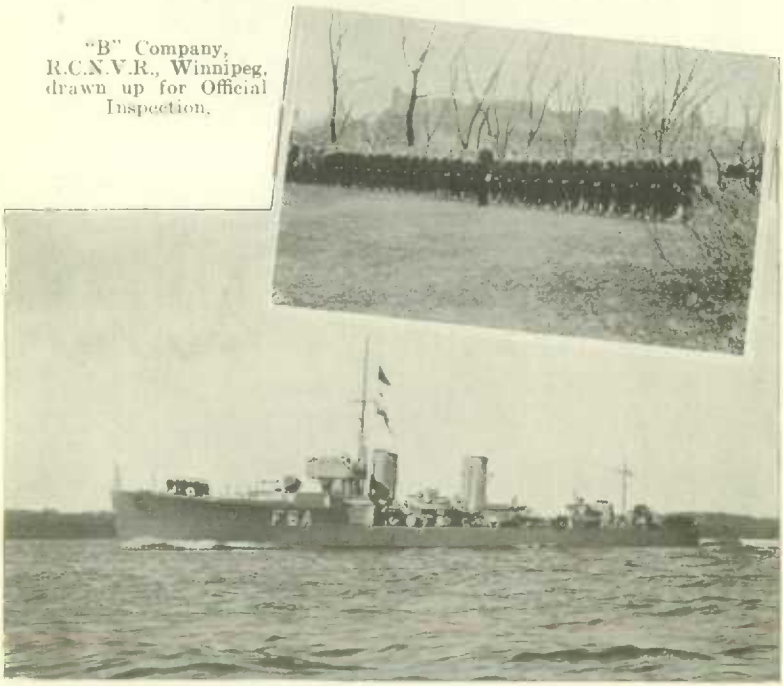
The strength of the Royal Canadian Air Force on Aug. 1, 1935, was 115 officers and 687 airmen, Permanent Force, and 46 officers and 279 airmen, Non-Permanent Force.

The appropriation for the Royal Canadian Air Force for the fiscal year 1935-36 totalled $3,130,000. The total flying time for the year 1934-35 was 12,467 hours.

The appropriation for out-of-pocket expenses incurred by the Royal Canadian Air Force in connection with Civil Government Air Operations totalled $425,000 for the fiscal year 1935-36. This expenditure was mainly for photography, and in the year 1934-35, 55,000 square miles were covered with oblique, and 6,700 square miles with vertical photography.

Civil Aviation.—The Controller of Civil Aviation administers the Air Regulations and controls commercial and private flying. The appropriation for civil aviation for the fiscal year 1935-36 was $747,900.

"B" Company, R.C.N.V.R., Winnipeg, drawn up for Official Inspection.



H.M.C.S. *Vancouver*—Canadian Destroyer in Commission on the Pacific Coast.
Photos, courtesy Department of National Defence.

Navy.—The Royal Canadian Navy was established in 1910. The authorized complements are: 104 officers and 862 men of the Permanent Force (Royal Canadian Navy); 70 officers and 430 men of the Royal Canadian Naval Reserve; and 80 officers and 930 men of the Royal Canadian Naval Volunteer Reserve. Ten appointments of officers of the Royal Canadian Naval Volunteer Reserve are reserved for graduates of the Royal Military College who have had naval training during their Royal Military College course. The vessels at present maintained in commission are: the destroyers *Champlain* and *Saguenay*, based on Halifax, N.S.; the destroyers *Vancouver* and *Skeena* and the mine-sweeper *Armentières*, based on Esquimalt, B.C. H.M.C. Dockyards are at Halifax and Esquimalt. Naval depots are maintained at both bases, and are used as training headquarters for the personnel of the R.C.N., R.C.N.R., and R.C.N.V.R.

The appropriation for naval services for 1935-36 was $2,395,000.

APPENDIX I.

Electoral Districts, Voters on Lists and Votes Polled, Names and Addresses of Members of the House of Commons, as elected at the Eighteenth General Election, Oct. 14, 1935.

Province and Electoral District	Population, 1931	Voters on List	Votes Polled	Name of Member	P.O. Address
Prince Edward Island— (4 members)					
Kings	19,147	11,536	9,709	Grant, T. V.	Montague, P.E.I.
Prince	31,500	18,281	14,355	MacLean, A. E.	Summerside, P.E.I.
Queens	37,391	23,465	37,576	Larrabee, J. J. Sinclair, P.	Eldon, P.E.I. Charlottetown, P.E.I.
Nova Scotia— (12 members)					
Antigonish-Guysborough	25,516	15,029	11,581	Duff, W.	Lunenburg, N.S.
Cape Breton North-Victoria	31,615	17,562	13,965	Cameron, D. A.	Sydney, N.S.
Cape Breton South	65,198	34,967	28,472	Hartigan, D. J.	New Waterford, N.S.
Colchester-Hants	44,444	27,233	21,064	Purdy, G. T.	Truro, N.S.
Cumberland	36,366	22,239	17,270	Cochrane, K. J.	Fox River, N.S.
Digby-Annapolis-Kings	50,859	32,079	23,119	Ilsley, Hon. J. L.	Kentville, N.S.
Halifax	100,204	60,197	85,986	Isnor, G. B. Finn, R. E.	Halifax, N.S.
Inverness-Richmond	35,768	21,207	16,929	McLennan, D.	Inverness, N.S.
Pictou	39,018	23,197	19,240	McCullough, H. B.	New Glasgow, N.S.
Queens-Lunenburg	42,286	26,662	19,935	Kinley, J. J.	Lunenburg, N.S.
Shelburne-Yarmouth-Clare	41,572	24,044	17,937	Potlier, V. J.	Yarmouth, N.S.
New Brunswick— (10 members)					
Charlotte	21,337	13,574	10,622	Hill, B. M.	St. Stephen, N.B.
Gloucester	41,914	20,342	15,993	Veniot, Hon. P. J.	Bathurst, N.B.
Kent	23,478	12,375	9,628	Robichaud, L. P. A.	Richibucto, N.B.
Northumberland	34,124	17,859	13,744	Barry, J. P.	Chatham, N.B.
Restigouche-Madawaska	54,386	26,405	17,858	Michaud, Hon. J. E.	Edmundston, N.B.
Royal	31,026	19,442	15,723	Brooks, A. J.	Sussex, N.B.
St. John-Albert	69,292	41,202	31,948	Ryan, W. M.	St. John, N.B.
Victoria-Carleton	35,703	20,284	15,831	Patterson, J. E. J.	Florenceville, N.B.
Westmorland	57,506	32,547	26,177	Emmerson, H. R.	Dorchester, N.B.
York-Sunbury	39,453	24,813	19,961	Clark, W. G.	Fredericton, N.B.
Quebec— (65 members)					
Argenteuil	19,379	11,122	9,059	Perley, Rt. Hon. Sir George	Ottawa, Ont.
Beauce	51,614	24,341	17,363	Lacroix, E.	St. Georges, P.Q.
Beauharnois-Laprairie	42,104	20,580	14,158	Raymond, M.	Outremont, P.Q.
Bellechasse	27,480	13,394	9,313	Boulanger, O. L.	Quebec, P.Q.
Berthier-Maskinongé	35,545	19,650	15,607	Ferron, J. E.	Louiseville, P.Q.
Bonaventure	36,184	18,570	14,589	Marcil, Hon. C.	Westboro, Ont.
Brome-Missisquoi	32,069	18,951	15,225	Gosselin, L.	Notre Dame de Stanbridge, P.Q.
Chambly-Rouville	39,648	23,169	18,385	Dupuis, V.	Laprairie, P.Q.
Champlain	37,526	18,860	15,598	Brunelle, H. E.	Cap de la Madeleine, P.Q.
Chapleau	24,328	13,120	9,101	Blais, F., Sr.	Amos, P.Q.
Charlevoix-Saguenay	55,594	25,591	18,869	Casgrain, P. F.	Montreal, P.Q.
Châteauguay-Huntingdon	24,412	13,655	11,163	Black, D. E.	Aubrey, P.Q.
Chicoutimi	55,724	25,558	20,623	Dubuc, J. E. A.	Chicoutimi, P.Q.
Compton	31,858	16,430	13,886	Blanchette, J. A.	Chartierville, P.Q.
Dorchester	27,150	12,775	10,588	Tremblay, L. D.	St. Malachie, P.Q.
Drummond-Arthabaska	53,338	29,246	22,778	Girouard, W.	Arthabaska, P.Q.
Gaspé	47,160	23,116	17,904	Brasset, M.	Percé, P.Q.
Hull	49,198	25,312	21,137	Fournier, A.	Hull, P.Q.
Joliette-L'Assomption-Montcalm	56,444	30,473	18,008	Ferland, C. E.	Joliette, P.Q.
Kamouraska	30,853	15,230	10,514	Bouchard, G.	Ste. Anne de la Pocatière, P.Q.
Labelle	36,953	18,314	12,825	Lalonde, M.	Mont Laurier, P.Q.

APPENDIX I—continued.

Electoral Districts, Voters on Lists and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.

Province and Electoral District	Population, 1931	Voters on List	Votes Polled	Name of Member	P.O. Address
Quebec—concluded					
Lake St. John-Roberval	50,253	22,690	19,672	Sylvestre, A.	Roberval, P.Q.
Laval-Two Mountains	26,224	13,828	11,649	Lacombe, L.	Ste. Scholastique, P.Q.
Lévis	28,548	14,625	12,770	Dussault, J. E.	Lévis, P.Q.
Lotbinière	38,546	20,377	15,249	Verville, J. A.	St. Flavien, P.Q.
Matapedia-Matane	39,977	18,624	14,433	Lapointe, J. A.	Amqui, P.Q.
Mégantic-Frontenac	44,440	20,368	16,304	Roberge, E.	Laurierville, P.Q.
Montmagny-L'Islet	30,869	15,636	11,843	Fafard, J. F.	L'Islet, P.Q.
Nicolet-Yamaska	39,219	20,891	16,592	Dubois, L.	Gentilly, P.Q.
Pontiac	43,045	28,139	18,465	McDonald, W. R.	Chapeau, P.Q.
Portneuf	37,383	19,051	15,602	Cannon, Hon. L.	Quebec, P.Q.
Quebec East	58,145	30,309	25,413	Lapointe, Hon. E.	Quebec, P.Q.
Quebec South	33,441	22,829	18,167	Power, Hon. C. G.	Quebec, P.Q.
Quebec West and South	43,617	23,339	19,358	Parent, C.	Quebec, P.Q.
Quebec-Montmorency	40,274	20,386	17,359	Lacroix, W.	Quebec, P.Q.
Richelieu-Verchères	35,901	19,965	14,553	Cardin, Hon. P. J. A	Ste. Anne de Sorel, P.Q.
Richmond-Wolfe	36,568	18,258	14,946	Mullins, J. P.	Bromptonville, P.Q.
Rimouski	40,208	19,827	14,581	Fiset, Sir Eugène	Rimouski, P.Q.
St. Hyacinthe-Bagot	42,820	24,967	16,089	Fontaine, J. T. A.	St. Hyacinthe, P.Q.
St. Johns-Iberville-Napierville	32,259	18,302	10,910	Rhéaume, M.	St. Jean, P.Q.
St. Maurice-Laflèche	45,450	21,943	16,941	Crête, J. A.	Grand'mère, P.Q.
Shefford	28,262	16,499	13,595	Leclerc, J. H.	Granby, P.Q.
Sherbrooke	37,386	21,980	18,085	Howard, C. B.	Sherbrooke, P.Q.
Stanstead	25,118	14,493	11,765	Davidson, R. G.	Katevale, P.Q.
Témiscouata	42,679	20,720	15,347	Pouliot, J. F.	Rivière du Loup, P.Q.
Terrebonne	38,940	20,748	15,389	Parent, L. E.	Ste. Agathe, P.Q.
Three Rivers	44,223	25,547	20,587	Gariepy, W.	Trois Rivières, P.Q.
Vaudreuil-Soulanges	21,114	11,643	8,848	Thauvette, J.	Vaudreuil, P.Q.
Wright	27,107	14,284	10,783	Perras, F. W.	Gracefield, P.Q.
Montreal Island—					
Cartier	61,280	41,373	21,389	Jacobs, S. W.	Westmount, P.Q.
Hochelaga	78,353	44,009	30,685	Saint-Père, E. C.	Montreal, P.Q.
Jacques-Cartier	42,671	20,957	16,120	Mallette, J. L. V.	Pte. Claire, P.Q.
Laurier	68,784	41,228	28,134	Bertrand, E.	Westmount, P.Q.
Maisonneuve-Rosemount	64,845	35,419	26,148	Fournier, S.	Montreal, P.Q.
Mercier	66,651	34,906	24,706	Jean, J.	Pointe-aux-Trembles, P.Q.
Mount Royal	65,012	46,133	33,224	Walsh, W. A.	Outremont, P.Q.
Outremont	46,136	28,805	20,616	Vien, T.	Outremont, P.Q.
St. Ann	38,673	20,565	15,803	Hushion, W. J.	Westmount, P.Q.
St. Antoine-Westmount	50,009	35,330	22,322	White, R. S.	Westmount, P.Q.
St. Denis	76,930	44,945	31,049	Denis, A.	Montreal, P.Q.
St. Henry	78,127	42,550	30,096	Mercier, P.	Montreal, P.Q.
St. James	89,374	54,768	37,672	Rinfret, Hon. F.	Montreal, P.Q.
St. Lawrence-St. George	40,213	22,549	14,329	Cahan, Hon. C. H.	Montreal, P.Q.
St. Mary	77,472	46,473	32,951	Deslauriers, H.	Montreal, P.Q.
Verdun	63,144	36,298	25,347	Wermenlinger, E. J.	Verdun, P.Q.
Ontario— (82 members)					
Algoma East	27,925	14,472	10,627	Farquhar, T.	Mindemoya, Ont.
Algoma West	35,618	20,098	14,949	Hamilton, H. S.	Sault Ste. Marie, Ont.
Brant	21,202	12,257	9,725	Wood, G. E.	Cainsville, Ont.
Brantford City	32,274	20,969	16,897	Macdonald, W. R.	Brantford, Ont.
Bruce	29,842	18,899	14,992	Tomlinson, W. R.	Port Elgin, Ont.
Carleton	31,305	19,603	16,311	Hyndman, A. B.	Carp, Ont.
Cochrane	58,284	34,225	19,976	Bradette, J. A.	Cochrane, Ont.
Dufferin-Simcoe	27,394	20,612	15,654	Rowe, Hon. W. E.	Newton Robinson, Ont.
Durham	25,782	17,084	13,964	Rickard, W. F.	Newcastle, Ont.
Elgin	43,436	29,376	22,694	Mills, W. H.	Sparta, Ont.
Essex East	51,718	28,223	19,467	Martin, P.	Walkerville, Ont.
Essex South	31,970	18,088	13,144	Clark, S. M.	Arner, Ont.
Essex West	75,350	41,726	26,630	McLarty, N.	Windsor, Ont.
Fort William	34,656	17,352	13,895	McIvor, D.	Fort William, Ont.

APPENDIX I—continued.

Electoral Districts, Voters on Lists and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.

Province and Electoral District	Population, 1931	Voters on List	Votes Polled	Name of Member	P.O. Address
Ontario—concluded					
Frontenac-Addington	26,455	17,398	14,512	Campbell, C. A.	Northbrook, Ont.
Glengarry	18,666	11,073	8,858	MacRae, J. D.	Apple Hill, Ont.
Grenville-Dundas	32,425	22,044	17,199	Casselman, A. C.	Prescott, Ont.
Grey-Bruce	35,736	23,384	18,110	McPhail, A. C. (Miss)	Ceylon, Ont.
Grey North	34,407	23,096	17,908	Telford, W. P.	Owen Sound, Ont.
Haldimand	21,428	13,927	11,388	Senn, M. C.	Caledonia, Ont.
Halton	26,558	17,539	13,262	Cleaver, H.	Burlington, Ont.
Hamilton East	66,771	40,725	28,421	Brown, A. A.	Hamilton, Ont.
Hamilton West	56,305	33,926	23,961	Wilton, W. E.	Hamilton, Ont.
Hastings-Peterborough	27,160	16,956	12,910	Ferguson, R. S.	Norwood, Ont.
Hastings South	39,327	25,122	20,603	Cameron, C. A.	Belleville, Ont.
Huron North	26,095	17,897	14,067	Deachman, R. J.	Wingham, Ont.
Huron-Perth	22,661	14,672	10,847	Golding, W. H.	Seaforth, Ont.
Kenora-Rainy River	39,834	21,892	14,656	McKinnon, H. B.	Kenora, Ont.
Kent	50,994	29,576	18,964	Rutherford, J. W.	Chatham, Ont.
Kingston City	26,180	17,022	13,367	Rogers, Hon. N. M.	Kingston, Ont.
Lambton-Kent	34,686	20,953	15,246	McKenzie, H. A.	Watford, Ont.
Lambton West	32,601	20,912	15,157	Gray, R. W.	Sarnia, Ont.
Lanark	32,856	21,478	17,763	Thompson, T. A.	Almonte, Ont.
Leeds	35,157	22,975	19,229	Stewart, Hon. H. A.	Brockville, Ont.
Lincoln	54,199	34,429	26,425	Lockhart, N. J. M.	St. Catharines, Ont.
London	59,821	41,777	30,522	Betts, F. C.	London, Ont.
Middlesex East	34,788	22,073	16,012	Ross, D. G.	Lucan, Ont.
Middlesex West	23,632	15,269	11,719	Elliott, Hon. J. C.	London, Ont.
Muskoka-Ontario	35,513	23,038	17,428	Furniss, S. J.	Brechin, Ont.
Nipissing	88,597	47,661	33,649	Hurtubise, J. R.	Sudbury, Ont.
Norfolk	31,359	19,842	14,521	Taylor, W. H.	Scotland, Ont.
Northumberland	30,727	20,291	16,583	Fraser, W. A.	Trenton, Ont.
Ontario	45,139	27,291	20,947	Moore, W. H.	Dunbarton, Ont.
Ottawa East	51,667	33,259	26,406	Chevrier, E. R. E.	Ottawa, Ont.
Ottawa West	78,656	55,759	44,671	Ahearn, T. F.	Ottawa, Ont.
Oxford	47,825	30,825	24,119	Rennie, A. S.	Tillsonburg, Ont.
Parry Sound	26,198	15,526	11,543	Slaght, A. G.	Toronto, Ont.
Peel	28,156	19,203	16,045	Graydon, G.	Brampton, Ont.
Perth	47,816	30,670	23,705	Sanderson, F. G.	St. Mary's, Ont.
Peterborough West	37,042	23,566	19,022	Duffus, J. J.	Peterborough, Ont.
Port Arthur	35,313	17,607	12,623	Howe, C. D.	Port Arthur, Ont.
Prescott	24,596	13,665	11,343	Bertrand, E. O.	L'Orignal, Ont.
Prince Edward-Lennox	28,697	18,958	15,056	Tustin, G. J.	Napanee, Ont.
Renfrew North	27,230	16,033	12,212	McKay, M.	Pembroke, Ont.
Renfrew South	26,986	15,800	11,960	McCann, J. J.	Renfrew, Ont.
Russell	26,809	14,761	11,717	Goulet, A.	Bourget, Ont.
Simcoe East	36,572	21,154	16,385	McLean, G. A.	Orillia, Ont.
Simcoe North	29,224	18,849	14,608	McCuaig, D. F.	Barrie, Ont.
Stormont	32,524	20,627	17,036	Chevrier, L.	Cornwall, Ont.
Timiskaming	37,594	23,306	15,890	Little, W.	Kirkland Lake, Ont.
Victoria	31,841	21,338	17,060	McNevin, B.	Omemee, Ont.
Waterloo North	53,777	32,847	20,369	Euler, Hon. W. D.	Kitchener, Ont.
Waterloo South	36,075	22,823	16,912	Edwards, A. M.	Galt, Ont.
Welland	82,731	47,069	34,614	Dumude, A. B.	Fonthill, Ont.
Wellington North	27,677	16,319	12,876	Blair, J. K.	Arthur, Ont.
Wellington South	35,856	22,614	16,987	Gladstone, R. W.	Guelph, Ont.
Wentworth	66,943	40,840	30,488	Lennard, F. E., Jr.	Dundas, Ont.
York East	66,194	46,215	33,703	McGregor, R. H.	Toronto, Ont.
York North	43,323	26,146	20,000	Mulock, W. P.	Armitage, Ont.
York South	60,350	42,998	31,237	Lawson, Hon. J. E.	Forest Hill, Ont.
York West	55,881	34,491	25,930	Streight, J. E. L.	Islington, Ont.
City of Toronto—					
Broadview	57,523	39,804	28,053	Church, T. L.	Toronto, Ont.
Danforth	41,824	29,034	21,135	Harris, J. H.	Toronto, Ont.
Davenport	57,039	40,454	27,772	McNichol, J. R.	Toronto, Ont.
Eglinton	54,859	43,147	31,894	Baker, R. L.	Toronto, Ont.
Greenwood	57,296	39,087	27,878	Massey, D.	Toronto, Ont.
High Park	52,971	37,590	27,550	Anderson, A. J.	Toronto, Ont.
Parkdale	51,398	34,956	24,408	Spence, D.	Toronto, Ont.
Rosedale	53,081	36,755	23,793	Clarke, H. G.	Toronto, Ont.
St. Paul's	62,283	45,113	26,821	Ross, D. G.	Toronto, Ont.
Spadina	82,127	52,154	34,318	Factor, S.	Toronto, Ont.
Trinity	60,806	39,642	26,973	Plaxton, H. J.	Toronto, Ont.

APPENDIX I—continued.

Electoral Districts, Voters on Lists and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.

Province and Electoral District	Population, 1931	Voters on List	Votes Polled	Name of Member	P.O. Address
Manitoba— (17 members)					
Brandon	40,483	22,262	17,059	Beaubier, D. W.	Brandon, Man.
Churchill	32,133	13,803	9,084	Crerar, Hon. T. A.	Clandeboye, Man.
Dauphin	37,703	20,501	15,405	Ward, W. J.	Dauphin, Man.
Lisgar	30,547	14,212	10,282	Winkler, H. W.	Morden, Man.
Macdonald	34,948	18,567	14,290	Weir, W. G.	Carman, Man.
Marquette	37,468	20,842	15,849	Glenn, J. A.	Russell, Man.
Neepawa	28,346	16,450	12,767	MacKenzie, F. D.	Neepawa, Man.
Portage la Prairie	25,569	13,846	11,015	Leader, H.	Portage la Prairie, Man.
Provencher	32,613	13,163	10,179	Beaubien, A. L.	St. Jean Baptiste, Man.
St. Boniface	31,289	16,483	13,082	Howden, J. P.	St. Boniface, Man.
Selkirk	52,222	26,411	19,650	Thorson, J. T.	Winnipeg, Man.
Souris	25,094	13,051	10,675	McDonald, G. W.	Boissevain, Man.
Springfield	42,350	21,276	14,593	Turner, J. M.	Winnipeg, Man.
Winnipeg North	74,762	37,761	29,321	Heaps, A. A.	Winnipeg, Man.
Winnipeg North Centre	59,004	34,253	24,797	Woodsworth, J. S.	Winnipeg, Man.
Winnipeg South	51,518	31,260	25,085	Mutch, L. A.	Fort Garry, Man.
Winnipeg South Centre	64,090	41,373	31,456	Maybank, R.	Fort Garry, Ont.
Saskatchewan— (21 members)					
Assiniboia	41,036	18,838	14,975	McKenzie, R.	Stoughton, Sask.
Humboldt	41,172	20,049	15,120	Fleming, H. R.	Humboldt, Sask.
Kindersley	39,652	17,797	13,891	Elliott, O. B.	Alsask, Sask.
Lake Centre	42,532	19,169	15,441	Johnston, J. F.	Bladworth, Sask.
Mackenzie	46,171	23,534	15,417	MacMillan, J. A.	Wadena, Sask.
Maple Creek	42,428	19,572	15,023	Evans, C. R.	Piapot, Sask.
Melfort	40,687	24,567	19,004	McLean, M.	Eldersley, Sask.
Melville	48,910	23,175	18,455	Motherwell, Hon. W. R.	Abernethy, Sask.
Moose Jaw	43,668	21,562	16,505	Ross, J. G.	Moose Jaw, Sask.
North Battleford	41,513	22,925	15,718	McIntosh, C. R.	North Battleford, Sask.
Prince Albert	39,869	21,082	16,724	King, Rt. Hon. W. L. M.	Ottawa, Ont.
Qu'Appelle	38,015	19,391	15,809	Perley, E. E.	Wolseley, Sask.
Regina City	53,209	30,823	24,969	McNiven, D. A.	Regina, Sask.
Rosetown-Biggar	40,512	18,735	15,277	Coldwell, M. J.	Regina, Sask.
Rosthern	43,885	19,152	13,291	Tucker, W. A.	Rosthern, Sask.
Saskatoon City	47,362	26,137	19,415	Young, A. M.	Saskatoon, Sask.
Swift Current	46,447	19,206	14,787	Bothwell, C. E.	Swift Current, Sask.
The Battlefords	45,064	23,576	18,415	Needham, J.	Unity, Sask.
Weyburn	44,710	19,635	16,290	Douglas, T. C.	Weyburn, Sask.
Wood Mountain	44,558	18,871	15,046	Donnelly, T. F.	Meyronne, Sask.
Yorkton	50,405	23,333	17,951	McPhee, G. W.	Yorkton, Sask.
Alberta— (17 members)					
Acadia	37,423	16,054	10,594	Quelch, V.	Morrin, Alta.
Athabaska	39,102	19,438	10,576	Rowe, P. J.	Edmonton, Alta.
Battle River	41,881	21,221	13,613	Fair, R.	Paradise Valley, Alta.
Bow River	44,491	20,680	14,317	Johnston, C. E.	Three Hills, Alta.
Calgary East	44,745	25,372	18,184	Landeryou, J. C.	Calgary, Alta.
Calgary West	41,418	24,915	18,361	Bennett, Rt. Hon. R. B.	Ottawa, Ont.
Camrose	42,717	20,247	13,392	Marshall, J. A.	Bashaw, Alta.
Edmonton East	46,086	24,956	16,449	Hall, W. S.	Edmonton, Alta.
Edmonton West	39,712	25,917	18,134	McKinnon, J. A.	Edmonton, Alta.
Jasper-Edson	47,394	25,316	14,835	Kuhl, W. F.	Spruce Grove, Alta.
Lethbridge	44,708	18,018	12,898	Blackmore, J. H.	Raymond, Alta.
Macleod	44,325	20,456	14,583	Hansell, E. G.	Vulcan, Alta.
Medicine Hat	40,986	18,506	13,099	Mitchell, A. H.	Medicine Hat, Alta.
Peace River	43,761	22,442	11,756	Pelletier, R. A.	Falher, Alta.
Red Deer	39,758	21,978	13,378	Poole, E. J.	Bowden, Alta.
Vegreville	47,708	20,678	13,620	Hayhurst, W.	Vegreville, Alta.
Wetaskiwin	45,330	22,524	13,302	Jaques, N.	Mirror, Alta.

APPENDIX I—concluded.

Electoral Districts, Voters on Lists and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—concluded.

Province and Electoral District	Population, 1931	Voters on List	Votes Polled	Name of Member	P.O. Address
British Columbia— (16 members)					
Cariboo	26,094	15,197	10,480	Turgeon, J. G.	Vancouver, B.C.
Comox-Alberni	28,379	13,533	10,041	Neill, A. W.	Alberni, B.C.
Fraser Valley	31,377	16,579	12,758	Barber, H. J.	Chilliwack, B.C.
Kamloops	29,249	16,085	11,296	O'Neill, T. J.	Kamloops, B.C.
Kootenay East	25,662	12,668	10,175	Stevens, Hon. H. H.	Ottawa, Ont.
Kootenay West	32,556	15,508	11,824	Esling, W. K.	Rossland, B.C.
Nanaimo	45,767	26,155	20,431	Taylor, J. S.	Vancouver, B.C.
New Westminster	59,170	33,749	27,280	Reid, T.	Newton, B.C.
Skeena	30,391	11,741	8,382	Hanson, O.	Prince Rupert, B.C.
Vancouver-Burrard	59,583	36,044	28,483	McGeer, G. G.	Vancouver, B.C.
Vancouver Centre	65,683	32,425	22,789	Mackenzie, I. A.	Vancouver, B.C.
Vancouver East	58,921	34,310	27,105	MacInnis, A.	Vancouver, B.C.
Vancouver North	48,906	28,121	21,804	McNeill, C. G.	West Vancouver, B.C.
Vancouver South	63,122	39,274	31,251	Green, H. C.	Vancouver, B.C.
Victoria	48,599	28,902	21,585	Plunkett, D. B.	Victoria, B.C.
Yale	40,804	21,777	16,640	Stirling, Hon. G.	Kelowna, B.C.
Yukon— (1 member)					
Yukon	4,230	1,805	1,265	Black, M. L. (Mrs.)	Dawson, Y.T.

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