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THE OFFICIAL HANDBOOK
OF PRESENT CONDITIONS AND
RECENT PROGRESS

The Royal Wedding



THE Prime Minister, the Rt. Hon. W. L. Mackenzie King, who attended the wedding services in Westminster Abbey as representative of Canada, described the ceremony as "surpassing in solemnity and beauty anything expected . . . it was deeply impressive in its simplicity and other outstanding features".





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HER ROYAL HIGHNESS THE PRINCESS ELIZABETH, DUCHESS OF EDINBURGH
and HIS ROYAL HIGHNESS PRINCE PHILIP, DUKE OF EDINBURGH
at Buckingham Palace immediately following the Wedding Ceremony
in Westminster Abbey, November 20, 1947.



Canada

1948

The Official Handbook
of Present Conditions
and Recent Progress

Published by Authority of
The Honourable James A. MacKinnon, M.P.
Minister of Trade and Commerce

Prepared by
DOMINION BUREAU OF STATISTICS
Department of Trade and Commerce
OTTAWA, CANADA

OTTAWA
EDMOND CLOUTIER, C.M.G., B.A., L.Ph.,
KING'S PRINTER AND CONTROLLER OF STATIONERY
1943

Foreword

THE "Canada" Handbook Series was initiated eighteen years ago to supplement the field of the *Canada Year Book* by offering, mainly to Canadian citizens, a brief and attractive record of current economic conditions at a price within reach of all. The *Year Book* is primarily a reference work and is not designed to meet the need for a popular publication medium: moreover, it is expensive to print and too bulky for wide distribution.

The growing popularity of the Handbook and the numerous editions and reprints that have been published over the period attest to the soundness of the original plan and to its value, especially in the schools across Canada and to business men.

The past eighteen years have seen expansion in every direction of the national economy and since a considerable proportion of space in the Handbook is allocated to illustrations, the editorial task of giving a well-balanced presentation in a publication of this size and present low cost becomes more difficult each year. Currently many thousands of copies are being distributed abroad through our Diplomatic and Trade Commissioner Services and it is desirable for these reasons alone that the Canadian economy should be explained fairly completely and that appropriate feature material should be included.

The frontispiece of H.R.H. the Princess Elizabeth, Duchess of Edinburgh, and H.R.H. Prince Philip, Duke of Edinburgh, marks the occasion of the Royal Wedding that took place on Nov. 20, 1947, at which our Prime Minister, the Rt. Hon. W. L. Mackenzie King, represented Canada.

Jas. A. Mac Kinnon

Minister of Trade and Commerce

Ottawa, January 1, 1948

Prefatory Note

THIS Handbook has been prepared and edited in the Year Book Division of the Dominion Bureau of Statistics from material that has, in the main, been obtained from the different Divisions of the Bureau. In certain special fields information has been kindly contributed by other branches of the Government Service.

The Handbook is planned to give a balanced picture of the general economic and social structure of Canada, the weight of emphasis being placed from year to year on those aspects that are currently of most importance, since there is not space to deal adequately with all. Special articles deal with "Travel and National Unity" and "Canadian External Relations". These are the result of co-operative effort between the Editorial Staff and the responsible Federal authorities, the first with the Canadian Travel Bureau and the second with the Department of External Affairs. A special treatment of the Lumber Industry in Canada is carried in the Forestry Chapter; this was prepared in close collaboration with the Dominion Forest Service, Department of Mines and Resources.

HERBERT MARSHALL,
Dominion Statistician

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*The Cabot Trail, Cape
Breton Island, N.S.*



*White Dog Falls on
Winnipeg River in
the Lake of the
Woods District of
Ontario—a para-
dise for the angler.*



*This scene, north of
Kipawa, Que., is
typical of much of
the Precambrian
area of Eastern
Canada.*



Kootenay Valley, B.C.





A combine at work on the prairies of Western Canada.

Introduction

Economic Conditions in Canada, 1947



*Hon. James A. MacKinnon, M.P.,
Minister of Trade and Commerce.*

THE period of post-war reconstruction has, for all practical purposes, now reached an advanced stage: Canada has fared better than the majority of countries in the transition to peace. At the end of 1947 the jobs being offered exceed the numbers of those seeking employment. The supply situation is being brought into balance with demand, the only limiting factor being man-power. Since the termination of hostilities encouraging progress has been achieved in expanding the production of food and other commodities and of restoring normal trade channels. All told, there are some very favourable aspects to the domestic picture. Many branches of Canadian industry are now receiving the world-market prices for their

exports, and the resulting greater flow of funds is enabling business to meet more readily the interplay of wage and cost problems.

The pent-up demand for commodities and services constituted a decidedly buoyant influence in 1947 and counteracted many unfavourable effects of delay due to difficult reconversion operations and shortages of essential materials.

Still higher output is anticipated in 1948 in the mineral, agricultural, and forest-products industries. Even for newsprint, which is now operating at well over 100 p.c. capacity and cannot extend itself further, the dollar return will be greater than the record set in 1947.

Canada is fortunate in possessing generous reserves of primary materials and in the national interest these must be developed and exploited

discreetly. Progress is evident in the co-operation of business with government in conserving, restoring, preserving and utilizing the timber, mineral, productive land and other resources.

Primary Production

Agriculture.—The present food shortage in most countries places emphasis upon the importance of Canada's agricultural production and the bounty of the recent harvest. The 1947 wheat crop of 340,800,000 bu. was about 73,000,000 bu. less than that of 1946 and, as a result, Canada's contribution to the bread-grain requirements of other countries will be considerably diminished. After making allowances for domestic consumption and stocks at the beginning and end of the crop year, the amount available for export may not reach 200,000,000 bu. With 160,000,000 bu. earmarked for Britain, only token amounts will be left for distribution to other countries.

The reduced volume of coarse grain crops is having an adverse effect on the output of animal products. Instead of the recommended advance of 9 p.c. in the oat acreage, there was a reduction of nearly 8 p.c. The barley acreage was advanced 15 p.c., but unfavourable weather took its toll of the crop. The decline in the yields of grain in Eastern Canada was placed at more than 21 p.c. and insufficient grain was shipped from Western Canada to meet feed requirements. The domestic subsidies on coarse grains were discontinued in September and an upward readjustment of price followed. Consequently costs are increasing for producers of live stock, poultry and dairy products.

The reduction in the numbers of live stock indicates that provision is not being made for the heavy production of meats and dairy products reached a few years ago. Contracts with the United Kingdom for 1947, including 350,000,000 lb. of bacon and pork, 120,000,000 lb. of beef and 125,000,000 lb. of cheese, were not completely carried out, due to lack of supplies. Better results were obtained for eggs and milk in different forms.

The rising cost of living was reflected in the prices received by farmers for agricultural products. The index was 8.7 points higher than during the first nine months of the preceding year.

Forestry.—Traditionally important in the national economy, Canadian forest industries, in order to offset depletion of the forest lands, have adopted modern planning methods, undertaken reforestation schemes and instituted educational programs to prevent fires.

The industry has recently improved its relative position as a primary producer and exporter. Dislocation caused by war has largely interfered with the re-entry of Northern Europe as a large-scale competitor.

As the output of newsprint reached a new high point of about 4,800,000 tons, it is evident that the industry contributed to the higher levels of national prosperity during the year. Canada's output is greater than the combined production of the next five leading producer countries.

Fisheries.—The fisheries perform an important function by adding to the food supply. Even with an ordinary productive effort, the annual output is far beyond the consuming capacity of a population of twelve



Threshing machines ready for shipment to all parts of the world. The production of farm implements and machinery is a highly developed industry in Canada.

millions, though the Canadian market, favoured with a supply of considerable variety, is taking a much larger proportion than during the war years. Exports of fishery products were valued at \$56,300,000 in the first nine months of 1947 compared with \$63,700,000 in 1946. Other producer countries now released from war conditions are seeking outlets in the same markets and competition is keener than it has been for some years.

Mining.—Canada's minerals are vital not only to the North American Continent but to the rest of the world also. Mining was one of the most effective props in Canada during the depression of the nineteen thirties and its wartime achievements are a matter of record.

A particularly encouraging feature of the higher base-metal prices is the stimulus provided to exploration and development. During the past two

years several base-metal deposits of promise have been discovered and drilling is well advanced in some of them. In the Lynn Lake area of Manitoba, a total of 4,400,000 tons of nickel-copper ore has been located. Large tonnages of copper-zinc-gold ore were disclosed on the Quemont property which adjoins the Noranda mine and plans are being considered for a milling plant.

The increase of 23 p.c. in copper production and 22 p.c. in nickel over the first nine months of 1946 is an indication of progress. The output of gold at more than 2,284,000 fine oz. was about 7.3 p.c. greater. To increase production of gold still further certain concessions and adjustments were made by the Government towards the end of 1947. Reduction occurred in the production of lead, zinc and silver from the high levels of the preceding year. Strong demand for building materials resulted in marked increases in the output of clay products, gypsum and lime.

Electric Power.—Water-power resources are of particular importance to the industrial and domestic life of Canada. The widespread and favourable distribution of low-cost hydro-electric power developed from these resources has been a vital factor in the rapid industrialization of the country and in the attainment of a high standard of living. The large developments in process or under consideration confirm the continuance of this trend, while the immense reserves of undeveloped power offer opportunities for future progress. Notwithstanding a large wartime increase in capacity, dislocation in power demand during the transition to a normal peacetime economy was not severe. Growing industrial and domestic demands in some areas caused a temporary shortage of power, pending the completion of new developments. The consumption of primary power rose to a new maximum in the first nine months of 1947, an increase of 24 p.c. over the same period of 1946.

Secondary Production

Manufactures.—The better balance between demand and supply during 1947 was due in large measure to the marked activity of industrial enterprise. The impetus of the War left a permanent imprint upon the variety and efficiency of Canadian plants, and manufacturing industries generally have embarked on long-term expansion programs involving an expenditure to date of more than \$1,000,000,000, to satisfy the accumulated demand which continues to dominate the domestic market. The tremendous expansion of the past nine years has provided a foundation for stability and growth.

The magnitude of operations in the first nine months of 1947 is measured by the indexes of production, employment and of the prices of manufactured goods. Volume and employment moved up 11 p.c. and 6.9 p.c., respectively, while the index of the prices of chiefly manufactured goods (1926=100) averaged 114.3 against 98.2 for the same months of 1946.

Construction.—Despite the excessive costs, the construction program of the year, measured in terms of value, was somewhat more than implemented. Demand for plant and equipment being strong, expenditures should continue at record levels for some time. The immediate prospects are excellent as the placements of contracts in 1947 were more than 8 p.c. greater than the high levels of 1946.

The construction of buildings for civilian use during the war years was practically at a standstill. In order to provide adequate housing, it was considered that 700,000 new dwelling units should be built in the ten years following the War. The objective for 1947 was 80,000 units.

Transportation

Rail transportation is the main co-ordinating factor forming a background for all the accomplishments of production. Effectively serving and operating continuously, the railways play a vital role in the great task of weaving together the diversified strands of activity that make up the fabric of the national economy.

Traffic continued heavy during the year, reflecting the strong demand for many types of consumer goods, the spur to agricultural production, and the call for export as well as domestic consumption. Carloadings rose 7.3 p.c. over the first 45 weeks of 1946, but the increase in the cost of operation had an adverse effect on net earnings.

Trade

Exports.—To ease world trade and expand Canadian markets, agreements were negotiated at Geneva to go into effect for three years commencing January, 1948. These agreements define the guiding principles of international trade for the future. Canada has obtained some major adjustments in tariffs and quota restrictions particularly for her agricultural goods and manufactured products.

The inconvertibility of sterling into dollars has resulted in an adverse balance for Canada as against the United States of approximately \$1,000,000,000 annually, thus placing a strain on Canada's reserve of gold and U.S. dollars. Emergency measures adopted by the Government as of Nov. 17, 1947, to meet this situation included sweeping restrictions on imports and travel, a special excise tax placed on many durable goods produced in Canada, a subsidy arranged for increased gold production, and negotiations made for a short-term loan of \$300,000,000 from the Export-Import Bank. It is hoped that Canadian exports to the United States can be further increased to help offset the unfavourable balance. The flow of Canadian exports from now on will have to be more evenly balanced between 'hard' and 'soft' currency countries in order that international obligations may be kept within the limits of capacity.

Retail Distribution.—Canadians spent a much greater sum of money in 1947 than in 1946 for consumer products, due to increased availability of goods as imported or produced by Canadian enterprise, upward price movements and a high level of consumer purchasing power. Social security payments and the expansion of employment have assured a high level of personal income and thus a strong demand for goods at retail outlets. The chief interest both for retail merchants and for consumers centred on the return of many items long absent from the retail market and the removal of restrictions on production and sale of various types of goods which in previous years had been obtainable in limited quantities only. The increase of sales at retail amounted to 9.6 p.c. over the first nine months of 1946. Consumers increased their purchases of both durable and non-durable goods

during 1947, to register sales that promise partially to counterbalance the drop in other forms of expenditure. The repeated advance in retail sales is the largest single factor responsible for lifting the national output of goods and services to a new high point in peacetime.

Price Movements.—Tendencies in price behaviour during the year were similar to developments after the First World War but the changes were more restrained. The advance in wholesale prices during the twelve months ended October, 1947, was 25.5 p.c., the cost of living rising 12 p.c. An inflationary danger still exists in excessive spending and there is the necessity of sharing food with destitute people of Europe. The current inflationary price situation is placing a handicap on the post-war adjustment of the Canadian economy. Price ceilings were reimposed on processed foods during November due to rising prices and reports of excessive buying, following the announcement as to measures to conserve U.S. dollars.

Finance

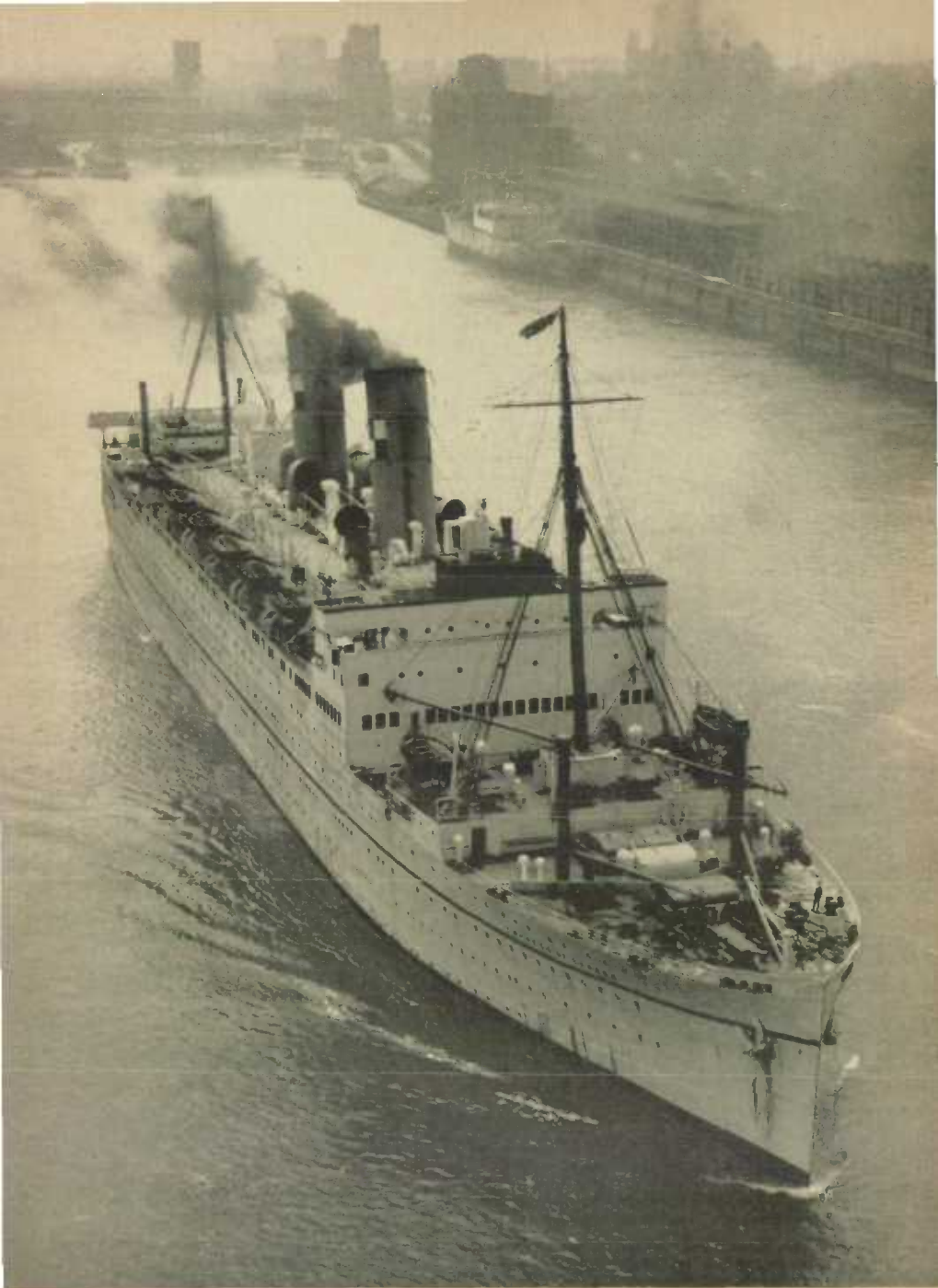
Federal Government Expenditures.—The aim of the Federal Government is to hold taxes and revenues at such levels in time of prosperity that the public debt may be reduced. Public works are limited to those of pressing necessity. The excess of revenue over expenditure was \$573,000,000 for the first eight months of the current fiscal year. Expenditures receded from \$1,614,000,000 in the corresponding eight months of 1946 to \$1,253,000,000, contrasting with an increase in revenues from \$1,798,000,000 to \$1,826,000,000.

Government outlay was the driving force during the war period in moving national income to new and higher levels. Thus the relative share of Government disbursements to total national expenditures was 16 p.c. in 1946 compared with 43 p.c. in 1944, the maximum of the war period. Maintenance of a high income level in coming years will require large increases in consumer expenditures and private investment to replace a reduced level of government outlay. To a greater extent than in most divisions of economic life, the after effects of war will remain dominant in the financial field for many years.

Personal Income.—The fluctuations in personal income or payments to individuals are determined by the level of production in a broad sense. Salaries and wages constitute the largest item in the total purchasing power of the Canadian people. The significance of wages as a factor in consumer demand for the products of industry is more direct than other forms of income because most of the wage-earner's income is usually spent for such products. Wages are the main source of income for the low per capita income groups.

The total labour income for all types of activity amounted to almost \$3,874,000,000, about 17.4 p.c. greater than the average level during the eight months of the preceding year. Increased employment and higher wage rates have both contributed to this advance. Except for the possibility of increasing output by improving industrial efficiency, the maximum level of real income would be reached with the full employment of the labour force.

Personal income has recorded consecutive increases for the past nine years. The total in 1946 was \$9,400,000,000, with a further advance forecast for 1947. The index of employment rose about 16.7 points to 194.8 in the twelve months ended October, 1947.



The "Empress of Canada" leaving Montreal Harbour. This Canadian Pacific liner, the former "Duchess of Richmond," was reconditioned after her service as a troopship during the War, and returned to service on the Atlantic in July, 1947.



Travel and National Unity

God gives all men all earth to love,
But, since man's heart is small,
Ordains for each one spot shall prove
Belovèd over all.

—*Rudyard Kipling*

THE great need in the world to-day is for understanding among nations. Canada, a country of many races and nationalities, built up around a central core of British and French stocks (in 1941 50 p.c. of the population was of British Isles origin and 30 p.c. of French), is a living example of how two strong but widely different ethnic groups can, in the common interest, merge their differences and apply themselves to constructive nation-building.

But in Canada, as everywhere, there is room for improvement and our contribution to international amity will be advanced in proportion to our success in harmonizing the differences that persist.

The proper study of Canada begins with knowledge of ourselves for we, the people, are Canada in a fuller sense even than the land we inhabit. With a relatively small population, Canada has been brought to her present eminence among nations by the united contributions of many races speaking several languages and practising many religions. Wide differences of viewpoint there are bound to be in such a composite people. These make for virility and sturdiness of character, but they can also give rise to prejudices, sectional differences and suspicions which should have no place in any country.

The thing to do then is to recognize these varied talents for what they really are and to weave them, like many coloured threads, into the fabric of our national life so that its texture will be enriched and the pattern made more harmonious and beautiful by the skilful blending of the materials. Nothing will be achieved by attempting to reduce the varied contributions to a common denominator. Standardization, of which perhaps there is already too much, would inevitably mean the loss of this valuable heritage. What is required is a clearer understanding of the contrasts that characterize different groups of Canadians and the intelligent tolerance of differences that are healthy and justifiable even where they are not altogether acceptable to every-one concerned.

No Canadian can traverse the length and breadth of the Dominion without returning to his fireside a wiser man and a better citizen. Two world wars have taught that no country can live unto itself: it is equally true that no



A bathing beach on Clear Lake, Riding Mountain, National Park, Man.

man can live unto himself—he must circulate physically and in thought lest his mind and outlook sink into the frame of narrow sectionalism. All Canadians are brothers of one great family under the same broad roof.

The qualities, mellowed by time but vitalized by a New World environment, that characterize different groups of Canadians are many and varied. To this their native land, the sons and daughters of the Dominion have brought the pioneering spirit and industry of the French, the enterprise of the Anglo-Saxon, the fire of the Celt, the artistry of the Scandinavian, the energy and persistence of the Teuton, and the stolidity of the Slav. It is from such widely varied qualities that the mosaic of the national character as we know it is made up: from them a young, new and distinctive national type is emerging.

There are several ways by which those of us who live in one province may come to know better our brothers elsewhere in Canada—how they live, the influences that combine to engender a different point of view and the varying resources that frequently account for an economic or cultural way of life quite different from the one to which we ourselves are accustomed.

The study and cultivation of the national literature is probably the readiest way of knowing our fellow Canadians. It can be engaged in by even the busiest and most pre-occupied, and with little or no financial outlay in a land such as ours where free libraries abound. The study of Canadiana can be

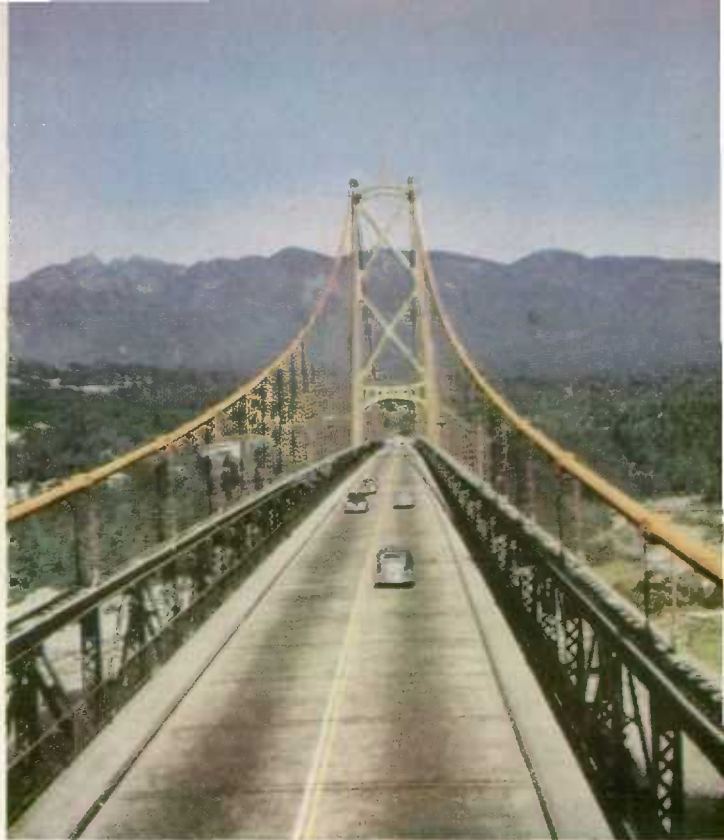


TULIPS ON THE DRIVEWAY, OTTAWA, ONT.

GASPE, QUE.



LION'S GATE BRIDGE
VANCOUVER, B.C.



CATHEDRAL PEAK
BANFF NATIONAL
PARK, ALTA.



an excellent as well as a satisfying hobby. Apart from other sources, federal, provincial and local government publications contain a wealth of information to stimulate curiosity. Newspapers and the modern type of topical magazine also serve a useful purpose. Radio is another influence that it would be very difficult to overrate; and motion pictures in the form of local travelogues, or plays based on the national life and character are, without doubt, among the most valuable media for those who have neither the time nor the means of knowing and studying the various parts of Canada by personal contact.

But as a means of fostering and cementing national unity, interprovincial travel, which is simply neighbourliness extended to take in the whole of Canada, is outstanding. It can be the bridge to cultural and economic understanding for all—the leaven that, working quietly and effectively, can bring us *en rapport* one with another. For, really to understand others, one must have the will and the desire to intermingle and associate closely with them: one must see his neighbours at work and at play, and feel the influences and the forces operating in their daily lives—their customs, their simple faiths, aspirations, successes, frustrations and even their failures. The radio, books, however well written, and even motion pictures directed with this sole purpose in view, fall short inasmuch as they bring knowledge to us as we sit comfortably in our own homes or in our local 'movie' houses without being up-rooted from our own accustomed surroundings. Moreover, these media are too often accepted as entertainment and, therefore, do not stir us out of our immediate environment sufficiently to bring about a full measure of understanding.

Travel on the other hand is all-embracing. It is when we are transplanted and find ourselves in new surroundings conversing with new people that we are completely receptive to them and to their charms. Travel puts us in the mood to enjoy and understand, largely because of this up-rooting from the customary and the trite. Which of us, transplanted to a new soil, is not reinvigorated and does not find new interests in things that would normally be taken for granted! All who have taken an ocean trip will realize the force of this argument. Being drawn together, even for a few days, with strangers from remote places who have lived through experiences widely different from our own, we set out at once to understand them and friendships follow naturally and in easy rhythm.

One of the few benefits of the recent War was the wholesale migrations within Canada. Workers from all parts of the country were brought into the great industrial areas, specialists were sent from coast to coast and large masses of the men and women of the Services were posted to training centres sometimes thousands of miles from their homes. By such means many young men and women from all over the Dominion glimpsed for the first time parts of the country distant from those in which they were born and raised, and Canada thus came to mean something far more vital and significant to them.

It is true that all do not have the means for extensive travel, but most Canadians have it within their power to plan a holiday at least once a year. The experience of spending a few weeks in a neighbouring province among fellow Canadians whom they have never had the opportunity of knowing before is an investment that can produce rich dividends in pleasure and, more important, in tightening the bonds that bind them into one nation.



Evening at Fairburn Lake, near Gatineau Park, Que.

The exceptional beauty of the deep calm expressed by this picture is made more interesting by a bewitching trick of nature. The camera has caught the cloud effects at a moment when they present an almost uncanny interpretation of the theme behind the old French-Canadian lumber-camp legend "La Chasse-Galerie".



Courtesy, Dr. Louis-Jules Côté, Ottawa.

National Parks Stimulate Interprovincial Travel

The National Parks of Canada provide one of the greatest incentives for interprovincial travel. It is not unusual to see cabin trailers from the Prairie Provinces and the far west parked in Prince Edward Island and Cape Breton Highlands National Parks, or cars bearing Nova Scotia and New Brunswick licence plates in Banff, Jasper, and other western playgrounds. The parks belong equally to all Canadians. They are dedicated to the people of Canada for their benefit, education and enjoyment. Here Canadians from all parts of the country meet in an atmosphere of tranquillity and goodwill, in a joyful holiday mood with nature presiding in awe-inspiring grandeur. Here they share in common delightful experiences which transcend all barriers of prejudice and sectionalism. When their visit is over, they take back with them not only memories of a happy and healthful holiday but a new and fuller understanding of this Canada of ours and of their fellow Canadians from other provinces.

In the development of Canada's system of national parks, stretching from British Columbia to Nova Scotia, and in dedicating these areas to the people of Canada, the Canadian Government has fostered the idea of an interprovincial exchange of visitors, as contributing to national unity and understanding. It is also recognized that recreation is a basic need for all Canadians. The fact that upwards of one million persons, mostly Canadians and their friends from south of the International Boundary, visit these parks annually emphasizes the importance of this aspect of national park development.

In "Legends of the St. Lawrence", published by the Canadian Pacific Railway Company, 1922, under the supervision of John Murray Gibbon, well-known Canadian author and at that time general director of publicity for that Company, this French-Canadian story finds a place, along with other quaint habitant legends of Old Quebec that have been orally handed down for generations. This particular story was written by Beaugrand, a Montreal writer in the 1890's as the theme of one of his tales.

The legend concerns a few Quebec woodsmen who, after a drinking bout before New Year's, wanted to spend the night in their home village. Following an impious deal with the Prince of Darkness, under the leadership of their foreman, they shouted:

*Satan, King of the infernal regions,
take me up into the air. Let Belzebuth
take us straight to our goal...*

and their birch-bark canoe darted swiftly from the surface of the lake, down the Ottawa River, past Montreal to a benighted village in the Laurentians.

The clouds just over the skyline, in the picture, are shaped like two woodsmen in their canoe; the dark and ominous cloud to the left bears true resemblance to the Devil with head hovering over the tail-end of the canoe.

*Narrative by Dr. C. M. Barbeau, Ethnologist,
National Museum of Canada, Ottawa.*



Rugged Shoreline at Middlehead, Cape Breton Highlands National Park, N.S.

National park areas were originally set apart to preserve the scenic beauty and natural phenomena and to conserve the wild life and the forest cover of the regions; others were formed to mark the sites of events deemed of outstanding interest in Canada's colourful history. All are wild life sanctuaries. Because of their natural beauty and interest they became popular centres for recreation and relaxation and, to facilitate their use for such purposes, roads and trails were built and improved, townsites laid out, administrative buildings constructed, camp-grounds developed, and accommodation provided. These developments have been carried out with as little disturbance as possible to the primitive character and natural beauty of the areas.

From a small beginning of 10 square miles, set apart in 1885 around the hot mineral springs at Banff, Alberta, the national parks system has grown to 25 units, with a total area of more than 29,000 square miles. Following is a list of the parks with a brief description of each.

Prince Edward Island—

Strip 25 miles long on shores of the Gulf of St. Lawrence. Recreational area; fine beaches. Accessible by highway. Hotel and bungalow cabin accommodation. Equipped camp-grounds. Established 1937; area, 7 square miles.

Nova Scotia—

CAPE BRETON HIGHLANDS. Rugged Atlantic coast line with mountain background. Fine seascapes from park highway. Recreational opportuni-

ties. Hotel and bungalow cabin accommodation, within park area. Hotel and boarding-house accommodation adjacent to park. Equipped camp-grounds. Established 1936; area, 390 square miles.

FORTRESS OF LOUISBOURG. National Historic Park with museum near Louisburg. Ruins of walled city erected by the French 1720-40. Interesting excavations. Established 1941; area, 340 acres.

PORT ROYAL. National Historic Park at Lower Granville. Restoration of "Habitation" or first fort built in 1605 by Champlain, DeMonts, and Poutrincourt. Established 1941; area, 17 acres.

FORT ANNE. National Historic Park with museum at Annapolis Royal. Well-preserved earthworks. Established 1917; area, 31 acres.

New Brunswick—

FORT BEAUSÉJOUR. National Historic Park with museum near Sackville. Site of early French fort. Established 1926; area, 79 acres.

Quebec—

FORT CHAMBLY. National Historic Park with museum at Chambly Canton. First built by French, 1665. Established 1941; area, 2.5 acres.

FORT LENNOX. National Historic Park on Ile-aux-Noix in Richelieu River, near St. Johns. Established 1941; area, 210 acres.

Ontario—

ST. LAWRENCE ISLANDS. Mainland area and 13 islands among the "Thousand Islands". Recreational and camping area. Mainland accessible by highway. Islands reached by boat from nearby mainland points. Established 1914; area, 190 acres.

POINT PEELE. Recreational area on Lake Erie. Camping area, remarkable beaches, southern flora. Resting place for migratory birds. Accessible by highway. Hotel and bungalow cabin accommodation in vicinity of park. Equipped camp-grounds. Established 1918; area, 6.04 square miles.

GEORGIAN BAY ISLANDS. Recreational and camping areas. Unique pillars on Flowerpot Island. Accessible by boat from nearby mainland points. Equipped camp-grounds on Beausoleil Island. Established 1920; area, 5.37 square miles.

FORT MALDEN. National Historic Park with museum at Amherstburg. Site of defence post built 1797-99. Established 1941; area, 5 acres.

FORT WELLINGTON. National Historic Park with museum at Prescott. Defence post built 1812-13. Established 1941; area, 8.5 acres.

Manitoba—

RIDING MOUNTAIN. Playground and game sanctuary on summit of Manitoba escarpment. Fine lakes; summer playground and recreational area. Accessible by highway. Hotel and bungalow cabin accommodation. Equipped camp-grounds. Established 1929; area, 1,148 square miles.

FORT PRINCE OF WALES. National Historic Park at Churchill on the shores of Hudson Bay. Ruins of fort built 1733-71. Established 1941; area, 50 acres.

Saskatchewan—

PRINCE ALBERT. Forested region dotted with lakes and interlaced with streams. Summer playground and recreational area. Accessible by highway. Hotel and bungalow cabin accommodation. Equipped camp-grounds. Established 1927; area, 1,496 square miles.

Alberta—

BANFF. Magnificent scenic playground in central Rockies. Contains noted resorts, Banff and Lake Louise. Summer and winter sports. Accessible by rail, highway and air. Hotel and bungalow cabin accommodation. Equipped camp-grounds. Established 1885; area, 2,585 square miles.

JASPER. Mountain playground and game sanctuary. Contains majestic peaks, ice-fields, beautiful lakes and famous resort, Jasper. Summer and winter sports. Accessible by rail, highway and air. Hotel and bungalow cabin accommodation. Equipped camp-grounds. Established 1907; area, 4,200 square miles.

WATERTON LAKES. Canadian section, Waterton-Glacier International Peace Park. Mountain playground with colourful peaks; varied flora and fauna. Accessible by highway. Hotel and bungalow cabin accommodation. Equipped camp-grounds. Established 1895; area, 204 square miles.

ELK ISLAND. Fenced preserve near Edmonton containing a large herd of buffalo; also deer, elk and moose. Recreational area and equipped camp-grounds. Accessible by highway. Established 1913; area, 74.8 square miles.

British Columbia—

YOHO. On west slope of Rockies. High peaks, beautiful lakes. Yoho and Kicking Horse Valleys. Accessible by rail and highway. Hotel and bungalow cabin accommodation. Equipped camp-grounds. Established 1886; area, 507 square miles.

KOOTENAY. Encloses Vermilion-Sinclair section of the Banff-Windermere Highway in Rockies. Broad valleys, deep canyons, hot mineral springs. Hotel and bungalow cabin accommodation. Equipped camp-grounds. Established 1920; area, 543 square miles.

GLACIER. Superb alpine region in Selkirk Mountains. Great peaks, glaciers, forests, accessible by railway only. Camping, skiing, climbing. Established 1886; area, 521 square miles.

MOUNT REVELSTOKE. Rolling mountain-top plateau on west slope of Selkirk Mountains. Accessible by rail and highway. Summer accommodation in park. All-year accommodation in nearby town of Revelstoke. Equipped camp-grounds. Championship ski course. Established 1914; area, 100 square miles.

Northwest Territories and Alberta—

WOOD BUFFALO. Immense region of forests and open plains between Athabaska and Great Slave Lakes. Contains a large herd of buffalo and other game. Established 1922; area, 17,300 square miles.

A new link in Canada's chain of national playgrounds is being forged. Negotiations with the Government of New Brunswick for the establishment of a national park in that Province are near completion. Title to an area of approximately 79 square miles situated mainly in Albert County is being provided by the Provincial Government. The area lies between the Goose and Upper Salmon (Alma) Rivers and extends northwards from the Bay of Fundy for a distance of about nine miles. It is expected that the development of the new area, including the provision of facilities for tourist accommodation and recreation, will be undertaken early in 1948.

It is the responsibility of the National Parks Bureau to administer these natural areas for the enjoyment of Canada's present and future generations. Canada is singularly fortunate in the extent and variety of her scenic and recreational areas, and the National Parks rank high among her assets in this respect. It is anticipated that these parks will continue to be used by ever-increasing numbers of Canadians in all walks of life from all parts of Canada, and by their many friends from the United States and countries abroad, and developments are being planned accordingly.

Lac Beauvert, Jasper National Park, Alta.



External Relations of Canada

CANADA has participated in world affairs on a rapidly expanding scale during recent years. In an age of diminishing distances and increasing contacts between nations, this country has a vital interest in the affairs of the world community. The Canadian attitude to the rest of the world is, like that of other countries, a complex product of historical, geographical, cultural, political and economic forces inherent in the structure of the nation.

Canada is a democratic nation of the British Commonwealth. By tradition and common experience, free political institutions, founded upon the freely expressed will of the people, are deeply rooted in the national life. First peopled by settlers from France, Canada grew to nationhood in an atmosphere of tolerance and respect as a land of two principal cultures and languages, French and English.

Canadians are increasingly conscious of their community of interest with like-minded nations. Twice within the present century, in co-operation with other free peoples, they have made important contributions in men and materials to turn back the forces of aggression.

Economically, Canada is among the principal trading nations of the world, and her prosperity is dependent to a high degree upon world trade and world prosperity. Geographically a North American nation, with close economic, social and strategic ties with the United States, she lies between two great centres of world power, the United States and the Soviet Union.

These are some of the factors underlying the nation's interest in world affairs. They determine the basic principles of Canadian external policy—the willingness to accept international responsibilities and the readiness to take full part in constructive international action. The development of international organizations on a broad scale is recognized as of first importance to Canada.

Active support of the United Nations is thus a central feature of her policy. At the first meeting of the Assembly in 1946, Canada was elected to membership on the Economic and Social Council and the Atomic Energy Commission and, at the second regular session of the Assembly in 1947, was elected to membership on the Security Council for a two-year term. Canadian delegates have taken an active part in all the specialized agencies of the United Nations.

The Historical Background of Canada's National Development.—The emergence of Canada as a nation was paralleled by her historical evolution from colonial dependence to full autonomy, an evolution whose turning point was the introduction of Responsible Government in the 1840's.



President Truman of the United States and Prime Minister W. L. Mackenzie King, on the occasion of Mr. Truman's official visit to Ottawa, June 10-12, 1947, leaving the United States Embassy on their way to the Parliament Buildings where the President addressed members of the Senate and the House of Commons.

Confederation to the First World War.—Autonomy in the conduct of domestic affairs and independence in fiscal matters (including the right to impose protective duties on British imports), through a responsible cabinet system of government, had been achieved before Confederation. In the interval between 1867 and 1914 significant advances were made in the growth of autonomy in external matters. The principle had become established that Canada was free to withdraw from British commercial treaties with foreign countries; new commercial treaties contracted by Great Britain were now extended to Canada only with her consent; and separate commercial treaties were in fact negotiated by Canadian Ministers or officials though such agreements were still signed by British plenipotentiaries. Canada was also a separate member of certain international bodies, such as the Universal Postal Union.

Autonomy was widest in the conduct of relations with the United States. Thus the International Joint Commission provided for by the Boundary Waters Treaty of 1909, consisted of Canadian and United States members only, and the abortive Reciprocity Agreement of 1911 was negotiated directly between Canadian and United States representatives.

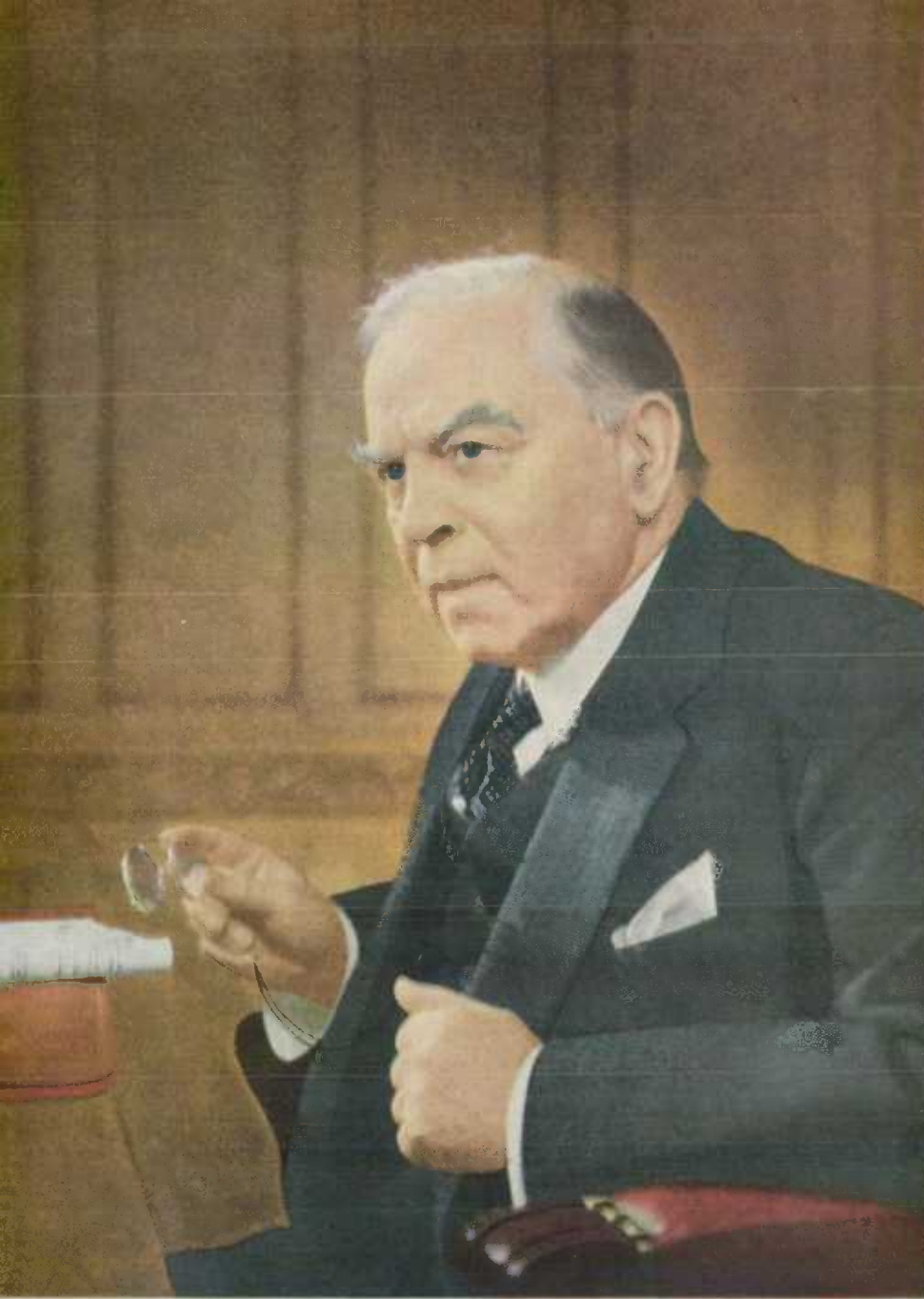
"High policy", however, was still a function of the British Government. Canada and other Dominions were not consulted about the understanding reached with France and Russia through which Great Britain sought to confront the growing challenge of Germany and her allies. The declaration of war in 1914 was made by the British Government alone and was deemed to cover the whole Empire, though it remained for each self-governing Dominion to decide through its own government and parliament whether to participate actively, and, if so, the manner and extent of participation. That Canada and her sister Dominions did participate at once and without stint is evidence of the validity of the principle of self-government which had been increasingly extended during the preceding century to those parts of the Empire settled by European stock.

Constitutional Development during the First World War.—The War hastened constitutional change. In 1917 the Dominion Prime Ministers were invited to sit with the British War Cabinet to form an Imperial War Cabinet, a new institution designed to co-ordinate the war effort of the Empire and to decide questions of high policy relating to the War. As the War drew to a close the Dominion Prime Ministers under the leadership of Canada's Prime Minister, Sir Robert Borden, sought and obtained the right to separate representation at the Peace Conference. The Peace Treaties negotiated at Paris were signed separately by Canada and her sister Dominions, Australia, New Zealand and South Africa, and by India, and ratified separately on their behalf.

In the new League of Nations, again upon the insistence of the Dominion Prime Ministers under the leadership of Sir Robert Borden, the Dominions and India were accorded separate membership. Thus by 1919 Canada and the other Dominions had won a separate, though not as yet completely independent status in world affairs.

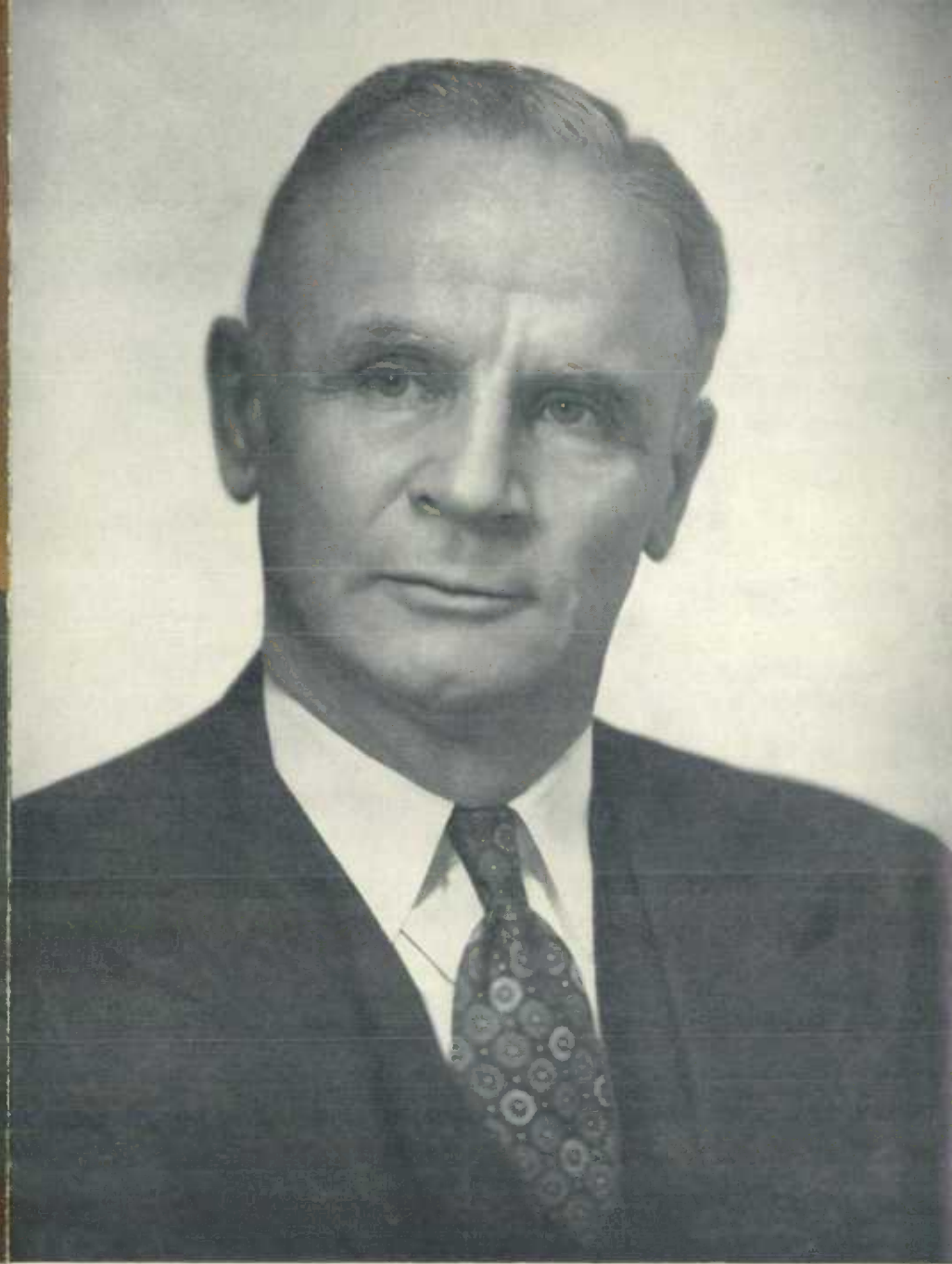
The British Commonwealth of Nations.—The early 1920's, however, witnessed a reversal of the apparent trend towards centralization in Empire policy which seemed to have developed during the years of war and peace-making. The Pacific Halibut Treaty of 1923 was negotiated and signed by a Canadian Minister alone. The final Treaty of Peace with Turkey, the Treaty of Lausanne, was made by the United Kingdom alone. The Dominions were neither invited nor did they ask to participate. In the negotiations prior to the Locarno Treaty, in which the United Kingdom and Italy guaranteed the territorial settlement between Germany on the one side and France and Belgium on the other, the Dominions took no part, the Treaty declaring that none of the Dominions nor India would be bound thereby except with their own consent. In 1924, Ireland, which had acquired dominion status in 1921, appointed a Minister to Washington, a right accorded to Canada by agreement between the British and United States Governments in 1920, but not up to that time exercised.

These and other developments seemed to require a restatement of the position of the Dominions, a step taken at the Imperial Conference of 1926, when a special committee of which Lord Balfour was Chairman brought in a report that was adopted by the Conference. This report confirmed the constitutional advances already made, including the right to separate diplomatic representation as well as the right to separate negotiation,



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THE RIGHT HONOURABLE WILLIAM LYON MACKENZIE KING, O.M.
Prime Minister of Canada



JOHN BRACKEN
Leader of the Opposition in the House of Commons

The Function of the Opposition in Canadian Parliamentary Practice

The Opposition occupies an essential place in the British Parliamentary System. Like many other institutions such as that of Prime Minister, for instance, it is not recognized in the written constitution (which for Canada is the British North America Act) but takes its place with the many unwritten arrangements, tested by time, that have been accepted and become firmly established.

Beauchesne (*see* Beauchesne, *Parliamentary Rules and Forms*, 3rd ed., 1943, p. 94) traces the title "His Majesty's Opposition" back to 1826 when Hobhouse (later Lord Broughton) remarked, during debate in the Imperial House of Commons, that it would be hard on His Majesty's Ministers to raise objections, but he thought it would be even harder on *His Majesty's Opposition* to compel them to take that course. Canning immediately hailed the phrase as a happy one. Tierney added that a better phrase could not have been invented "to describe us, for we are certainly to all intents and purposes, a branch of His Majesty's Government".

As recently as 1931, Ramsay MacDonald, Prime Minister of the United Kingdom, acting as witness before a Select Committee on Procedure expressed the relationship of the Opposition to the Government very cogently: "The House of Commons", he said, "consists of not only a Government, but of an Opposition and they have both got functions and rights".

The choice of the Canadian electorate then not only determines who shall govern Canada but, by deciding which party receives the second largest number of seats in the House of Commons, it settles which of the major parties becomes the Official Opposition. The function of the Leader of the Opposition is to offer intelligent and constructive criticism of the government of the day. Sir Charles Tupper in a farewell letter to the Canadian Conservative Party on Jan. 17, 1901, said "the duty of Her Majesty's Loyal Opposition is to exercise its vast influence in restraining vicious legislation and in giving a loyal support to proposals of the Government which commend themselves as in the interests of the country".

If criticism by the Opposition were sufficiently effective it could overthrow the existing government and the Leader of the Opposition might then, as a result of the ensuing election, find himself in the Prime Minister's seat.

Although the position of Leader of the Opposition is not recognized in the British North America Act, it received statutory acknowledgment in Canada in 1927. Under the Senate and House of Commons Act of that year, the Leader of the Opposition is paid an annual salary of \$10,000, in addition to his indemnity as a Member of the House. The situation, whereby the public supports a leader whose function it is to oppose in debate the government in power, is sometimes difficult to comprehend by those who do not understand democracy as practised by occidental countries.

Record in Office of the Prime Minister

On June 10, 1947, William Lyon Mackenzie King, who celebrated his 73rd birthday anniversary on Dec. 17, 1947, completed his twentieth year and entered upon his twenty-first year in office as Prime Minister of Canada. On June 3, 1947, Mr. King's tenure of office as Prime Minister equalled one-quarter of the period since Canada has been in Confederation. He has held that office for a longer time than the head of any other government in the world to-day has held similar office.

Mr. King has shouldered the responsibilities of leadership in shaping the destinies of Canada during a period that has proved to be critical economically and of profound significance constitutionally.

In comparing his term of office with those of other Prime Ministers of the nations of the Commonwealth it is necessary, because of leap years, to give the figures in days.

For example, William Pitt held office for 6,911 days (18 years, 11 months, 3 days). On May 12, 1946, Mr. King equalled Pitt in length of service.

Sir John A. Macdonald served a total of 6,937 days (18 years, 11 months, 26 days). By June 9, 1946, Mr. King passed this record.

Sir Wilfrid Laurier served a total of 5,564 days (15 years, 2 months, 26 days). This record was equalled by Mr. King on Sept. 5, 1942.

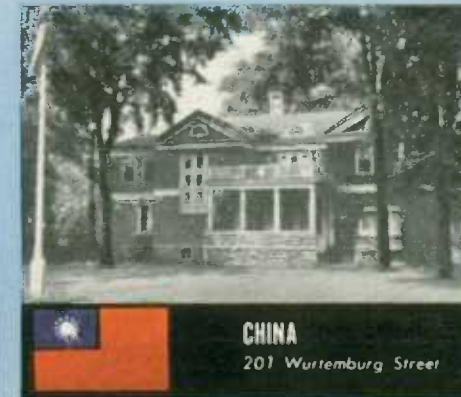
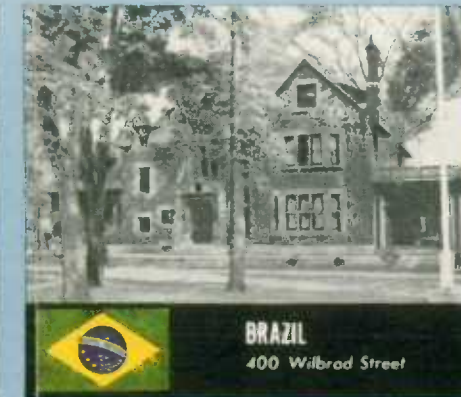
As of Jan. 1, 1948, the record of service for any Prime Minister of the nations of the British Commonwealth is still held by Sir Robert Walpole (later the Earl of Orford), the first Minister to be designated "Prime Minister" of the United Kingdom. Sir Robert was Prime Minister from Apr. 3, 1721 to Feb. 11, 1742—7,620 days (20 years, 10 months, 9 days). The date on which Mr. King will equal this record will be Apr. 20, 1948.

On Nov. 18, 1947, His Majesty King George VI conferred on Mr. King the coveted Order of Merit at the same time graciously indicating the Sovereign's esteem for Mr. King's contributions to the system of British Government during a quarter of a century of political leadership. The honour carries with it special distinction and membership is limited to only twenty-four. Mr. King now takes an appropriate place, both on grounds of personal merit and as a representative of Canada, in the select company of such great men as Lord Halifax, Winston Churchill, Augustus John, John Masfield, Alfred Whitehead, Sir Gilbert Scott, Field Marshall J. C. Smuts—the only other Dominion Prime Minister similarly honoured—and General D. D. Eisenhower, the sole Honorary Member.

EXTERNAL RELATIONS AND DIPLOMATIC REPRESENTATION AT OTTAWA



SOME OF THE EMBASSIES AND OFFICIAL RESIDENCES AT OTTAWA



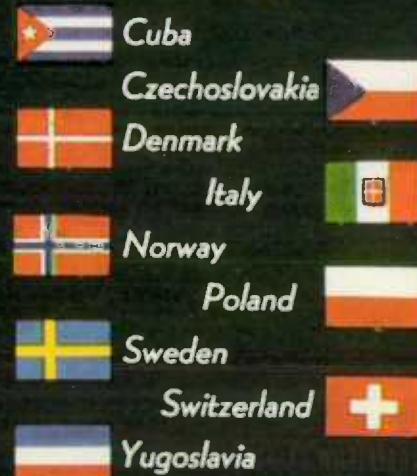
HIGH COMMISSIONERS



EMBASSIES



LEGATIONS



Finland, Iceland, Luxembourg and Uruguay have completed arrangements to send Representatives to Ottawa.

signature and ratification of treaties on behalf of a Dominion. It also gave official sanction to a new title for self-governing British nations as a group—the British Commonwealth of Nations—and defined the status and relations of the United Kingdom and the Dominions in a statement which has become classic. "They are autonomous communities within the British Empire, equal in status, in no way subordinate one to another in any aspect of their domestic or external affairs, though united by a common allegiance to the Crown, and freely associated as members of the British Commonwealth of Nations."

The years following the Imperial Conference of 1926 witnessed wider application of the principle of equality of status. The Governor General henceforth became representative of the King alone, rather than of the United Kingdom Government, and came to be appointed by His Majesty on the nomination of his Canadian Ministers alone. The British Government since 1928 has been represented in Canada by a High Commissioner. Similar steps were taken with respect to other Dominions. Canada had maintained her own High Commissioner in London since 1880, though the functions of this office were not preponderantly diplomatic until after the First World War. The present Canadian diplomatic service had its beginning with the establishment of a Legation at Washington in 1927. For a decade before the Second World War, it had thus been clearly recognized that the Dominions were to all intents and purposes completely autonomous in their external as well as their internal affairs. But the question whether they had the right to remain neutral in a war in which the United Kingdom was engaged remained still unanswered. Although the Commonwealth countries had been kept fully informed by the United Kingdom regarding the drift of events in Europe, they had made no commitments to participate should war come. When the United Kingdom declared war, there was momentary confusion as to whether Canada was legally at war. Parliament had been called, and the Government at the opening, declaring its stand for participation, asked for Parliament's approval. After three days' debate Parliament gave overwhelming assent and war was declared Sept. 10, 1939, on the authority of this decision.

For the week intervening between the declaration of war by the United Kingdom and the declaration of war by Canada, the United States recognized Canada's neutrality by permitting her to buy supplies of war as she could not have done under the United States Neutrality Act if she had been regarded as a belligerent. Germany during the week refused to close the office of her Consul-General in Ottawa, thus also recognizing Canada's neutrality. Canada's right to declare war or to remain neutral in a war in which Great Britain was engaged, the ultimate test of sovereignty, was thus formally recognized by foreign nations.

The Recent Years.—The First World War hastened Canada's growth in status, the Second brought increased responsibilities of nationhood. With the fall of France in 1940, Canada at once moved to the defence of Newfoundland, which had hitherto been a responsibility of the United Kingdom. By agreement with the Newfoundland and United Kingdom Governments Canada took over for the duration of the War the Newfoundland airport at Gander and the seaplane base at Botwood, and constructed new air bases at Torbay near St. John's and Goose Bay, Labrador, acquiring a 99-year

lease of the latter for military purposes. In co-operation with the British Admiralty, Canada also constructed and operated a naval base at St. John's for the protection of convoys, and for repairing merchant and naval ships.

These bases were of great importance not only for the defence of North America, but for providing protection to convoys and, in the case of Gander and Goose Bay air bases, for ferrying aircraft to the United Kingdom and Europe. With the expansion of naval forces Canada assumed increasing responsibilities for the protection of convoys on the North Atlantic, and on the invasion of Europe, she was able to assume responsibility for the protection of all convoys, except special troop convoys, between North America and the United Kingdom.

A second important development was the Ogdensburg Agreement of August, 1940, negotiated between Prime Minister King for Canada and President Roosevelt for the United States, by which it was agreed to establish a Permanent Joint Board on Defence, to "study" the problems of defence of the "northern half of the western hemisphere". Under the ægis of the Board, plans were made to strengthen the defences of North America. Among other arrangements was that for the construction of the Alaska Highway by the United States across Canadian territory and the development by Canada of a chain of air bases between the United States border and Alaska. Plans were also developed for the joint defence of the Atlantic Coast, including Newfoundland, where in 1941 the United States was granted by the United Kingdom three bases on 99-year lease.

The Board was intended to be a permanent arrangement and has continued to operate since the War. It has no administrative powers; its method is rather to make joint recommendations to either or both Governments, which then decide what action should be taken.

In 1941 Canadian troops were sent to Hong Kong to assist British forces there. Hong Kong was attacked by Japan at the same time as Pearl Harbour, and Canada immediately declared war on Japan—a few hours ahead of either the United States or the United Kingdom. By agreement with her allies Canada's military efforts abroad were largely concentrated in the European and Atlantic theatres while hostilities were in progress there, but forces were being deployed to take part in the war in the Pacific when military operations there came to a sudden end. The experience of the War indicated clearly that Canada must take a greater share in maintaining peace in the Pacific region.

With expansion of her military, naval and air forces during the War, Canada became an important military power. Over 1,000,000 were enlisted in the Armed Services—about one-twelfth of her total population. When the War came to an end in Europe a complete army was in the field, the Canadian Navy then ranked third among the naval forces, and the Royal Canadian Air Force fourth among the air forces, of the United Nations.

During the War huge quantities of materials were made available without charge to the United Kingdom and other United Nations by a system of Mutual Aid similar to the Lend-Lease system of the United States. Canada also experienced a phenomenal economic development, particularly in the production of munitions, mechanical military equipment, ships and aircraft. For two years she ranked as the world's second largest exporter, four-fifths of her exports consisting of war material.

Canada emerged from the War with an immensely greater productive equipment than in 1939, and as a relatively large creditor nation on current account. The reconstruction of Europe and the rebuilding of international trade are essential to Canada's interests as a great trading nation and Canadian resources have been directed to this end as well as to internal reconstruction. By the end of 1947, over \$2,000,000,000 in export credits and relief had been made available to her recent Allies, including a loan of \$1,250,000,000 to the United Kingdom. Canada also gave strong support to the establishment of the International Bank for Reconstruction and Development and the International Monetary Fund. She took an active part in promoting the International Trade Organization of the United Nations and in working out the charter of the Organization which was drafted in 1947 at Geneva.

The Growth of Canada's Diplomatic Service.—The Department of External Affairs was set up by the Government in 1909. The Washington Legation having been opened in 1927, the Agent-General in Paris was elevated to the rank of Minister the following year and in 1929 a Legation was opened in Tokyo. The development of the new service was halted during the depression years of the 1930's. Only one further advance was made before the outbreak of war: in 1939, Canadian Legations were established in Belgium and the Netherlands, with the two missions served jointly by one Canadian Minister. The urgent needs of the Second World War made necessary a rapid extension of Canadian representation abroad. New missions were opened in all member States of the British Commonwealth and in many foreign countries. The growth of the Canadian diplomatic service continued after the end of the War, with the recruitment of personnel returning from the Armed Forces. By the autumn of 1947, the Department of External Affairs was responsible for Canadian diplomatic or consular establishments in thirty-three countries.*

At present there are Canadian Embassies in Argentina, Belgium, Brazil, Chile, China, France, Greece, Mexico, the Netherlands, Peru, Turkey, the Union of Soviet Socialist Republics, and the United States. Canadian Legations are located in Cuba, Czechoslovakia, Denmark, Italy, Norway, Poland, Sweden and Switzerland. The Ambassador to Belgium is also accredited as Minister to Luxembourg.

Canada has High Commissioners in the Commonwealth countries of Australia, India, Ireland, Newfoundland, New Zealand, South Africa, and the United Kingdom and has agreed to exchange representatives with Pakistan.

The Canadian Consular Service was first established during the Second World War. In the United States there are at present Consulates-General in New York and Chicago, and a Vice-Consulate in Portland, Maine. There are Canadian Consulates-General in Brazil (São Paulo), in Portugal (Lisbon), and in Venezuela (Caracas).

Canada is also represented in enemy countries still occupied by Allied troops. There is a Canadian Military Mission in Berlin, and a civilian Liaison Mission in Tokyo.

*At the time of going to press with this edition of the Handbook (Jan. 3, 1948), it was announced that Canada had established an additional Legation in Yugoslavia.



The United Nations Security Council discusses the Greek question at Lake Success N.Y., July 15, 1947. Representatives of Greece, Albania, Bulgaria and Yugoslavia were invited to take places at the Security Council table during the discussions.

With reference to the great expansion of the Canadian diplomatic service during recent years, the Secretary of State for External Affairs, the Right Honourable L. S. St. Laurent, has said: "We have not taken this step merely through a desire to follow a conventional practice, or to advertise ourselves abroad. We have done so because our geography, our climate, our natural resources have so conditioned our economy that the continued prosperity and well-being of our people can best be served by the prosperity and well-being of the whole world. We have thus a useful part to play in world affairs, useful to ourselves through being useful to others, and to play that part we must have our spokesmen amongst our neighbours".

Canada and International Organizations.—The role of Canada in the growing structure of international organization reflects a conviction that the widest possible measure of international collaboration is needed to promote general security and well-being in the post-war world. As a nation with increasing external interests, but of relatively small population, Canada recognizes that its own contribution can most effectively be made through the instrument of international organization.

Canada from the outset took an active part in the organizations developed by the United Nations before the conclusion of hostilities to serve the needs of peace. She contributed to the first of these, the United Nations Relief and Rehabilitation Administration, \$154,000,000, and was the third largest contributor, both in her share of the costs and as an actual supplier of goods. In 1947, with the conclusion of UNRRA operations, a further \$20,000,000 was made available for continuing relief needs in Europe.

Canada has been a member of the Food and Agriculture Organization of the United Nations from its beginning at Hot Springs in 1943. At Bretton Woods in 1944 Canada played a prominent part in drafting the constitutions of the International Monetary Fund and the International Bank for Reconstruction and Development—the financial institutions backed by the member nations to facilitate the revival and expansion of the world economy through the promotion of exchange stability and the flow of investment capital for the rebuilding of devastated areas and the development of natural resources.

As a pioneer in the development of civil aviation, vitally interested in the promotion of international co-operation in this field, Canada played a leading part in the discussions in 1944, leading to the setting up of the International Civil Aviation Organization. Montreal, the scene of the first Assembly of the provisional body, was chosen as the permanent headquarters of the Organization.

In the United Nations, from its first conference, Canada has been represented by strong, parliamentary delegations. At San Francisco, her delegates urged that representation on the governing bodies of the United Nations should be determined on a functional basis under which those countries, large or small, that had the greatest contribution to make to the particular object in question, would be members. The Canadian Delegation was largely responsible for having this principle of functionalism set forth in Article 23 of the Charter, which governs the election of non-permanent members of the Security Council.

According to Article 23, the primary consideration determining the election of the non-permanent members of the Security Council should be their contribution "to the maintenance of international peace and security and to other purposes of the Organization". "Equitable geographical distribution" should be a secondary consideration. This functional principle, however, has not always been adhered to in practice by the Assembly.

At the San Francisco Conference, the attitude of the Canadian Delegation throughout the controversy over the veto power in the Security Council was that the unanimity rule was undesirable and unnecessary, particularly in relation to the peaceful settlement of international disputes, and that it might seriously weaken the Security Council. When it became apparent that the joint statement of the Sponsoring Powers interpreting the voting formula represented the greatest possible measure of agreement which could be achieved among them at that time, the Canadian Delegation took the view that, while they could not accept this interpretation of the voting procedure as satisfactory, it was not too high a price to pay for a world organization which was good in other respects. Canada, therefore, did not oppose the adoption of the Security Council's unanimity rule.

The Canadian Delegation was influenced in this decision by the statements of the major powers that their special voting positions would be used with a sense of responsibility and consideration for the interests of smaller nations. Canada has since expressed concern at the impairment of world confidence in the Council's efficiency because of its inability to reach prompt and satisfactory decisions on a number of questions—due largely to the use of the veto power. She has favoured the reform of procedures within the terms of the present Charter to minimize the danger that the special voting privileges of the great powers might prevent the Council from reaching prompt and effective decisions.

Canada was elected to the Security Council for a two-year term at the second regular session of the Assembly in 1947. It is the Canadian view that each member of the Security Council should exercise its rights and responsibilities not in its own special national interests, but for the good of the United Nations as a whole, and that of the peoples the United Nations represents.

In the field of atomic energy control, Canada's contribution in research, in raw materials, and the early development of a pilot plant led to Canadian participation from the start in negotiations to bring atomic energy under international control. Canada was associated with the United Kingdom and the United States in the Washington Declaration on atomic energy issued in November, 1945, which recommended that a commission of the United Nations be established to meet the problems of international control.

Canada was given a permanent place on the Atomic Energy Commission of the United Nations set up by the first Assembly to draft measures for the control of atomic energy so as to ensure its use only for peaceful purposes, and to draft proposals with regard to controls necessary to protect complying States against the hazards of violations and evasions.

The Canadian Delegation took a leading part in drafting the portion of the United Nations Charter which deals with the Economic and Social Council. It urged that the Council's authority within the United Nations be made as great as possible within the agreed scope of studies, reports and recommendations, and that its co-ordinating functions with reference to the specialized agencies be comprehensive.

Canada was elected to membership on the Economic and Social Council for a three-year term at the first session of the Assembly, and is at present represented on five of the commissions set up by the Council—the Narcotic Drugs, Economic and Employment, Social, Statistical, and Population Commissions. Delegations from Canada have participated in all the sessions of the Economic and Social Council.

The Prime Minister, Right Honourable W. L. Mackenzie King, speaking on the occasion of the second anniversary of the signing of the Charter, said of the Economic and Social Council: "This important work is less spectacular and less well known than that of other United Nations organs. It is, however, the real foundation of international co-operation and lasting peace".

Canada is an active member of all the specialized agencies that have been brought into relationship with the United Nations through the Council, and has participated in the setting up of those still in process of organization. These include the International Labour Organization, the International Civil Aviation Organization, the Food and Agriculture Organization, the United Nations Educational, Scientific and Cultural Organization, the International Bank of Reconstruction and Development, the International Monetary Fund, the Universal Postal Union, the International Telecommunications Union, the World Health Organization, the International Refugee Organization, and the proposed International Trade Organization.

Prime importance is also attached to the juridical functions of the United Nations. In the Canadian view, no enduring system of general security can be established in the absence of an international order based upon justice and regulated by law.



The Right Hon. L. S. St. Laurent (left), Canadian Secretary of State for External Affairs, delegation chairman, Kuzma K. Kiselev (centre), Byelorussian SSR delegation chairman, and Souza Costa (right), Brazilian representative, at the first meeting of Committee I (Political and Security) of the Second Session of the United Nations General Assembly. That Committee unanimously adopted the resolution recommending the admission of Pakistan and Yemen to the United Nations—Lake Success, N.Y., Sept. 24, 1947.

Recognizing the obligations that Canada has assumed as a member of the United Nations, the Canadian Parliament has passed legislation giving the Government power to implement immediately any decision of the Security Council regarding economic sanctions against an aggressor nation. Canada is among the first to have taken this step, and is anxious to do the same with regard to military sanctions as soon as the Security Council is ready to negotiate military agreements with the member nations.

Canada has grown to mature nationhood in the eighty years since Confederation, and has accepted the obligations and responsibilities of a sovereign power. Through a comprehensive system of representation in other countries, and through effective participation in international organizations, she hopes to play her part in the establishment of an era of peace and growing well-being in the world. This is, and must continue always to be, the fundamental purpose of Canada's external policy.



Population

ALTHOUGH Canada is the largest country in the Americas, yet, due to her topography and surface characteristics, she is not capable of supporting an over-all population as dense as her size would imply. Certain areas such as the St. Lawrence Valley, parts of the Maritimes and the coastal plains of the Pacific are exceedingly fertile and situated in latitudes that invite a vigorous population growth but, by and large, these areas are limited in extent and widely separated from one another. Vast areas are suited only to the growing of timber or are economically valuable as potential sources of mineral wealth. In either case, the permanent settlement in such areas will be of very limited proportions.

When Canada's first census was taken in 1666 to measure the advancement made by this French colony since the founding of Quebec 58 years earlier, it was found that there were 3,215 inhabitants. About one hundred years later, that population, settled along the shores of the St. Lawrence River with its western outpost at Montreal, had increased to about 70,000; what is now the Maritime Provinces had another 20,000. The coming of the United Empire Loyalists and their settlement in the Eastern Townships and along the Upper St. Lawrence, Lake Ontario and the Niagara Peninsula in the last quarter of the eighteenth century, opened up new areas and Canada began the nineteenth century with a population of probably 400,000.

The year 1851 marks the beginning of the regular decennial census, so that there has been a continuous measure of population growth in Canada over the past 90 years. The last half of the nineteenth century was characterized by large numbers of immigrant arrivals by a large outward movement from the country mainly of immigrant population, and by the movement of native population from the more thickly settled parts of Quebec and the Maritimes to other parts of the country where the population was more thinly distributed.

But it was within the first decade of the present century that the most spectacular expansion of the population of Canada took place. The outstanding feature was, of course, the opening to settlement of the West. The unorganized southern stretch of the Northwest Territories, ceded to the Dominion by the Hudson's Bay Company soon after Confederation, had been traversed by the Canadian Pacific Railway between 1875 and 1885. But, though the western population had roughly doubled in each of the decades ended 1881, 1891 and 1901, it was only with the discovery of the wheat-growing potentialities of the prairies and the launching of a large-scale immigration movement after 1900 that western settlement became a factor of first importance. In the decade 1901-11 immigration exceeded 1,800,000 and, though at least a third of these were lost to Canada, it formed the chief factor in the gain of 34 p.c. which the total population registered in that period and which was larger than the relative growth of any other country during the same period. The



A T.C.A. aircraft flying over an old Quebec village. In the days of the French régime, attacks by Indians forced the settlers to divide the land into triangular sections with the houses clustered together in the centre for protection.

movement was continued in the first three years of the second decade of the century after which a recession set in to which the outbreak of war gave a new and wholly unexpected turn. Nevertheless, Canada's relative gain for that decade was again among the largest in the world.

After the War of 1914-18, immigration never again reached anything like its former levels and during the depression years of the 1930's it was still further restricted by Government regulations as well as by economic necessity. The population increase in the decade 1921-31 amounted to 18.1 p.c. and in the decade 1931-41 to 10.9 p.c. During the latest decade, and even to some extent in the previous one, the trend of movement of population has been from the Prairie Provinces to Ontario and to British Columbia, the percentage increase in British Columbia in these two decades being higher than in any other province.

The trend towards urban life in Canada is very striking. Early in the second half of the nineteenth century signs of an increase in the small urban proportion were beginning to be seen, and with the expansion of manufacturing and service industries and the increasing ease of transportation and communication, that proportion grew continuously. In 1871, 19.6 p.c. of the

population were urban dwellers, in 1901 37.5 p.c., in 1921 49.5 p.c. and in 1941 54.3. The great advance of employment during the war years in the larger cities of Canada is evidence of the drain from country to city that has taken place since the 1941 Census.

Canadians do not form a compact group like the many European nations, but are a collection of diverse races moulding themselves into a nation that takes its pattern from the land of their adoption. At the time of Confederation, the largest individual British racial group was Irish, and the Irish and Scottish together outnumbered the English by almost two to one. After 1881 the English predominated and the Scottish moved to second place after 1911. By the time of the 1941 Census, the numerical strength of the principal racial stocks was in the following order: French, English, Scottish, Irish, German, Ukrainian, Scandinavian, Netherlandish, Jewish and Polish. Canada is officially bilingual, and the 1941 Census revealed 1,474,000 people speaking both official languages, while 7,735,000 spoke English only and 2,182,000 spoke French only.

The sex distribution of the Canadian people is characterized, as is that of any 'young' population, by a preponderance of males, although this condition has been greatly modified in recent times, especially since the rigid control of immigration following the First World War. From 1871 to 1941, for Canada as a whole, the percentage of males never dropped below 51 p.c. of the total population, whereas for Western Canada it varied between 53 p.c. and 59 p.c.

Population Statistics

The following tables give a picture of the Canadian population from various angles at the time of the 1941 Census; Prairie Province figures for the quinquennial census years 1906-46 are also included. In the space available in this publication, the subject of population can be dealt with only very summarily. Since the 1941 Census does not reflect current conditions in post-war Canada, estimates of the population for 1938-47 are given at p. 45.

Population of Canada, Census Years 1891-1941, with Density, 1941

NOTE.—The figures for certain censuses are not altogether comparable but the qualifications are for the most part technical and are given in detail in the Census volumes.

Province or Territory	Land Area in Sq. Miles	Population						Persons per Sq. Mile 1941
		1891	1901	1911	1921	1931	1941	
P.E.I....	2,184	109,078	103,259	93,728	88,615	88,038	95,047	43.52
N.S....	20,743	450,396	459,574	492,338	523,837	512,846	577,962	27.86
N.B....	27,473	321,263	331,120	351,889	387,876	408,219	457,401	16.65
Que....	523,860	1,488,535	1,648,898	2,005,776	2,360,510	2,874,662	3,331,882	6.36
Ont....	363,282	2,114,321	2,182,947	2,527,292	2,933,662	3,431,683	3,787,655	10.43
Man....	219,723	152,506	255,211	461,394	610,118	700,139	729,744	3.32
Sask....	237,975	—	91,279	492,432	757,510	921,785	895,992	3.77
Alta....	248,800	—	73,022	374,295	588,354	731,605	796,169	3.20
B.C....	359,279	98,173	178,657	392,480	523,582	694,263	817,861	2.28
Yukon...	205,346	—	27,219	8,512	4,157	4,230	4,914	0.02
N.W.T....	1,253,438	98,967	20,129	6,507	8,143	9,316	12,028	0.01
Canada	3,462,103	4,833,239	5,371,315	7,206,643	8,787,949¹	10,376,786	11,506,655	3.32

¹ Includes 485 members of the Royal Canadian Navy who were recorded separately.

Prince Rupert, B.C., about 550 miles north of Vancouver. The population of this city, which was about 7,000 at the time of the 1941 Census, has since grown rapidly. It is situated on an excellent harbour, has splendid warehouse, cold-storage and harbour facilities, and is an important centre of the great halibut and salmon fishing industry of the Pacific. At present a \$15,000,000 cellulose plant is under construction, scheduled to be completed within two years.



Population of the Prairie Provinces, Quinquennial Census Years 1906-46

Province	1906	1916	1926	1936	1946
Manitoba.....	365,688	553,860	639,056	711,216	726,923
Saskatchewan.....	257,763	647,835	820,738	931,547	832,688
Alberta.....	185,195	496,442	607,599	772,782	803,330
Totals	808,646	1,698,137	2,067,393	2,415,545	2,362,941

Rural Farm, Rural Non-farm and Urban Population, by Provinces, 1931 and 1941

Province or Territory	1931			1941		
	Rural		Urban	Rural		Urban
	Farm	Non-farm		Farm	Non-farm	
P.E.I.....	54,963	12,690	20,385	50,732	19,975	24,340
N.S.....	173,965	107,227	231,654	141,182	169,240	267,540
N.B.....	178,494	100,785	128,940	163,067	150,911	143,423
Que.....	743,598	317,458	1,813,606	823,791	398,407	2,109,684
Ont.....	785,550	550,141	2,095,992	694,684	754,338	2,338,633
Man.....	254,302	129,868	315,969	248,684	159,187	321,873
Sask.....	561,407	69,473	290,905	513,279	87,567	295,146
Alta.....	370,899	82,198	278,508	380,693	108,890	306,586
B.C.....	100,244	199,280	394,739	100,810	273,657	443,394
Yukon.....	74	2,796	1,360	42	3,075	1,797
N.W.T.....	Nil	9,316	Nil	Nil	12,028	Nil
Canada	3,223,496	1,581,232	5,572,058	3,116,964	2,137,275	6,252,416



**Urban Centres Having over 20,000 Inhabitants in 1941, Census Years
1901-41**

Urban Centre and Province	Population				
	1901	1911	1921	1931	1941
Montreal, Que.	325,653	490,504	618,506	818,577	903,007
Greater Montreal.....	—	—	—	1,023,158	1,139,921
Toronto, Ont.	218,504	381,833	521,893	631,207	667,457
Greater Toronto.....	—	—	—	810,467	900,491
Vancouver, B.C.	29,432	120,847	163,220	216,593	275,353
Greater Vancouver.....	—	—	—	308,340	351,491
Winnipeg, Man.	42,340	136,035	179,087	218,785	221,960
Greater Winnipeg.....	—	—	—	284,295	290,540
Hamilton, Ont.	52,634	81,969	114,151	155,547	166,337
Greater Hamilton.....	—	—	—	163,710	176,110
Ottawa, Ont.	64,226	87,062	107,843	126,872	154,951
Greater Ottawa.....	—	—	—	175,988	215,022
Quebec, Que.	68,840	78,118	95,193	130,594	150,757
Greater Quebec.....	—	—	—	172,517	200,814
Windsor, Ont.	15,198	23,433	55,935	98,179	105,311
Greater Windsor.....	—	—	—	110,385	121,112
Edmonton, Alta.	4,176	31,064	58,821	79,197	93,817
Calgary, Alta.	4,392	43,704	63,305	83,761	88,904
London, Ont.	37,976	46,300	60,959	71,148	78,264
Greater London.....	—	—	—	—	86,740
Halifax, N.S.	40,832	46,619	58,372	59,275	70,488
Greater Halifax.....	—	—	—	74,161	91,829
Verdun, Que.	1,898	11,629	25,001	60,745	67,349
Regina, Sask.	2,249	30,213	34,432	53,209	58,245
Saint John, N.B.	40,711	42,511	47,166	47,514	51,741
Greater Saint John.....	—	—	—	58,717	65,784
Victoria, B.C.	20,919	31,660	38,727	39,082	44,068
Greater Victoria.....	—	—	—	—	75,218
Saskatoon, Sask.	113	12,004	25,739	43,291	43,027
Three Rivers, Que.	9,981	13,691	22,367	33,450	42,007
Sherbrooke, Que.	11,765	16,405	23,515	28,933	35,965
Kitchener, Ont.	9,747	15,196	21,763	30,793	35,657
Hull, Que.	13,993	18,222	24,117	29,433	32,947
Sudbury, Ont.	2,027	4,150	8,621	18,518	32,203

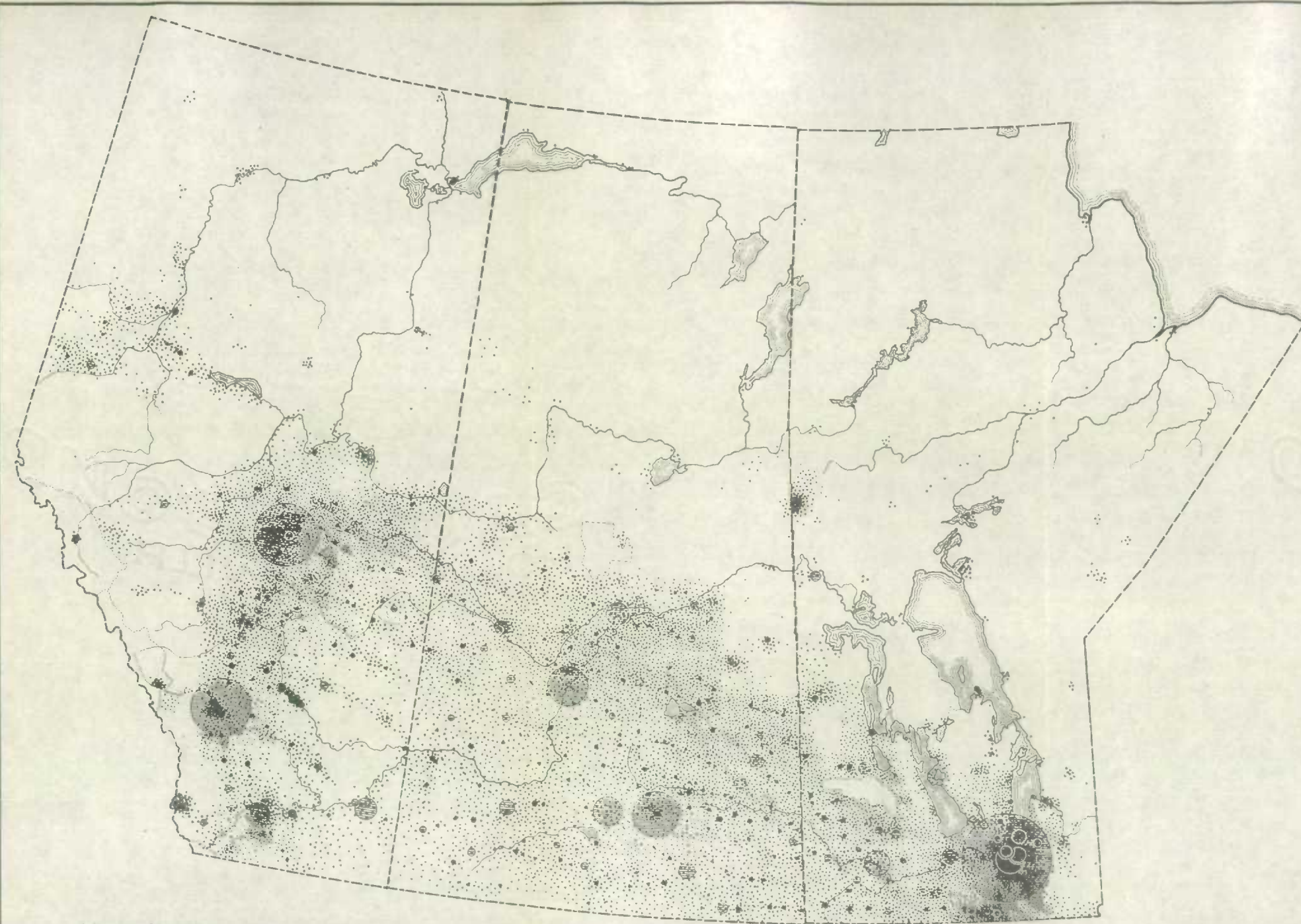
**Urban Centres Having over 20,000 Inhabitants in 1941, Census Years
1901-41—concluded**

Urban Centre and Province	Population				
	1901	1911	1921	1931	1941
Brantford, Ont.....	16,619	23,132	29,440	30,107	31,948
Outremont, Que.....	1,148	4,820	13,249	28,641	30,751
Fort William, Ont.....	3,633	16,499	20,541	26,277	30,585
St. Catharines, Ont.....	9,946	12,484	19,881	24,753	30,275
Kingston, Ont.....	17,961	18,874	21,753	23,439	30,126
Timmins, Ont.....	—	—	3,843	14,200	28,790
Sydney, N.S.....	9,909	17,723	22,545	23,089	28,305
Oshawa, Ont.....	4,304	7,436	11,940	23,439	26,813
Westmount, Que.....	8,856	14,579	17,593	24,235	26,047
Sault Ste. Marie, Ont.....	7,169	14,930	21,092	23,082	25,794
Peterborough, Ont.....	12,886	18,360	20,991	22,327	25,350
Glace Bay, N.S.....	6,945	16,562	17,007	20,706	25,117
Port Arthur, Ont.....	3,214	11,220	14,886	19,818	24,326
Guelph, Ont.....	11,496	15,175	18,128	21,075	23,273
Moncton, N.B.....	9,026	11,345	17,488	20,689	22,763
New Westminster, B.C.....	6,499	13,199	14,495	17,524	21,967
Moose Jaw, Sask.....	1,558	13,823	19,285	21,299	20,753
Niagara Falls, Ont.....	5,702	9,248	14,764	19,046	20,589
Shawinigan Falls, Que.....	—	4,265	10,625	15,345	20,325
Lachine, Que.....	6,365	11,688	15,404	18,630	20,051

Conjugal Condition of the Population, by Provinces and Sex, 1941

Province or Territory	Single	Married	Widowed	Divorced	Per- manently Separated	Total ¹
MALES						
Prince Edward Island.....	29,828	17,625	1,549	22	202	49,228
Nova Scotia.....	173,506	111,132	9,359	247	1,770	296,044
New Brunswick.....	140,953	85,093	6,695	197	1,137	234,097
Quebec.....	1,027,162	591,533	46,386	500	7,270	1,672,982
Ontario.....	993,265	851,096	60,210	2,291	14,105	1,921,201
Manitoba.....	209,939	155,157	10,268	473	2,218	378,079
Saskatchewan.....	283,297	179,996	11,383	468	2,351	477,563
Alberta.....	243,666	168,469	10,594	801	2,891	426,458
British Columbia.....	215,205	200,027	13,979	1,547	4,213	435,031
Yukon.....	2,029	957	116	17	34	3,153
Northwest Territories.....	3,978	2,443	204	6	10	6,700
Canada.....	3,322,827	2,363,528	170,743	6,569	36,201	5,900,536
FEMALES						
Prince Edward Island.....	24,748	17,473	3,401	19	178	45,819
Nova Scotia.....	148,474	109,513	21,544	268	2,115	281,918
New Brunswick.....	123,540	84,275	14,040	192	1,256	224,304
Quebec.....	981,890	581,569	85,425	616	9,353	1,658,900
Ontario.....	876,215	826,525	142,731	2,865	18,039	1,866,454
Manitoba.....	176,458	151,105	20,625	654	2,818	351,665
Saskatchewan.....	221,557	175,112	18,965	381	2,414	418,429
Alberta.....	186,215	161,953	17,963	717	2,850	369,711
British Columbia.....	165,064	181,932	29,235	1,718	4,878	382,830
Yukon.....	833	810	88	3	27	1,761
Northwest Territories.....	2,747	2,211	361	Nil	8	5,328
Canada.....	2,907,741	2,292,478	354,378	7,463	43,936	5,606,119

¹ Includes persons with conjugal condition not stated.



Scale of miles — Echelle en milles
 25 50 75 100 125 150 175 200

DISTRIBUTION OF POPULATION, PRAIRIE PROVINCES, 1946

DISTRIBUTION DE LA POPULATION, PROVINCES DES PRAIRIES, 1946

NOTE:

A dot represents 100 people. Cities, towns and villages with populations of more than 1,000 are shown by discs proportionate in area to the dot. Lesser centres are shown by concentrations of dots.

NOTA:

Un point représente 100 personnes. Les cités, villes et villages d'une population de plus de 1,000 sont indiqués par des disques dont la surface est proportionnée au point. Les centres moins considérables sont indiqués par des concentrations de points.

LEGEND — LEGENDE

SCALE FOR TYPICAL URBAN CENTRES SHOWN BY DISCS
 ECHELLE POUR LES CENTRES URBAINS TYPES INDICUÉS PAR DES DISQUES

MANITOBA



SASKATCHEWAN



ALBERTA



Distribution of Population by Sex and Age Groups, by Provinces, 1941

Age Group	Prince Edward Island		Nova Scotia		New Brunswick		Quebec	
	Males	Females	Males	Females	Males	Females	Males	Females
Under 10 years	9,745	9,438	57,621	55,833	49,513	48,457	354,186	347,189
10-19 "	9,512	9,162	56,643	55,164	48,636	47,629	357,840	354,791
20-29 "	8,412	7,291	53,883	50,947	40,972	37,625	287,888	298,408
30-39 "	6,099	5,063	39,338	34,835	29,162	27,092	232,719	231,371
40-49 "	5,047	4,701	29,921	28,639	22,939	22,148	175,562	169,859
50-59 "	4,156	4,007	24,912	23,452	18,952	17,529	131,186	123,202
60-69 "	3,302	3,156	19,339	17,536	13,970	12,564	83,316	79,569
70 or over	2,955	3,001	11,387	15,512	9,953	10,260	50,285	54,511
All Ages..	49,228	45,819	296,044	281,918	234,097	223,304	1,672,982	1,658,900

	Ontario		Manitoba		Saskatchewan		Alberta	
	Males	Females	Males	Females	Males	Females	Males	Females
Under 10 years	304,406	295,033	63,006	60,877	87,995	85,191	76,400	74,349
10-19 "	336,738	327,182	70,770	69,719	97,088	93,811	78,533	77,528
20-29 "	323,502	316,193	67,150	66,315	81,528	76,007	71,208	67,926
30-39 "	284,697	270,187	51,203	48,560	59,909	52,524	59,885	50,272
40-49 "	247,696	235,242	43,109	40,015	51,424	43,146	50,550	39,371
50-59 "	204,055	191,773	42,648	33,929	53,930	36,333	48,926	32,312
60-69 "	132,989	132,979	26,007	19,824	31,119	20,083	28,008	18,163
70 or over	87,118	97,865	14,186	12,426	14,570	11,334	12,948	9,790
All Ages..	1,921,201	1,866,454	378,079	351,665	477,563	418,429	426,458	369,711

	British Columbia		Yukon		Northwest Territories		Canada	
	Males	Females	Males	Females	Males	Females	Males	Females
Under 10 years	58,087	56,340	428	439	1,608	1,533	1,062,995	1,034,679
10-19 "	64,307	63,019	311	290	1,138	1,101	1,121,516	1,099,396
20-29 "	69,998	71,151	538	365	1,217	892	1,006,296	993,120
30-39 "	63,305	54,489	582	244	1,145	719	828,044	775,356
40-49 "	53,799	46,806	336	158	736	487	681,119	630,572
50-59 "	61,532	44,524	314	129	489	306	591,100	507,496
60-69 "	42,385	29,640	358	94	281	193	381,074	333,801
70 or over	21,618	16,861	286	42	86	97	228,392	231,699
All Ages..	435,031	382,830	3,153	1,761	6,700	5,328	5,900,536	5,606,119

Buildings, Dwellings, Households and Families, by Provinces, 1941

Province	Buildings	Dwellings		Households	Families	Persons per		
		Occupied	Vacant			Dwell-ing	House-hold	Fam-ily
P.E.I.....	19,719	20,236	753	20,432	19,590	4.70	4.65	4.19
N.S.....	114,451	124,396	3,840	128,641	123,561	4.65	4.49	4.04
N.B.....	83,419	92,703	2,912	94,599	93,479	4.93	4.84	4.32
Que.....	436,012	650,838	14,321	663,426	647,946	5.12	5.02	4.53
Ont.....	779,751	916,122	21,464	969,267	909,210	4.13	3.91	3.56
Man.....	149,206	164,985	2,342	176,942	166,249	4.42	4.12	3.83
Sask.....	209,291	209,820	6,465	214,939	190,137	4.27	4.17	4.13
Alta.....	185,585	195,574	4,040	201,796	175,744	4.07	3.95	3.91
B.C.....	207,120	223,295	5,861	236,047	199,383	3.66	3.46	3.36
Canada	2,181,564	2,597,969	62,008	2,706,089	2,525,299	4.42	4.25	3.94

Gainfully Occupied Males and Females, 14 Years of Age or Over, by Occupation Groups, 1941

(Exclusive of Yukon and the Northwest Territories)

Occupation Group	Males			Females	
	Including Active Service ¹	Not Including Active Service	P.C. of Total ²	No.	P.C. of Total
Agriculture.....	1,104,579	1,064,847	31.7	18,969	2.3
Fishing, trapping and logging.....	138,460	131,374	3.9	326	.3
Mining, quarrying.....	77,909	71,861	2.1	25	.1
Manufacturing.....	615,281	573,574	17.1	129,588	15.6
Construction.....	215,333	202,509	6.0	339	.3
Transportation.....	278,402	254,591	7.6	14,065	1.7
Trade.....	292,910	273,059	8.1	82,020	9.8
Finance, insurance.....	33,104	30,576	0.9	816	0.1
Service.....	339,307	316,313	9.4	418,111	50.2
Clerical.....	204,666	182,823	5.4	155,208	18.6
Labourers ⁴	273,925	251,889	7.5	11,655	1.4
Not stated.....	39,166	9,695	0.3	1,718	0.2
All Occupations.....	3,613,045	3,363,111	100.0	832,840	100.0

¹ Includes only males on Active Service with a gainful occupation prior to enlistment.
² Based on column 2. ³ Less than 0.05 p.c. ⁴ Does not include agricultural, fishing, logging or mining labourers.

Nine Leading Origins, by Provinces, 1941

Province	British Isles Races	French	German	Ukrainian	Scandinavian	Netherlandish	Jewish	Polish	Indian
P.E.I.....	78,714	14,799	172	2	152	494	25	1	258
N.S.....	445,178	66,260	15,038	711	2,353	23,834	2,285	2,206	2,063
N.B.....	276,758	163,934	1,394	22	2,929	4,539	1,228	233	1,939
Que.....	452,887	2,695,032	8,880	8,006	4,840	2,645	66,277	10,036	11,863
Ont.....	2,729,830	373,990	167,102	48,158	27,225	73,001	69,875	54,893	30,336
Man.....	360,560	52,996	41,479	89,762	32,620	39,204	18,879	36,550	15,473
Sask.....	397,905	50,530	130,258	79,777	68,806	35,894	4,149	27,902	13,384
Alta.....	399,432	42,979	77,721	71,868	63,494	20,429	4,164	26,845	12,565
B.C.....	571,336	21,876	22,407	7,563	41,560	12,737	3,350	8,744	24,875
Canada¹	5,715,904	3,483,038	464,682	305,929	244,603	212,863	170,241	167,485	118,316

¹ Includes Yukon and the Northwest Territories.
 Icelandic, 100,718 Norwegian and 85,396 Swedish.

² Includes 37,439 Danish, 21,050

Birthplaces of the Population, Census Years 1901-41

Year	Canadian Born		Other British Born ¹		Foreign Born				Total Population
					U.S. Born		Other		
	No.	p.c.	No.	p.c.	No.	p.c.	No.	p.c.	No.
1901....	1,671,815	86.98	421,051	7.84	127,899	2.38	150,550	2.80	5,371,315
1911....	5,619,682	77.98	834,229	11.58	303,680	4.21	449,052	6.23	7,206,643
1921....	6,832,224	77.75	1,065,448	12.12	374,022	4.26	516,255	5.87	8,787,949
1931....	8,069,261	77.76	1,184,830	11.42	344,574	3.32	778,121	7.50	10,376,786
1941....	9,187,808	82.46	1,003,769	8.72	312,473	2.72	701,660	6.10	11,506,655 ²

¹ Includes some hundreds of persons born at sea.
 not stated.

² Includes persons with birthplace

Eight Leading Religious Denominations, by Provinces, 1941

Province or Territory	Roman Catholic ¹	United Church of Canada	Anglican	Presbyterian	Baptist	Lutheran	Jewish	Greek Orthodox
P.E.I.	42,743	24,005	5,739	14,724	5,443	45	18	10
N.S.	188,944	124,301	103,393	47,415	89,272	9,104	2,167	347
N.B.	220,454	63,268	55,155	15,382	88,766	870	1,196	85
Que.	2,894,621	100,196	162,056	56,086	12,303	7,081	65,683	12,040
Ont.	882,369	1,073,425	815,413	433,708	192,915	104,111	69,217	28,383
Man.	203,259	194,001	125,076	43,073	13,267	48,213	18,715	20,777
Sask.	243,734	230,495	117,674	54,856	19,460	104,717	4,076	37,699
Alta.	191,343	193,664	113,279	68,910	32,268	84,630	4,052	34,991
B.C.	113,282	200,817	245,531	94,300	29,780	41,772	3,235	5,198
Yukon.	742	404	2,545	422	75	368	2	67
N.W.T.	5,061	299	5,327	271	43	242	6	32
Canada..	4,986,552	2,204,875	1,751,188	829,147	483,592	401,153	168,367	139,629

¹ Includes Greek Catholic.

Annual Estimates of Population.—The exact number of the population of Canada given at ten-year intervals by the Census is supplemented by estimates for intervening years. These are essential for the calculation of per capita figures in production and trade, and particularly for use as a base in birth and death comparisons. At every census the previous post-censal data are adjusted to the newly recorded population figures.

Estimates of the Population, by Provinces, Intercensal Years 1938-47

Year	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon and N.W.T.	Canada
	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000
1938 ..	94	555	442	3,183	3,672	720	914	781	775	16	11,152
1939 ..	94	561	447	3,230	3,708	726	906	786	792	17	11,267
1940 ..	95	569	452	3,278	3,747	728	900	790	805	17	11,381
1941 ..	95	578	457	3,332	3,788	730	896	796	818	17	11,507
1942 ..	90	591	464	3,390	3,884	724	848	776	870	17	11,654
1943 ..	91	607	463	3,457	3,917	726	842	792	900	17	11,812
1944 ..	91	612	462	3,500	3,965	732	846	818	932	17	11,975
1945 ..	92	621	468	3,561	4,004	736	845	826	949	17	12,119
1946 ..	94	612	480	3,630	4,101	727	833	803	1,003	24	12,307
1947 ..	94	621	491	3,712	4,189	743	842	822	1,044	24	12,582

¹ These estimates are subject to adjustment as later data are made available.

Aboriginal Races

Indians.—The Indians of Canada, whose affairs are administered by the Indian Affairs Branch of the Department of Mines and Resources, number 125,686 (according to a departmental census taken in 1944). The popular opinion that the race is disappearing is not in accordance with fact. Before the advent of the European, the number of Indians was undoubtedly larger, though there is little reliable information on the subject. The trend during this twentieth century, however, has been fairly steadily upward. The distribution among the provinces and territories is as follows: Prince Edward



An Indian woman hanging meat to dry in the fashion of her ancestors. The native Indians of Canada live for the most part on reserves set aside for them by the Federal Government, and in many cases are little influenced by the modern customs of the White population.

Island, 266; Nova Scotia, 2,364; New Brunswick, 2,047; Quebec, 15,194; Ontario, 32,421; Manitoba, 15,933; Saskatchewan, 14,158; Alberta, 12,441; British Columbia, 25,515; Yukon, 1,531; and the Northwest Territories, 3,816. These are the Indians under Federal administration. There are many others who, under the provisions of the Indian Act, have become enfranchised and have acquired full status of citizenship; these have ceased to be Indians under the law.

The rapid spread of civilization in Canada made it necessary to take effective measures to protect the moral claims of the Indians. As the various sections of the country were opened up, treaties were entered into whereby the Indians ceded to the Crown their aboriginal title and interest in the country, in lieu of which the Crown agreed to set aside adequate land reserves, to make cash grants, provide per capita annuities, give assistance in agriculture, stock-raising, hunting, trapping, etc., as particular circumstances might require, provide education for Indian children, and otherwise safeguard the interests of the Indian population. Accordingly, reserves have been set aside for the various bands of Indians throughout the Dominion and the Indians located thereon are under the supervision of local agents of the Department of Mines and Resources. In addition to the agent, the local staff usually includes a medical officer, clerk, farming instructor, field matron, constable, stockman, etc., according to the special requirements of the agency.

The total area of Indian reserves was 5,464,503 acres as at Mar. 31, 1945, 25.7 p.c. of which was in Alberta, 23.9 p.c. in Ontario and 21.8 p.c. in Saskatchewan. Of the total, only 187,457 acres were under cultivation, 3,369,869 acres being uncleared.

The Government has undertaken a number of special projects for the various sections of the Indian population in accordance with their needs, including fur development enterprises in selected areas, the promotion of handicraft, and planned agricultural operations.

While the Department of Mines and Resources acts as the administrator of the affairs of the Indians, all matters connected with their health are

under the jurisdiction of the Department of National Health and Welfare. The distribution of family allowances is conducted jointly by the two Departments.

In 1946, the Federal Government, realizing the importance of reviewing the Indian Act, set up a Special Joint Committee of the Senate and the House of Commons to examine and consider the Indian Act. This inquiry is still (October, 1947) continuing. The Indian Act is to be redesigned in keeping with needs and conditions facing the Indian population of Canada to-day.

Eskimos.—Eskimos in Canada are found principally north of the tree-line on the northern fringe of the mainland and around the coasts of many of the islands in the Arctic Archipelago and in Hudson Bay. Most of the Eskimo are essentially coastal dwellers, obtaining much of their food and clothing from the mammals of the sea. However, there are bands of Eskimo living in the interior of Keewatin District on the west side of Hudson Bay who are inland people, and who subsist chiefly on caribou.

The administrative care of the Eskimo, exclusive of medical services, devolves upon the Lands, Parks and Forests Branch of the Department of Mines and Resources, which, by regulative measures, conserves the natural resources necessary to their subsistence. Medical care and hospitalization is a function of the Department of National Health and Welfare.

Contact with the Eskimo is maintained through permanent stations at a number of which medical officers are located—in the eastern, central and western Arctic; by patrols of the Royal Canadian Mounted Police; by radio-communication; by means of the annual Canadian Eastern Arctic Patrol by steamship; and by auxiliary motor vessels.

The 1941 Decennial Census of Canada established the Eskimo population at 7,205, of which 5,404 were located in the Northwest Territories, 1,778 in northern Quebec, and the remainder, 23, in other provinces. Delayed returns received too late for inclusion in the Census, would raise the 1941 Eskimo population to a total of 7,639, of which 1,965 were located in northern Quebec.

An Eskimo family in their igloo at Baker Lake, Chesterfield Inlet on Hudson Bay. The man is working on a snow knife while his wife makes caribou moccasins. Their grandson sits in to enjoy the gramophone music, for the radio, gramophone and other innovations of the White man have penetrated even to the igloo of the far north.



Immigration

During the year ended Mar. 31, 1947, a total of 66,990 immigrants entered Canada, this figure showing a 115.5 p.c. increase over the 31,081 immigrants received during the fiscal year 1945-46, and a marked rise over the 1944-45 total of 15,306.

Of the 66,990 immigrants, 47,976 were English, Scottish, Irish and Welsh from overseas, as compared with 20,162 and 9,943 in 1945-46 and 1944-45, respectively; 11,410 were from the United States, as compared with 7,454 and 4,624, respectively; and 7,604 were from other countries, as compared with 3,465 and 739, respectively. Canadians returning from the United States after residing in that country numbered 6,315, as compared with 2,895 in 1945-46.

The most notable development of Canada's immigration policy during 1947 was the admission of the first displaced persons from refugee camps in Europe. Special Orders in Council authorized the entry to Canada in group movements of 20,000 displaced persons in response to requests for workers received from industries throughout the Dominion. All of these 20,000 people are expected to reach Canada by the spring of 1948. In addition, there was a broadening of the categories under which relatives of Canadian citizens, whether or not they were displaced persons, could secure admission to this country.

By Oct. 31, 1947, 4,679 displaced persons had reached Canada. Of these, 3,007 went to lumber companies, 100 were given jobs in textile mills, and 426 were assigned to domestic duties in hospitals and other service institutions; 1,102 displaced persons were admitted under the Close Relatives Plan; and 44 children were placed in private homes. Of the approximately 21,000 applications for admission made under the Close Relatives Plan, more than 11,000 had been investigated and approved. At the same date, applications for the entry of 15,021 workers under the Group Movement Plan had been approved. These workers included the following: hydro workers, 2,000; miners, 2,301; railroad workers, 705; woods workers, 4,210; foundrymen, 114; steel workers, 375; construction workers, 500; domestics, 2,000; clothing workers, 2,316; dressmakers, 200; terrazo workers, 100; textile workers, 200.

Included among immigrants from the British Isles are those being brought to this country by air through the Ontario Government plan which has an objective of 7,000 new residents for that Province.

Some 4,527 Polish ex-service men were admitted to Canada to furnish immediate relief to farmers urgently requiring help. At the end of two years' employment at prevailing rates, consideration will be given to granting them permanent admission.

Approximately 3,000 Dutch agriculturists, including married people and their families as well as single men, have also been admitted.

Figures for tourists who, although not immigrants, submit to immigration examination at the International Boundary and ocean ports, showed a total entry (in round figures) of 34,693,300 people, made up of 20,622,000 visitors from other countries, 14,065,000 Canadians returning from trips to other countries, and 6,300 Canadians returning after residing in the United States. Comparable figures for the previous year were 17,827,000 visitors, 11,091,000 returning residents, and 3,000 returned Canadians.

NEW CANADIANS

This Dutch family, arriving at Montreal, will settle on a farm near Edmonton, Alta.



Immigrants from the United Kingdom arriving in Canada under the sponsorship of the Ontario Government immigration scheme. These new citizens travel by air at their own expense.



Displaced persons from Germany brought to Canada by the Federal Government to work in the lumber industry.



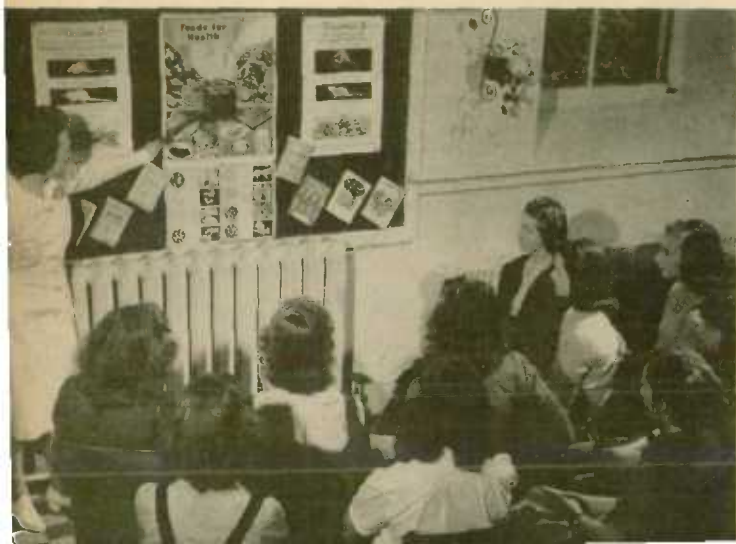
Vital Statistics Public Health

★ *Vital Statistics*

NO nation can afford to neglect the study of its vital statistics if the health of its citizens is to be maintained at a high level. Both Federal and Provincial Governments are fully alive to the dependence of the one upon the other and since 1926 they have collaborated in the compilation of statistics on which they base their joint efforts to offset any abnormally high incidence of disease. The one is a function of the Dominion Bureau of Statistics and the Provincial Registration Officials, the other of the Health Departments at Ottawa and the provincial capitals.

National Vital Statistics Index.—A Dominion-Provincial Conference on Vital Statistics in September, 1944, decided that the Dominion and the provinces would collaborate in the creation of a National Vital Statistics Index for Canada. This index is being used collectively by the several governments. Modern mechanical methods of microfilm and punch-card equipment are being synchronized. The former permits the rapid transmission to the Dominion Bureau of Statistics of photographic copies of the events registered in the provincial vital statistics offices. In setting up the National Index and for the analysis of the statistical facts, mechanical tabulation processes are being applied to the material on a uniform basis at the Bureau.

Vital Statistics Council.—A Vital Statistics Council for Canada was established by Order in Council dated July 31, 1945, to facilitate co-operation between Dominion and Provincial Governments with respect to the use of



The important subject of nutrition has a place in the school curriculum in Canada.

vital records and statistics, and to ensure the creation and maintenance of a system that is adequate to meet increasing demands both for Dominion and provincial purposes. The Dominion Statistician is the Chairman, and the Council comprises one representative for each province, one for Yukon and the Northwest Territories, and the Chiefs of Vital Statistics and Census Divisions in the Dominion Bureau of Statistics.

Births, Deaths and Marriages, by Provinces

Province	Births			Deaths			Marriages		
	1946 ¹		Av. 1926-30	1946 ¹		Av. 1926-30	1946 ¹		Av. 1926-30
	No.	Rate per M	Rate per M	No.	Rate per M	Rate per M	No.	Rate per M	Rate per M
P.E.I.....	2,815	29.9	19.7	876	9.3	11.0	837	8.9	5.4
N.S.....	17,885	29.2	21.4	6,008	9.8	12.4	6,549	10.7	6.3
N.B.....	16,258	33.9	25.8	4,854	10.1	12.5	5,866	12.2	7.4
Que.....	110,809	30.5	30.5	33,573	9.2	13.5	36,671	10.1	6.9
Ont.....	94,809	22.8	21.0	38,592	9.4	11.2	46,052	11.2	7.8
Man.....	18,881	26.0	21.7	6,526	9.0	8.3	8,594	11.8	7.5
Sask.....	20,699	24.9	24.7	6,417	7.7	7.3	8,279	10.0	7.0
Alta.....	22,161	27.7	24.2	6,582	8.2	8.4	9,478	11.8	8.0
B.C.....	22,488	22.4	16.2	10,091	10.1	9.3	11,752	11.7	7.5
Canada ²	325,805	26.5	24.1	113,519	9.2	11.1	134,078	10.9	7.3

¹ Preliminary figures.

² Exclusive of Yukon and the Northwest Territories.

Births.—From 1926 to 1930 the number of births showed an upward trend, rising from 232,750 to 243,495. This movement was then reversed until 1937 when the number of births reached its lowest point at 220,235. In 1938 it increased again and in 1939 was 229,468. Because of the growing population, the rate of births per 1,000 population showed a steeper decline, falling from 23.9 in 1930 to 20.0 in 1937. In 1938 it rose slightly to 20.6 and in 1939 it was 20.4. The influence of the War is reflected in the sharp increase that has taken place since 1939. In 1941 the number of births was 255,224 and the rate 22.2. The preliminary figures for 1946 show 325,805 births and a rate of 26.5; this is the highest birth rate recorded since 1926.

Wherever birth statistics have been collected, they have shown an excess of male over female births. No conclusive explanation of this excess has yet been given. Nevertheless it is so much of an accepted statistical fact that a proper ratio of male to female births has become one of the criteria of complete registration. The number of males to every 1,000 females born in Canada in 1941-45 has varied between 1,057 and 1,067.

Hospitalization and medical attendance at birth have increased greatly in recent years. In 1926-30 only 22 p.c. of live births occurred in hospitals, while in 1945 the proportion was 63 p.c.

Deaths.—The annual death rate in Canada averages less than 10 per 1,000 population, which is fairly low in comparison with other countries of the world.

The ten leading causes of death accounted for 80 p.c. of the total deaths in Canada in 1945. Diseases of the heart, considered as a group, was the most important cause; cancer was second. The death rate from cancer has

advanced almost every year from 1926 to 1945, the increase in that period being from 80.7 to 119.3 per 100,000 population. This increase in cancer deaths is rather misleading, being due in part to improvement in diagnostic and X-ray techniques which enable the causes of death to be identified, instead of being attributed to other or unknown causes, but mainly to the aging of the Canadian population. Pneumonia, which was in third place in 1926 with a rate of 89.3 per 100,000 population, dropped in 1945 to seventh place with a rate of 45.9.

Maternal Mortality.—The average rate for the five-year period 1926-30 was 5.7 per 1,000 live births. Since that time there has been a marked improvement. The rate decreased to 4.0 in 1940 and reached the low figure of 1.8 in 1946.

Infant Mortality.—In Canada during recent years this rate has shown a substantial reduction, falling from 102 per 1,000 live births in 1926 to 60 in 1941 and 54 in 1942 and 1943. In 1946, the rate was 47 per 1,000, the lowest on record.

Infant Deaths and Death Rates, by Provinces

Province	Infants under One Year					Rates per 1,000 Live Births				
	1926	1943	1944	1945	1946 ¹	1926	1943	1944	1945	1946 ¹
P.E.I.	123	98	102	102	97	70	45	45	45	34
N.S.	882	898	838	823	821	80	58	54	53	46
N.B.	1,095	886	1,035	966	1,061	106	68	77	71	65
Que.	11,666	6,642	6,918	6,464	6,119	142	67	68	62	55
Ont.	5,302	3,390	3,346	3,209	3,509	78	42	43	41	37
Man.	1,122	909	786	781	883	77	55	49	48	47
Sask.	1,681	873	858	824	1,005	81	47	47	44	49
Alta.	1,233	810	889	862	941	85	42	46	43	42
B.C.	588	711	767	792	845	58	38	40	42	38
Canada ²	23,692	15,217	15,539	14,823	15,281	102	54	55	51	47

¹ Preliminary figures.

² Exclusive of Yukon and the Northwest Territories.

Natural Increase.—In 1926 the rate of natural increase was 13.3 per 1,000 population. During the early 1930's, when the birth rate was declining rapidly, the death rate was also declining, but more slowly. In 1939, the death rate was 9.7, and the rate of natural increase 10.7. Since the beginning of the War, the natural increase rate has, of course, risen substantially. It was 12.2 in 1941, 14.0 in 1943 and, according to the preliminary figures, it stood at 17.3 in 1946.

Marriages.—In 1929 marriages in Canada numbered 77,288. They had increased steadily since 1926. The depression exercised a marked influence on marriages and the marriage rate, causing a steep downward movement until 1932, when the number of marriages was 62,531. From 1933 to 1942 a fairly steady increase took place, so that in 1942 marriages numbered 127,372, and the rate per 1,000 population was 10.9. For the years 1943 to 1945 the numbers and rates were somewhat lower. During 1946, marriages numbered 134,078, the largest number ever recorded, and the rate was 10.9.

★ *Public Health*

The Federal Government has jurisdiction only respecting such public-health matters as are exclusively international, national and interprovincial, but it assists Provincial Departments of Health by conducting investigations and research into public-health problems and by co-operating with them in the preservation and improvement of public health. The Federal Government also makes grants to the provinces and to voluntary organizations engaged in public-health work. Treatment for ex-members of the Armed Forces is provided by the Department of Veterans Affairs in veterans services and public hospitals.

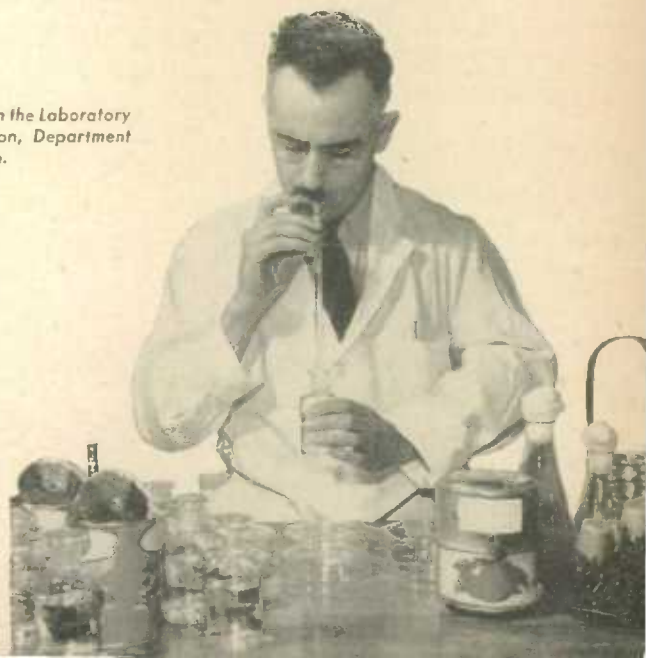
The Dominion Council of Health, created originally in 1919, is responsible for correlating and co-ordinating the activities of Provincial Departments of Health; it comprises the Deputy Minister of Health of each of the provinces as well as a representative from each of the groups of agriculture, labour, and urban and rural women. A scientific adviser on matters of public health is attached to the Council.

A tremendous amount of work in caring for the sick in their own homes, in the prevention of disease and in the education of the public in health improvement and first aid is carried on throughout Canada by such voluntary public-health agencies as the Victorian Order of Nurses for Canada, the Canadian Red Cross Society and the Order of St. John.

Statistics of Health Institutions

The Dominion Bureau of Statistics collects, through its Census of Institutions, statistics concerning public and private hospitals, institutions for incurables, Dominion hospitals, tuberculosis sanatoria and mental institutions. The latest figures available are summarized in the following tables.

Testing canned foods for spoilage in the Laboratory of Hygiene, Bacteriology Section, Department of National Health and Welfare.



Hospitals and Sanatoria, by Provinces, 1945

Type of Institution	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	N.W.T.	Canada
Hospitals.....	5	59	32	145	245	60	163	127	129	8	973
Public ¹	4	33	17	83	151	40	87	90	76	6	587
Incurable ¹	Nil	Nil	1	3	9	1	1	1	1	Nil	17
Private ¹	1	12	5	44	44	6	68	19	34	1	234
Dominion....	Nil	14	9	15	41	13	7	17	18	1	135
Mental Institutions...	1	17	1	8	17	4	2	5	4	Nil	59
Tuberculosis Sanatoria ² ...	1	10	3	30	15	9	4	5	7	"	84
Totals....	7	86	36	183	277	73	169	137	140	8	1,116

¹ Reporting units only.

² Includes 41 units in other hospitals.

Summary Statistics of Reporting Public and Private Hospitals, 1941-45

NOTE.—Figures include hospitals for incurables, but do not include Dominion hospitals, mental institutions or sanatoria for tuberculosis.

Item	1941	1942	1943	1944	1945
	No.	No.	No.	No.	No.
Public Hospitals—¹					
Units reporting.....	612	614	613	601	604
Bed capacities ²	59,733	60,205	61,041	62,195	62,619
Patients under treatment ³ ...	1,057,553	1,115,666	1,204,170	1,273,721	1,356,161
Total patient days.....	14,215,921	14,638,647	15,562,644	16,031,425	16,767,607
Private Hospitals—					
Units reporting.....	322	287	264	267	234
Bed capacities ²	4,733	4,475	4,251	4,579	4,113
Patients under treatment ³ ...	47,361	48,225	52,045	53,224	50,977
Total patient days.....	789,468	811,156	857,332	905,614	929,991

¹ Includes hospitals for incurables.

² Includes bassinets.

³ Includes newborn.



Health education is carried on through information services, community health projects, radio presentation, posters, exhibits, etc. Free literature may be had for the asking.

Welfare Services Veterans Affairs

★ *Welfare Services*

THE necessity for rectifying economic and social maladjustment was anticipated during the War and in April, 1945, a White Paper was presented to Parliament. Social security was also among the subjects of discussion at the Dominion-Provincial Conference of 1945 and throughout the War there was constant planning for the day when Canadian service men and women would return to civilian life.

As a result of this groundwork, two new administrations, National Welfare (associated with Health as the Department of National Health and Welfare) and Veterans Affairs, were set up and now occupy important places in the over-all program for social and economic welfare.

The responsibility for social welfare in Canada rests traditionally on the provinces, which, in turn, delegate a large share of this responsibility to the municipalities. It is but recently, relatively speaking, that the concept of public welfare has grown to include more than poor relief, sanitation and institutions of confinement and that the provinces have undertaken to meet these expanding needs by maintaining institutions of one kind or another, child welfare services, and other specialized programs. Thus the provinces themselves have latterly assumed the major role in public welfare and, even though the municipalities have continued to carry substantial burdens, the Provincial Governments have taken a direct part in co-ordinating the work and assisting by subsidies and other means.

At the same time, an increasing measure of responsibility on the part of the Federal Government has been in evidence; this was especially noticeable during the pre-war depression decade in the fields of unemployment relief, agricultural relief, old age pensions, financial aid to the provinces and, later, by the institution of a national system of contributory unemployment insurance.

Dominion Welfare Services

The creation of the Department of National Health and Welfare (8 Geo. VI, c. 22, 1944), brought into being for the first time a Federal Government service in which matters of welfare are a prime responsibility. The main functions of that Department, in the field of welfare, are: the promotion of social security and social welfare of the people of Canada; investigation and research; the preparation and distribution of information on social and industrial conditions affecting the lives and health of the people; co-operation with provincial authorities with a view to co-ordination of efforts in the

welfare field. The Welfare Branch administers family allowances, old age pensions and pensions for the blind, and the national physical fitness program. Other welfare services are administered by the Department of Labour, the Unemployment Insurance Commission and the Department of Veterans Affairs.

Family Allowances.—The Family Allowances Act, 1944, was introduced for the purpose of equalizing opportunity for the children of Canada. The allowances are paid monthly to parents (to mothers, except in unusual circumstances) and must be spent exclusively for the maintenance, care, training, education and advancement of the child.

In general, all children under sixteen years of age are eligible for an allowance, including Indians and Eskimos. To be eligible a child must be registered for the allowance and be maintained by a parent, who is defined in the Act. For registration purposes a child must be under the age of sixteen years, must reside in Canada and, in addition, must have been born in Canada and resident since birth or lived in Canada for the three years preceding registration. Residence provisions do not apply to children born to parents domiciled in Canada but temporarily out of the country. The allowance is not payable to a child who, being of an age when he is required to attend school by the laws of the province where he resides and physically fit to attend school, fails to do so or to receive equivalent training.

The allowances, which are tax free, are paid by cheque monthly at the following rates:—

Children under 6 years of age	\$5
Children from 6-9 years of age	\$6
Children from 10-12 years of age	\$7
Children from 13-15 years of age	\$8

The allowances are reduced after the fourth child as follows: one dollar reduction for the fifth child, two dollars each for the sixth and seventh child, and three dollars for each additional child.

Current disbursements under the Family Allowance Act are running at the rate of \$264,000,000 per annum.



Rest and relaxation for mothers and children are provided in the three-room nursery at Windsor Station, Montreal, for the use of families while waiting between trains.

Family Allowance Statistics, September, 1947

Province or Territory	Families to Whom Allowances Were Paid	Total Children	Average Allowance per Family	Average Allowance per Child	Total Allowances Paid Sept., 1947
	No.	No.	\$	\$	\$
Prince Edward Island	12,583	31,794	14.97	5.94	188,425
Nova Scotia	86,123	200,353	13.82	5.94	1,190,302
New Brunswick	67,409	172,558	14.96	5.84	1,008,347
Quebec	460,536	1,246,219	15.87	5.86	7,308,986
Ontario	544,096	1,078,588	11.93	6.02	6,492,211
Manitoba	99,434	206,208	12.47	6.01	1,239,908
Saskatchewan	114,693	258,528	13.55	6.01	1,553,846
Alberta	116,338	249,317	12.87	6.00	1,497,075
British Columbia	132,324	248,601	11.25	5.99	1,488,733
Yukon and N.W.T.	3,017	6,564	12.80	5.88	38,626
Totals	1,636,553	3,698,730	13.45	5.95	22,006,456

Old Age Pensions and Pensions for Blind Persons.—The Old Age Pensions Act, passed by Parliament in 1927, provided for the payment of non-contributory pensions to persons 70 years of age or over who fulfilled certain requirements as to income, residence and nationality. An amendment to the Act, passed in 1937, provided for pensions for blind persons 40 years of age or over who fulfilled similar requirements.

Several amendments have since been made to the Act, the most important of these being made in 1947. As the Act stands at present, the maximum income allowed to old age pensioners, including pension, is \$600 a year in the case of an unmarried pensioner and \$1,080 a year in the case of a married pensioner, with higher amounts for blind pensioners. Each province is free to fix the maximum pension payable and the maximum income allowed within the limits of the Act and the Federal Government's contribution to any pensioner shall not exceed 75 p.c. of \$30 a month. The qualifying age for old age pensioners remains at 70 years, while that for blind pensioners has been lowered to 21 years. Residence requirements have been relaxed by the latest amendments and the requirement regarding nationality has been eliminated. The Department of National Health and Welfare is responsible for the Dominion administration of pensions paid under the Old Age Pensions Act.

Summary of Old Age Pensions, by Provinces, as at June 30, 1947

Province or Territory	Total Pensioners	Average Monthly Pension	Pensioners to Total Population	Persons 70 Years of Age to Total Population	Federal Government's Contribution since 1927
	No.	\$	p.c.	p.c.	\$
Prince Edward Island	2,140	19.41	2.28	6.38	3,009,604
Nova Scotia	15,613	22.81	2.55	5.39	28,164,999
New Brunswick	13,571	22.79	2.83	4.58	19,851,359
Quebec	54,906	24.03	1.51	3.28	91,291,747
Ontario	65,975	24.52	1.61	5.06	160,645,989
Manitoba	13,774	24.51	1.89	4.26	34,174,454
Saskatchewan	14,396	24.32	1.73	3.86	33,096,641
Alberta	12,811	24.09	1.60	3.63	27,236,639
British Columbia	18,400	24.19	1.83	5.08	37,649,065
Northwest Territories	17	24.71	0.14	1.52	36,814
Canada	241,603	—	—	—	435,157,311

**Summary of Pensions for Blind Persons, by Provinces, as at
June 30, 1947**

Province or Territory	Total Pensioners	Average Monthly Pension	Pensioners to Total Population	Federal Government's Contribution since 1937
	No.	\$	p.c.	\$
Prince Edward Island.....	119	22.81	0.127	162,644
Nova Scotia.....	690	24.23	0.113	1,075,018
New Brunswick.....	761	24.65	0.159	1,252,153
Quebec.....	2,742	24.65	0.076	4,007,972
Ontario.....	1,634	24.71	0.040	2,681,690
Manitoba.....	395	24.76	0.054	583,279
Saskatchewan.....	381	24.79	0.046	564,305
Alberta.....	285	24.51	0.036	398,400
British Columbia.....	376	24.49	0.037	566,778
Northwest Territories.....	1	25.00	0.008	325
Canada.....	7,384	—	—	11,262,564

Unemployment Insurance.—In 1940, by an amendment to the British North America Act, the Federal Government was given complete jurisdiction in the field of unemployment insurance and since that time a national system of unemployment insurance administered by the Unemployment Insurance Commission has been in operation. (See Labour Chapter.)

Physical Fitness.—A program of fitness and recreation for Canada was introduced with the proclamation on Oct. 1, 1943, of the National Physical Fitness Act. Under that Act a National Council has been established to promote the well-being of the people of Canada through physical fitness and recreational activities. The Council, set up on Feb. 15, 1944, is an advisory body appointed by the Governor General in Council, which meets twice each year to discuss the over-all program, and to advise the Minister of National Health and Welfare on various aspects of it. In some provinces, provincial fitness councils function on lines comparable to the National Council.

The Act is administered by the Department of National Health and Welfare whose Physical Fitness Division acts as a clearing house among the provinces for the latest information on fitness, recreation, community centres, physical education, sports and kindred activities.

The Federal Government makes available to the provinces on a per capita basis an amount not exceeding \$225,000 annually for the promotion of physical fitness and recreational projects. Financial assistance is given only to those provinces that have signed specific agreements with the Federal Government, such provinces receiving their share to the extent to which they match it dollar for dollar.

Province	Maximum Financial Grant \$	Expiry Date of Agreement	Province	Maximum Financial Grant \$	Expiry Date of Agreement
P.E.I.....	1,861	Mar. 31, 1948	Man.....	14,290	Mar. 31, 1948
N.S.....	11,318	Dec. 31, 1948	Sask.....	17,546	Jan. 1, 1954
N.B.....	8,958 ¹	No agreement	Alta.....	15,591	Mar. 31, 1948
Que.....	65,248 ¹	No agreement	B.C.....	16,016	Mar. 31, 1948
Ont.....	74,174 ¹	No agreement			

¹ Set aside pending agreement.



Youth-training centres have been established in many communities as part of provincial fitness programs encouraged by Federal grants under the National Physical Fitness Act. These programs direct the energies of growing boys and girls into useful and enjoyable channels.

Canadian Government Annuities.—The Canadian Government Annuities Act was passed in 1908 to authorize the issue of Government annuities, the purpose being to encourage and aid Canadians to make provision for old age. Any resident of Canada may purchase a Federal Government annuity up to \$1,200, payable for life only, or for life with a guarantee period of 10, 15 or 20 years, or for the lives of joint annuitants with continuation to the survivor. Immediate annuities may be purchased in a lump sum and are payable immediately. Deferred annuities are usually bought by employed persons and are purchased by payment of periodic premiums or a single premium, and are payable on retirement.

Annuities may be purchased under individual contracts or by members of groups under group contracts. A group contract is generally an agreement with an employer to implement a retirement plan approved by the Minister of Labour, the purchase money being, as a rule, derived jointly from employers' contributions and deduction from wages.

On Mar. 31, 1947, annuity income of \$16,191,058 was payable under 38,754 contracts. The number of deferred annuities being purchased by

individuals privately was 63,504. The number of group contracts was 612, covering 70,996 registered employees. The balance at credit of the Annuities Fund was \$357,161,953.

Local offices are maintained in 43 centres throughout Canada to advise the public regarding the purchase of Government annuities.

Dependents' and Veterans' Allowances.—Allowances paid to veterans' dependents and to certain non-pensionable veterans are dealt with under Veterans Affairs, p. 65.

Provincial Welfare Services

The field of provincial welfare work is a very wide one. It includes homes for the aged and infirm, children's aid societies, reformatories, day nurseries, homes for child delinquents, training schools for mentally defective children, psychiatric services and industrial schools. These are, in some provinces, maintained solely by provincial funds, in others by municipal, public or joint municipal and provincial funds. The Provincial Governments also supervise the institutions operated by cities, counties, districts and religious and benevolent societies, provide mothers' allowances and other social services and, in co-operation with the Federal Government, provide old age pensions and pensions for the blind (*see pp. 57-58*).

Mothers' Allowances.—Eight of the provinces provide allowances to mothers who are widowed or who, under certain circumstances, are without means of support. Except in Alberta, where 25 p.c. of the allowance is borne by the municipality, and in Manitoba, where part of the cost is charged back to the municipalities through an equalized assessment, the whole cost is provided from provincial funds. The Acts of the respective provinces stipulate that the applicant must comply with certain conditions at the time of application.

In Nova Scotia the exact amount paid is determined by the special circumstances of each case, with a monthly maximum of \$80 per family. In New Brunswick the maximum allowance is \$27.50 per month for a mother and one child, and \$7.50 per month for each additional child. Under certain circumstances an additional \$7.50 per month may be paid, provided the total amount payable per month does not exceed \$60. In Quebec a mother with one child receives \$35 per month if living in a city or town of 10,000 or more, \$30 per month if living elsewhere. An additional one dollar per month each is paid for the second, third, fourth and fifth child, \$2 each for the sixth and seventh and \$3 each for the eighth and subsequent children. In Ontario the maximum rate for mother and child is \$42 in a city, \$36 in a town and \$30 in a rural district, with \$6 for each additional child. An additional \$10 per month per beneficiary may also be paid where need is evidenced. Manitoba pays a maximum monthly allowance of \$40 for a mother and one child, excluding winter fuel, with additional allowances for subsequent children and a disabled father in the home. The maximum monthly allowance, excluding winter fuel, granted to any size of family, with or without the father in the home, is \$121. In Saskatchewan, a maximum allowance of \$10 is paid for the mother, \$10 for an incapacitated father living with the family, \$15 for the first child, \$10 for the second and \$5 for each succeeding child to a maximum of ten children. The maximum monthly allowance for a family is \$85. Alberta pays a maximum of \$35 per month for a mother and child, with the

amount rising to \$100 for a mother with nine children. The exact amount of allowance is set by the Department after consideration of circumstances in each case. Under the British Columbia regulations the amount that may be paid is \$42.50 per month for mother and one child and \$7.50 for each additional child and for an incapacitated husband in the home.

Workmen's Compensation

For accidents occurring in the course of employment, compensation is payable in accordance with the law of every province, except Prince Edward Island, to workers or, in fatal cases, to their dependents. The entire cost of compensation and medical aid is borne by employers through a collective liability scheme administered by the province. Monthly pensions at a fixed rate are paid to widows and children; injured workmen receive two-thirds of their earnings (three-quarters in Saskatchewan) during total disablement, but the maximum amount of earnings taken into account is \$2,000 in Nova Scotia, New Brunswick, Manitoba and Alberta and \$2,500 in Quebec, Ontario, Saskatchewan and British Columbia.

Dependent and Handicapped Groups.—The work of the various institutions and agencies for the care of dependent and handicapped groups may be classified under two main headings: the care of adults and the care of children.

Mothers bring their infants to baby clinics for early immunization against common childhood diseases.



Latest data show that at June 1, 1946, there were 16,334 adults under care. Of these, 1,043 were between the ages of 20 and 30 years; 1,617 between 30 and 50; 1,369 between 50 and 60 years; and 12,305 were 60 years of age or over. Forty per cent were supported from charitable and private funds. In regard to mental and physical condition, 1,794 were either blind, deaf and dumb, or crippled, while 1,826 were feeble-minded or sub-normal, and 1,183 were epileptics, incurables or insane.

At the same date, there were under care 30,317 children under 20 years of age, of which number 5,926 were in homes for adults and children; 11,754 in orphanages; 583 in day nurseries; and 12,054 in children's aid societies.

Other Welfare Services

There are in existence many voluntary organizations whose efforts are directed to social service work. The Canadian Welfare Council gives national direction to, and co-ordinates the work of, the local welfare agencies; specialized organizations, such as the Canadian National Institute for the Blind and the Canadian Federation of the Blind, occupy a somewhat similar role in their particular fields. The various Community Chest organizations and service clubs assist welfare work by helping to finance local organizations, and the great work of the Young Men's Christian Association, the Young Women's Christian Association, the Catholic Youth Organization and the Young Men's Hebrew Association, the Boy Scouts, Girl Guides and similar youth organizations in what may be described as preventive rather than curative work cannot be overlooked. Day nurseries prove invaluable to many mothers who are obliged to work. Most of the activities of these organizations are not susceptible to statistical measurement. The Canadian Red Cross, the Victorian Order of Nurses, and the Order of St. John perform many welfare services, though they are more properly designated as public-health organizations.

★ Veterans Affairs

The Second World War was only a few months old when Canada began planning for the re-establishment of her ex-service men and women in civilian life. During the War this planning continued and a comprehensive program, justly termed one of the most extensive and generous in the world, was in effect when victory became a fact.

The Department of Veterans Affairs was established in October, 1944, to administer the legislation concerning rehabilitation. The peak of the Department's work was reached in 1946, since demobilization of approximately one million men and women who served in the Armed Forces of Canada was almost entirely completed during that year. It has been estimated that, assisted by the rehabilitation program, 95 p.c. of these veterans have found peacetime occupations or are completing training for their chosen careers.

The Department of Veterans Affairs has an organization extending from Halifax to Vancouver, including hospitals in all the large centres. Close liaison is maintained between the Department of Veterans Affairs and other Dominion and Provincial Departments and community organizations.

Approximately one-half of the staff of the Department has been engaged in providing adequate medical treatment and care for the thousands of eligible veterans requiring it. The remainder of the staff has dealt with the various other Branches: the Veterans' Land Act Administration; the Rehabilitation Branch; the Canadian Pension Commission; the War Veterans' Allowance Board; General Administration; etc.

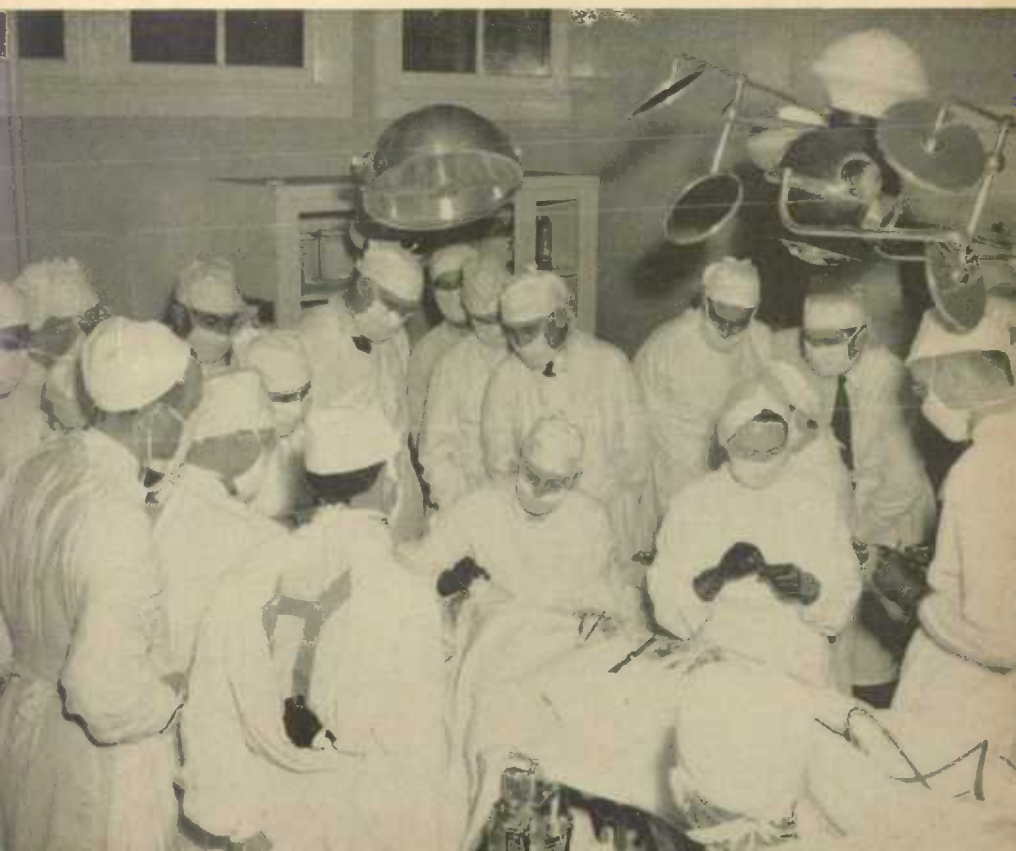
Certain of the legislation passed for the assistance of veterans has served its purpose and has been dropped. Continuing legislation is outlined below.

Treatment Regulations.—The majority of veterans receive treatment under five of the twelve classifications contained in these regulations.

Class I provides treatment for pensioners for their pensionable disability. If hospitalized, the veteran receives the equivalent of 100 p.c. pension rate less \$15 per month, and if an out-patient, the equivalent of 100 p.c. pension rate.

Class II provides treatment shown to be required at the time of discharge. Such treatment must be commenced generally within thirty days following discharge and may be continued for the period of a year, or the period of service if less than a year, with allowances equal to the pay and allowances of rank in effect at the time of discharge. If pension entitlement has been granted, treatment may be continued to finality.

Eminent medical men from Canada and the United States watch intently while the plastic surgery consultant at Christie Street Hospital, Toronto, performs a delicate operation.



Class III provides treatment for veterans for any disability not a result of misconduct arising during the year following their discharge. While receiving such treatment, monthly allowances of: single \$50, married \$70, plus allowances for dependents, may be paid.

Class V provides treatment for the remainder of their lives for veterans with meritorious service, where it is shown that the veteran is unable to afford the treatment required. No allowances are paid, except, where necessary, a "comforts and clothing" allowance of up to \$10 a month.

Class VI provides domiciliary care for totally disabled aged veterans who require some one to look after them, but who do not require active treatment.

Veterans are also entitled to any dental treatment required during the year following discharge. They are provided, free of charge, with prosthetic appliances which they require and these appliances are serviced and renewed for life.

The general policy with regard to post-discharge treatment is designed to provide the best possible professional medical and surgical care for veteran patients. The peak of the load was reached in the spring of 1946 and since then a large proportion of the Service hospitals taken over to meet the peak have been closed and a permanent building program undertaken, much of which will not concern beds but rather ancillary services essential for adequate investigation, diagnosis and treatment.

Veterans Rehabilitation Act.—Under this legislation considerable numbers of veterans have been given the opportunity to resume schooling interrupted by war service and to upgrade their abilities in almost every field of business and professional endeavour. Training allowances as well as academic fees were paid under the Act, which also provided for allowances to veterans temporarily incapacitated, those awaiting returns from new farms and businesses, and veterans lacking employment in the first eighteen months after discharge. The majority of these allowances have now ceased, except for those to veterans still studying at Canada's universities under the rehabilitation plan, and those whose applications for vocational training came late in 1947. Awaiting returns allowances may be made available to veterans settled on farms under the Veterans' Land Act at any time within one year after their establishment. Provision is also made under the Act for certain disabled pensioners and veterans in hospital whose training has been necessarily postponed.

War Service Grants Act.—This Act provides for gratuities and re-establishment credits for veterans, and these are calculated on length, type and category of service. Payment of war service gratuities has been made to more than 940,000 ex-service men and women, virtually completing this portion of the program. However, re-establishment credits, which are in effect additional gratuities expended on the veterans' behalf only for certain approved purposes, may be used at any time within ten years after the date of discharge or cessation of hostilities (Dec. 31, 1946, under this Act), whichever is the later, provided alternative rehabilitation benefits have not been obtained. The average re-establishment credit is approximately \$400.

The Pension Act.—Under this Act pensions are paid to veterans as a compensation for loss or lessening of normal abilities incurred during service. The 100 p.c. pension rates per annum for ranks equivalent to Lieutenant (military) or lower are: man, \$900; wife, \$300; first child, \$180; second

Student veterans in an engineering class receive instruction in the use of a rock-grinding mill.



child, \$144; each subsequent child, \$120; widows, \$720. Higher rates are in effect for higher ranks. Pensions vary from 5 p.c. to 100 p.c. based on assessed percentage of disability. The insurance principle applies for service in Canada and overseas. Under this principle the disability need not be directly a result of service duties.

The Canadian Pension Commission examines the final medical report of each discharged member of the Forces. If a disability is found on discharge a decision on pension entitlement is rendered. Adequate provision exists for unfavourable decisions to be reviewed, and veterans may have the assistance of the Veterans' Bureau in preparing and presenting such claims for review at no cost to the veteran.

War Veterans' Allowance Act.—Veterans become eligible for an allowance under this Act when they reach the age of 60 or, due to physical or economic reasons, or a combination of both, become incapable of supporting themselves before reaching that age. The age limit for widows of veterans who might have qualified is 55. To qualify, veterans must have served with the Canadian Forces in a theatre of war, or on active service with the Canadian Forces in two wars. The maximum annual allowances are: single \$365, married

\$730. Reductions in these allowances are made for other income, although the exemptions to this rule were recently increased to permit single veterans a maximum annual income of \$640, and married veterans \$1,130, inclusive of allowances, without the allowances being reduced.

Veterans' Land Act.—This act offers three main types of assistance to qualified veterans for settling on the land: full-time farming, small holdings in connection with industrial or other employment, or small holdings in connection with commercial fishing. Maximum assistance allowed is \$6,000, of which up to \$1,200 may be spent for stock and equipment. The veteran pays down 10 p.c. of the cost of land, buildings and permanent improvements, and contracts to repay two-thirds of that cost over a period of not more than twenty-five years at $3\frac{1}{2}$ p.c. interest. The remainder of the cost becomes a grant from the Federal Government but may not be realized until the veteran has satisfactorily fulfilled the terms of his contract for at least ten years.

The Act also contains provision for assistance to veterans settling on provincial Crown lands and Indian Reserves, and to veterans holding farms under lease or by agreement of sale. There is also provision for fully repayable loans at $3\frac{1}{2}$ p.c. interest to veterans who own their own farms.

The Veterans' Business and Professional Loans Act.—This Act enables veterans to obtain loans through the chartered banks of Canada up to a maximum of \$3,000 at not more than 5 p.c. interest for business or professional purposes. The amount of the loan may not exceed two-thirds of the total amount to be invested in the business by the veteran. The chartered banks follow normal lending practices, but the Government guarantees each individual bank at the rate of 25 p.c. on any loss incurred on the first million dollars loaned by each bank, and 15 p.c. on loans in excess of the first million dollars. The total amount of loans by all banks to which such guarantee extends is \$25,000,000.

In addition to the above legislation constituting the Canadian rehabilitation program, there are a number of Acts entitling, to a greater or lesser degree, former members of Auxiliary Services, Merchant Navy, South African Nurses, Special Operators, etc., to benefits under all or part of this program.



A convalescent veteran exercises muscles and passes the time pleasantly at carpentry in the occupational therapy department of a Veterans Affairs hospital.

Survey of Production

PROSPEROUS conditions, caused by huge post-war demand for civilian goods, prevailed in the past two years, though industrial operations showed some recession from wartime achievements. Ample buying power in the domestic market was supplemented by heavy export trade financed by Government credits. Construction to meet the demand for new residential and industrial requirements also contributed to the general state of well-being.

The value of production, according to preliminary computation, was greater in 1947 than in any other peacetime year. Activity during 1946 was retarded by lack of raw materials and by industrial disputes but the situation improved greatly in 1947, volume and prices rising to high levels.

The scope of the survey of production is limited to a discussion of the production of commodities classified as primary and secondary operations. The activities of the transport, trade, finance, government and service groups are entirely excluded. A report of this kind must differentiate between the more important branches of production and at the same time present a grand total from which duplication has been eliminated. In the component items for some industries, such as sawmilling, fish canning and curing and non-ferrous metal smelting, production is regarded both as a primary and a secondary operation but the duplication is eliminated from the grand totals.

The gross value of commodity production in 1945, the latest year for which final figures are available, amounted to \$11,700,000,000 compared with \$12,600,000,000 in the preceding year. The termination of hostilities in 1945 led to a reduction in productive operations during the last half of the year; the high level reached in 1944 resulting from the heavy demands of wartime was the peak of production in Canada. While the statistics of gross production are of interest as indicating the amount of revenue produced by the operating units in the field, the total includes a large element of duplication. The net value of production, obtained by deducting the cost of materials, is a more accurate measure of the contribution to the national economy. The net value of output was \$6,100,000,000 in 1945, compared with \$6,700,000,000 in the preceding year and \$6,300,000,000 in 1943. The records of all years other than those two were broken in the period under review.

The net output of the six primary industries expanded from \$1,400,000,000 in 1938 to \$2,500,000,000 in 1945, an increase of 80 p.c. The relative advance by the secondary industries consisting of construction, manufactures and custom and repair was far greater, the gain having been 134 p.c. The outstanding feature was the marked advance of 149.6 p.c. in the net value of goods manufactured, the relative importance of which rose from 49.9 p.c., in the pre-war year to 58.6 p.c., in 1945. Forestry, fisheries and trapping were also of relatively greater importance in 1945 than in 1938.



Apple orchards in bloom at Penticton on the southern shore of Okanagan Lake, B.C.

Manufacturing has definitely taken precedence over agriculture in net value of production, the share of the latter in 1945 having been slightly more than 21 p.c. Forestry at 9 p.c., and mining at 6.8 p.c. followed in the order named.

A general impression of the change in the volume of commodities produced may be obtained by dividing the net values for each of the nine industrial groups by its price index. There was, of course, a marked advance in the volume of production during the war years, the output of commodities rising 65 p.c. between 1938 and 1945. Manufactures, after the elimination of duplication with the primary industries, showed the greatest gain at 119.5 p.c. Important advances were shown by each of the nine main branches of production except mining.

The size of the working force, without distinction as to status, is an excellent measure of the relative importance of the various industries in the economic life of Canada. In 1945, manufactures and agriculture afforded working opportunities to slightly more than one-half of Canada's working force, with manufactures slightly in the lead. Services at 17.3 p.c. and trade and finance at 15.1 p.c. came next in importance. The transportation and communications, construction and mining industries were responsible for the occupation of 7.7 p.c., 4.2 p.c. and 1.6 p.c. of the active civilian labour force.

Ontario produced 41.1 p.c. of the Canadian output in 1945, leading the other provinces by a considerable margin. Quebec followed with 27.9 p.c., while British Columbia held third place with a percentage of 8.8. The advances in net value produced in Ontario, Nova Scotia, Manitoba

and Alberta during 1945 over 1938 were less than the percentage increase in the nation-wide total. On the other hand, the percentage for Quebec rose from 25.3 in 1938 to 27.9 in 1945, and for Saskatchewan from 4.2 to 6.0.

Net commodity production was \$502 per capita in 1945 compared with \$257 in the pre-war year. Each of the provinces showed per capita betterment in this comparison. Ontario with its pre-eminent industrial position and diversification was in first place with \$624 per capita, a gain of \$279 over the level of 1938. British Columbia ranked second with a per capita of \$564, compared with \$305. The per capita output of Quebec was more than doubled amounting to \$476 in 1945.

Gross and Net Values of Production, by Industries, 1944 and 1945

Industry	1944		1945	
	Gross	Net	Gross	Net
	\$	\$	\$	\$
Agriculture.....	1,918,212,000	1,533,372,000	1,683,237,000	1,284,682,000
Forestry.....	887,973,532	507,357,605	964,237,446	550,970,574
Fisheries.....	123,705,565	76,889,487	158,202,990	85,373,768
Trapping.....	23,988,773	23,988,773	21,505,447	21,505,447
Mining.....	897,407,212	454,022,468	766,721,126	413,576,800
Electric power.....	215,246,391	209,757,908	215,105,473	210,036,214
Less duplication in forest production ¹	78,294,000	61,357,833	80,641,000	64,501,946
Totals, Primary Production.....	3,988,239,473	2,744,030,408	3,728,368,482	2,501,642,857
Construction.....	449,838,059	249,037,017	543,579,833	267,957,847
Custom and repair....	243,424,000	165,174,000	262,621,000	178,200,000
Manufactures.....	9,073,692,519	4,015,776,010	8,250,368,866	3,564,315,899
Totals, Secondary Production.....	9,766,954,578	4,429,987,027	9,056,569,699	4,010,473,746
Less duplication in manufactures ²	1,160,974,424	437,045,069	1,115,688,513	428,243,781
Grand Totals.....	12,594,219,627	6,736,972,366	11,669,849,668	6,083,872,812

¹ Duplication eliminated between the agriculture and forestry totals; both items include the value of forest products obtained from farm lots. ² This is the duplication eliminated under "Manufactures" which item includes sawmills, pulp and paper mills, etc., also included under other headings above.

Gross and Net Values of Production, by Provinces, 1944 and 1945

Province or Territory	1944		1945	
	Gross	Net	Gross	Net
	\$	\$	\$	\$
Prince Edward Island.....	32,865,329	18,850,736	36,441,776	20,604,911
Nova Scotia.....	342,965,225	193,327,946	338,522,173	182,724,409
New Brunswick.....	249,614,350	135,376,199	254,962,964	133,984,112
Quebec.....	3,694,059,531	1,899,594,337	3,308,798,968	1,694,335,871
Ontario.....	5,347,245,765	2,682,709,260	5,051,713,237	2,499,527,223
Manitoba.....	587,765,693	313,093,535	560,731,469	288,608,923
Saskatchewan.....	740,052,295	528,818,265	575,140,633	364,706,923
Alberta.....	655,354,857	416,120,352	599,366,498	350,235,626
British Columbia.....	938,643,866	543,947,198	939,029,406	535,488,648
Yukon and Northwest Territories.....	5,652,716	5,134,538	5,152,544	4,656,166
Totals.....	12,594,219,627	6,736,972,366	11,669,849,668	6,083,872,812



Agriculture

AGRICULTURE is the most important single industry in Canada—about one-quarter of the population is engaged in farming. At the time of the 1941 Census, 3,200,000 people were living on 733,000 farms, the total extent of which, including 92,000,000 acres of improved land, was 175,000,000 acres. Most of the readily available agricultural land is now occupied and any further increase in cultivated acreage must be developed on, or beyond, the fringe of settlement or by improvement of occupied land through clearing, draining, irrigation and control of weeds.

★ *Agricultural Developments Since 1939*

The annual output of farm products increased during the war years as much as 40 p.c. over the average in the immediate pre-war period, 1935-39. The expansion was accomplished by more intensive farming, by greater efficiency and by a bountiful nature. In reaching this increased production, Canadian farmers were guided by objectives based on war needs determined at annual Dominion-Provincial agricultural conferences.

The outstanding wartime agricultural development was the rapid and pronounced expansion in the production of live stock and live-stock products, particularly of hogs, beef, poultry, eggs and dairy products. While output increased in all parts of the country, the most continuous expansion was in the Prairie Provinces where the increase in feed grains, poultry, eggs and beef cattle was striking, and that of hogs almost phenomenal. The relatively greater increase in the West was occasioned by the considerable shift from wheat-growing to more diversified farming. This was due partly to the wheat acreage diversion program and partly to lack of export demand for wheat, with consequent low prices, during a period when the markets for live stock and live-stock products were reasonably satisfactory. Later, in 1944, with improved wheat prices and a reduced carry-over, wheat acreage increased and, by the first quarter of 1945, hog production showed a decline. Total area in field crops in Canada fluctuated between 56,800,000 acres and 62,800,000 acres in the period between 1939 and 1945. In terms of grain-consuming animal units, Canada's live stock expanded significantly during the war years, reaching its peak during the 1944 crop year. By 1944, marketings of cattle, hogs, lambs and sheep were up 33 p.c., 139 p.c., and 40 p.c., respectively, over 1939. Production of milk and eggs was increased by about 11 p.c. and 63 p.c., respectively, during the same period. Since that time there has been a downward trend. Between June 1, 1944, and June 1, 1945, the number of grain-consuming animal units declined by over 7 p.c. Heavy marketings during the autumn of 1945 were an important factor in a further liquidation of live stock. Hogs declined in number most noticeably.

particularly in the Prairie Provinces. Such crops as fibre flax, soybeans, rapeseed and sunflower seed, assumed more importance in the farm production program.

The wartime shift or change in pattern of production was as significant as the increase in total output. On the prairies there was a rapid expansion in the live-stock population, a shift from wheat to coarse grains, and also a greater production of oil-bearing crops. In Ontario and Quebec, the great dairy production areas of Canada, shifts were evident in the utilization of milk, marked increase occurring in fluid sales and in the output, largely for export, of cheese and concentrated milk. There was also a moderate increase in creamery butter but a marked decline in dairy butter. In the Maritime Provinces the shift was to live stock. The Province of British Columbia expanded its seed-growing industry.

The expansion of agricultural output in Canada during the war years was the result of a number of factors, and some of these may continue in the post-war period.

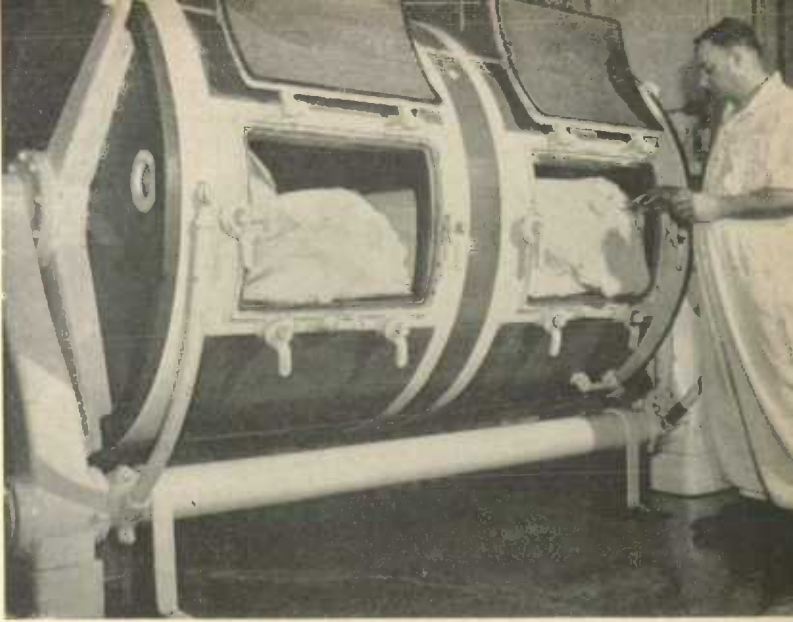
(1) *Farm Prices*.—The relatively high level of prices of farm products was of major importance in increasing production. The farm price level in 1945 was 92.3 p.c. higher than that of 1939.

(2) *Weather*.—Weather on the whole was conducive to large farm production. Adequate rainfall and favourable wintering for live stock in many parts of Canada helped to bring about a higher total output.

(3) *Technological Changes*.—In an endeavour to achieve maximum production, efforts were directed towards finding higher yielding strains and varieties of crops. This resulted in a substantial addition to agricultural output, but it is difficult to isolate the effect of any single item. Since 1939 six new kinds of oats—Ajax, Exeter, Brighton, Beaver, Larain and Laural—have been introduced. All of these are high yielding, early maturing and stem-rust resistant. Between 1939 and 1944 the acreage planted to corn for husking in Ontario changed almost entirely from the open-pollinated varieties to corn hybrids. In 1939, only 10 p.c. of the total corn acreage was planted with the hybrid seed variety; by 1944, the figure had increased to 95 p.c. Average acre yields were 38.9 bu. for the period 1936-40, and 45.8 bu. for the period 1941-45. In addition to greater yields per acre, hybrid corn has reduced the amount of labour required for harvesting as it does not lodge because of the stronger stalks and roots. The increased production of sunflowers, a valuable source of edible oil, came from improved varieties such as the better strains of Mennonite and Sunrise. These are semi-dwarf types which can be harvested by means of the ordinary combine. During the last year of the War, a hybrid variety of sunflower was developed, with a 30-p.c. greater yield per acre.

(4) *Mechanization*.—No doubt one of the major influences on farm output in recent times has been the rapid rate of mechanization in farm operations. Even with a limited supply of farm equipment available during the war years, there was a decided change toward mechanization because of shortage of labour and increased income. The largest increases were in tractors, milking machines, potato planters and diggers, combines, manure spreaders and hay machinery. Almost 90,000 tractors of all kinds were sold

Taking a moisture sample from butter churns in a modern dairy.



in the years between 1940 and 1944; there were only 160,000 tractors on all farms in 1941. More than 21,000 milking machines were sold during the same period.

(5) *Commercial Fertilizers.*—The world shortage of fertilizers during wartime directed attention to the more efficient use of such supplies as could be obtained and their careful use increased crop yields. Through the efforts of the Fertilizer Administration supplies in Canada were well maintained and the sale of mixed fertilizers rose to 527,000 tons by the middle of 1945, an increase of 161 p.c. over the pre-war period.

(6) *Processing and Preservation of Foods.*—The necessity for transporting perishable farm products to different parts of the world under adverse conditions increased research in processing farm products. The task was two-fold: to process the product so that it would keep, and to reduce bulk to conserve limited shipping space. The rapid expansion of the egg-drying and vegetable-dehydration industries enabled Canadian farmers not only to maintain, but greatly to increase production of many perishable products. Canned vegetables and juices, evaporated milk and processed fruits were sent overseas in large quantities.

(7) *Specialization.*—Another important factor in the expansion of agricultural output was the continued development of specialization. Though on many farms a wide range of products is still produced, the output on others is more specialized, and probably more efficient, than it was formerly. The more specialized operator in turn tends to leave to other specialists the production of farm products and supplies, or the operation of services, at which they are more proficient. Thus the production of seeds, eggs for hatching, and such services as milk hauling, feed mixing and seed cleaning, are being undertaken more generally by persons other than the farmers themselves. For example, the output of commercial mixed feeds (prepared stock and poultry

feed) trebled between 1939 and 1944. The production of poultry feeds, including laying and hatching mash, growing mash, scratch feed and chicken starter, was the largest single item.

In summation, agriculture, like many other industries, underwent marked changes in the war years. The Canadian agricultural problem was not one of ploughing up pastures, of bringing new areas into production in order to expand food supplies at all costs; rather it was the diversion of farm acreages to new commodities, or to new proportions of previously cultivated crops. Encouragement, rather than direct regulation, was relied upon. Production in Eastern Canada was intensified. In Western Canada major shifts occurred in the production program, and diversification, which had been making slow progress, was hastened. This trend slowed down considerably after 1944. Production in Canada as a whole was influenced by the requirements of the British Ministry of Food and by domestic needs. Specifically, this resulted in expansion of the live-stock and live-stock products enterprise, in coarse grain acreage, and in the acreage of such crops as flaxseed, soybeans, rapeseed, fibre flax, sugar beets and peas. These changes in volume and type of product reflect a major adjustment which, considered as a whole, brought a better balance to agriculture. Though the adjustment was Dominion-wide, it was reflected most in the Prairie Provinces.

Since the War agricultural production has been maintained at nearly wartime volume though somewhat below the peak of 1944. With the demand for food practically world-wide, marketing problems are almost negligible; indeed the task is to keep production in reasonable balance to meet the somewhat varied requirements. At the Dominion-Provincial Conference in December, 1946, called to plan agricultural production for 1947, it was generally agreed that Canadian agriculture and the requirements of a hungry world could best be served by endeavouring to increase the production of live stock and dairy products and maintain the production of eggs and poultry. This involved a greater production of feed grains and, as an incentive, a considerably higher support price for oats and barley was announced in March, 1947.

Thus post-war agriculture has followed closely the pattern that arose from wartime requirements, with special emphasis on the production of live stock and dairy and poultry products, particularly eggs. Despite the world shortage of wheat, increased production of this grain in Canada beyond a somewhat definite acreage presents difficulties. Broadly speaking, unless summerfallow, an essential in long-time crop rotation, is to be sacrificed, every increase in wheat acreage tends to reduce the production of oats and barley required to feed live stock and poultry. The problem is to keep the acreage in wheat, feed grains and summerfallow in suitable balance.

As conditions permitted, wartime agricultural controls and subsidies were lifted and by mid-summer of 1947 few remained. At the end of March 1947, it was possible to abolish the Agricultural Supplies Board and its administrations dealing with feeds, fertilizers and pesticides, seeds and fibre flax, and transfer to the Department of Agriculture continuing programs previously directed by the Board. At the same time the work of the Agricultural Food Board in directing and paying agricultural subsidies was completed and the Board ceased operations. Because of the continuation of forward food contracts with Great Britain (reviewed below) it remained necessary

to continue the operations of the three commodity boards—Meat Board, Dairy Products Board, and Special Products Board. As these Boards were originally established under the War Measures Act, it was necessary to re-establish them under the provisions of the Agricultural Products Act, 1947. With the continued shortage of agricultural products and supplies and the generally higher price level in some countries, it remained necessary to retain control of the export of many agricultural commodities under the Export and Import Permit Act, 1947. Without this control over exports, domestic requirements and overseas commitments of many agricultural commodities could not be safe-guarded.

The United Kingdom has always been Canada's best customer for farm products, and since the War the bulk of Canada's exportable surplus has gone to that country. Almost immediately after the outbreak of war the British Ministry of Food became the sole buying agency for all food imported from Canada, and the British Government announced its desire to purchase through the Canadian Government and not through the trade. This necessitated the establishment of commodity boards, though wheat purchases were negotiated through the Canadian Wheat Board. This action by the British Government, originally arising from the necessity of war and continuing through the post-war period because of world shortage and as a means of providing a greater measure of price stability, was a considerable departure from pre-war export trading and made it necessary for the two Governments to enter into agreements for practically all agricultural products, most of which have been projected into future years. This form of trading may continue for some time. The more important agreements concern wheat, bacon, beef, lamb and mutton, cheese, evaporated milk, eggs and poultry.

Demand for food in the United Kingdom has resulted in a great increase in Canada's hog production. Though not at its peak, the pig population was almost 5,500,000 at the end of June, 1947. Exports of hams, shoulders and sides in the first ten months of 1947 were valued at \$49,918,854, the United Kingdom receiving 97.9 p.c. of that total.



The major agreement is a four-year (1946-50) wheat agreement under which Canada will sell to the United Kingdom during the period a total of 600,000,000 bu. of wheat, some of it as flour. Based on this contract, the Canadian Government announced an arrangement aimed at giving price stability to the grain producers in the Prairie Provinces over a period of years. A guaranteed initial price will be paid on all wheat delivered to the Canadian Wheat Board and, in addition, a pool will be established into which money from the sale of all wheat will be credited. Any surplus in the pool above any initial payments on all wheat sold by the Board will be distributed to growers on the basis of their wheat deliveries over a specified period. (See also p. 82.)

The present contract for bacon is for 350,000,000 lb. in 1947 and 400,000,000 lb. in 1948, and 120,000,000 lb. of beef and 10,000,000 lb. of mutton and lamb are under contract for 1947. Miscellaneous meat products contracted for include beef and pork livers, tongues and kidneys, and 25,000,000 lb. of canned meat lunch. Eggs, either in the shell or processed as powder, call for the delivery of 83,000,000 doz. annually for 1947 and 1948. The cheese contract is for 125,000,000 lb. in each of the annual periods ending Mar. 31, 1947 and 1948, and evaporated milk will be supplied at the rate of 28,800,000 lb. in each of the similar periods. The British Ministry of Food has expressed its readiness to take quantities in excess of those specified in most of the food agreements.

Lack of dollar exchange by Great Britain, which became acute in the summer of 1947, did not upset the food contracts materially, but that country has not found it possible to buy any fresh apples of the 1946-47 crop nor, since August 1947, any poultry. Fortunately, Canadian poultry is in reasonably good demand in the United States, and the provisions of the Agricultural Prices Support Act have been extended to the apple growers (see also p. 94).

Although long-term contracts for export have been signed, Canadian farmers will need to maintain high quality to retain export markets in competition with farmers of other exporting nations. Science has made rapid progress during the War, and farmers cannot afford to ignore the contributions of scientific investigators in the fields of production, marketing and distribution of agricultural products. Canadian farmers are fortunately well served in this respect by the Dominion and Provincial Departments of Agriculture and by the universities and other research agencies.

Possibly one of the most important pieces of farm legislation enacted within recent years is the Agricultural Prices Support Act, 1944, which enables the Canadian Government, acting through a Board, to establish support prices at which the Board will buy any unmarketable surplus of designated agricultural products (except wheat, which is handled separately) and so protect the farmer against declining prices. Actually, the present food contracts with Great Britain, which are at fixed prices, act as support prices without invoking the provisions of the Agricultural Prices Support Act, and Canadian farmers, because of them, are in the satisfactory position of being able to produce many farm products with the full knowledge of an assured market at a guaranteed price.

To provide adequate farm credit, the Canadian Farm Loan Board at present carries on lending operations throughout Canada. The purposes for which loans may be granted are for farm improvements, including the erection



A feed-lot of two-year-old baby beef cattle on a ranch near Lethbridge Alta. Part of their menu includes mash drawn from the sugar-beet plant in the background.

of buildings, the purchase of live stock and equipment, farm operating expenses, purchase of farm lands and the refinancing of existing farm indebtedness. Second-mortgage loans cannot be made for the purpose of purchasing farm lands. For intermediate term credit, the Federal Parliament amended the Bank Act (Aug. 9, 1944) and passed a "companion" Act, the Farm Improvement Loans Act 1944.

Land conservation activities are being continued under the Prairie Farm Rehabilitation Act. The Act was passed in April, 1935, "to provide for the rehabilitation of drought and soil-driifting areas in the provinces of Manitoba, Saskatchewan and Alberta". Emphasis is placed upon assistance to farmers in the development of water supply and improved farm practices. Under the terms of this Act the Minister of Agriculture is authorized to introduce throughout the affected area those "systems of farm practice, tree culture, and water supply that will afford greater economic security" to the agricultural population. By an amendment to the Act in March, 1937 (1 Geo. VI, c. 14), "land utilization and land settlement" were included as additional objectives, while a later amendment in March, 1939 (3 Geo. VI, c. 7), removed the original five-year limit to the life of the Act. In 1941, the Minister of Agriculture was authorized to purchase land.

In accordance with the terms and intentions of this Act, there has been organized throughout the drier regions of the Prairie Provinces (comprising over 400,000 sq. miles located in southwestern Manitoba, southern Saskatchewan and southeastern Alberta) a rehabilitation program which has

as its main objective the adjustment of prairie agriculture to new conditions imposed by the severe droughts of the 1930-37 period and by depressed conditions affecting western grain production since 1929. This rehabilitation program covers three main phases of work: water development, land utilization, and investigations of cultural practices. In addition, considerable research in the economics of land use adjustments has been carried out.

The main forms of financial assistance provided at the present time by the Federal Government to farmers for housing purposes include: the Canadian Farm Loan Board outlined above, the National Housing Act (see pp. 197-199), the Farm Improvement Loans Act (see p. 200-201), and the Veterans' Land Act (see p. 66).

★ *Statistics of Agriculture*

Income of Farm Operators From Farming Operations

Net income of farm operators from farming operations (gross income including supplementary payments less operating expenses and depreciation charges) amounted to \$1,267,362,000 in 1946. The figure is the highest recorded since the compilation of comparable statistics back to 1938 and compares with an income figure of \$1,003,724,000 in 1945 and the previously recorded high of \$1,226,849,000 in 1944.

Net Income of Farm Operators from Farming Operations, 1943-46

Item	1943	1944	1945	1946 ¹
	\$'000	\$'000	\$'000	\$'000
Cash income.....	1,409,561	1,828,483	1,697,698	1,712,341
Income in kind.....	262,247	275,821	286,037	300,229
Value of changes in inventory.....	-61,878	-123,910	-238,316	+46,609
Gross income.....	1,609,930	1,980,394	1,745,419	2,089,179
Operating expenses and depreciation charges.....	656,926	758,716	758,649	830,817
Net income excluding supplementary payments.....	953,004	1,221,678	986,770	1,258,362
Supplementary payments.....	37,062	5,171	16,954	9,000
Net income of farm operators from farming operations.....	990,066	1,226,849	1,003,724	1,267,362

¹ Preliminary.

While some increase was noted in the cash income from the sale of farm products and from the value of farm produce consumed on the farm in 1946 as against 1945, the most significant item contributing to the addition to net income was the increase in year-end inventory values. Another feature of note is the fact that while gross income increased almost 20 p.c., operating expenses and depreciation charges in 1946 gained only 12 p.c. over 1945.

Cash income from the sale of farm products estimated to be \$1,742,341,000 in 1946 was \$44,643,000 above that of 1945, but \$86,142,000 or about 5 p.c. below the recorded high of \$1,828,483,000 established in 1944. Compared with 1945, cash receipts from sales of grains, seeds and hay showed an increase

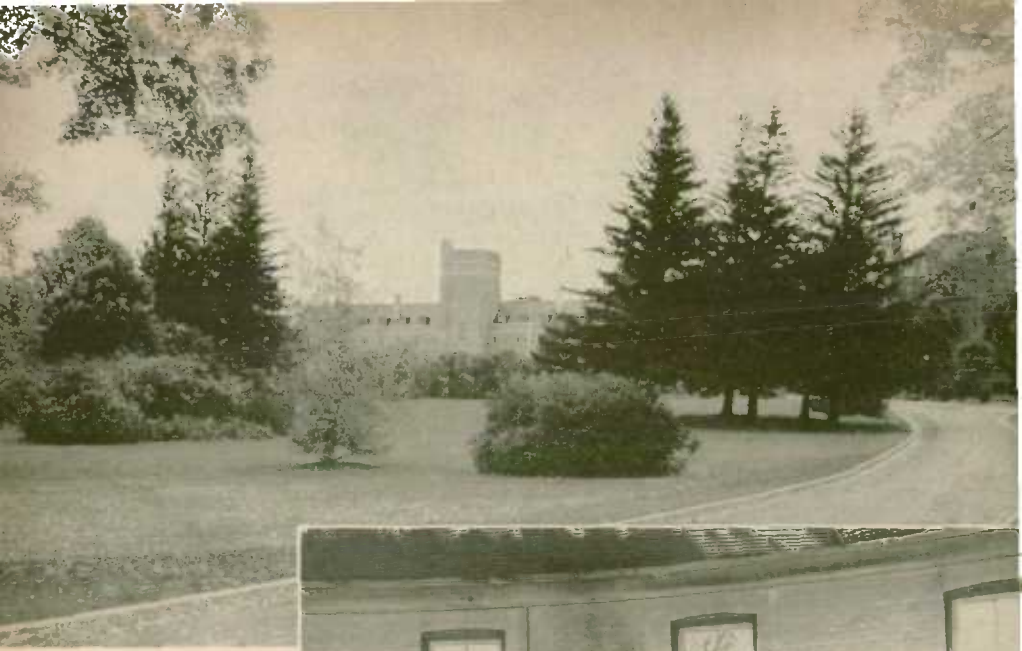
of \$15,946,000 in 1946. This increase was due largely to the payments on wheat participation certificates for preceding crop years amounting to \$33,307,000. Gains were also recorded for 1946 in the receipts from dairy products, fruits, vegetables and special crops such as tobacco and sugar beets. These increases were considerably offset by a decline in cash income from the sale of live stock, due to a much lower volume of hog marketings. Further, liquidation of cattle, horses, sheep and lambs during 1946 more than offset increases in the numbers of hogs and poultry to result in reduced year-end live-stock inventory values for 1946 against 1945. On the other hand, larger grain crops in 1946 together with increased prices for rye and flax resulted in higher year-end grain inventory values than in 1945, the increase outweighing the loss sustained in the case of live stock. The difference in the value of live-stock and grain inventories as between the beginning and the end of 1946 amounted to \$46,609,000 as compared with a difference of \$238,316,000 between the beginning and the end of 1945. This figure for 1946 plus cash income and the value of produce consumed on farms provided a gross income of \$2,089,179,000, the largest recorded since 1938.

Operating expenses and depreciation charges amounting to \$830,817,000 in 1946 were \$72,168,000 above the 1945 figure. Of this increase, \$34,811,000 or about 48 p.c. was due to a substantial increase in the wages paid to labour. While some increase was noted for the other expense items, the maintenance of price ceilings on these items probably had a moderating effect on the increase.

Supplementary payments comprise the amount paid under the Prairie Farm Assistance Act, the Prairie Farm Income Order and the Wheat Acreage Reduction Act and are included in the year in which they were earned. These

Newly hatched
chicks in an Onta-
rio hatchery.





↑ Ontario Agricultural
College, Guelph.

Second-year students
of animal husbandry
attend class in mar-
ket appraisal.



payments amounted to about \$9,000,000 in 1946 as compared with \$16,954,000 in 1945, the difference being due to improved crop conditions throughout the Prairie Provinces, resulting in fewer municipalities seeking aid because of crop failure.

Cash Income from the Sale of Farm Products

Annual estimates of cash income from the sale of farm products represent the gross returns from all products sold off farms valued at prices received by farmers. The estimates include those Federal and Provincial Government payments that farmers receive as subsidies to prices. They do not include payments made under the Prairie Farm Assistance Act, the Prairie Farm Income Act and the Wheat Acreage Reduction Act.

Cash Income from the Sale of Farm Products, by Provinces, 1943-46

Province	1943	1944	1945	1946 ¹
	\$'000	\$'000	\$'000	\$'000
Prince Edward Island.....	14,060	13,740	16,469	16,776
Nova Scotia.....	25,692	28,017	26,745	32,212
New Brunswick.....	31,373	33,134	35,295	34,667
Quebec.....	200,310	222,312	232,720	248,180
Ontario.....	385,946	404,539	452,274	469,353
Manitoba.....	146,112	176,815	154,413	171,503
Saskatchewan.....	327,634	543,689	415,058	398,853
Alberta.....	220,447	338,101	289,776	284,605
British Columbia.....	57,987	68,136	74,948	86,192
Totals.....	1,409,561	1,828,483	1,697,698	1,742,341

¹Preliminary.

Cash Income from the Sale of Farm Products, by Sources, 1946

Source	Cash Income	Source	Cash Income
	\$'000		\$'000
Grains, seeds and hay.....	524,860	Miscellaneous farm products....	28,716
Vegetables and other field crops..	127,498	Forest products sold off farms...	46,404
Live stock.....	574,170	Fur farming.....	10,459
Dairy products.....	285,604	Cash Income from Farm	
Fruits.....	47,509	Products.....	1,742,341
Eggs, wool, honey and maple products.....	97,121	Supplementary payments.....	16,970
		Total Cash Income.....	1,759,311

Farm Wage Rates

Scarcity of labour and the maintenance of a high level of farm income were important factors contributing to the continuing rise in farm wage rates in 1947. By Aug. 15, 1947, average wage rates paid to farm help were at their highest level since comparable statistics became available in 1940. At that date average wages were \$4.13 per day and \$82.75 per month where the employer provided the board as compared with rates of \$4.04 and \$75.28, respectively, at the same date a year previously. Where the employee provided his own board, the average rates were \$5.17 per day and \$109.03 per month as against \$4.95 and \$100.62, respectively, as reported Aug. 15, 1946.

Field Crops

Wheat.—The post-war world wheat shortage has continued unabated with import requirements far in excess of exportable supplies. In response to the heavy demand and with the added impetus of a guaranteed wheat payment of \$1.35 per bu. for No. 1 Northern at the Lakehead, Canadian farmers maintained their 1947 wheat acreage at a level only slightly below that achieved in 1946. Wheat seedings would doubtless have been even higher

had not an impending shortage of feed grains and oilseeds led to substantial increases in the prices offered for coarse grains and flaxseed which were sharply reflected in increased seedings of these crops.

Although acreage in the Prairie Provinces declined less than 2 p.c. from the 1946 level, unfavourable weather conditions developed on the Prairies during mid-summer and, due principally to the effects of heat and drought, the third official estimate placed 1947 wheat production on the Prairies at 319,000,000 bu. compared with 393,000,000 bu. in 1946. The estimate of 1947 production for all Canada, including the Prairie Provinces, amounted to 340,800,000 bu. as compared with 413,700,000 bu. in 1946. Ontario, which contains the only substantial wheat acreage in Canada outside of the Prairie Provinces, produced a total of 18,300,000 bu. in 1947. All but 600,000 bu. of this total was fall wheat.

When the 1947 crop is combined with the carryover of 84,500,000 bu. at July 31, 1947, the total supply of Canadian wheat for the crop year 1947-48 amounts to 425,267,000 bu., which is some 62,000,000 bu. less than for 1946-47 and is the smallest total supply since 1938.

The United Kingdom has first claim on Canada's exportable surplus of wheat under the terms of the Canada-United Kingdom Wheat Agreement which is effective from Aug. 1, 1946, to July 31, 1950. The terms of the Agreement provide that Canada will sell to the United Kingdom during that period a total amount of 600,000,000 bu. of wheat. During each of the first two years 160,000,000 bu. will be provided at a fixed price of \$1.55 per bu., basis No. 1 Northern in store Fort William-Port Arthur, Vancouver or Churchill. The 1946-47 commitment under the contract was carried out in full and shipments under the 1947-48 commitment of 160,000,000 bu. are under way. The latter two years of the contract call for delivery of 140,000,000 bu. of wheat at a price not less than \$1.25 per bushel in 1948-49 and not less than \$1.00 per bushel in 1949-50 basis in store Fort William-Port Arthur, Vancouver or Churchill. The contract states that the actual prices to be paid during the 1948-49 and 1949-50 season are to be negotiated and settled not later than Dec. 31 immediately preceding the crop year for which it is effective. In this respect, the announcement was made on Oct. 1, 1947, that the price for the 1948-49 crop year would be \$2.00 per bu., basis in store Fort William-Port Arthur, Vancouver or Churchill.

At the time of writing (Nov. 15, 1947) the price policy enunciated on July 30, 1946, was still in effect. This policy asserted that, retroactive to Aug. 1, 1945, and continuing until July 31, 1950, the initial payment on wheat has been raised from \$1.25 to \$1.35 per bu., basis No. 1 Northern in store Fort William-Port Arthur, Vancouver or Churchill. After participation payments have been completed for the 1943 and 1944 wheat crops, and after the 10-cent payment on the 1945 crop has been made to bring the initial payment up to \$1.35 per bushel, all the remaining surplus from that crop, along with the surpluses from the succeeding four crops of 1946, 1947, 1948 and 1949 will be placed in a five-year pool. Participation certificates will be issued in the usual way, but the payment on these certificates will not be made until after the conclusion of the five-year pool at July 31, 1950. However, late in August, 1947, the Minister of Trade and Commerce announced that early in the next session of Parliament the Federal Government would recommend



Rolling farmlands near Minnedosa, Man.

an increase in the initial wheat price paid to western farmers and would suggest that it be made retroactive to the 1945 crop. It was further stated that the amount of the increase could not then be decided as it would depend on developments in the market situation between that time and the assembling of Parliament.

As a part of the policy announced for the crop year 1946-47, the export price of Canadian wheat to countries other than the United Kingdom was raised on Aug. 1, 1946, to a level approximating that on the principal United States markets and has since fluctuated in sympathy with the United States price. At the same time the price to domestic users of wheat in Canada was continued at \$1.25 per bu. with the Government assuming carrying costs on the wheat used domestically. The Government continued to pay the drawback to millers covering the difference between 77½ cents and \$1.25 per bu. on wheat used in Canada for domestic consumption. This policy was changed in part, effective midnight Feb. 17, 1947, when the domestic price of wheat was increased to \$1.55 per bu. plus 3½ cents per bu. carrying charges, basis No. 1 Northern in store Fort William-Port Arthur. The subsidy to millers was increased at the same time so that the prevailing ceiling prices on flour, bread, millfeeds and other wheat products would not be affected by the increase in the domestic price of wheat. The main effect of the change was to increase the price of western wheat used for feed in Canada by 33½ cents

per bu. No further important changes in policy occurred until Sept. 15, 1947, when, in line with the Government's broad policy of decontrol, the ceiling prices on bread and flour were suspended. Effective midnight the same date, the Government discontinued the payment of the drawback on flour and wheat products milled or processed from wheat of Western Canada grain grades.

Production, Imports and Exports of Wheat, Years Ended July 31, 1939-48

NOTE.—Wheat flour has been converted into bushels of wheat at the uniform average rate of 4½ bu. to the barrel of 196 lb. of flour.

Year ended July 31—	Production ¹	Imports of Wheat and Flour	Exports of Wheat and Flour
	'000 bu.	bu.	bu.
1939.....	360,010	1,891,177	160,034,188
1940.....	520,623	444,368	192,674,369
1941.....	540,190	122,036	231,206,246
1942.....	314,825	29,103	225,828,434
1943.....	556,684	3,022	214,700,902
1944.....	284,460	432,931	343,755,320
1945.....	416,635	404,547	342,945,515
1946.....	318,512	74,765	340,105,510
1947.....	413,725	15,384	242,542,925 ²
1948 (third estimate).....	340,767		

¹Previous year's harvested crop. ²Subject to revision. ³Not available at time of going to press.

Coarse Grains.—Supplies of feed grains, particularly barley, reached a low ebb during the feeding season of 1946-47. Exports of both barley and oats were restricted. A large and growing demand for malting barley remained unsatisfied. In an effort to increase barley acreages the Government, on Mar. 18, 1947, increased the ceiling price of barley to 93 cents per bu. and of oats to 65 cents per bu., basis in store Fort William-Port Arthur or Vancouver. Support prices were advanced to 90 cents per bu. for barley and 61½ cents for oats, basis No. 1 feed at the Lakehead. The ceiling prices correspond with the support prices for the highest grades of barley and oats.

In the spring of 1947, western farmers increased their barley acreage by 1,200,000 acres over the 1946 level. Oat seedings, however, declined by 600,000 acres. Midsummer drought and heat adversely affected the development of the crop and the third estimate of production on Nov. 14, 1947, indicated a decline of 3,000,000 bu. in the western barley crop and a drop in western oat production of nearly 53,000,000 bu. from 1946 levels.

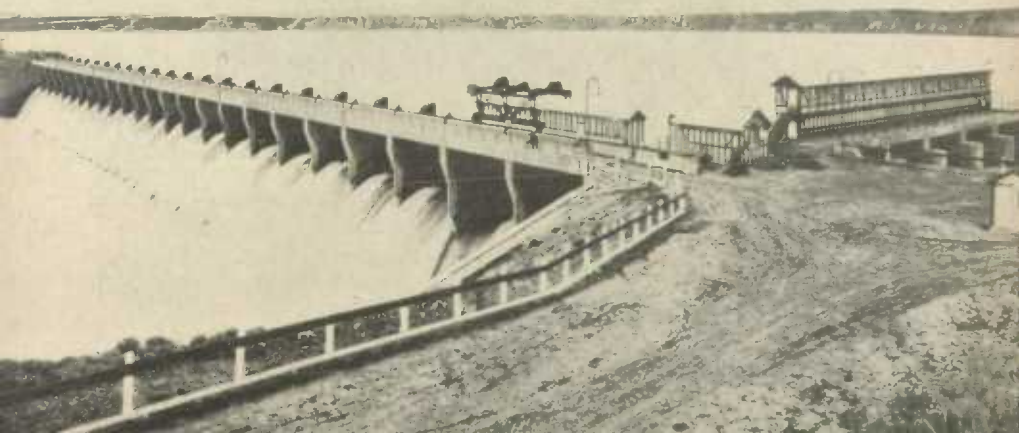
In Eastern Canada, particularly in Ontario, adverse spring seeding conditions resulted in sharply reduced sown acreages of oats and barley and the November production estimate for Ontario indicated declines below 1946 production figures of about 30,000,000 bu. of oats and 4,600,000 bu. of barley. Taking into consideration the carryover stocks of both oats and barley on July 31, 1947, which were below the comparable figures for the previous year, it is observed that supplies of Canadian oats and barley available for use during 1947-48 are 98,000,000 and 9,000,000 bu., respectively, below the available supply in 1946-47. Since a fairly general increase in

live-stock numbers was recorded on June 1, it would appear that a very tight feed situation for the winter of 1947-48 is in prospect, particularly in Eastern Canada. It is problematical whether sufficient feed-grain supplies will be available in the west to meet eastern demands.

In addition, competition of wheat and other commodities for the available supply of box cars during the winter will doubtless be keen, thus making more difficult the timely movement of feed grains from west to east.

On Sept. 13, the Canadian Wheat Board instructed the grain trade that, in accordance with advice from the Dominion Department of Agriculture, permits to export oats or barley either whole or ground (with certain minor exceptions) would not be approved during the 1947-48 crop year. The Department of Agriculture subsequently announced that the same export restrictions

A broad program for the conservation and utilization of the water resources of the Prairie Provinces is well under way. This dam on the Bow River, Alberta, is one of a number of large water-storage projects that have been constructed. From these storage points, the water runs by gravity through large main canals and various smaller ones to innumerable ditches on the farms.



apply to millfeeds, protein feeds of all kinds and commercial feeds. It is considered that export of live-stock feeds would seriously handicap the feeding of live stock and might force considerable liquidation of farm animals, the effects of which would be widespread not only to farmers but also to consumers generally, and might adversely affect the filling of current meat contracts with the United Kingdom.

With rye trading at very high prices on the Winnipeg grain exchange, western farmers stepped up their 1947 seedings of this crop by nearly 450,000 acres. The November estimate places the western rye crop at 11,600,000 bu. as against 7,300,000 bu. last year. The all-Canadian 1947 rye crop is placed at 13,200,000 bu. compared with a 1946 crop of 8,800,000 bu.

In an effort to stimulate the production of flaxseed, the Minister of Agriculture announced on Mar. 17, 1947, that the Government intended to authorize the Canadian Wheat Board to increase its buying price for that crop, effective on Aug. 1, 1947, to \$5.00 per bu., basis No. 1 C.W. in store Fort William-Port Arthur or Vancouver. With this incentive Canadian farmers seeded just under 1,500,000 acres to this crop and in the November estimate the probable production was placed at 11,500,000 bu.

Acreage and Production of Field Crops, 1946 and 1947

Crop	3rd Estimate 1946 Crops			3rd Estimate 1947 Crops		
	Area	Production	Gross Farm Value ¹	Area	Production	Gross Farm Value ¹
	acres	bu.	\$	acres	bu.	\$
Wheat.....	24,076,100	413,725,000	472,644,000	23,895,400	340,767,000	398,694,000
Oats.....	12,074,700	371,069,000	206,242,000	11,048,500	282,714,000	187,406,000
Barley.....	6,258,500	148,887,000	104,392,000	7,465,000	141,451,000	121,004,000
Rye.....	715,000	8,811,000	19,651,000	1,156,400	13,225,000	42,610,000
Peas, dry.....	126,600	2,333,000	6,860,000	127,900	1,797,000	5,184,000
Beans, dry.....	91,900	1,573,000	4,865,000	96,700	1,436,000	7,637,000
Buckwheat.....	217,500	4,881,000	4,789,000	290,400	5,274,000	6,231,000
Mixed grains.....	1,317,900	53,031,000	35,358,000	1,150,400	35,700,000	33,115,000
Flaxseed.....	840,900	6,402,700	19,173,000	1,472,300	11,540,000	57,962,000
Corn, shelled..	251,700	10,661,000	11,269,000	176,200	6,682,000	14,460,000
		cwt.			cwt.	
Potatoes.....	520,500	47,963,000	82,721,000	497,400	44,623,000	88,870,000
Turnips, etc. ² ..	123,000	26,997,000	20,439,000	113,700	21,041,000	19,649,000
		tons			tons	
Hay and clover.....	9,882,500	14,372,800	183,974,000	10,202,700	16,357,000	228,987,000
Alfalfa.....	1,163,300	2,732,000	37,422,000	1,135,100	2,559,000	38,345,000
Fodder corn.....	460,800	3,970,000	16,711,000	475,100	3,865,400	19,814,000
Sugar beets.....	66,800	733,500	9,164,000	57,700	608,000	5,744,000

¹First estimate of value.

²Excluding production in the Prairie Provinces.

Live Stock

A substantial growth in the live-stock industry occurred in Canada during the war years as is shown in the following table. From the peak of 1943, hog numbers declined sharply to 4,900,000 head in 1946 but increased 11.5 p.c. to 5,500,000 head in 1947. The decline in cattle numbers amounted to about 10 p.c. since 1945. This decrease occurred between 1945 and 1946, and the 1947 figure was slightly above that of the previous year. Numbers of cattle on farms are still considerably above the pre-war figure. A continued decline

in sheep numbers has been taking place since 1944. The 1947 figure of 2,700,000 was slightly below that of 1939. The number of horses on farms has been declining for many years. A small upturn occurred between 1939 and 1942, but each year thereafter substantial declines have taken place.

Numbers of Principal Species of Live Stock on Farms, June 1, 1939-47

Year	Horses	Cattle	Hogs	Sheep and Lambs
	'000	'000	'000	'000
1939.....	2,761	8,374	4,364	2,911
1940.....	2,780	8,380	6,002	2,887
1941.....	2,789	8,517	6,081	2,840
1942.....	2,816	8,945	7,125	3,197
1943.....	2,775	9,665	8,148	3,459
1944.....	2,735	10,346	7,741	3,726
1945.....	2,585	10,759	6,026	3,622
1946.....	2,200	9,665	4,910	2,942
1947.....	2,032	9,718	5,473	2,707

Poultry and Eggs

During the war years, egg and poultry-meat production rose steadily to meet the unprecedented export and domestic demand. The number of domestic fowl (hens, cocks and chickens) on Canadian farms rose from 55,700,000 head in 1939 to 79,700,000 in 1944. There were small recessions in 1945 and 1946 to 77,500,000 and 76,900,000, respectively. Turkeys increased in numbers from 2,900,000 at June 1, 1939, to a peak of 4,200,000 in 1942, but have fluctuated since that time. On June 1, 1946, there were 2,600,000 turkeys on farms. Geese and ducks remained fairly steady throughout the period.

A large sheep ranch near Del Bonita, Alta., with snow-capped peaks of the Rocky Mountains lining the horizon.



being produced for home consumption only. Egg production showed an increase of 56.2 p.c. from 1939 to a peak in 1945 when 346,325,000 doz. eggs were produced. A decline of 8.5 p.c. was experienced in 1946.

Poultry-Meat and Farm-Egg Production, by Economic Areas, 1945 and 1946

Economic Area and Year	Poultry-Meat Production			Egg Production		
	Marketed	Farm-Home Consumed	Total	Marketed	Farm-Home Consumed	Total
	'000 lb.	'000 lb.	'000 lb.	'000 doz.	'000 doz.	'000 doz.
Maritimes.....1945	13,880	2,633	16,513	15,996	8,997	25,542
.....1946	14,747	2,718	17,465	14,498	8,076	22,991
Que. and Ont.1945	105,445	30,133	135,578	130,480	42,996	175,321
.....1946	108,433	31,183	139,616	127,747	36,826	167,040
Prairies.....1945	92,413	26,187	118,600	77,796	37,755	117,810
.....1946	79,013	23,090	102,103	65,450	29,620	97,434
B.C.....1945	11,181	2,696	13,877	24,176	3,456	27,652
.....1946	11,033	2,598	13,631	25,711	3,338	29,284
Totals 1945	222,919	61,649	284,568	248,448	93,204	346,325
.....1946	213,226	59,589	272,815	233,406	77,860	316,749

* Includes eggs for hatching on farms.

Dairying

The expansion of dairying enterprises that developed during the war period reached a peak in 1945. Dairy production during this period was stimulated by the payment of producer-subsidies on butter-fat, fluid milk, milk for cheese and milk for concentration. Similarly, the demand for fluid milk was increased by the consumer-subsidy. This was removed on June 1, 1946, and on Oct. 1, 1946, payments of producer-subsidies on fluid milk and milk for concentration were also discontinued. On June 1, 1946, the Federal Government relinquished price control and, with the termination of producer-subsidies, the provincial authorities revised price schedules by orders or agreements which covered the subsidy, price increases over and above the subsidy, and in some cases gave price increases to producers over and above the amount represented by subsidy payments. The increases which went into effect on Oct. 1, 1946, added $1\frac{1}{2}$ to 3 cents per quart to retail fluid-milk prices, while milk for concentration moved up in relation to higher ceiling prices ordered by the Wartime Prices and Trade Board.

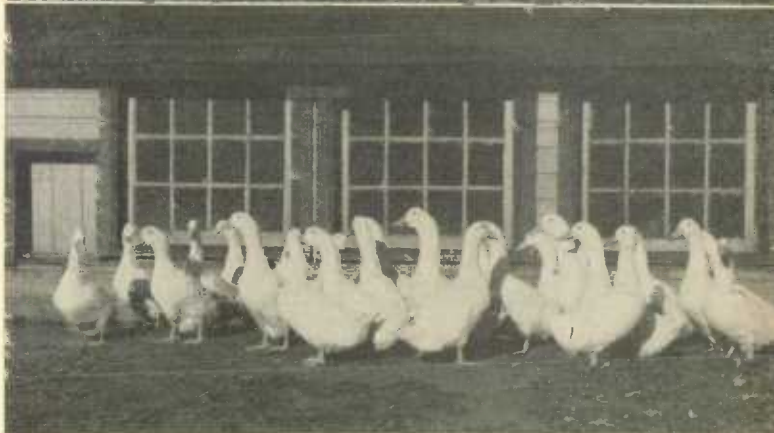
Milk Production.—During 1946, 16,937,028,000 lb. of milk were produced on farms. The decline of approximately 689,744,000 lb. from the 1945 production was shared by all the provinces. Of the 1946 total production, 59.8 p.c. was used in the manufacture of dairy products. The quantity of milk used for creamery butter declined 7.6 p.c. and fluid sales increased 6.1 p.c.

Butter Production.—Butter production in 1946 showed a further decline from the peak of 1943. Since fluid milk was in greater demand and was in a preferred price bracket so far as the farmers were concerned, it was natural that the production of butter should suffer to some extent.

*Range shelters and
birds on a Nava
Scotian poultry
farm.*



*A group of ten-week-
old Pekin ducklings.*



*Part of a flock of
over 12,000 turkeys
on a farm in south-
ern British Colum-
bia. These birds
weigh from 25 to
30 lb. each, and
are seven months
old.*



Cheese Production.—Cheese production in 1946 amounted to 148,060,000 lb., a decline of 21.9 p.c. from the 1945 production and of 11.4 p.c. from that of 1943. The cheese contract made with the United Kingdom for the year ended Mar. 31, 1946, called for delivery of 125,000,000 lb. but shipments exceeded that amount by over 5,000,000 lb.

Income and Values.—Dairy production proved to be one of the more profitable branches of farming during the war period. This situation arose as a result of the demand for milk and milk products, both for export and domestic use, and also as a result of the subsidies paid by the Government, which contributed considerably to the farm value of milk production. Total income from the sale of dairy products amounted to \$285,604,000 in 1946, an increase of approximately \$15,730,000 compared with that of the previous year. This represented 16 p.c. of the total farm income of Canada, as compared with 12 p.c. in 1939. Although prices were high, the quantities produced did not keep pace with the increased output in other lines of farming.

The total farm value of dairy production, which includes sales income, income in kind and milk fed to live stock, amounted to \$370,480,000 in 1946; the total value of dairy production, which comprises manufactured products and fluid sales valued at the factory, as well as products held on the farm, showed a total valuation of \$421,967,000. Both totals were higher than for 1945.

Domestic Disappearance.—The daily per capita consumption of fluid milk and cream on a milk basis was 1.01 pt. in 1946 as compared with 0.91 pt. in 1942. The annual per capita domestic disappearance of butter in 1946 (creamery, dairy and whey) was 25.64 lb.; due to rationing the consumption of creamery butter declined 15.1 p.c. from the 1942 figure. Cheese consump-



Cheese produced in Canada is mostly of the cheddar variety, but other types are being manufactured in increasing quantities. Here Blufort cheese is being salted and shelved. After ten days, the salted cheese stones are moved to a curing room where they are allowed to season before being sold.



A herd of dairy cows feeding in a luxuriant growth of clover in Eastern Canada.

tion, on the other hand, showed a continual increase from 1942, reaching 5.06 lb. per capita in 1945, but decreased to 4.15 lb. per capita in 1946. During the past six years, concentrated whole-milk products advanced from less than 10 lb. per capita to over 13 lb. in 1946. All products, in terms of milk, showed a decrease of 70 lb. per capita between 1945 and 1946, the total per capita consumption in the latter year amounting to approximately 1,174 lb.

Dairy Production, by Economic Areas, 1945 and 1946

Economic Area and Year	Milk		Milk Products			
	Fluid Sales	Total Milk	Butter		Cheddar Cheese	Evaporated Milk
			Creamery	Dairy		
	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.
Maritimes..... 1945	239,899	1,096,643	19,143	7,569	2,246	3,911
..... 1946	241,190	1,066,987	17,799	7,742	1,642	5,165
Que. and Ont. 1945	2,845,866	10,968,592	165,691	15,583	175,549	154,575
..... 1946	3,016,257	10,460,809	154,381	15,567	134,378	149,998
Prairies 1945	623,532	4,920,247	102,772	28,495	8,213	13,647
..... 1946	671,232	4,772,831	93,856	29,283	6,800	13,005
B.C. 1945	298,561	641,290	6,205	1,636	749	28,396
..... 1946	325,321	636,401	5,330	1,633	689	24,020
Totals... 1945	4,007,858	17,626,772	293,811	53,283	186,757	200,529
..... 1946	4,254,000	16,937,028	271,366	54,225	143,509	192,188

¹ Total cheese production amounted to 189,473,000 lb. in 1945 and 148,060,000 lb. in 1946.



Inspecting and gathering green tobacco leaves in southern Ontario. Almost the whole of Canada's tobacco crop is grown in that district.

Special Crops

Tobacco.—Continuing the trend that has been evident since 1943, the area planted to tobacco in 1947 was substantially greater than that of the previous season. The over-all acreage, including all types, is currently (October, 1947) estimated at 131,347 acres, of which 109,217 acres were planted to flue-cured tobacco. Burley tobacco ranks second in importance and the area in the 1947 season was 13,500 acres. The cigar tobacco acreage was estimated at 4,300 acres, followed by pipe tobacco at 2,250 acres and dark tobacco at 2,080 acres.

The great bulk of the crop is produced in Ontario where 119,880 acres were planted. The areas planted to tobacco in Quebec and British Columbia were 11,350 acres and 117 acres, respectively.

Pre-harvest estimates of production indicated that the crop would be the largest in the history of the industry. In August it was expected that 146,369,000 lb. would be harvested, but heavy frost in September reduced the yields in Ontario. The full extent of the damage, however, is still unknown.

Sugar Beets.—The acreage of sugar beets in 1947, estimated at 57,700 acres, as well as the yield, estimated at 10.54 tons per acre, was well below the 1946 level. The irrigated area of southern Alberta is the chief producing

district; in the 1947 season there were 29,200 acres under crop in that area. It is anticipated that 365,500 tons of beets will be handled by the two plants at present in operation, one at Raymond, the other at Picture Butte. Ontario is second in importance among the provinces as a sugar-beet producer, with a refining plant operating at Chatham. The acreage of beets in Ontario in the 1947 season was sharply reduced by unfavourable weather during planting and this, coupled with poor yields, reduced the harvest to 160,000 tons. Production in 1946 was estimated at 232,400 tons.

The Manitoba acreage in 1947 was also smaller than that of a year ago. The area harvested was 9,000 acres and yields averaged 8.0 tons per acre, giving a total crop of 72,000 tons. The Manitoba sugar refinery is located at Fort Garry. Production of sugar beets in Quebec is a recent undertaking and is not on a large scale. The producing area is located in the Eastern Townships and centres around the plant at St. Hilaire. There were 1,500 acres harvested in 1947, yielding 10,500 tons of beets.

There were 205,767,000 lb. of beet sugar produced from the 1946 sugar-beet crop. During the calendar year 1946, beet sugar represented 23 p.c. of the total of both beet and cane sugar manufactured in Canada.

Maple Products.—Approximately 80 p.c. of the production of maple products in Canada comes from the Province of Quebec. New Brunswick, Ontario and Nova Scotia contribute the remaining 20 p.c. Maple syrup is the most popular item of production and on the average makes up 89 p.c. of the crop. Maple sugar includes such items as maple cream, maple butter and la tire or maple wax, all of which have a ready though limited market.

The 1947 crop was the largest in many years. Weather conditions were more satisfactory than usual and producers tapped more heavily. Expressed as syrup, the total crop amounted to 3,923,000 gal. This was 83 p.c. more than was produced in 1946 and 55 p.c. more than the ten-year (1937-46) average of 2,526,000 gal.

Honey.—The 1947 honey crop which, according to the preliminary estimates, amounted to 41,862,000 lb. was the largest since 1938 when a record crop of 45,702,000 lb. was harvested. The average yield per colony in the 1947 season was set at 69 lb. compared with an average of 44 lb. in 1946, when the crop amounted to 23,975,000 lb. Production in 1947 for the different provinces, with 1946 figures in parentheses, was: Prince Edward Island, 78,000 lb. (15,000 lb.); Nova Scotia, 152,000 lb. (65,000 lb.); New Brunswick, 226,000 lb. (109,000 lb.); Quebec, 6,124,000 lb. (1,900,000 lb.); Ontario, 13,598,000 lb. (5,685,000 lb.); Manitoba, 7,732,000 lb. (4,810,000 lb.); Saskatchewan, 5,802,000 lb. (3,953,000 lb.); Alberta, 6,820,000 lb. (6,192,000 lb.); British Columbia 1,330,000 lb. (1,246,000 lb.).



Seed Crops.—The production of hay and pasture seeds during the 1947 season, with the exception of crested wheat grass, western rye grass and bent grasses, was well above the ten-year (1937-46) average. The 1947 estimates with the ten-year averages in parentheses were: alfalfa, 9,728,000 lb. (6,400,000 lb.); alsike, 3,285,000 lb. (3,064,000 lb.); red clover, 7,593,000 lb. (5,076,000 lb.); sweet clover, 9,688,000 lb. (7,810,000 lb.); timothy, 12,687,000 lb. (9,420,000 lb.); brome grass, 7,570,000 lb. (7,144,000 lb.); crested wheat grass, 550,000 lb. (1,886,000 lb.); western rye grass, 105,000 lb. (108,000 lb.); Kentucky blue grass, 300,000 lb. (167,000 lb.); Canadian blue grass, 620,000 lb. (268,000 lb.); creeping red fescue, 566,000 lb. (219,000 lb.); bent grass, 2,000 lb. (8,400 lb.).

The vegetable-seed industry expanded rapidly during the war years but with the re-establishment of the European production centres and the increased competition for the United Kingdom market, production of many varieties is now declining. Preliminary estimates of production of garden seeds in 1947 with final estimates for 1946 in parentheses were: beet, 47,500 lb. (47,923 lb.); cabbage, 2,135 lb. (10,883 lb.); carrot, 76,500 lb. (174,950 lb.); cauliflower, 720 lb. (1,189 lb.); cucumber, 25,700 lb. (8,050 lb.); leek, 1,250 lb. (700 lb.); lettuce, 37,100 lb. (65,450 lb.); muskmelon, 1,100 lb. (1,570 lb.); onion, 73,550 lb. (235,505 lb.); parsnip, 2,900 lb. (12,330 lb.); peas, 16,458,500 lb. (16,023,700 lb.); pepper 145 lb. (335 lb.); pumpkin 1,200 lb. (2,505 lb.); radish, 23,850 lb. (151,800 lb.); spinach, 9,000 lb. (18,100 lb.); squash and marrow, 7,800 lb. (5,360 lb.); tomato, 1,000 lb. (4,820 lb.); watermelon, 600 lb. (475 lb.).

Fruit.—Commercial production of fruits in Canada is confined to five provinces: Nova Scotia, New Brunswick, Quebec, Ontario and British Columbia. Fruit is grown in the remaining four provinces, but due to climatic conditions production is on a very limited scale. British Columbia is the most important fruit-producing province, both from the standpoint of volume and of variety of fruit grown. Ontario ranks second, followed by Nova Scotia, Quebec and New Brunswick.

In 1947, early spring prospects for the fruit crop were excellent. There were indications that good crops would be produced in all provinces but continuous cold wet weather until July throughout Eastern Canada resulted in an unsatisfactory 'set' for tree and small fruit. The Nova Scotia apple crop and the stone-fruit crops in Ontario were particularly disappointing. The September estimates of production with the final estimates for 1946 in parentheses were: apples, 15,621,000 bu. (19,282,000 bu.); pears, 965,000 bu. (951,000 bu.); plums and prunes, 732,000 bu. (811,000 bu.); peaches, 1,728,000 bu. (2,145,000 bu.); cherries, 251,000 bu. (337,000 bu.); apricots, 146,000 bu. (147,000 bu.); strawberries, 24,978,000 qt. (17,412,000 qt.); raspberries, 13,727,000 qt. (13,240,000 qt.); loganberries, 1,768,000 lb. (1,637,000 lb.); grapes, 74,223,000 lb. (67,321,000 lb.).

Normally the United Kingdom is Canada's best market for apples but, due to the steps taken by the Government of that country to conserve dollar credits, it is not expected that any shipments will be made in 1947-48. On the other hand, by international agreement, a market for 3,000,000 bu. of apples is assured in the United States.

The Nova Scotia orchardists were hardest hit by the loss of the United Kingdom market. During the 1946-47 crop year shipments amounted to approximately 640,000 bbl. and in normal peacetime years approximately 60 p.c. of the crop moved to the United Kingdom. Although the 1947 crop is considerably smaller than that of the previous season, there is still a large volume of fruit for which no market is in sight. The Nova Scotia Apple Marketing Board expects to be able to market some 450,000 bbl., leaving a surplus of approximately 700,000 bbl. To remedy this situation, the Agricultural Prices Support Board proposes to purchase 200,000 bbl. and has set the minimum price to be paid to farmers at \$2.25 per bbl. for naked fruit, with not more than 35 p.c. cull apples, delivered for packing or processing.

Values of Fruits Produced in Canada, 1943-46, with Five-Year-Averages, 1938-42

Fruit	Five-Year Average 1938-42	1943	1944	1945	1946
	\$	\$	\$	\$	\$
Apples.....	11,068,000	16,814,000	22,807,000	12,857,000	27,196,000
Pears.....	971,000	1,462,000	2,007,000	1,582,000	2,278,000
Plums and prunes.....	514,000	1,133,000	1,375,000	1,270,000	1,755,000
Peaches.....	2,307,000	2,079,000	4,534,000	4,502,000	5,356,000
Apricots.....	167,000	102,000	489,000	319,000	446,000
Cherries.....	966,000	1,545,000	1,909,000	1,724,000	2,113,000
Totals, Tree Fruits....	15,993,000	23,135,000	33,121,000	22,254,000	39,144,000
Strawberries.....	2,088,000	3,337,000	2,303,000	4,186,000	4,498,000
Raspberries.....	1,220,000	2,708,000	2,682,000	3,147,000	3,364,000
Grapes.....	1,170,000	1,733,000	2,380,000	2,543,000	3,160,000
Loganberries.....	119,000	153,000	196,000	140,000	222,000
Totals, Small Fruits...	4,597,000	7,931,000	7,561,000	10,016,000	11,244,000
Totals, All Fruits....	20,590,000	31,066,000	40,682,000	32,270,000	50,388,000

Spraying pear trees
against blossom
blight in the Nia-
gara Peninsula,
Ont.





Forestry

THE total forested area of Canada is estimated to be 1,290,960 square miles. Forests occupy 38 p.c. of the total land area of the Dominion, and 58 p.c. of the land area of the nine provinces. The industry based on the forests and the statistics of those industries which are dependent on operations in the woods form the two main divisions of the following treatment.

★ *The Primary Forest Industries*

The lumber industry in Canada had its origin when the early pioneers began to make clearings for their settlements. At first the logs surplus to their needs were burnt but, as the requirements of the growing population increased and the supply of trees decreased, it became necessary to go farther afield for lumber. Under the French régime the industry remained a local one, chiefly because the demand from France was small. Despite this, some important contributions were made to the industry by the French. Local sawmills, run by water power, were developed and the methods of making up logs into booms and rafts and floating them down the rivers were worked out in those early days.

The British found their principal source of supply for shipbuilding in the colonies along the Atlantic seaboard, but after the American Revolution they sought new areas from which to obtain their materials. These they found in Canada, the white pine of New Brunswick being reserved at one time for masts and spars for the Royal Navy.

The rich forests of Quebec and Ontario bordering on the Ottawa River and its tributaries became the first important centre of the industry. Squared timber in these early times was rafted down the Ottawa and St. Lawrence Rivers to Quebec city for export. The Georgian Bay and Rainy River districts were later opened up and lumbering in the timbered areas of the Prairie Provinces progressed with the settlement of the Middle West. The development of the industry in British Columbia proceeded simultaneously with that in the western United States. To-day the forest industry is established from coast to coast and is rated the second largest primary industry in Canada.

Forest Resources.—The total saw material available is estimated to be 250,250,000,000 ft.b.m. of which 109,740,000,000 ft.b.m. is located in British Columbia. Of the total accessible small material, there are 186,290,000 cords available in British Columbia and 1,498,420,000 cords elsewhere in Canada.

It is estimated that nearly 70 p.c. of the total accessible stand comprises softwood species. By far the larger part of the world demand for wood is

for softwood, or coniferous species. Canada possesses the principal reserves of softwoods within the British Empire, and these include large supplies of the most desirable species—spruces, Douglas fir, western hemlock, western red cedar, and white, red and other pines. Hardwoods such as birches, maples and elms abound in the Eastern Provinces.

Ownership of more than 90 p.c. of the forest area of Canada is still vested in the Crown. However, all the forests in Prince Edward Island, 71 p.c. of those in Nova Scotia and 50 p.c. of those in New Brunswick are privately owned. In the early days of the industry, operations were developed on a scale that could not possibly have been supported over a prolonged period. Timber limits were worked without any particular plan, with the result that when the demand was great and prices were high there was over-expansion of the industry. To-day, the policy of the provincial forest authorities, under whose administration these resources are controlled and developed, permits expansion of the industry only where conditions are justified: the size of a plant is now restricted by the productive capacity of the area in which it operates. Licences are granted to private operators and are flexible enough to provide for different types of operation. For example, areas set aside for the great pulp and paper mills are granted for long periods of time, subject to certain basic requirements laid down by the Provincial Government concerned. In contrast to this, short-term licences are given to individuals to cut small quantities of wood. Operators may also be required to pay annual rental for the land occupied and fire protection taxes in addition to Crown dues assessed on each unit of wood cut.

Eastern Canadian Woods Operations.—The differences in soil, climate, topography and numerous other local conditions give rise to differences in logging methods not only between provinces but also between adjacent logging areas in the same province. In Eastern Canada, the widespread nature of the timber limits, the deep winter snow that enables logs to be transported easily to the rivers, the suitability of rivers after spring thaw for log-driving, and the sharp contrast in climatic seasons are at wide variance with conditions experienced on the West Coast.



A method of loading heavy logs on a truck, which has come into fairly common use in recent years.



Pine logs dumped on a river in Eastern Canada, awaiting the spring break-up.

The logging industry of the east is almost entirely seasonal and, so far as woods operations are concerned, depends on a seasonal labour supply. In fact, about 75 p.c. of the workers in the eastern industry are farmers who turn to logging operations in the winter season as a means of adding to their incomes at a time when they can be spared from agriculture. Other farmers work their own woodlots and produce quantities of fuelwood, pulpwood and logs which they sell to the mills. Before lumbering operations commence on a large scale, surveys of the areas to be logged must be made. These vary from the detailed scientific and systematic surveys, in which aerial photography plays an important part, to the visual estimates of the smaller licence holders where the "walking boss" or "timber cruiser" exercises his practised skill—often with amazing accuracy. Actual logging operations are usually carried on by mill owners or licensees of timber lands—often through the medium of contractors, sub-contractors and jobbers. Pulp and paper mills also conduct their own woods operations. However, there are still many pulpwood cutters who sell their output to the larger companies or even on the export market.

Camps are located conveniently within the cutting areas and are relatively permanent where the area to be cut is new and extensive. Sometimes portable camps are more suited to local circumstances and these are hauled in and out by truck or tractor. Some of these portable units may be very large and by their use the site of operations, even though fairly extensive, can be economically changed.

Living and working conditions in the camps have improved during the war years. Shortages of labour have had much to do with increased mechanization of the industry, a longer working year and all-around improvement of working and living conditions. The transportation of supplies to the

camp depends upon accessibility. When roads are available and open, supplies are often brought in during logging operations. This is not always possible, however, and in such cases it is necessary to have food and other supplies brought in during the late summer ready for the winter operations, or at times even during the previous winter. Saws, axes and wedges are the principal tools used in felling the trees and making logs. The modern chain saw is economical in labour and timber. A small crew can by this means fell many trees in a day, cutting them close to the ground and eliminating high stumps.

Although autumn and winter operations have long been a feature of the industry in the east, the construction of good roads in back country has encouraged logging in the summertime. Hardwood log production, particularly in accessible areas and with portable mills, is often carried on in the summertime as well as in the winter.

After the trees are felled, trimmed and cut into merchantable lengths, they are transported to lakes and rivers where, in winter, they are skidded onto the ice to await the spring break-up. Hauling in the winter depends on snow conditions. The roads are ploughed and iced to provide a solid bottom and are laid out previous to winter operations using natural grades wherever possible. The spring drive begins as soon as the ice is cleared sufficiently from the rivers to carry the logs on their way to the mills. However, where circumstances permit, autumn drives may take place on large rivers when there is an accumulation of logs from the previous spring drive.

River operations involve a certain amount of risk of loss or damage to logs. Flood waters may carry the logs back from the main river channel where they are left high and dry when the waters recede. In addition, logs suffer damage during the drive, owing to the character of the river and the number of rapids or falls. Several companies often conduct drives on the same river. They frequently find it to their advantage to co-operate in the financing of improvement and boom companies which are organized to aid the movement of logs down the river, and to build dams, sluices and other works. Logs carry the distinguishing mark or brand of the owner and are gathered together and sorted by the boom company before being rafted or boomed for towing to their respective mills.

The sawlogs, as a rule, are the property of mill owners and are not generally marketed in Eastern Canada but are converted into lumber by their owners. In more settled parts of the country, however, a considerable quantity of lumber is sawn by custom sawmills or small mills purchasing logs from the farmers. Pulpwood, poles, ties and other forest produce all find a ready market.

West Coast Lumbering Operations.—The accessible forest resources of the West Coast are made up predominantly of timber suitable for sawlog purposes so that the pulp and paper industry at the present time is of secondary importance in this part of the country as contrasted to its prominent position in the east. In fact, about 30 of the largest sawmills in Canada are on the West Coast and this small region produced, in pre-war years, about one-half of all the lumber cut in Canada. In contrast to this, British Columbia in 1945 accounted for 9.3 p.c. of the Canadian production of pulp and 7.7 p.c.

of newsprint and other paper. However, there is a trend now towards the utilization of smaller logs. When an area has been logged for lumber purposes by high-powered equipment, it has been found that the debris can be salvaged and that large quantities of wood can be economically recovered for pulpwood.

In the west the separate operations of logging and milling have for many years been carried on for the most part by different companies. Logging is undertaken by a group of men who lease a timber limit and remove and transport logs either to a middleman or directly to a sawmill for sawing into lumber. In this manner, the larger logging companies have built up very successful connections and are able to carry on in an extremely efficient manner.

Apart from the large lumber companies there is also an important independent logging industry in the west: in fact about 40 p.c. of the output of the West Coast is still produced by independent loggers. Small companies, depending entirely on motor-trucks, are able to haul lumber that could not be handled economically by the larger companies, which depend chiefly on railways for log transportation. On the other hand, the size of the logs and the necessarily extensive degree of mechanization make it difficult for the small operators to make the most of their limits. The wartime demand for lumber has had much to do with the construction of roads, thus opening up areas in the west which under peacetime conditions would not have been worked for a number of years to come.

Because of the nature of the terrain the usual practice in opening up a logging operation is to survey the area, run a logging railroad through the most convenient outlet valley and then work from the valley bottom up the mountain side. With the advent of trucks and better roads these have generally replaced the logging railroad as transport. To bring the fallen

Dump and booming ground for logs on the west coast of Vancouver Island, where log booms are made up for towing to the sawmill.



trees down to the floor of a valley, cable systems—high-lead, sky-line or drag-line—are set up to drag the huge logs from stump to an assembly point. The logs are then transported by logging train or truck to tidewater where they are made up into large rafts or booms and towed sometimes for many miles along the coast to the mills. On arrival at the mill the logs are removed from the water and placed on a carriage operated by steam ram or cable rig, bringing the logs into contact with the saw. In the larger mills the head-saws are usually of the band type and these are often followed by band resaws. A few log gang-saws are in operation and there appears to be a growing interest in the introduction of this type of machinery for cutting up small logs. The logs are turned and held in the desired position by mechanical devices producing lumber of the sizes desired in quick successive operations. In some of the larger sawmills in British Columbia there may be more than one of these large log carriages. The lumber is then carried out on conveyer belts to other smaller saws which cut the lumber to desired specifications. After the cut lumber has gone through the various operations it is sorted, graded and marketed.

Production.—Although almost one-third of all the wood consumed in Canada is burnt as fuel, there is no organized fuelwood industry. More than 85 p.c. of the total amount used is produced by farmers either from their own woodlots or from nearby public lands. Two-thirds of the quantity cut is consumed on the farms, and the remainder is sold in the cities and towns.

The sawmill industry is widely distributed throughout Canada. It is made up of 42 mills, each producing more than 15,000,000 ft.b.m. of lumber annually, 84 producing from 5,000,000 to 15,000,000 ft., 690 producing 1,000,000 to 5,000,000 ft. and over 4,000 small mills whose average production is less than 1,000,000 ft. annually.*

In 1946 there were 113 pulp and paper mills in operation, employing 44,967 workers. Of this number 50 were located in Quebec, 43 in Ontario, 7 in British Columbia and 13 in the rest of Canada. The apparent total production of pulpwood for 1946 was 10,523,256 rough cords and of this amount 82 p.c. was manufactured into pulp in Canadian pulp mills, the remaining 18 p.c. was exported to the United States.

Exports.—In pre-war years Canadian lumber exports averaged 50 to 55 p.c. of total output. Wartime export quotas resulted in 40 to 45 p.c. being exported. In 1945, 4,514,160,000 ft.b.m. valued at \$181,045,952 were produced and of this amount 2,001,042,000 ft.b.m. valued at \$99,994,581 were exported. In the same year 3,324,033 tons of newsprint were produced, valued at \$189,023,736 and of this amount 3,058,946 tons valued at \$179,450,771 were exported.

Current Position.—The extraordinary demand for forest products caused by the War showed no sign of abating in 1947. Requirements for housing and other forms of construction at home, together with increased exports, provided a stimulus for continued high production. Stocks, however, which fell to a relatively low level during the War, depend on the judgment of industry and its ability to maintain them. Post-war conditions have militated against

* Latest statistics available are for 1945, see p. 105.



Hauling a western fir log by truck in British Columbia.

any effort to improve the situation despite the efforts of both industry and Provincial Governments to facilitate the transition from unrestricted exploitation to sustained-yield woodlands management.

★ *Forestry Statistics*

Operations in the Woods.—Woods operations produce not only the raw material for the sawmills, pulp-mills, wood distillation, charcoal, excelsior and other plants, but they also provide 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 Christmas trees, maple sugar and syrup, balsam gum, resin, cascara, moss and tanbark, that go to swell the total value of the products of woods operations.

It is often impossible to state for what purpose the timber being cut will eventually be used. Some lumber manufacturers install machinery for cutting-up and barking pulpwood, and direct a part of their spruce and balsam logs to pulp manufacture; other pulp and paper companies operate sawmills in connection with their plants for the purpose of utilizing the larger timber on their limits.

It has been estimated that operations in the woods in Canada in 1945 gave employment during the logging season amounting to 36,558,000 man days, and distributed over \$209,000,000 in wages and salaries.



A large sawmill at Braeside, Ont. The log booms are in position for servicing the mill on the water's edge—more conspicuous are the stock piles of lumber after cutting, sorting and grading.

Value of the Products of Woods Operations, by Products, 1941-45

Products	1941	1942	1943	1944	1945
	\$	\$	\$	\$	\$
Logs and bolts.....	86,514,625	92,897,611	99,852,479	115,788,036	120,682,306
Pulpwood.....	88,193,045	103,619,151	110,844,790	124,363,926	146,172,701
Firewood.....	26,662,296	27,264,486	45,152,897	44,332,748	45,193,219
Hewn railway ties....	1,547,780	878,830	1,138,663	1,289,165	1,339,920
Poles.....	2,467,336	2,663,603	2,032,681	5,217,255	5,663,793
Round mining timber	2,458,435	2,169,268	3,418,857	3,509,015	6,437,074
Fence posts.....	964,568	1,291,393	1,902,546	2,216,585	2,690,569
Wood for distillation..	588,747	745,408	774,344	887,260	687,102
Fence rails.....	262,521	341,607	464,365	513,135	367,741
Miscellaneous products.....	3,503,736	2,500,534	3,033,661	3,453,698	5,090,476
Totals.....	213,163,089	234,371,891	268,615,283	301,570,823	334,324,901

Sawn Lumber.—Conifers usually form about 95 p.c. of the total cut of all kinds of wood, only 5 p.c. being deciduous-leaved trees or hardwoods. Spruce is the most important kind of lumber sawn, and is produced in every province. Douglas fir, which is produced almost entirely in British Columbia, comes second, with hemlock, white pine, cedar, and yellow birch next in order of importance.

Besides sawn lumber from the sawmills the industry includes the products of shingle, tie, lath, shook, stave, heading and hoop mills and the products of mills for the cutting-up and barking of pulpwood. Sawn lumber produced in 1945 amounted to 4,514,160,000 ft. valued at \$181,045,952. Shingles numbered

2,665,432 squares at \$11,737,224, sawn ties 6,340,176 at \$6,486,261 and lath 117,731,000 at \$752,245. The gross value of production for the industry as a whole showed an increase of 6.7 p.c. over the total for 1944.

Production of Sawn Lumber and All Sawmill Products, 1945

Province or Territory	Sawn Lumber Production		Total Sawmill Products
	'000 ft. b.m.	\$	\$
Prince Edward Island.....	8,885	344,741	407,865
Nova Scotia.....	250,795	10,075,523	11,395,270
New Brunswick.....	269,375	12,143,966	14,640,642
Quebec.....	1,029,313	45,790,905	56,109,217
Ontario.....	522,497	23,825,561	29,705,850
Manitoba.....	63,453	2,364,945	2,493,378
Saskatchewan.....	125,082	4,227,527	4,632,856
Alberta.....	189,412	5,897,668	6,729,682
British Columbia.....	2,055,082	76,354,956	104,972,850
Yukon.....	266	20,170	20,420
Totals.....	4,514,160	181,045,952	231,108,030

Pulp and Paper.—The production of pulp and its conversion into newsprint and other paper products is one of Canada's major manufacturing enterprises. Canada's extensive pulpwood resources and widely distributed water powers have been largely responsible for the remarkable development of the industry. From the early 1920's until 1941, the pulp and paper industry headed the lists in net value of production and in wage and salary distribution. From 1942 to 1944 some of the war industries surpassed it in these respects, but in 1945 it recaptured first place for net value of products and it appears to have regained in 1946 the top position for wage and salary distribution. In these comparisons only the manufacturing stages of the pulp and paper industry are considered, no allowances being made for employment furnished, payroll, or production of operations in the woods.

The volume of pulp and paper produced in 1946 was the highest ever recorded, and new peaks were also reached for gross and net values of production, employment, salaries and wages paid, cost of materials used, cost of purchased fuel and electricity, and power equipment used. The gross value of production in 1946 was 32.3 p.c. over the previous record of 1945 and an increase of 116.3 p.c. over 1929. Figures from 1935 are:—

	Gross Production \$	Net Production \$		Gross Production \$	Net Production \$
1935.....	159,325,546	79,199,741	1941.....	334,726,175	174,852,041
1936.....	183,632,995	86,406,163	1942.....	336,697,277	164,509,420
1937.....	226,244,711	106,002,017	1943.....	344,411,614	164,244,088
1938.....	183,897,503	89,034,186	1944.....	369,846,086	174,492,103
1939.....	208,152,295	103,123,660	1945.....	398,804,515	180,401,885
1940.....	298,034,843	158,230,575	1946.....	527,814,916	258,164,578

There were, in 1946, three classes of mills in this industry: 31 making pulp only, 56 combined pulp and paper mills, and 26 making paper only. The 87 mills making pulp produced 6,615,410 tons valued at \$287,624,227, repre-

senting increases of 18.1 p.c. in quantity and of 24.0 p.c. in value over 1945. About 75 p.c. by quantity was made in combined mills and used by them in papermaking and about 25 p.c. was made for sale in Canada and for export.

Two pulping methods are used. The mechanical process, in which the wood is reduced to fibre by pressing against large revolving grindstones, produces groundwood pulp. In the chemical process small chips of wood are cooked at high temperature and under pressure in a chemical liquor. The type or mixture of pulp employed determines the character of the paper produced. Newsprint is composed of about 85 p.c. groundwood and 15 p.c. unbleached sulphite.

Production of pulp during the past ten years is given in the following tables.

Pulp Production, Mechanical and Chemical, 1937-46

Year	Mechanical Pulp		Chemical Fibre		Total Production ¹	
	Quantity	Value	Quantity	Value	Quantity	Value
	tons	\$	tons	\$	tons	\$
1937.....	3,384,744	46,663,759	1,756,760	70,065,469	5,141,504	116,729,228
1938.....	2,520,738	39,707,479	1,147,051	48,189,669	3,667,789	87,897,148
1939.....	2,796,094	44,530,367	1,370,208	53,601,450	4,166,301	97,131,817
1940.....	3,368,209	56,017,547	1,922,553	93,987,720	5,290,762	149,005,267
1941.....	3,550,285	61,749,788	2,170,562	113,689,763	5,720,847	175,439,551
1942.....	3,308,118	65,208,919	2,208,343	126,936,143	5,606,461	192,145,062
1943.....	3,033,751	63,721,703	2,239,079	130,797,449	5,272,830	194,519,152
1944.....	3,113,142	72,097,231	2,157,995	138,944,181	5,271,137	211,041,412
1945.....	3,380,873	86,723,425	2,219,941	145,149,697	5,600,814	231,873,122
1946.....	4,122,046	113,599,526	2,493,364	174,024,701	6,615,410	287,624,227

¹ Certain of the totals include unspecified pulp.

Pulp Production, by Chief Producing Provinces,¹ 1937-46

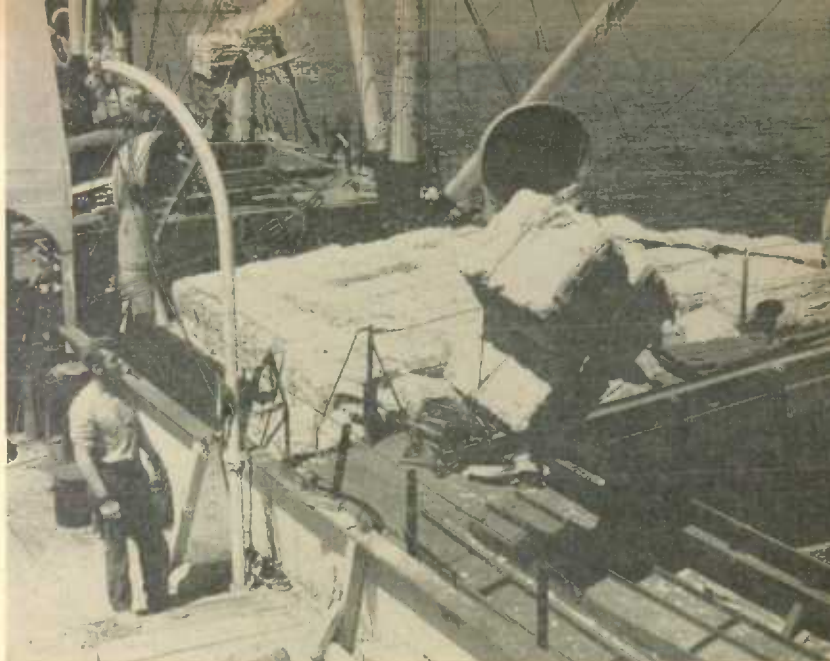
Year	Quebec		Ontario		British Columbia	
	Quantity	Value	Quantity	Value	Quantity	Value
	tons	\$	tons	\$	tons	\$
1937.....	2,551,546	55,277,014	1,466,555	33,964,784	425,558	8,995,594
1938.....	1,858,971	44,220,224	1,057,984	25,821,023	242,020	4,456,691
1939.....	2,119,183	49,026,966	1,158,576	27,631,051	321,132	6,197,175
1940.....	2,794,381	76,996,100	1,369,389	38,235,733	445,564	12,109,948
1941.....	2,971,386	89,103,399	1,507,324	46,908,967	508,375	14,875,937
1942.....	2,896,440	97,632,408	1,518,967	51,936,704	481,294	16,243,737
1943.....	2,617,403	94,054,176	1,490,966	54,818,046	450,009	17,543,397
1944.....	2,767,081	105,042,991	1,316,365	54,934,993	489,690	19,739,476
1945.....	2,887,176	114,197,036	1,468,682	62,596,260	520,571	21,998,381
1946.....	3,460,853	140,930,891	1,837,975	84,049,038	820,779	24,216,820

¹ Production in other provinces (Nova Scotia, New Brunswick and Manitoba) may be obtained by subtraction from total production figures given in preceding table.

Newsprint made up 77.8 p.c. of the total production of Canada's 82 paper mills in 1946; paper boards 12.8 p.c.; book and writing paper 3.5 p.c.; wrapping paper 3.3 p.c.; and tissue and miscellaneous papers the remainder.

Many Canadian pulp and paper mills not only manufacture basic paper and paperboard stock but also convert this stock into more highly manufactured

Canadian paper pulp being transferred from a small to a larger vessel at Halifax for shipment to Europe.



products such as napkins, towels, packaged toilet papers, coated and treated papers, boxes, envelopes, stationery, and other cut paper and boards. Figures covering this conversion are not included here.

Newsprint and Total Paper Production, 1937-46

Year	Newsprint Paper		Total Paper	
	Quantity	Value	Quantity	Value
	tons	\$	tons	\$
1937.....	3,673,886	126,424,303	4,345,361	175,885,423
1938.....	2,668,913	107,051,202	3,249,358	151,650,065
1939.....	2,926,597	120,858,583	3,690,502	170,776,062
1940.....	3,503,801	158,447,311	4,319,414	225,836,809
1941.....	3,519,733	158,925,310	4,524,776	241,450,292
1942.....	3,257,180	147,074,109	4,231,767	230,269,512
1943.....	3,046,442	152,962,868	3,966,344	234,036,152
1944.....	3,039,783	165,655,165	4,044,376	255,545,841
1945.....	3,324,033	189,023,736	4,359,576	282,837,614
1946.....	4,162,158	280,809,610	5,347,118	396,956,390

Canada's newsprint production in 1946 was over five times that of the United States, not so very long ago the world's chief producer. The latest monthly figures of Canadian newsprint production indicate that output in 1947 will exceed the record established for 1946.

1947—	tons		tons		tons
January.....	370,000	May.....	384,520	September....	366,092
February.....	341,268	June.....	355,606	October.....	396,251
March.....	372,482	July.....	379,731	November....	364,483
April.....	369,490	August.....	377,941		

For 1946, exports of newsprint amounted to 3,858,467 tons valued at \$265,864,969 and ranked first among the exports of the Dominion.

Fisheries

THE Canadian fishing industry while nationally not as important as agriculture and other primary industries from the standpoint of value of products and numbers of men employed, is, nevertheless, of vital importance to the economy of the Atlantic Coast provinces and British Columbia. In the Atlantic Coast provinces particularly, where general economic conditions have tended to be less buoyant than in other areas of the Dominion, any diminution of activity in the fishing industry has a profound effect on the whole economy of the area.

The Atlantic Coast fishery had its beginnings even before the discovery of Canada when European fishermen came to exploit the banks of Nova Scotia for cod. Cod has remained throughout the years the mainstay of the Atlantic fishery, although from the standpoint of value of the catch, the lobster fishery has approached and, in some years, exceeded that of cod. The herring and sardine fisheries of the Atlantic Coast are also of major importance. From a more localized point of view, many other species of fish are of commercial importance. Each individual species may be processed in a variety of forms and marketed as fresh, frozen, salted, pickled, smoked or canned.

Except for the deep-sea ground fishery prosecuted on the offshore banks by fishing schooners, vessels and trawlers operating out of Halifax, Lunenburg, Lockeport, Shelburne, North Sydney and other ports, the Atlantic Coast fisheries are mainly carried on by independent fishermen operating relatively small boats or fixed nets close to the shore. The industry has tended, therefore, to be organized on the basis of many isolated small-scale units with a relatively small investment in capital equipment. The fresh fish branch of the industry is concentrated generally in the larger ports served by the offshore vessels. Greater availability of capital has resulted in a higher degree of modernization of this branch of the industry than in the others where capital has been a limiting factor.

The salted fish branch of the industry is mainly based on the small-scale operations of shore fishermen who follow the traditional curing methods of their forefathers. However, the introduction of modern artificial driers has to a considerable extent replaced in recent years the open-air drying on flakes. The canning branch of the industry, with the exception of a few large-scale producers, is still carried on by a large number of small independent or co-operative canneries, located in the smaller fishing communities.

During the war years the fresh, and particularly the frozen fish branch of the industry, expanded markedly in the use of raw materials, mainly at the expense of the salted fish trade. The wartime requirements of the United Kingdom were responsible for the increased demand for the frozen filleted product. The canned fish branch was also expanded to meet wartime

and relief requirements. In 1947, with the restoration of the northeastern Atlantic fishery, the European demands for frozen fish were sharply reduced. The production of Newfoundland, and to some extent that of Iceland, sought entry into the United States market in competition with the Canadian product. As a result, prices weakened, although the generally higher prices of foods in the United States were a sustaining factor. The markets for salted fish remained strong with the result that the proportion of the catch utilized for salting increased considerably, while that disposed of as fresh and frozen declined. Relief requirements maintained the market for the canned product.

Salmon is the dominant species taken on the Pacific Coast. For the most part, the salmon is canned for market, although an increasing proportion of the catch is being sold in the frozen form, both dressed and as fillets. Halibut stands second to salmon in importance on a landed-value basis, although herring usually exceeds halibut on a value-of-product basis. Grayfish livers, used in the production of oils, and pilchards, used mainly for fish meal, are of importance on the Pacific Coast. In the past two years landings of pilchards have been abnormally low.

On the Pacific Coast the industry has tended to become centralized in the hands of a relatively small number of large-scale processors. These companies operate fish-processing plants in the Vancouver area, at Victoria, Prince Rupert and at many points along the coast. Frequently an individual company will have more than one plant which it may operate only periodically, depending on the availability of fish supplies. These companies have the necessary capital to finance modern processing and fishing equipment. While substantial quantities of fish are taken by independent fishermen owning their own boats and gear, particularly gill-netters and trollers, a very large proportion of the total catch, especially of salmon, herring and pilchards, is taken by large vessels owned by the processing companies and operated on a share basis by the fishermen. The organization of the fishing economy on the Pacific Coast, therefore, has made it possible to take advantage of modern methods of fishing and modern methods of processing. The fishermen themselves on the Pacific Coast are highly organized into strong unions. Prices paid to fishermen and other operating conditions are negotiated between the

A British Columbia salmon comes aboard. This fish was caught on a troll line, but much the larger part of the salmon catch is taken by means of gill-nets and purse-seines.



unions and the management of the fish-processing plants. The co-operative movement has also grown to considerable proportions on this coast, covering not only the production of fish, but also the co-operative marketing of fresh and frozen fish products, and fish-liver oils. So far the co-operatives have not extended their operations into the canning branch of the industry.

The more important species of inland fish include whitefish, trout, pickerel, tullibee, and lake herring. The inland fisheries extend throughout the northern areas of Manitoba, Saskatchewan and Alberta, as well as the Great Lakes region and the northern lakes of Ontario.

The organization of the inland fisheries differs somewhat as between the Prairie Provinces and Ontario. In the Prairie Provinces, the fishing activity takes place mainly in the more or less remote northern lakes. In Manitoba and Alberta, dealers and exporters, located in Winnipeg and Edmonton, undertake the major part of the financing of the fishermen in those two provinces. In Saskatchewan, recent developments under the Saskatchewan Fish Marketing Board, have altered the production and marketing program of that Province to a considerable extent. The Board purchases the fish from fishermen on an initial payment basis with subsequent payments depending on the market returns for the fish products. The Board operates three filleting plants where considerable quantities of fish are filleted and frozen. In the more northern lakes, private dealers purchase the fish directly from the fishermen, and in many cases assist them in the financing of their operations. In Ontario the Great Lakes fishery is the most important from a commercial standpoint, although substantial quantities of fish are taken in the lakes of the northwestern part of the Province. Production of the Great Lakes is marketed almost entirely in the fresh form with a relatively small quantity filleted and smoked.

The total landings of fishery products in Canada during 1946 amounted to about 1,300,000,000 lb., having a landed value of about \$65,000,000, and a marketed value of approximately \$125,000,000. The inland fisheries of Ontario and the Prairie Provinces account for about 100,000,000 lb. of fish annually. The remainder of the catch is divided about equally between the Atlantic and Pacific Coasts.

The year 1946 was one of high returns to all branches of the industry. The catch of most species was good, and a ready market at wartime prices was available for all the products of the industry. The fishing industry is dependent to a very large degree on the export market and, consequently, is very sensitive to changes in world economic conditions. Continued high employment and consumer purchasing power in the United States, together with abnormally high prices for competing protein foods, such as meat, has maintained the fresh and frozen branch of the industry in a reasonably strong position, although there have been some indications of a diminishing demand. Canned fish of the more favoured species, such as salmon, sardines and lobster, have tended to enjoy a high level of demand, although prices of canned lobster have receded considerably as a result of consumer resistance to the very high prices that prevailed in 1946. Other varieties of canned fish, such as Atlantic chicken haddie, mackerel and herring, and Pacific herring, have found a ready market under the various relief programs.

Salted fish, produced essentially for the markets of the Caribbean and Latin America, has enjoyed several years of relatively strong demand and



British Columbia salmon fishing boats, some of them gill-netters and some of them trollers, tied up at a shore plant.

high prices. During the war years, supplies normally furnished by Norway and Iceland were not available to the traditional markets. Even in the years immediately following the War, supplies have continued to be low relative to market demand. Consequently, prices have remained firm. Economic conditions in the countries of the Caribbean area, which are largely dependent on exports of other primary products, particularly sugar, have remained strong. Salted fish is a staple item in the diet of the people of this area, serving as a source of both protein and salt. Hence, it is unlikely that the quantitative demand will greatly diminish. However, financial difficulties in the importing countries is a further factor affecting Canadian exports.

Estimates for the first eight months of 1947 indicate that, although total landings may not fall far short of 1946, substantial changes will be recorded for individual species. The landings of cod on the Atlantic Coast, including Quebec, are sharply lower, partly as a result of the strike which tied up the offshore vessels for the first three months of the year and partly due to reduced fishing efforts following the lowering of market prices early in the year. The catch of lobster will also be somewhat lower, largely as a result of unfavourable fishing weather. On the Pacific Coast landings of the major species, salmon and halibut, have been running above those of 1946.

From a marketing point of view, the transition from wartime to peacetime conditions in the fisheries has been postponed to a large extent through continued world shortages and abnormal export demands for foods. The Canadian Government relief program, following that of UNRRA, has maintained the market for those types of fishery products, the production of which was expanded to meet military and other wartime requirements. However, some weaknesses did appear in the marketing picture during the early months of 1947, particularly in the Atlantic Coast area where the diminution in the purchasing of frozen fillets by the United Kingdom resulted in a general reduction of prices to fishermen. It will be recalled that the fishing industry, particularly on the Atlantic Coast, suffered a prolonged period of depressed conditions prior to the outbreak of war in 1939. The memory of this period still dominates the thinking of many associated with the industry.

★ *Statistics of Production*

Canada's list of food fishes embraces nearly 60 different kinds, chief among which are salmon, cod, herring, lobster, whitefish, halibut, sardines, mackerel, pickerel, grayfish and haddock. The total quantity of fish of all kinds taken by Canadian fishermen in 1945 was 13,391,629 cwt., for which fishermen received, at the point of landing, a total of \$64,138,349 compared with a catch of 11,791,456 cwt. with a landed value of \$52,078,439 in 1944. The figures given in the following table are the values of all fisheries products marketed, both primary and secondary.

Fisheries Production, by Provinces, 1914, 1944 and 1945

Province or Territory	Values of Production			Percentages of Total Values		
	1914	1944	1945	1914	1944	1945
	\$	\$	\$	p.c.	p.c.	p.c.
Prince Edward Island..	1,261,666	2,598,975	3,076,811	4.1	2.9	2.7
Nova Scotia.....	7,730,191	23,674,055	30,706,900	24.7	26.5	27.0
New Brunswick.....	4,940,083	11,968,692	13,270,376	15.8	13.4	11.7
Quebec.....	1,924,430	5,361,567	7,907,692	6.2	6.0	6.9
Ontario.....	2,755,291	4,938,193	7,261,661	8.8	5.5	6.4
Manitoba.....	849,422	3,581,795	4,263,670	2.7	4.0	3.7
Saskatchewan.....	132,017	1,482,223	1,286,361	0.4	1.7	1.1
Alberta.....	86,720	929,887	1,450,502	0.3	1.0	1.3
British Columbia.....	11,515,086	34,900,990	44,531,858	36.8	39.0	39.1
Yukon.....	69,725	3,131	3,138	0.2	—	—
Northwest Territories..	1	1	112,131	—	—	0.1
Totals.....	31,264,631	89,439,508	113,871,100	100.0	100.0	100.0

¹ Not collected before 1945.

The salmon fishery of British Columbia gives to that Province first place in respect to value of production, the position that in earlier times belonged to Nova Scotia with her cod fishery. The herring fisheries (on both the Atlantic and Pacific Coasts) are of rising importance and second only to salmon in value of output in British Columbia; canned herring is the chief product, but herring meal and oil are also produced. On the Atlantic Coast, the cod, lobster and sardine fisheries are of importance, while among the inland fishes, whitefish occupies first place.

Unloading and weighing codfish and livers landed from Atlantic coastal waters.



Averages of Production and Values Marketed, by Principal Kinds of Fish, 1935-39 and 1941-45

Kind of Fish	Averages 1935-39		Averages 1941-45	
	Quantity Caught	Value Marketed	Quantity Caught	Value Marketed
	cwt.	\$	cwt.	\$
Salmon.....	1,769,319	13,435,975	1,530,829	20,484,817
Cod.....	1,620,056	3,159,882	2,268,881	12,994,332
Herring.....	2,773,682	2,643,737	3,360,127	10,900,403
Lobsters.....	308,448	4,194,228	312,933	7,896,045
Whitefish.....	156,919	1,643,670	175,848	3,547,391
Halibut.....	153,691	1,646,448	143,830	2,978,763
Sardines..... bbl.	219,184	1,630,962	382,550	2,866,847
Mackerel.....	286,702	571,564	354,001	1,945,342
Pickarel.....	129,505	970,781	137,446	1,962,132
Grayfish.....	142,858	88,652	86,838 ¹	2,034,498
Haddock.....	387,801	1,287,394	287,828	2,048,371

¹ Four-year average for quantity—only livers landed in 1945.

The fish-processing industry is connected almost entirely with the sea fisheries, the plants being scattered along the coasts in locations of easy accessibility to the fishermen in delivering their catches. Salmon canneries comprise the principal group, having an investment in 1945 valued at \$12,248,403, or 36 p.c. of the total for all establishments. About 59 p.c. of the value of production was in the form of fish canned, cured or otherwise prepared, and 41 p.c. fish marketed for consumption in the fresh state.

Capital invested in vessels, boats, nets, traps, piers and wharves, etc., used in the primary operations of catching and landing fish, had a total value in 1945 of \$40,943,579, of which 82 p.c. was accredited to the sea fisheries.

Furs

THE fur resources of Canada are among its most valuable assets, and though, with the advance of settlement, trapping has moved farther and farther northward and the practice of fur farming has developed considerably, wild life still produces the greater portion of Canadian furs. Over an area of about 1,550,000 square miles, which is about 45 p.c. of the total land area of Canada, wild life is relatively more productive than agriculture, and of the products of wild life, furs are the principal item and the principal support of the population of that area.

The conservation of fur-bearers, which has marked the policy of Federal and Provincial authorities to an increasing extent, has been made necessary by an increasing demand for furs coupled with decreasing supplies. The resulting substantial rise in prices also brought about a tendency to 'over-trapping', and it has been found necessary to control the 'take' by prohibition, close seasons and the enforcement of trapping regulations. However, in a country of such extent, where trappers, both White and Indian, are scattered over a vast wilderness, prohibition of capture of certain animals with the aim of conserving future catches is not always effective. Such furs become higher priced because of this scarcity and the temptation to violate protective measures is great.

One noteworthy reconstructive measure that appears to have had a very beneficial influence on the rehabilitation of certain fur-bearers, especially beaver and muskrat, is the organized development of marshlands where these animals are actively assisted to increase their numbers in their natural habitat.



Examining beaver skins brought to a Hudson's Bay Company post by Indian trappers.

All provinces to-day have their trapping regulations and licence individual trappers. Some provinces register trap lines. The Saskatchewan Government has recently inaugurated a system whereby districts are assigned to individual licensed trappers. The licensee in his own interests will see to it that poaching on his preserve is stopped.

Many of the most valuable fur-bearing animals are subject to marked fluctuations in numbers. The periods of abundance and of scarcity recur with sufficient regularity to be called cycles and these cycles have an important bearing on the pelt take year by year. The total number of pelts taken, including those from fur farms, in each of the past ten years is shown in the following table.

Numbers and Values of Pelts Taken, Years Ended June 30, 1937-46

Year Ended June 30	Pelts		P.C. of Value Sold from Fur Farms	Year Ended June 30	Pelts		P.C. of Value Sold from Fur Farms
	Number	Value			Number	Value	
		\$				\$	
1937.....	6,237,640	17,526,365	40	1942....	19,561,024	24,859,869	19
1938.....	4,745,927	13,196,354	43	1943....	7,418,971	28,505,033	24
1939.....	6,492,222	14,286,937	40	1944....	6,324,240	33,147,392	28
1940.....	9,620,698	16,668,348	31	1945....	6,994,686	31,001,456	31
1941.....	7,287,337	21,123,161	27	1946....	7,593,416	43,870,541	30

Ontario is the leading province in respect to value of fur production. The relation that the value in each province and territory bore to the total for Canada in the year ended June 30, 1946, was: Ontario, 24·7; Quebec, 17·0; Manitoba, 14·8; Alberta, 11·8; Saskatchewan, 8·4; British Columbia, 7·8; Northwest Territories, 6·3; Prince Edward Island, 2·7; Nova Scotia, 2·6; New Brunswick, 2·4; Yukon, 1·5.

Numbers and Values of Pelts Taken, by Provinces, Years Ended June 30, 1944-46

Province or Territory	Pelts			Values		
	1944	1945	1946	1944	1945	1946
	No.	No.	No.	\$	\$	\$
Prince Edward Island	24,706	26,945	34,201	890,362	875,785	1,195,930
Nova Scotia.....	101,913	100,353	184,119	764,863	593,551	1,123,390
New Brunswick.....	70,159	88,078	95,976	834,741	927,158	1,053,699
Quebec.....	519,155	534,783	645,123	6,167,605	5,059,995	7,444,582
Ontario.....	1,049,371	992,802	1,240,661	7,129,781	7,003,877	10,822,246
Manitoba.....	880,622	1,511,130	1,489,079	3,832,641	4,818,625	6,507,406
Saskatchewan.....	1,106,354	925,240	1,131,845	3,437,777	2,310,760	3,671,751
Alberta.....	1,513,951	1,772,381	1,501,722	4,686,311	3,884,998	5,209,064
British Columbia....	682,371	696,751	598,373	2,736,991	3,113,780	3,414,795
Yukon.....	78,005	87,292	107,252	467,188	669,217	677,495
Northwest Territories	297,633	258,931	565,065	2,199,132	1,743,710	2,750,183
Canada.....	6,324,240	6,994,686	7,593,416	33,147,392	31,001,456	43,870,541

Muskrat skins contributed the largest amount to the total value in 1946 with a production valued at \$11,159,502. The value of mink pelts was almost as high at \$11,127,442. Beaver skins were third at \$7,817,490, while the

pelts of all types of fox totalled \$7,121,698. These figures represent increases over the previous season of 77.2 p.c. for muskrat, 39.4 p.c. for mink, 66.8 p.c. for beaver and 7.5 p.c. for fox.

The average values per pelt of the more important types of fur increased from 1945 to 1946. Muskrat pelts at \$3.26 advanced 23 p.c., standard mink fur averaged \$29.03, an increase of 29.7 p.c., and beaver at \$50.80 went up 39.8 p.c. Silver-fox pelts were up 2.8 p.c. to \$27.93, but platinum fox went down to \$62.39, or 10.3 p.c. from the previous season. The lowly rabbit skin advanced 35.6 p.c. to 80 cents and squirrel rose 83.7 p.c. to 79 cents.

Fur Farming

The potentialities of fur farming are such as to offer ample reward to those who are prepared to work steadily and intelligently towards the goal of raising animals with pelts at least equal in every respect to the best caught in their natural habitat. Fur farming is carried on in all provinces of the Dominion. An Experimental Fox Ranch operated by the Dominion Department of Agriculture at Summerside, Prince Edward Island, specializes in the breeding, feeding, housing and general care of foxes. Although the fox was the first to be raised in captivity, many other kinds of fur-bearing animals are now being raised including mink, raccoon, skunk, marten, fisher, rabbit and chinchilla. Mink farms are the most numerous of the miscellaneous class. There was a considerable expansion of fur farming in Canada during the twenty years prior to the outbreak of war in 1939, and in that period there was a marked change in type of furs that were most acceptable to the market. Black fox was popular twenty-five years ago. A few years later the full silver and new types sold in the upper price limits. The development of new colour phases of fox and mink has proved to be an incentive to the fur-farming industry. New-type fox such as platinum, glacier blue, pearl platinum, and white-marked and new-type mink including 'silverblue', pastel, silver-sable, black-cross, snow-white and several others are finding a ready market.

In 1945 there were 6,590 fur farms in Canada, 194 more than in 1944. Increases were recorded by each of the provinces with the exception of the three Maritimes. Fox farms, which numbered 4,245 in 1945, declined in all provinces, while mink farms, at 2,720, increased in all but two. The capital invested in fur animals and in buildings and equipment used in fur farming rose from \$19,389,783 in 1944 to \$24,554,030 in 1945. Of the 1945 total, Ontario's share was \$5,400,000, Quebec's \$4,600,000, Alberta's \$4,300,000 and Manitoba's \$3,600,000.

There were in all, 310,220 fur-bearing animals on farms in 1945, valued at \$15,412,758. During the year, births numbered 529,813 and deaths 50,784, leaving a net increase of 479,029. There were 411,156 animals pelted and 404,603 pelts were sold for \$10,276,474. In addition, 30,187 live animals were sold for \$1,753,500.

Each year an estimate is made of the anticipated pelt production. The figures forecast for the 1946-47 season were: standard silver fox to be pelted, 96,300; new-type fox, 54,200; standard mink, 303,700; mutation mink, 15,300. It is estimated that 105,000 standard silver foxes and 76,900 new-type foxes



Silver foxes in unprotected outdoor pens.

will be pelted in the 1947-48 season, while the estimate for mink is 430,400 standard and 60,000 mutation. These figures are computed from information received directly from fur farmers.

Grading

In 1939 the Dominion Department of Agriculture introduced the grading of furs. One of the Department's main objectives in grading is to secure uniformity so that furs may be purchased by grade without the necessity of buyers from other countries personally examining the pelts. Grading offers many advantages to the producer as well as to the trade in general. It educates the rancher as to the proper value of his pelts, and creates an incentive to improve the quality of the product; it furnishes guidance in the planning of future matings, aids in raising the standard of quality of the entire crop of pelts and helps in advancing the level of prices for the high-quality pelts.

Trade

Prior to the War, Canada marketed her fur pelts mainly in the United Kingdom but, since that market was practically dormant during the war years, the fur trade was carried on for the most part with the United States. A definite revival of trade with the United Kingdom was shown in 1946 and 1947.



Dressed Persian lamb skins, purchased at auction, are matched for curl and sheen. These pelts, despite the name, come chiefly from the United States.



Blocking a flank muskrat coat. The leather back of the fur is wetted and the fur stretched and nailed into place.

The Canadian fur trade, both exports and imports, is chiefly in undressed furs, the value of dressed and manufactured furs going out of Canada or coming in making up a comparatively small proportion of the total. A good part of the exports consists, of course, of those furs which Canada produces in the greatest abundance, mink being the most valuable, followed by fox, beaver and muskrat. On the other hand, such furs as Persian lamb, certain types of muskrat, rabbit and squirrel, opossum and raccoon, which are not produced to any extent in Canada, make up the major portion of the imports.

The first Canadian fur auction sale was held at Montreal in 1920 and since then that city has been the leading Canadian fur mart. To-day auction sales are also held at Vancouver, Edmonton, Regina and Winnipeg and at Regina the Saskatchewan Government maintains a Fur Marketing Service to assist the producers in that Province.

Exports and Imports of Raw and Dressed Furs, 1937-46

Year	Exports ¹			Imports		
	United Kingdom	United States	All Countries	United Kingdom	United States	All Countries
	\$	\$	\$	\$	\$	\$
1937.....	10,722,537	5,728,014	17,515,460	1,676,407	4,293,135	8,169,840
1938.....	8,794,834	4,478,818	14,096,503	1,135,686	3,148,940	5,650,624
1939.....	7,054,745	6,772,641	14,568,986	1,018,417	4,455,938	7,133,052
1940.....	3,306,271	12,187,096	16,176,075	920,528	6,813,080	8,885,540
1941.....	430,328	14,883,751	16,159,033	1,970,910	4,112,345	9,120,337
1942.....	156,586	16,869,153	17,976,615	945,360	3,306,214	6,448,861
1943.....	66,844	25,086,912	26,148,522	496,578	4,923,632	8,613,879
1944.....	28,321	25,748,651	27,029,329	250,280	6,832,775	11,434,257
1945.....	1,363,727	26,755,604	29,572,474	262,775	9,078,294	21,205,473
1946.....	10,842,086	19,679,471	32,291,425	765,577	14,764,115	27,291,573

¹ Canadian produce only.

There were 20 fur-dressing plants in operation in Canada in 1945. The industry is established on a custom basis, that is, the customer sends the furs to be dressed or dyed and is charged an amount per skin treated. The number of skins treated in 1945 totalled 11,079,292 compared with 8,606,642 in 1944, and the amount received by the industry for such treatment was \$3,740,854, an increase of 22 p.c. over the previous year.

The value of production of the 571 establishments engaged in the manufacture of fur goods in 1945 amounted to \$51,032,829. This was a record figure, exceeding the 1944 total by 24 p.c. Women's fur coats comprised the bulk of the product, having a value of \$36,171,780, or 71 p.c. of the total.

A trapper removes a silver fox caught in his trap, sets it again and continues on his rounds.



Production of non-ferrous metals was considerably less than in the preceding year. Copper and nickel production was affected by labour and market conditions. The principal copper producers, as in the immediately preceding years, were the Noranda, Waite-Amulet-Dufault and Normetal mines in Quebec; the International Nickel and Falconbridge Nickel mines in Ontario; the Hudson Bay and Sherritt-Gordon mines in Manitoba and Saskatchewan; and the Britannia and Granby deposits in British Columbia. Nickel production, as usual, came from the large nickel-copper deposits of the Sudbury District of Ontario. The famous Sullivan Mine of the Consolidated Mining and Smelting Company of Canada, located at Kimberley, British Columbia, continued to be the largest lead-producing property. The production of zinc in 1946 comprised the refined zinc produced at Trail, British Columbia, and Flin Flon, Manitoba, together with the zinc in concentrates exported from mines in Quebec, Manitoba and British Columbia. The Cobalt District showed renewed interest in the mining industry, but the fluctuations of market conditions for silver and cobalt caused hesitation in completing planned developments.

The magnesium plant at Haley, Ontario, was still idle as there was a sufficient stock of metal on hand to meet immediate peacetime needs. The lower price of mercury did not permit production from Canadian mines. Toward the end of the year the ceiling on copper, lead and zinc was raised to allow a higher domestic price for these metals.

The development of the large nickel-copper deposit in the Lynn Lake area, Manitoba, holds interest for the mining world, and also the exploration of large high-grade iron ore deposits in Labrador and Ungava, which continued during the summer season.

Fuels.—The fuel situation in Canada has always demanded the serious consideration of the authorities. The country is in a somewhat anomalous position in that large deposits of coal are located in the eastern and western provinces, but no coal is mined in Ontario and Quebec, where the greatest number of Canadian manufacturing industries are located and denser populations exist. For that reason, coal must be brought into these central provinces, chiefly from the United States. Supplies of anthracite coal, formerly brought in from Great Britain in substantial amounts, have been practically cut off in recent years because of the difficulties in ocean shipping. Production of coal in Canada totalled 17,806,450 tons in 1946 and 16,506,713 tons in 1945. Of the 1946 output, 8,826,239 tons came from mines in Alberta; 5,452,898 tons from Nova Scotia; 1,636,792 tons from British Columbia; 1,523,786 tons from Saskatchewan; and 366,735 tons from New Brunswick.

Natural gas has been found in most of the provinces of Canada. It is produced commercially in abundance in Alberta, to a lesser extent in Ontario, and in smaller quantities in New Brunswick, Saskatchewan and the Northwest Territories. In Alberta, most of the production comes from the Turner Valley Field, which supplies fuel for the field itself and is then piped to the cities and districts of Calgary and Lethbridge. In Saskatchewan, the eastern part of the Lloydminster field supplies the town of Lloydminster, and it is also produced in the Kamisack area. In Ontario, natural gas is produced only in the southwestern part of the Province and is piped to several cities



Negus Gold Mine, near Yellowknife, N.W.T.

and towns for industrial and domestic consumption. In New Brunswick, the Stoney Creek Field supplies the urban centres of Moncton and Hillsborough with natural gas. Output totalled 47,900,484,000 cu. ft. in 1946.

Crude petroleum is produced in Canada from wells in Alberta, the Northwest Territories, Ontario, New Brunswick and Saskatchewan. The Turner Valley in Alberta is the largest single oil-producing field in the Dominion with a normal output of over 90 p.c. of Canada's entire petroleum production. But Turner Valley, which has been the mainstay of Canadian output for more than 30 years, has been less productive since 1942. It is fortunate, therefore, that at the opportune time a new and very promising field should have been discovered in the area of Leduc, 18 miles from Edmonton. The discovery was made by Imperial Oil Limited in February, 1947. The defining of the field by exploratory drilling has been carried on intensively since that time and the results to date are extremely favourable. At the time of writing (October, 1947), it appears that Canada has under development a valuable new source of crude oil: during that month a new well, Globe-Leduc West No. 1, 2½ miles west of the former western production area, came into major production. This operation practically doubled the size of the field, which had at that date 15 producing wells.

In Ontario, crude oil continues to be produced at Petrolia, Oil Springs, and other places in the southwestern part of the Province. The Stoney Creek field supplies the output from New Brunswick. Production of crude petroleum in the Northwest Territories showed a sharp decline following suspension of activities associated with the Canol project in March and April of 1945. The production of crude petroleum commenced in the spring of 1945 in the Lloydminster Field of Saskatchewan. Output for Canada totalled 7,585,555 bbl. in 1946.

Non-Metallics.—Asbestos production reached an all-time high of \$25,240,562 in value. Output of gypsum exceeded 1,810,000 tons. The value of the mica produced was considerably below that sold during the war years. Clay



Imperial's No. 2 well, ten miles northwest of Leduc, Alta., roars into production.

products, including brick, tile, sewer pipe, etc., exceeded \$12,207,000; this was the highest value since 1929. For the first time in Canada's mineral history, the shipments of cement exceeded \$20,122,000 in value. A new high was recorded also in tonnage and value of sand and gravel produced.

Canada is endowed with widespread and diversified mineral wealth and the great unexplored areas of her northland afford promising fields for the prospector and explorer.

Mineral Production, by Products, 1945 and 1946

Item	1945		1946	
	Quantity	Value	Quantity	Value
		\$		\$
METALLICS				
Copper..... lb.	474,914,052	59,322,261	367,936,875	46,632,093
Gold..... fine oz.	2,696,727	103,823,990	2,832,554	104,096,359
Iron ore..... ton	1,135,444	3,635,095	1,549,523	6,822,947
Lead..... lb.	346,994,472	17,349,723	353,973,776	23,893,230
Magnesium..... "	7,358,545	1,607,264	320,677	75,538
Molybdenite concentrates .. "	978,114	411,663	736,400	295,640
Nickel..... "	245,130,983	61,982,133	192,124,537	45,385,155
Palladium, rhodium, iridium, etc..... fine oz.	458,674	18,671,074	117,566	5,162,801
Platinum..... "	208,234	8,017,010	121,771	7,672,791
Silver..... "	12,942,906	6,083,166	12,544,100	10,493,139
Zinc..... lb.	517,213,604	33,308,556	470,620,360	36,755,450
Others..... ton	22,858	2,881,784	—	3,139,546
TOTALS, METALLICS.....	—	317,093,719	—	290,424,689
FUELS				
Coal..... ton	16,506,713	67,588,402	17,806,450	75,361,481
Natural gas..... M. cu. ft.	48,411,585	12,309,564	47,900,484	12,165,050
Peat..... ton	118	1,062	145	1,305
Petroleum..... bbl.	8,482,796	13,632,248	7,585,555	14,989,052
TOTALS, FUELS.....	—	93,531,276	—	102,516,888

Mineral Production, by Products, 1945 and 1946—concluded

Item	1945		1946	
	Quantity	Value	Quantity	Value
OTHER NON-METALLICS		\$		\$
Asbestos..... ton	466,897	22,805,157	558,181	25,240,562
Barite..... "	139,589	1,211,403	120,419	1,006,473
Gypsum..... "	839,781	1,783,290	1,810,937	3,671,503
Magnesian dolomite and brucite.....	1	1,278,596	1	1,225,593
Mica..... lb.	7,044,221	233,270	8,720,669	199,039
Peat moss..... ton	83,963	2,011,139	96,839	2,395,649
Quartz.....	1,513,828	1,535,458	1,413,378	1,554,798
Salt..... "	673,076	4,054,720	484,420	3,626,165
Sodium sulphate..... "	93,068	884,322	105,919	1,117,683
Sulphur..... "	250,114	1,881,321	234,771	1,784,666
Others.....	—	2,031,837	—	1,932,322
TOTALS, OTHER NON-METALLICS.....	—	39,710,513	—	43,754,453
CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS				
Clay products, brick, tile, sewer pipe, etc.....	1	8,913,092	1	12,207,367
Cement..... bbl.	8,471,679	14,246,480	11,560,483	20,122,503
Lime..... ton	832,253	6,525,038	840,799	7,074,940
Sand and gravel..... "	29,750,703	10,568,363	39,949,994	15,529,700
Stone..... "	6,205,555	8,166,700	8,056,260	11,185,711
TOTALS, CLAY PRODUCTS, ETC.....	—	48,419,673	—	66,120,221
Grand Totals.....	—	498,755,181	—	502,816,251

¹ Not available.

Ontario is the principal mineral-producing province of Canada, the gold and nickel-copper deposits of the northern districts being the outstanding features of the mineral resources of that Province. A great part of Quebec's mineral output is made up of gold, copper and asbestos, while lead and zinc are of chief importance in British Columbia. Nova Scotia and Alberta are the most important coal-producing provinces, Alberta producing also the bulk of the petroleum and natural gas output.

Mineral Production, by Provinces, 1944-46

Province or Territory	1944		1945		1946	
	Value	P.C. of Total	Value	P.C. of Total	Value	P.C. of Total
	\$		\$		\$	
Nova Scotia.....	33,981,977	7.0	32,220,659	6.5	35,350,271	7.0
New Brunswick.....	4,133,902	0.9	4,182,100	0.8	4,813,166	1.0
Quebec.....	90,182,553	18.5	91,518,120	18.3	92,785,148	18.4
Ontario.....	210,706,307	43.4	216,541,856	43.4	191,544,429	38.1
Manitoba.....	13,830,406	2.8	14,429,423	2.9	16,403,549	3.3
Saskatchewan.....	22,291,848	4.6	22,336,074	4.5	24,480,900	4.9
Alberta.....	51,066,662	10.5	51,753,237	10.5	60,082,513	12.0
British Columbia.....	57,246,071	11.8	64,063,842	12.8	74,622,846	14.8
Yukon.....	939,319	0.2	1,239,058	0.2	1,693,904	0.3
Northwest Territories	1,440,069	0.3	470,812	0.1	1,039,525	0.2
Canada.....	485,819,114	100.0	498,755,181	100.0	502,816,251	100.0



Water Powers

THE potential power available from the falls and rapids on the numerous rivers, large and small, which are distributed across the Dominion, constitutes one of Canada's great natural resources. In most sections of the country precipitation and topography are favourable to power development: in the Maritimes, while there are no large rivers, the precipitation is moderately heavy and the streams have steep gradients; the great St. Lawrence River system, which covers a large portion of Quebec and Ontario, offers tremendous power possibilities, a considerable part of which has been developed; the rivers flowing into Hudson Bay have large reserves of potential power of which only a small proportion is used; the tributaries of the Mackenzie River present numerous opportunities for power development; and the mountainous rivers in British Columbia, where the precipitation is very high, have abundant resources of water power.

Low-cost hydro-electric energy is fundamental to the industrial activities of Canada, and is the basis upon which several essential industries have been built. These include mining, milling and refining of base and precious metals; the fabrication of metallic products; the enormous power needs of the pulp, paper and wood-products industries; also the lesser but important requirements of food processing, textile and other light manufacturing. It has contributed largely to the high standard of living in Canada by providing economical domestic service to homes and farms, a service which is being rapidly extended.

From hydro-electric developments ranging in size from a few hundred to more than one million horse-power, networks of transmission lines carry power to most urban centres of Canada, to rural areas in many parts of the country, and to industries in isolated locations.

As an installation of hydraulic capacity averaging 30 p.c. in excess of available power, indicated by the ordinary six-month flow, has been found to be sound commercial practice, it is estimated that Canada's presently recorded water-power resources represent an installation of more than 52,000,000 h.p. Thus, the total of installed capacity is only 20 p.c. of the possible turbine installation.

During 1947 the demand for hydro-electric energy expanded in most parts of the country, owing to the high level of industrial activity and increased commercial and domestic consumption. This was due in part to the removal of wartime restrictions on the use of power and in part to the increased use of electrical appliances which again became available for purchase. The consumption of primary power distributed by central stations for the first 11 months of the year exceeded the same months of the previous high year of 1944 by 4.8 p.c. and was more than double that used during

the average of the pre-war years 1935-39. This high demand for primary power has resulted in a shortage of power in some areas, pending the completion of plants now under construction or planned.

Available and Developed Water Power, by Provinces, Jan. 1, 1948

Province or Territory	Available 24-Hour Power at 80 p.c. Efficiency		Turbine Installation
	At Ordinary Minimum Flow	At Ordinary Six-Month Flow	
	<i>h.p.</i>	<i>h.p.</i>	<i>h.p.</i>
Prince Edward Island.....	3,000	5,300	2,617
Nova Scotia.....	20,800	128,300	133,384
New Brunswick.....	68,600	169,100	133,347
Quebec.....	8,459,000	13,064,000	5,878,872
Ontario.....	5,407,200	7,261,400	2,749,740
Manitoba.....	3,309,000	5,344,500	458,825
Saskatchewan.....	542,000	1,082,000	90,835
Alberta.....	507,800	1,258,000	106,560
British Columbia.....	7,023,000	10,998,000	917,024
Yukon and Northwest Territories.....	382,500	813,500	19,719
Canada.....	25,722,900	40,124,100	10,490,923

Provincial Distribution of Water Power.—The water powers of the *Maritime Provinces*, despite the lack of large rivers, constitute a valuable source of electric power, a considerable proportion of which has been developed. *Quebec* ranks highest in available water-power resources, having over 32 p.c. of the total recorded for the Dominion; it has made remarkable progress as its present installation of 5,848,572 h.p. represents almost 57 p.c. of the total for Canada. The Saguenay River Shipshaw development of 1,200,000 h.p. and the St. Lawrence River Beauharnois Plant of 689,000 h.p. are the two largest in Canada. The Province of *Ontario* has extensive water-power resources and in total hydro-power developed is exceeded only by *Quebec*. The Hydro-Electric Power Commission of *Ontario* operates 55 generating stations with installations totalling 1,800,000 h.p., the largest being the Niagara River Queenston Plant of 560,000 h.p.; a large amount of power is also purchased.

Manitoba has more water-power resources and has developed them to a greater extent than either of the other *Prairie Provinces*. Practically all of the developed sites centre on the Winnipeg River. These supply not only Winnipeg and its suburban areas but, through the transmission network of the Manitoba Power Commission, power is distributed to more than 200 municipalities and a large part of the rural areas of southern *Manitoba* where farm electrification is a primary objective. In *Saskatchewan* water-power development is confined to the northern mining districts. The southern portions of *Saskatchewan* and *Alberta*, which are lacking in water-power resources, have large fuel reserves. In *Alberta*, present developments are located in the Bow River Basin from which power is delivered to the transmission system serving Calgary and numerous other municipalities between the International Boundary and the area north of Edmonton. However, the larger part of power resources are located north of, and remote from, the centres of population.

British Columbia, traversed by three distinct mountain ranges and with favourable climate and rainfall, ranks second among the provinces in available power resources and its hydraulic development is exceeded only by Quebec and Ontario. Present developments are practically all located in the southern part of the Province in the Fraser and Columbia River Basins, although resources are well distributed. In *Yukon* and the *Northwest Territories*, there are numerous rivers offering opportunities for power development, although relatively light precipitation and a prolonged winter season limit favourable sites to locations where adequate storage is available. Successful developments have been made for local mining purposes.

Hydro-Electric Construction during 1947.—Although the total of installed hydraulic capacity in Canada was increased during 1947 by 168,000 h.p., the growing demand for power, not only readily absorbs the additional power produced, but creates a shortage of primary power during the peak-load winter periods, particularly throughout southern Ontario. To offset this shortage, occasioned by great industrial activity and by increased commercial, domestic and farm consumption, a huge program of hydro-electric expansion is now under way.

Ontario.—During 1947, the Hydro-Electric Power Commission of Ontario brought into operation its new 70,000-h.p. unit in the DeCew Falls plant near St. Catharines. The Commission also had four major projects under construction: (1) On the Madawaska River at Stewartville, progress was made on a dam and powerhouse designed to produce 81,000 h.p. Originally scheduled for completion early in 1948, work has been somewhat delayed by construction difficulties. (2) Construction, including highway and railway

Power development of La Tuque, on the upper St. Maurice River, Que. This plant, operated by the Shawinigan Water and Power Company, has a capacity of 226,000 h.p. at maximum efficiency, and is an integral part of the St. Maurice Valley system.



relocation, was commenced on the 360,000 h.p. development on the Ottawa River at Des Joachims above Pembroke. (3) In northern Ontario, construction was begun on the Agnasabon River project at Terrace Bay, capacity 53,000 h.p. (4) An additional unit of 7,500 h.p., being installed in the Ear Falls plant on the English River, is scheduled for early operation. The Commission has also been investigating the following sites: Chenaux Rapids on the Ottawa River above Renfrew, 160,000 h.p.; Tunnel Rapids on the Mississagi River near Thessalon, 58,000 h.p.; Pine Portage Falls on the Nipigon River, 40,000 h.p., ultimately 160,000 h.p.; and two additional sites on the Madawaska River.

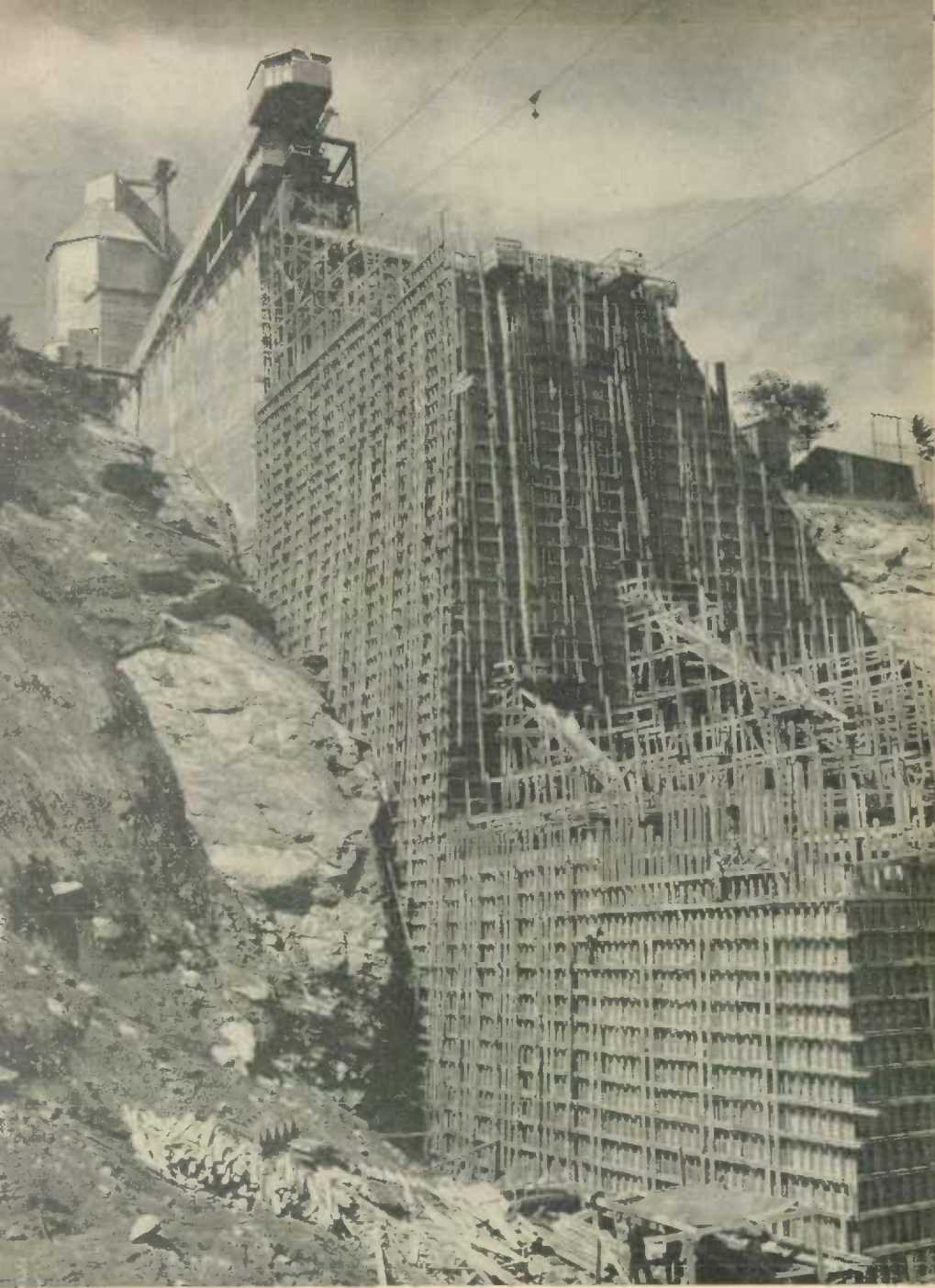
Quebec.—The Gatineau Power Company completed the installation of the fifth and final unit of 24,000 h.p. in its Farmers Rapids plant on the Gatineau River. The Lower St. Lawrence Power Company brought into operation its new plant of 6,000 h.p. on the Metis River and the International Paper Company completed a plant of 500 h.p. on the Riverin River. The Shawinigan Water and Power Company had under construction at Shawinigan Falls on the St. Maurice River, a new power house designed to develop 195,000 h.p. in three units. At the end of the year work was well advanced in connection with raising the head and increasing the storage area of the Rapid VII, Ottawa River plant of the Quebec Hydro-Electric Commission, and preparatory construction, covering proposed extension of capacity, was continued in the Commission's Beauharnois Plant, St. Lawrence River.

British Columbia.—While no capacity was added during 1947, construction was advanced on two major projects. The British Columbia Power Commission began the installation of two units of 25,000 h.p. each in the Campbell River plant, Vancouver Island, as part of a projected installation of 100,000 h.p. The British Columbia Electric Railway Company made good progress in its development on Bridge River, the initial capacity of which will be two units of 62,000 h.p. each. To alleviate a shortage of power in the Vancouver district, an inter-connection was completed with the Bonneville Power Administration, Washington State, United States.

Alberta.—The Calgary Power Company completed construction and brought into operation its new Barrier plant of 13,500 h.p. on the Kananaskis River near Seebe, Alta.; this plant is tied in to the power network served by the Company's other plants on the Bow and Cascade Rivers.

Manitoba.—The city of Winnipeg continued work on the extension of the Slave Falls plant on the Winnipeg River, covering the installation of units Nos. 7 and 8 of 12,000 h.p. each. At the Seven Sisters development of the Winnipeg Electric Company, favourable progress was being made with alterations to raise the head and provide for the installation of a fourth unit which will increase the plant capacity by 90,000 h.p. Preliminary investigations and power surveys were being made by the Manitoba Power Commission on the Dauphin River and, by northern mining interests, on the Churchill River at Granville Falls.

Northwest Territories.—Good progress was reported on the Snare River project, 92 miles northwest of Yellowknife, where the Federal Government, through the Surveys and Engineering Branch, Department of Mines



Construction work on the new dam at Stewartville on the Madawaska River, Ont. This hydraulic installation will have a capacity of 81,000 h.p. and is being built at an estimated cost of \$10,500,000.

and Resources, is building a plant of 8,000 h.p. to serve mines in the Yellowknife area. This is the first stage of a projected 30,000 h.p. development.

Nova Scotia.—The Nova Scotia Power Commission has under construction a plant of 3,200 h.p. on Dickie Brook, near Guysborough. Preliminary plans have been drawn by the Nova Scotia Light and Power Company for a further development of 4,000 h.p. on the Gaspercan River diversion.

Central Electric Stations

Central electric stations are companies, municipalities or individuals selling or distributing electric energy generated by themselves or purchased for resale. They are divided into two classes according to ownership, viz., (1) commercial—those privately owned and operated by companies or individuals, and (2) municipal—those owned and operated by municipalities or Provincial Governments. These are subdivided according to the kind of power used into (a) hydraulic, (b) fuel and (c) non-generating. This last sub-class purchases practically all the power it resells; a few of these stations have generating equipment that is held for emergencies. The hydraulic stations contain water turbines and wheels with approximately 88 p.c. of the total capacity of hydraulic installations in all industries in Canada and the generators driven by this hydraulic equipment generate 98 p.c. of the total output of all central electric stations. The fuel stations number 300 and 45 hydraulic stations have thermal auxiliary equipment.

The central electric stations industry is one particularly suited to large-scale operation because of the huge outlays of capital required. Capital invested and total horse-power installed increased almost continuously even during the depression years, mainly because large power projects, planned before the depression, were in process of construction.

Statistics for the production of electricity by central electric stations were first compiled in 1919. From the 5,500,000,000 kwh. produced in that year the output doubled by 1925, and reached 18,000,000,000 kwh. by 1930. After a period of decline in the early 1930's, there was an almost continuous



Generator wheel being placed in position over the turbine runner in a unit at Slave Falls development, N.W.

Electricity reaches out to the rural areas. The dream of supplying the Canadian farmer with power that will transform his whole way of living is moving steadily toward realization. Continued improvement in the supply of materials and an easing of the labour shortage should see a rapid extension of rural electrification schemes.



succession of increases until in 1947 the average monthly output was more than eight times what it had been in 1919.

Average Monthly Output of Central Electric Stations, 1929-47

Year	From Water	From Fuel	Total	Year	From Water	From Fuel	Total
	'000 kwh.	'000 kwh.	'000 kwh.		'000 kwh.	'000 kwh.	'000 kwh.
1929.....	1,441,203	27,622	1,468,825	1942....	3,037,823	62,109	3,099,932
1932.....	1,296,360	25,845	1,322,205	1943....	3,299,998	64,807	3,364,805
1938.....	2,130,006	37,728	2,167,734	1944....	3,290,538	81,637	3,372,175
1939.....	2,321,815	40,811	2,362,626	1945....	3,262,771	78,946	3,341,717
1940.....	2,460,466	46,222	2,506,688	1946....	3,382,602	84,374	3,466,976
1941.....	2,731,880	55,233	2,787,113	1947 ¹	3,717,215	84,844	3,802,059

¹ Seven-month average.

Revenues of central stations in 1945 amounted to \$215,105,473 and 1,987,360 domestic customers were served, representing approximately two-thirds of all families in Canada, both urban and rural.

Electric energy is exported from Canada only under licence and an export tax of 0.03 cent per kwh. is levied. Exports have shown a steady increase over the past decade and amounted to 2,646,435,000 kwh. in 1945, but declined to 2,481,631,000 kwh. in 1946.

Manufactures

THE chief forward movement in the development of Canadian manufactures has been the result of three great influences: first, the opening of the west at the beginning of the present century, which greatly increased the demand for manufactured goods of all kinds, especially construction materials; secondly, the First World War which left a permanent imprint upon the variety and efficiency of Canadian plants; and thirdly, the Second World War with its insatiable demands for food and manufactured materials of all sorts.

The tremendous increase in production attained by the manufacturing industries of Canada during the war years is indicated by the increase in some of the main factors of production between 1939 and the highest point attained during the War. For manufacturing as a whole, there was an increase of 161 p.c. in the gross value of production, 162 p.c. in the value added by manufacture, 89 p.c. in the number of persons employed, and 175 p.c. in the salaries and wages paid.

The situation created as a result of Canada's strategic position as a source of food and armaments had far-reaching effects on the magnitude and diversification of Canadian manufacturing production, with the result that Canada has now entered a new era in manufacturing development.

Statistics of Manufactures, 1870-1945

Year	Estab- lish- ments	Capital	Em- ployees	Salaries and Wages	Cost of Materials	Net Value of Products ¹	Gross Value of Products
	No.	\$ '000	No.	\$ '000	\$ '000	\$ '000	\$ '000
1870.....	41,259	77,964	187,942	40,851	124,908	96,710	221,618
1880.....	49,722	165,303	254,935	59,429	179,919	129,757	309,676
1890.....	75,964	353,213	369,598	100,415	250,759	219,089	469,848
1900 ²	14,650	446,916	339,173	113,249	266,828	214,526	481,053
1910 ³	19,218	1,247,584	515,204	241,008	601,509	564,467	1,165,976
1920 ³	22,157	2,914,519	591,753	711,080	2,083,580	1,609,169	3,692,748
1929.....	22,216	4,004,892	666,531	777,291	2,029,671	1,755,387	3,881,446
1933.....	23,780	3,279,260	468,658	436,248	967,789	919,671	1,954,076
1937.....	24,834	3,465,228	660,451	721,727	2,006,927	1,508,925	3,625,460
1939.....	24,805	3,647,024	658,114	737,811	1,836,159	1,531,052	3,474,784
1940.....	25,513	4,095,717	762,244	920,873	2,449,722	1,942,471	4,529,173
1941.....	26,293	4,905,504	961,178	1,264,863	3,296,547	2,605,120	6,076,308
1942.....	27,862	5,488,786	1,152,091	1,682,805	4,037,103	3,309,974	7,553,795
1943.....	27,652	6,317,167	1,241,068	1,987,292	4,690,493	3,816,411	8,742,861
1944.....	28,483	4	1,222,882	2,029,621	4,832,333	4,015,776	9,073,693
1945.....	29,050	4	1,119,372	1,845,773	4,473,669	3,564,316	8,250,369

¹ For and since 1929 the figures for the net value of production represent the gross value less the cost of materials, fuel and electricity. Prior to this, only the cost of materials is deducted.

² Includes all establishments employing five hands or over. ³ From 1920 to 1945 the figures include all establishments irrespective of the number of employees, but exclude construction and custom and repair work.

⁴ Not collected.

Industrial production as a whole now exceeds that of any former peacetime period. An even greater supply of goods would have been available and many current shortages relieved if industrial operations had not been interrupted so seriously by labour disturbances during 1946 which have produced critical shortages in many basic commodities. Such disturbances have indeed been the main restrictive influence on output.

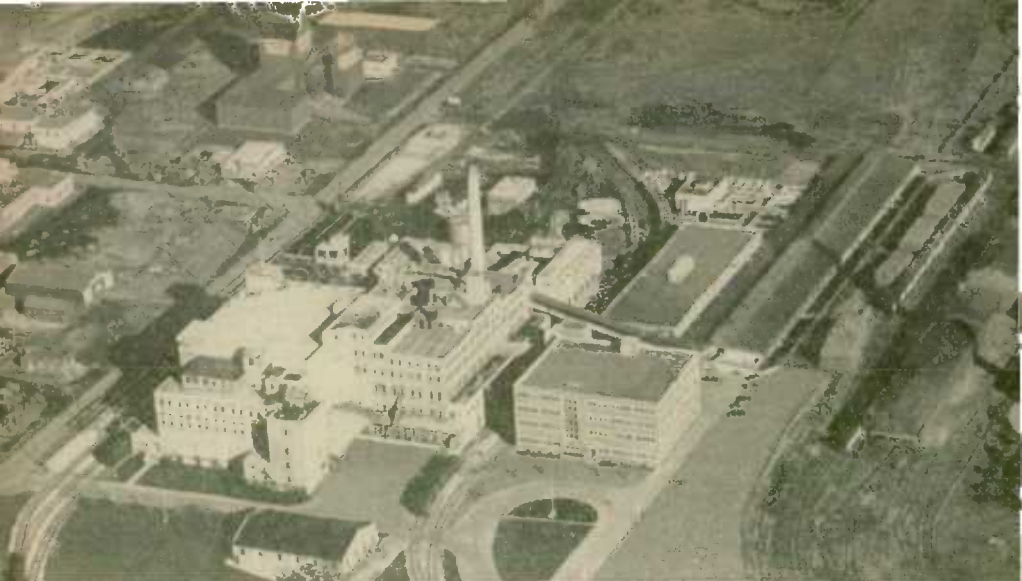
Statistics of Manufactures, by Provinces and Purpose Groups, 1945

Province and Group	Estab- lish- ments	Em- ploy- ees	Salaries and Wages	Cost of Mater- ials	Net Value of Products ¹	Gross Value of Products
	No.	No.	\$ '000	\$ '000	\$ '000	\$ '000
Prince Edward Island.....	244	1,851	1,679	8,243	3,178	11,593
Nova Scotia.....	1,297	33,423	51,703	107,800	84,358	199,775
New Brunswick.....	889	22,503	32,408	87,235	64,380	156,624
Quebec.....	10,048	384,031	607,473	1,307,534	1,149,391	2,531,901
Ontario.....	10,869	518,056	882,483	2,148,291	1,720,938	3,965,069
Manitoba.....	1,302	38,367	59,814	216,115	117,775	339,821
Saskatchewan.....	926	11,617	16,906	126,279	38,275	167,688
Alberta.....	1,157	21,486	32,760	166,198	78,548	248,288
British Columbia.....	2,326	87,974	160,419	305,760	307,955	628,904
Yukon and N.W.T.....	12	64	127	153	518	705
Totals.....	29,050	1,119,372	1,845,772	4,473,668	3,564,316	8,250,369
Producers materials.....	8,941	320,974	529,821	1,258,478	1,046,626	2,428,837
Food.....	8,310	138,798	194,248	1,275,251	421,152	1,719,329
Industrial equipment.....	2,996	199,851	351,885	653,420	662,460	1,348,435
Vehicles and vessels.....	442	160,321	331,826	507,145	562,303	1,084,077
Clothing.....	3,046	123,681	159,792	303,595	266,681	573,291
Drink and tobacco.....	648	29,762	47,398	140,745	180,081	324,989
Books and stationery.....	2,502	51,276	85,429	84,950	156,992	244,398
House furnishings, etc.....	1,102	41,204	61,924	90,428	102,342	195,860
Personal utilities.....	780	20,998	29,266	61,740	66,176	129,130
Miscellaneous.....	283	32,507	55,184	97,916	99,503	202,023

¹ Net value of production represents the gross value less the cost of materials, fuel and electricity.

Food Industries.—Normally the food industries of Canada contribute about one-quarter of the total output of manufactured products. In 1945 the gross production of the food industries was valued at \$1,719,329,000. The leading industries, with the gross value of production in 1945, were as follows: slaughtering and meat packing, \$504,849,523; flour and feed mills, \$224,269,380; butter and cheese, \$224,174,572; bread and other bakery products, \$132,518,212; miscellaneous foods, \$109,931,480; fruit and vegetable preparations, \$99,371,391; fish curing and packing, \$93,567,274; biscuits, confectionery, cocoa, etc., \$84,627,083; prepared stock and poultry feeds, \$70,250,739; sugar refining, \$61,821,443; and condensed milk, \$34,809,972. Each of these industries reported a substantial increase; all told, there was an increase of 39 p.c. in the physical volume of production as compared with 1939.

Slaughtering and Meat Packing.—Slaughtering and meat packing is the leading industry of the food group. In 1945 it ranked first among all the manufacturing industries of Canada in gross value of production, having for the second time displaced the non-ferrous metal smelting and refining industry. In that year the physical volume of production in the industry was about 67 p.c. higher than in 1939; the industry furnished employment to 23,215 persons who were paid \$40,009,888 in salaries and wages, and paid out \$366,000,000



A large meat-packing plant at St. Boniface, Man.

for live stock. Of the 152 establishments in 1945, 28 contributed 80 p.c. of the total output with an average gross value of production per establishment of \$14,300,000.

Dairy Products.—The expansion in the dairying industry, with the consequent increases in output of butter, cheese and concentrated milk products, which commenced at the beginning of the War reached a peak in 1945. Statistics on this branch of manufacturing are given in the chapter on Agriculture, pp. 88-91.

Flour Milling.—The maximum daily capacity of Canada's flour mills is 94,730 bbl. per day of 24 hours, or an annual running capacity of about 29,000,000 bbl. The output of flour during the 1946-47 crop year amounted to 28,518,602 bbl., the highest on record, and an increase of about 44 p.c. over the previous ten-year average.

Exports of wheat flour to all countries increased to 14,984,287 bbl. in 1946 from an export of only 3,911,886 in 1938. The wartime demand for Canadian flour in foreign markets was a decided boon to Canadian agriculture, inasmuch as it enabled flour mills to make available large quantities of mill feeds that otherwise would not have been produced. Farmers were thus enabled to obtain sufficient feeds to permit them to fulfil the large commitments for the export of cheese and bacon.

Canned Foods.—Exports of canned goods from Canada have almost kept pace with increased production. Nearly 30 p.c. of such production finds its way abroad. There has, however, been a considerable change in the emphasis in export trade that certain canned products have assumed. Canned fruits exported in 1945, for instance, were 41 p.c. of their volume in 1939, although such exports were much greater in 1945 than in the two preceding years. Exports of canned vegetables and canned soups maintained their pre-war volume fairly well until 1945, when exports were less than 14 p.c. of those in 1939, but canned fish, canned meats and concentrated milk in cans all showed very substantial increases which were held throughout the period.

Principal Foods Canned in Canada, 1939 and 1945

Product	1939		1945	
	Quantity	Value	Quantity	Value
		\$		\$
Fish..... lb.	108,893,332	15,478,961	189,406,289	34,473,056
Fruits..... "	116,500,115	7,769,005	56,649,898	5,709,009
Vegetables..... "	251,432,000	14,526,671	320,363,766	22,643,212
Meats..... "	7,887,228	1,743,227	145,857,917	32,866,948
Soups..... "	96,660,000	9,259,222	131,907,508	15,868,485
Other foods..... "	—	9,113,941	—	17,659,252
Concentrated milk..... cwt.	1,660,425	11,575,971	2,952,698	29,895,009
Totals.....	—	69,466,998	—	159,114,971

Textile Industries.—Individual industries in the textile group represent practically all stages of manufacturing and these industries are, to a high degree, centralized in Quebec and Ontario.

The peak of textile production was reached in 1942. For that year the index of the physical volume of production stood at 152·4, an increase of 45·3 p.c. as compared with 1939. Minor declines in volume were reported in 1943, 1944 and 1945, the indexes being 140·2, 136·2 and 134·7, respectively. In spite of the declining production during these three years, all the major industries of the group operated at substantially higher levels in 1945 than in 1939. For textiles as a whole there was an increase of 29 p.c. in volume. The woollen cloth industry reported an increase of 57 p.c., silk and artificial silk 56 p.c., women's factory clothing 39 p.c., men's factory clothing 36 p.c., cotton yarn and cloth 8 p.c., and hosiery and knitted goods 7 p.c.

During 1945 the textile industries employed 158,148 persons, 27,975 of whom were employed in the women's factory clothing group, 27,423 in men's factory clothing, 23,654 in hosiery and knitted goods, 21,646 in cotton yarn and cloth and 11,950 in silk. For the whole industry \$207,629,471 was paid out in salaries and wages. Before the War the textile industries employed almost half the women employed in all manufacturing industries, but during the war years so many avenues of employment were opened up to women that by 1944 the proportion in textiles had dropped to about 26 p.c. With the lay-off of large numbers of women in war industries during 1945 the proportion advanced to 30 p.c. for that year.

New developments in the industry include the use of silk (viscose) yarns in the production of tire cord and fabrics, the experimental production of acetate artificial silk from wood-pulp, and the production of the basic raw material for nylon yarn production.

Iron and Steel Industries.—The three major corporations that constitute the core of the industry in Canada are self-contained in that they process iron and steel from the ore through to the semi-finished and finished articles. The activities of the Steel Company of Canada, Limited, cover a wide range of products. The main plant at Hamilton, Ont., has 3 blast furnaces, 13 open-hearths, 1 electric furnace, and rolling mills for making billets, bars, wire rods, sheets, plates and light shapes. Its capacity is about 1,100,000 net tons of ingots annually. In addition, it operates several works in Ontario and

Quebec for the production of wire, fencing, nails, screws, bolts, nuts, forgings, pipe, horseshoes, etc. The Algoma Steel Corporation, Limited, has 5 blast furnaces, 12 open-hearths, and also rolling mills. Its capacity is about 760,000 tons of ingots yearly and its chief products are billets, rails and rail fastenings, carbon and alloy merchant bars, structural shapes and sheet piling. It is Canada's main producer of heavy structural shapes which are made in all standard sizes and forms. The Dominion Steel and Coal Corporation operates 4 blast furnaces and 16 steel furnaces with a yearly ingot capacity of 750,000 tons. Its rolling mill makes billets, rails, rail fastenings, merchant bars and wire rods and in other plants or plants of subsidiary companies it makes wire, fencing, nails and similar lines.

During the War the producers of pig iron built two of the largest blast furnaces in the British Empire, to bring the capacity of Canadian furnaces to a total of 2,744,000 net tons per annum. Actual output of pig iron in 1946 was 1,403,758 net tons compared with 1,777,949 tons in 1945 and 846,418 tons in 1939.

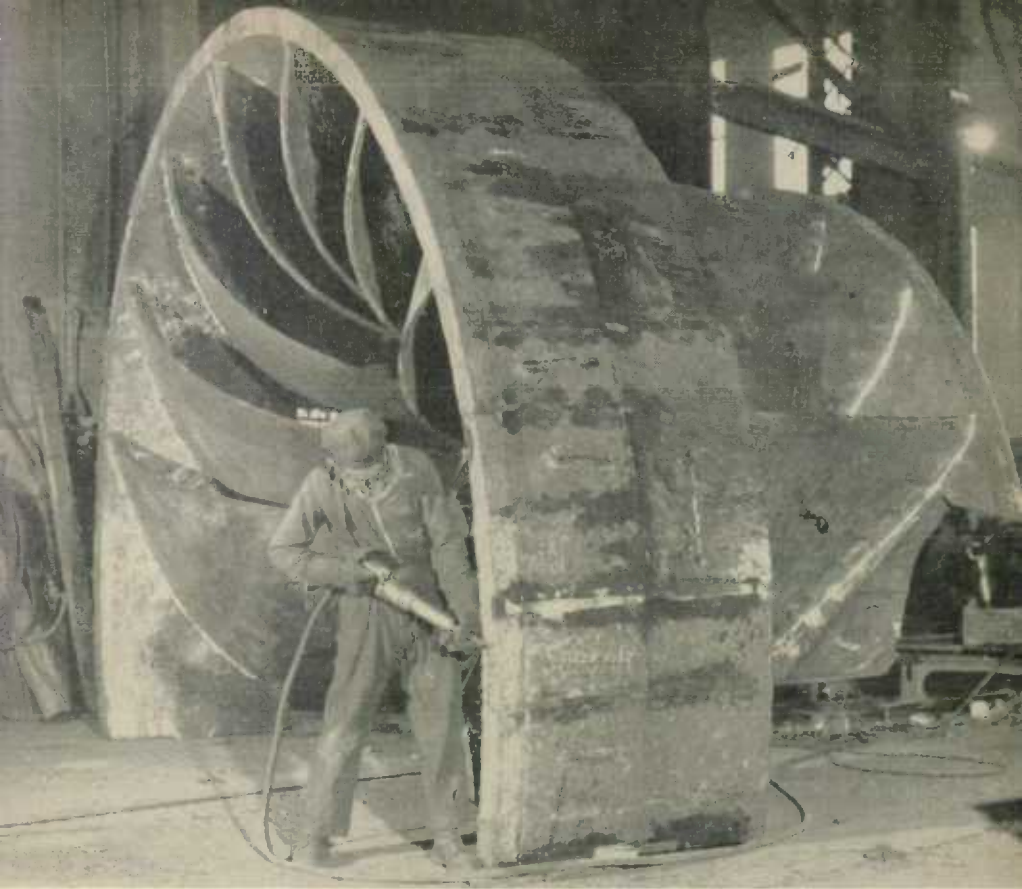
Notable expansion occurred during the war years in connection with alloy steels and steel plates. The production capacity and output of alloy steels was multiplied six times, making Canada practically independent in providing the types used in guns, armour plate and machine tools. In all, there are 133 steel furnaces in Canada, including 49 open-hearth units, 81 electric units and 3 converters.

Canada's steel production in 1946 amounted to 2,334,631 tons compared with the record of 3,109,851 tons in 1942 and with the best pre-war tonnage of 1,571,227 in 1937. At the beginning of 1940 the rated capacity of steel furnaces in the Dominion was 2,300,000 net tons, but new installations raised this potential to 3,547,000 tons at the end of 1946, including 3,245,000 tons ingot capacity and 302,000 tons for castings.

In the secondary or steel-fabricating industries, there was tremendous expansion in the war years, particularly in the shipbuilding, aircraft and motor-vehicle industries. The cessation of hostilities brought drastic declines in these groups. For a decade prior to 1940 the shipbuilding industry was practically inactive, but in 1944 there were over 67,000 workers in 22 major and 72 smaller yards with output valued at \$329,000,000; in 1946 the estimated value of output was \$109,000,000. The aircraft industry, which had fewer than 1,000 employees at the outbreak of war in 1939, had approximately 80,000 workers in main assembly and in sub-assembly plants in 1944 when output amounted to \$427,000,000, while in 1946 employees were 15,200 in number and output totalled \$72,755,000. The automobile industry, which early in the War was switched entirely to military vehicles, reached a peak in 1944 with 22,499 employees and production valued at \$324,000,000; in 1946 the output was valued at \$193,439,000.

For the entire group of iron and steel industries, the output in 1946 was valued at \$1,441,000,000 compared with \$2,541,000,000 in 1944 and \$553,000,000 in 1939.

Chemicals and Allied Products.—Output from the chemicals and allied industries in 1946 totalled \$356,000,000 compared with \$479,000,000 in 1945. While these figures indicate a decline of 26 p.c., it should be remembered that there was still a very large volume of war production in 1945, especially from the shell-filling and small-arms ammunition plants. Omitting the data



Trimming a section of a two-piece hydro-electric turbine runner being made for shipment to Brazil. This is the largest hydro casting ever made in Canada—each section weighs 73,350 lb. and the assembled runner is over 16½ ft. in diameter.

for these ammunition works, the total output value for chemicals and allied products was \$356,000,000 in 1946, \$362,000,000 in 1945 and \$159,000,000 in 1939.

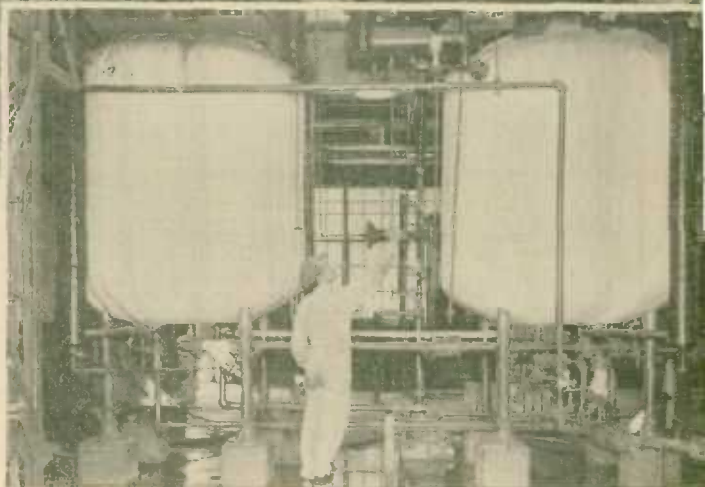
On this basis, the decline in 1946 was less than 2 p.c., but the outstanding fact revealed by the statistics for the current year is not that there was a slight drop from the 1945 level of production, but that in its first full post-war year the industry operated at more than double the rate attained in 1939, the best pre-war year. Higher prices for the products of these industries probably accounted for about 12 p.c. of this rise in production but, after allowing for such increases, it appears that the advance in physical volume of output was close to 100 p.c. The output of paints was up 106 p.c. in value; medicinals increased 136 p.c.; and fertilizers advanced 283 p.c.

It appears that the chemical industries have emerged from the War in a slightly better position than industry as a whole. The index of the physical volume of business for all manufactures in Canada averaged 188.4 in 1946 (1935-39=100), a gain of 88 p.c. for industry in general compared with about 100 p.c. for the chemical group. Quite a number of the Government wartime chemical projects have now been taken over by private companies and have



↑ A chemical plant at Shawinigan Falls, Que. This plant is the largest producer of calcium carbide in the British Empire and is also one of the world's leading manufacturers of synthetic acetic acid and other acetylene derivatives.

Interior of the chloro plant. →



become part of the permanent industry. For example, the North American Cyanamid Company Limited has purchased the huge plant of the Welland Chemicals Limited, and the Consolidated Mining and Smelting Company of Canada Limited has taken over the ammonia plant at Trail, British Columbia, and also the works at East Calgary which was formerly operated by Alberta Nitrogen Limited. These works, which were begun when the bombing of Britain was at its height, were intended to insure an adequate supply of ammonia and ammonium nitrate for military purposes. At present they are operating near to capacity on 'Nitraprills' for fertilizer use.

In 1946, there were about 968 establishments making chemicals and allied products, and a monthly average of 36,000 workers were employed. About \$148,000,000 were expended by the industry during the year for materials for manufacturing, \$13,000,000 for fuel and power, and \$72,000,000 for labour. The 509 works in Ontario accounted for 53 p.c. of the production, and the 318 establishments in Quebec accounted for 33 p.c.

Leading Individual Industries

The extraordinary demand for war equipment and food resulted in a rearrangement in the ranking of many industries during the war years. Such industries as miscellaneous chemicals, shipbuilding, iron and steel and aircraft moved up near the top of the list during 1942-44, while pulp and paper, in second place after non-ferrous metal smelting and refining up to 1941, stood in third place in 1942, seventh place in 1943 and fifth place in 1944. Slaughtering and meat packing displaced non-ferrous metal smelting in first place in 1944. In 1945, however, while slaughtering and meat packing remained in first place, pulp and paper moved up again to second place and sawmills from eleventh to fifth place. Miscellaneous chemicals, which stood in third place in 1944, dropped to fifteenth place in 1945.

Principal Statistics of Fifteen Leading Industries, 1945

Industry	Estab- lish- ments	Em- ployees	Salaries and Wages	Cost of Materials	Net Value of Products	Gross Value of Products
	No.	No.	\$ '000	\$ '000	\$ '000	\$ '000
Slaughtering and meat packing.....	152	23,215	40,010	427,168	74,765	504,849
Pulp and paper.....	109	39,996	80,463	179,369	180,402	398,804
Non-ferrous smelting and refining.....	17	16,771	33,853	238,940	89,809	355,676
Aircraft.....	38	37,812	84,230	115,093	161,747	278,653
Sawmills.....	5,295	44,040	54,017	126,007	103,154	231,108
Electrical apparatus and supplies.....	247	44,129	76,469	92,041	135,920	230,532
Automobiles.....	6	17,915	43,623	164,964	61,987	228,695
Flour and feed mills.....	1,023	7,511	11,323	192,271	30,014	224,269
Butter and cheese.....	2,241	19,435	26,864	171,011	49,110	224,174
Shipbuilding.....	89	48,118	99,470	60,294	141,646	204,594
Petroleum products.....	46	6,775	13,891	151,153	41,424	201,684
Primary iron and steel.....	63	29,378	57,862	86,417	89,859	192,279
Rubber goods (including footwear).....	55	23,490	39,111	78,501	98,836	181,413
Railway rolling-stock.....	37	30,515	61,794	84,264	92,804	181,250
Miscellaneous chemical products.....	232	29,214	50,197	83,755	89,661	177,661
Totals, Fifteen Leading Industries—						
1945.....	9,650	418,314	773,177	2,251,248	1,441,228	3,815,641
1944.....	10,092	519,491	950,891	2,680,140	1,866,935	4,681,490
Grand Totals, All Industries—						
1945.....	29,050	1,119,372	1,845,773	4,473,669	3,564,316	8,250,369
1944.....	28,483	1,222,882	2,029,621	4,832,333	4,015,776	9,073,693
Percentages of Fifteen Leading Industries to All Industries, 1945.....	33.2	37.4	41.9	50.3	40.4	46.2

Manufacturing Industries in Urban Centres

The prosperity of most of the cities and towns of Canada, especially in the east, is intimately connected with their manufacturing industries, which provide employment for a large proportion of their gainfully occupied population. In the west the cities are more largely distributing centres, though manufactures are rapidly increasing there also.



↑ Manufacturing stockings in an Ontario plant. These single-unit, single-head knitting machines make 54-gauge full-fashioned hose. Each machine turns out two stockings per hour.

Stocking "blank" is seamed at foot and leg. →



The extent to which the manufacturing industries of Canada are concentrated in urban centres is indicated by the fact that in Ontario 89.9 p.c. of the gross manufacturing production of the province in 1945 was contributed by cities and towns having a gross production of over \$1,000,000 each. In Quebec the percentage was 91.5, while in the Maritime Provinces and British Columbia, where sawmilling, fish-packing and dairying are leading industries, the proportions fell to 70.4 and 76.2 p.c. respectively. In the Prairie Provinces, the leading industries are based on the agricultural resources—grain-growing, cattle-raising and dairying—and to a lesser extent on industries providing for the more necessary needs of the resident population. But even so, the urban concentration of industry is high, especially in Manitoba, the percentages being: Manitoba, 90.2, Saskatchewan, 79.3; and Alberta, 84.8.

Urban Centres with Manufacturing Production of Over \$35,000,000 in 1945

NOTE.—Statistics cannot be published for Arvida, Quebec; Copper Cliff, Ontario; and North Vancouver, British Columbia, since statistics for places with less than three establishments, or for cities and towns with three or more establishments, when one establishment has 75 p.c. or two establishments 90 p.c. of the total production, cannot be published.

Urban Centre	Estab- lish- ments	Employees	Salaries and Wages	Cost of Fuel and Electricity	Cost of Materials	Gross Value of Production
	No.	No.	\$'000	\$'000	\$'000	\$'000
Montreal, Que.....	3,404	181,679	304,248	15,604	600,919	1,144,175
Toronto, Ont.....	3,482	146,335	244,055	11,765	496,205	961,737
Hamilton, Ont.....	482	50,520	89,639	11,611	166,350	351,676
Windsor, Ont.....	241	28,826	63,515	4,053	167,675	280,744
Vancouver, B.C.....	992	37,599	66,144	3,443	137,118	265,035
Winnipeg, Man.....	716	26,206	40,116	2,530	117,454	197,524
Montreal East, Que.....	19	3,471	6,688	4,376	90,553	115,317
Port Colborne, Ont.....	22	2,747	5,075	2,331	71,926	103,794
Kitchener, Ont.....	156	13,344	20,807	1,107	52,645	97,599
Edmonton, Alta.....	195	7,368	11,742	702	68,515	93,361
Leaside, Ont.....	47	9,963	19,583	527	63,106	89,889
Sarnia, Ont.....	43	6,297	12,760	5,217	47,868	88,986
Calgary, Alta.....	216	6,673	11,082	1,698	56,067	87,601
London, Ont.....	240	13,733	21,702	1,215	35,744	82,455
Oshawa, Ont.....	51	7,962	16,175	875	54,077	80,262
St. Boniface, Man.....	55	3,453	5,951	478	61,805	80,034
New Toronto, Ont.....	27	7,084	13,801	1,207	40,713	79,983
Quebec, Que.....	333	17,547	25,273	2,759	38,939	79,981
Peterborough, Ont.....	85	8,625	14,254	829	43,090	67,961
Welland, Ont.....	51	8,518	15,726	3,732	27,616	64,345
St. Catharines, Ont.....	94	9,351	16,630	1,003	32,277	61,830
Brantford, Ont.....	123	12,245	19,812	1,102	27,093	58,689
Trail, B.C.....	17	4,284	9,482	5,214	28,939	58,130
Sault Ste. Marie, Ont.....	48	5,790	11,656	3,871	29,842	56,360
Three Rivers, Que.....	73	6,989	11,151	4,334	25,040	51,431
Niagara Falls, Ont.....	62	6,325	11,674	4,226	18,837	51,429
Longueuil, Que.....	19	5,093	11,633	334	14,818	51,194
Ottawa, Ont.....	203	9,413	15,030	1,003	21,250	50,362
Shawinigan Falls, Que.....	41	5,220	9,488	5,773	20,862	48,277
Lachine, Que.....	79	6,667	12,813	780	16,233	46,746
New Westminster, B.C.....	100	5,209	9,160	568	23,867	44,563
Saint John, N.B.....	116	4,387	6,852	785	28,861	43,780
Sherbrooke, Que.....	87	8,050	11,226	780	19,097	42,573
Halifax, N.S.....	116	7,135	12,988	581	18,486	42,075
Regina, Sask.....	108	3,150	5,278	977	26,483	39,912
Saskatoon, Sask.....	80	2,319	3,575	425	29,878	39,049

Motor coaches on the
production line of a
large Fort William
plant.



Employment in Manufactures

The Dominion Bureau of Statistics compiles each month statistics of employment, payrolls and man-hours in manufacturing as well as in certain non-manufacturing industries, information being obtained from establishments employing 15 or more persons. In view of the concentration of factory employment in the larger enterprises, the coverage of total workers in these industries in the monthly surveys is particularly high. In the first nine months of 1947, returns were received from an average of 9,210 manufacturers, employing an average staff of 1,037,000 men and women, whose weekly salaries and wages averaged \$37,229,000.

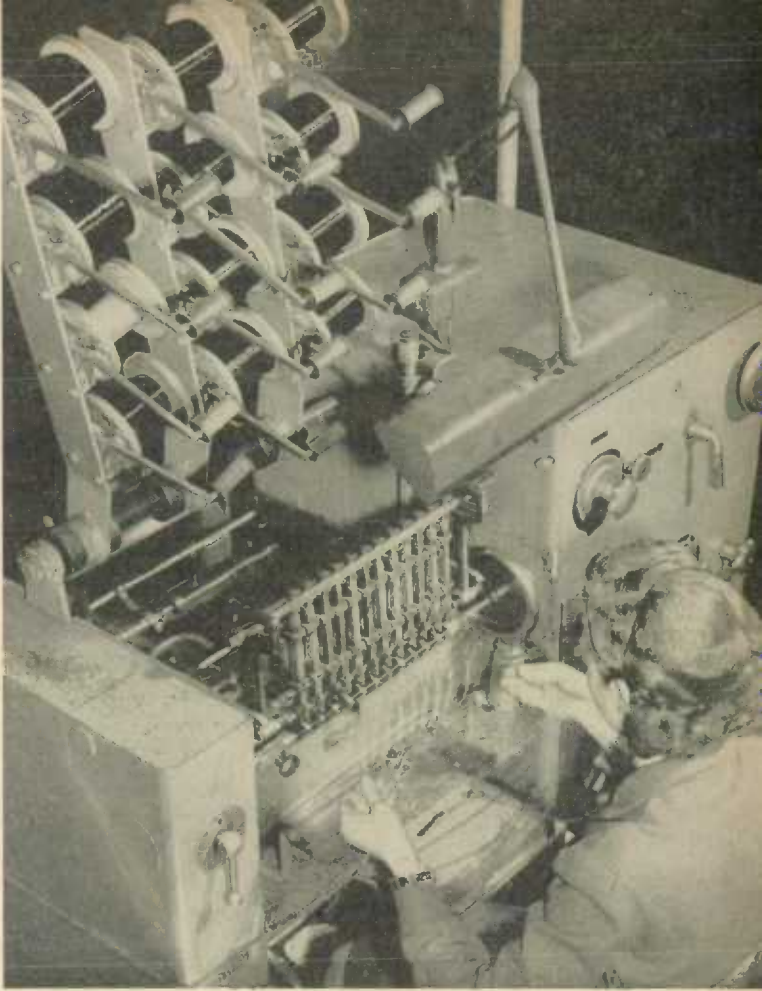
A brief review of the situation in the post-war period shows that, immediately after V-J Day, the employment index for manufacturing, at Sept. 1, 1945, was 198.6, or 14 p.c. below the figure at Oct. 1, 1943, the wartime peak. During the reconversion period, the index continued to decline, until the post-war minimum of 179.9 was reached at Jan. 1, 1946. As a result of the pent-up demand at home and abroad for manufactured articles, an upward movement soon became evident, although there were marked changes in the distribution of the workers reported in manufacturing. At Sept. 1, 1947, the index stood at 203.3; this was 76 p.c. above the figure at the outbreak of the War, although it was 12 p.c. lower than that at Sept. 1, 1943.

With the exception of the seasonal decline at Jan. 1, which was below normal for that time of year, recorded employment in manufacturing increased steadily during the first nine months of 1947, normally a period of seasonal activity. The index averaged 197.1, compared with 184.4 in the first nine months of 1946. The early part of 1947 was relatively free of labour-management disputes, while the strikes that were called had a less serious effect upon the general situation than those in the preceding year. Another favourable factor in the period under review was the greater availability of material in most industries.

Of the total employees reported by manufacturers participating in the monthly survey at Sept. 1, 1947, 238,638 or 23 per 1,000 were women, a proportion considerably smaller than that of 236 per 1,000 workers, indicated 12 months earlier. In the year, the reported number of men increased by 10.3 p.c., while the number of women rose by only 3.1 p.c. The indicated changes in the proportion of workers of the two sexes have been accompanied by geographical shifts in the distribution of employment in manufacturing since the end of the War. Thus such industries in the Maritime Provinces, Quebec and British Columbia employed at Sept. 1, 1947, smaller proportions of the Dominion total of factory workers than were indicated at Sept. 1, 1945, while in Ontario there was an increase in this comparison.

The index of aggregate payrolls has followed the same general trend as that of employment during the post-war period, although the increase was relatively greater, due to upward revisions of wage-rates in many industries and establishments. The average weekly earnings of salaried employees and wage-earners employed by the co-operating manufacturers were \$37.15 at Sept. 1, 1947, compared with \$32.71 at Sept. 1, 1946, and \$32.03 at Sept. 1, 1943. The average hours worked by hourly-rated employees in manufacturing, which had stood at 42.7 in the week of Sept. 1, 1946, were given as 42.3

Reconversion to peacetime production in many industries has meant the development of new techniques, layout and machinery design to facilitate more rapid output. This machine, capable of winding, simultaneously, twelve coils for telephone ringers, has replaced an earlier model winding a single coil.



hours in the week of Sept. 1, 1947, when the hourly earnings averaged 82.2 cents, an increase of 11.6 cents as compared with a year previously.

Monthly Indexes of Employment in Manufactures, 1942-47

(1926=100)

Month	1942	1943	1944	1945	1946	1947
Jan. 1.....	187.1	219.6	226.4	212.7	179.9	190.6
Feb. 1.....	191.2	222.1	227.3	215.0	182.8	193.9
Mar. 1.....	195.7	223.4	226.5	214.3	182.6	194.5
Apr. 1.....	199.4	224.1	225.5	212.9	184.9	195.2
May 1.....	202.3	222.9	223.2	210.6	186.2	195.8
June 1.....	205.9	224.1	223.1	209.0	184.7	197.6
July 1.....	209.5	226.5	225.8	207.2	187.2	200.6
Aug. 1.....	212.4	227.7	225.0	204.1	184.2	202.5
Sept. 1.....	215.6	229.9	226.2	198.6	187.2	203.3
Oct. 1.....	218.3	231.4	223.7	188.3	188.4	203.6
Nov. 1.....	218.6	230.8	221.3	186.3	192.8	—
Dec. 1.....	221.7	230.9	220.1	184.2	194.2	—



Transportation Communications

IMPROVED and ever-expanding means of transportation by land, air and water have characterized the development of the distributive agencies of Canada's economy. Indeed, in some aspects of this advance, such as the transport of freight by air in the northwest, Canada has pioneered. The following treatment shows that the country is abreast of the times not only in transportation but also in the means whereby distributive facilities are made more efficient.

Steam Railways

It would be difficult to over-estimate the importance of the railways in the building of Canada and to-day, with its relatively small population thinly distributed along the southern strip of a vast area 4,000 miles in length and its extensive external and internal trade, a large and costly transportation system is a necessity.

One of the first great undertakings to engage the attention of the Dominion of Canada after Confederation in 1867 was the building of a transcontinental railway to link the east and west. Surmounting tremendous difficulties, the Canadian Pacific Railway was completed in 1885 and the vast hinterland of the Canadian west was opened for settlement. The wheat boom during the period 1900-13 brought prosperity and rapid economic expansion and precipitated another era of railway development. Two other transcontinental systems, the Canadian Northern and the Grand Trunk Pacific (with the government-built National Transcontinental) were built, and total Canadian railway mileage increased from 18,140 in 1901 to 30,795 in 1914.

Construction continued in the war years and during 1914-18 nearly 7,500 miles of railway were opened to traffic, bringing the total up to 38,252 miles. Much of the financing of the Canadian Northern and Grand Trunk Pacific lines was aided by the Federal and Provincial Governments guaranteeing the interest and principal of their debentures. Immigration was stopped by the War, traffic in the Western Provinces did not develop as anticipated, and these two railways and also the Grand Trunk Railway, which was constructing the Grand Trunk Pacific, soon were unable to meet their interest payments. A commission was appointed on whose advice the Federal Government took over these railways and amalgamated them with the Government-owned railways, some of which had been constructed as a part of Confederation. The resulting Canadian National Railways had a total mileage in 1923 of 21,805 miles, including mileage of the Grand Trunk lines in the United States; this mileage had grown to 23,437 by 1946.

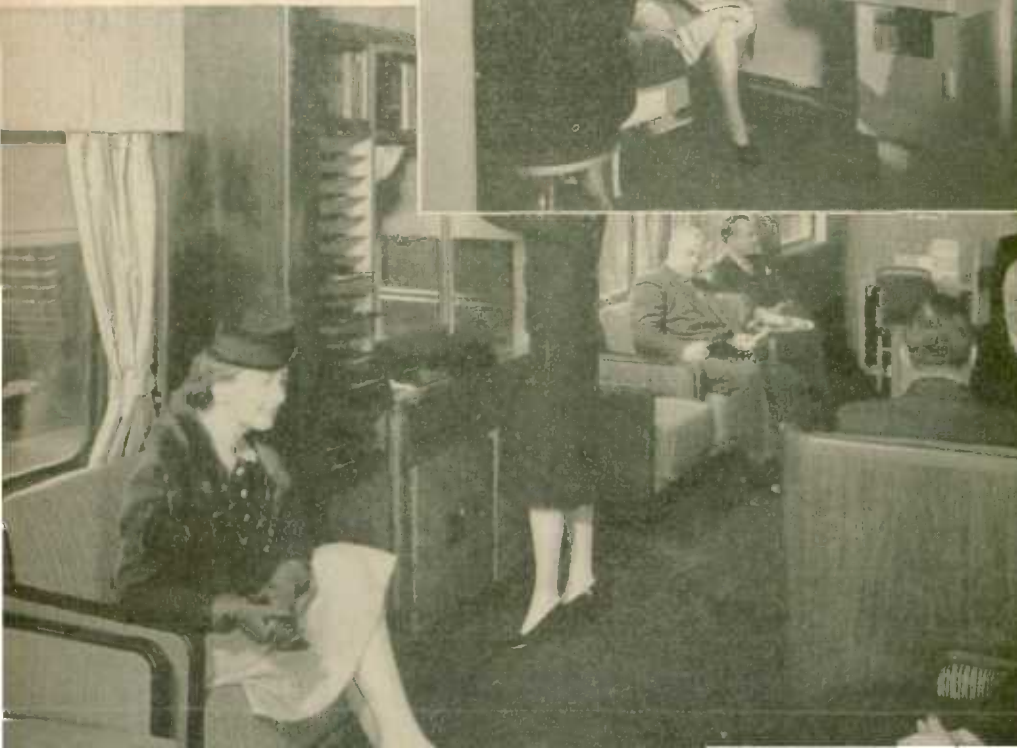
The Provincial Government of British Columbia also took over a bankrupt railway (348 miles) and the Canadian National and Canadian Pacific

jointly took over the Northern Alberta Railway (923 miles), which had been under private ownership but was unable to continue operations. The Province of Ontario built and operated a railway (574 miles) primarily for colonization purposes. Thus, the publicly operated railways in Canada are a combination of lines, some of which were constructed for political reasons or colonization purposes and some taken over from private companies faced with bankruptcy.

As a group these railways have not been prosperous: the Canadian National Railways earned a surplus only in 1926 and 1928, and in the five war years 1941-45, inclusive. During the period 1923-46 the net result was a cash deficit of \$470,379,800 exclusive of capital losses of \$89,292,974. These losses do not include any interest on advances by the Federal Government to meet operating deficits, which were charged against the system up to 1937.

With the outbreak of the Second World War, industrial production increased rapidly and freight traffic of the railways showed corresponding

New equipment in service on Canadian railways. The streamlined bedroom-buffet lounge car and rest-room facilities are especially designed for the comfort and convenience of the passenger.



increases. Passenger traffic showed even larger increases. The table below shows railway data for 1928, the pre-war peak year; 1933, the lowest of the depression years; and 1942-46, years affected by war and post-war conditions. Since the end of the War, passenger traffic has declined more rapidly than freight traffic, due mainly to the influence of the motor-bus and private automobile which were unrestricted in 1946 by gasoline and tire shortages, although new motor-vehicles were still insufficient to meet the demand.

Summary Statistics of Canadian Railways, 1928, 1933, 1938 and 1942-46

Year	Freight Carried One Mile	Passengers Carried ¹	Employees	Gross Operating Revenues	Operating Expenses
	Tons	No.	No.	\$	\$
1928.....	41,610,660,776	40,592,792	187,710	563,732,260	442,701,270
1933.....	21,092,594,200	19,172,193	121,923	270,278,276	233,133,108
1938.....	26,834,696,695	20,911,196	127,747	336,833,400	295,705,638
1942.....	56,153,953,000	47,596,602	157,740	663,610,570	485,783,584
1943.....	63,915,074,000	57,175,840	169,663	778,914,565	560,597,204
1944.....	65,928,078,992	60,335,950	175,095	796,636,786	634,774,021
1945.....	63,349,094,918	53,407,845	180,603	774,971,360	631,497,562
1946.....	55,310,257,842	43,405,177	180,383	718,510,764	623,529,472

¹ Duplications included.

The trend toward amalgamation of railways during the past half-century brought with it the elements of monopoly and possible over-charge, and it was considered necessary to set up an authority to control freight and passenger rates as well as other matters relating to construction and operation of railways. This control is in the hands of the Board of Transport Commissioners.

Electric Railways

Widespread changes in urban transport systems have been taking place in recent years. Electric street railways, at one time the sole type of conveyance, have been replaced or supplemented in many Canadian cities by the motor-bus and the trolley-bus, while a large number of interurban electric lines have been abandoned. At the end of 1946, electric cars were in operation in 22 Canadian cities, compared with 43 in 1926. In many cases, the same transportation company has remained in operation, using motor-buses instead of electric cars, but in a considerable number of cities in Ontario and Western Canada the transportation services are owned and operated by the municipalities. Windsor is at present the largest city where buses, exclusively, are operated. Trolley-buses are in use in Montreal, Toronto, Kitchener, Winnipeg, Calgary and Edmonton.

Equipment owned by companies or municipalities operating electric railways in 1945 included 3,512 electric passenger cars, 1,454 buses and 67 trolley-buses. Passengers carried by these vehicles reached an all-time high in that year, numbering 1,316,572,000, an increase of 5.1 p.c. over 1944. Electric cars carried 83 p.c. of the traffic, motor-buses 16 p.c. and trolley-buses 1 p.c.

Roads and Highways

Construction of roads suitable for motor traffic has been one of the principal items of provincial expenditure during the past 25 years. The

Federal Government has built roads in National Parks and has granted subsidies to the provinces, first in 1920 and again as an unemployment relief measure in 1930-39, but has not constructed any rural roads outside Dominion lands.

At the end of 1945 there were in Canada 131,453 miles of surfaced roads and 420,562 miles of earth roads. Of the surfaced roads, 113,991 miles were gravel or crushed stone, 14,826 bituminous surfaced and 2,513 portland cement concrete.

The expenditures for 1945 amounted to \$84,164,757, including \$28,350,266 for construction of roads, \$3,829,461 for construction of bridges, \$45,748,872 for maintenance of roads, \$3,231,073 for maintenance of bridges, \$20,045 for footpaths and sidewalks, and the remainder for general expenses.

Motor-Vehicles

The number of motor-vehicles registered in Canada reached a high point in 1946 at 1,622,463. The previous peak of 1,572,784 was recorded in 1941, after which the restrictions of wartime caused a reduction in the number of passenger cars in use, though registrations of commercial cars and buses increased each year throughout the war period. However, in 1946 the number of passenger vehicles, 1,234,006, had almost reached the 1941 figure, while the number of commercial cars, 364,078—including 355,095 trucks, 5,788 buses and 3,195 miscellaneous vehicles—continued to increase. Motor-cycles in 1946 numbered 17,163 as compared with 14,477 in 1941.

Provincial revenues from motor-vehicle registrations amounted to \$31,856,824 in 1945, a figure slightly higher than that for 1941.

The following table shows the number of motor vehicles registered in the different provinces during the war period.

Motor-Vehicles Registered, 1938-46

Year	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada ¹
1938...	7,992	51,214	37,110	205,463	669,088	88,219	109,014	107,191	119,220	1,394,853
1939...	8,040	53,008	38,116	213,148	682,891	88,864	119,018	113,702	122,087	1,439,245
1940...	8,070	57,873	39,000	225,152	703,872	90,932	126,970	120,514	128,044	1,500,829
1941...	8,015	62,805	41,450	232,149	739,194	96,573	131,545	126,127	134,499	1,572,784
1942...	7,537	58,872	37,758	222,622	715,380	93,147	130,040	125,482	132,893	1,524,153
1943...	8,032	59,194	40,205	222,676	691,615	93,404	133,839	127,559	134,691	1,511,845
1944...	8,412	57,933	39,570	224,042	675,057	93,297	140,992	127,416	135,090	1,502,567
1945...	8,835	56,699	41,577	228,681	662,719	92,758	140,257	130,153	134,788	1,497,081
1946...	9,192	62,660	44,654	255,172	711,106	101,090	148,206	138,868	150,234	1,622,463

¹ Includes registrations in Yukon.

Motor-Carriers.—Motor-buses and motor-trucks have increased steadily in importance in the transportation field, providing as they do freight and passenger service between numerous localities, both with and without railway facilities. During the war years rationing of gasoline, tires and motor-vehicles restricted the service considerably. The heavy short-haul traffic of employees to and from munition factories, air fields, etc., obscured, in the statistics, the curtailment in interurban traffic, but in 1946, when buses began to be more



The Nipigon River Bridge on Highway No. 17, Northern Ontario.

plentiful and rationing was abandoned, vehicle-mileage of inter-city and rural transit systems showed an increase of 14.7 p.c. over 1945 mileage, while the number of passengers increased 6.7 p.c.

Statistics of Motor-Carriers, 1942-45

Item	1942	1943	1944	1945
Investments in land, buildings and equipment	\$ 1	49,940,584	54,186,461	59,400,753
Revenues.....	\$ 67,527,491	76,020,555	81,707,604	88,157,490
Equipment—				
Trucks.....	No. 8,419	7,037	6,772	6,486
Tractor, semi-trailers.....	" 1,251	2,069	2,063	2,063
Trailers.....	" 2,529	974	1,103	1,154
Buses.....	" 2,529	2,992	3,104	3,322
Passengers carried.....	" 147,599,000	221,012,000	234,809,000	239,858,000
Freight—inter-city and rural	ton 10,866,000	11,144,000	9,605,000	10,853,000

¹ Not available.

Shipping

Canadian shipping is divided into two classes: (1) foreign service, and (2) coasting service. The first is subdivided into: (a) seagoing, i.e., between Canadian ports on the Pacific and Atlantic Oceans and on the St. Lawrence up to Montreal, and ports in other countries, including fishing at sea; and (b)

inland, i.e., between Canadian and United States ports on the Great Lakes and connecting rivers. The second is service between Canadian ports, including fishing in Canadian waters.

Shipping statistics are collected only from ports at which there is an official of the Customs and Excise Division of the National Revenue Department, and consequently do not include shipping on Mackenzie River, Lake Winnipeg, etc.

Vessels Entered at Canadian Ports, 1938-46

Year	Foreign Service ¹		Coasting Service		Totals	
	No.	Tons Register	No.	Tons Register	No.	Tons Register
1938 ²	42,582	45,603,055	75,537	44,471,834	118,119	90,074,889
1939 ²	43,601	44,775,116	73,386	45,386,457	116,987	90,161,573
1940 ²	46,241	46,666,396	78,212	44,361,232	124,453	91,027,628
1941 ²	25,122	32,579,900	79,951	50,471,166	105,073	83,051,066
1941 ³	26,203	31,452,400	77,592	48,111,082	103,795	79,563,482
1942 ³	21,066	25,640,763	73,366	43,990,764	97,432	69,631,527
1943 ³	23,901	26,345,562	65,066	40,300,778	87,967	66,646,340
1944 ³	24,786	28,356,681	64,999	43,776,497	88,785	72,133,178
1945 ³	21,431	29,655,984	65,410	48,098,201	89,841	77,754,185
1946 ³	26,461	30,367,071	67,014	45,559,014	93,475	75,926,085

¹ Sea-going and inland international.

² Year ended May 31.

³ Calendar year.

Harbours

Facilities provided for the co-ordination of land and water transportation at Canada's many ports include docks and wharves, warehouses for general cargo, cold-storage warehouses, harbour railway and switching connections, grain elevators, coal bunkers, oil storage tanks and, in the chief harbours, dry-dock accommodation. Eight of the principal harbours—Halifax, Saint John, Chicoutimi, Quebec, Three Rivers, Montreal, Vancouver and Churchill—are administered by the National Harbours Board, seven others by commissions that include municipal as well as Federal Government appointees, and the remainder by harbour masters directly under the authority of the Department of Transport.



The "Abegweit", world's largest ice-breaking train ferry, in service between Prince Edward Island and New Brunswick. The largest all-welded vessel ever built in Canada, the "Abegweit" has a capacity of 19 railway freight cars, 60 automobiles and 950 passengers.



Montreal Harbour, which provides extensive facilities to ocean-going vessels, including 105 berths, 26 transit sheds, 4 grain elevators with a total capacity of 15,000,000 bu., and cold-storage warehouse capacity of 3,000,000 cu. ft.

Canals

There are six canal systems under the Department of Transport, 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, and (6) from the Atlantic Ocean to the Bras d'Or Lakes in Cape Breton. These canals have opened to navigation from the Atlantic about 1,890 miles of waterways. Under the Department of Public Works or other authority are minor canals and locks that facilitate local navigation.



A Trans-Canada Air Lines DC-3 over Quebec City. This type of aircraft is used by T.C.A. for transcontinental flights.

The Great Lakes and St. Lawrence River form one of the busiest waterways in the world. More traffic passes up and down the Detroit River than any other waterway and the traffic through the canals at Sault Ste. Marie in 1929 reached a total of 92,616,898 tons, more than through the Panama and Suez Canals combined. Due to heavy war requirements for iron ore this traffic was increased to a new peak of 120,200,814 tons in 1942. In 1946 the total was 91,740,696 tons.

Civil Aviation

Canada is to-day well supplied with airports and aerodromes scattered throughout the country and is in a position to meet the expansion of aviation

that has resulted from war and post-war developments. During the war years 207 airports and aerodromes for Western Hemisphere operations and other war purposes were constructed or improved by the Department of Transport under the British Commonwealth Air Training Plan. These were additional to the 45 airports, aerodromes and emergency landing fields previously owned and operated by the Department.

Under the post-war reconstruction plan, the Department of Transport has retained what airports were required. Municipal airports which were taken over during the War have been returned to the respective centres and some of the surplus aerodromes have been made available to municipalities that had not previously been air-minded.

The airports, airfields and anchorages in Canada are classified as follows:

Department of Transport airports (land) and airfields...	143
Other Federal Government airports (land and water), airfields and anchorages	68
Provincial air services airports (water) and anchorages..	23
Municipal airports (land and water), airfields and anchorages	62
Private airlines airports (land) and airfields.....	19
Private airlines airports (water) and anchorages	40
United States Army Air Forces airports (land) and air- fields	3
Private, miscellaneous and unlicensed	260
TOTAL	618

Indicative of the expansion of private and commercial flying with the lifting of all wartime restrictions, some 29 active flying clubs, employing 105 aircraft were in operation in 1947. The clubs, members of the Royal Flying Clubs Association, represented a membership of 3,277. During the year ended Mar. 31, 1947, a total of 4,497 instructional flying hours were recorded by these clubs. In addition to flying clubs organized on a non-profit basis, 29 commercial flying schools were in operation, employing 96 aircraft. Student pilots enrolled in flying clubs and commercial flying schools in the year ended Mar. 31, 1947, numbered more than 1,500.

Civil Aviation Certificates and Licences in Force, January, 1946, and July, 1947

Type	In Force Jan. 1, 1946	In Force July 31, 1947	Increase
Private air pilot	389	1,431	1,042
Commercial and transport pilot	1,038	2,338	1,300
Airport traffic control officer	71	116	45
Air engineer	962	1,437	475
Registration of aircraft—			
Private.....	14	177	163
Commercial.....	367	1,442	1,075

Government Air Policy.—The Government's air policy, as outlined in 1943, stated that Trans-Canada Air Lines would "continue to operate all transcontinental systems and such other services of a mainline character as may from time to time be designated by the Government" and that Trans-Canada was "the sole Canadian agency which may operate international air services". Secondary services would be left to private enterprise.

The Air Transport Board was created in 1944 in lieu of the Board of Transport Commissioners to advise on questions of general policy in connection with air transport, to investigate and recommend the establishing of new air routes, and to license all commercial air-transport services.

Trans-Canada Air Lines.—Trans-Canada Air Lines has been in operation since 1937. The Trans-Canada Air Lines Act was amended in 1945, increasing the capital from \$5,000,000 to \$25,000,000 and providing authority to create corporations to operate and maintain air services under contract with Trans-Canada Air Lines. Trans-Canada Air Lines is now operating over a total of 6,511 miles of air routes in Canada, including routes to New York, Chicago, Cleveland, Duluth, Seattle and to Newfoundland, and 3,030 miles across the Atlantic between Montreal and Prestwick, Scotland. Another transatlantic service between Montreal and Shannon, Ireland, commenced in the autumn of 1947.

Trans-Canada Air Lines carried 305,442 revenue passengers (exclusive of the Atlantic service) in 1946 as compared with 183,121 in 1945 and 158,884 in 1944; 2,325,977 lb. of mail as compared with 3,429,232 lb. in 1945 and 3,739,105 lb. in 1944; and 1,043,713 lb. of air express as compared with 950,323 lb. in 1945 and 856,016 lb. in 1944. T.C.A. now utilizes 50 aircraft.

Canadian Pacific Air Lines.—Canadian Pacific Air Lines consolidated into one organization a number of independent commercial operators that had been chiefly engaged in servicing the mining industry in northern Canada including Canadian Airways Limited, Arrow Airways Limited, Ginger Coote Airway, Prairie Airways, Mackenzie Air Services, Yukon Southern Air Transport Limited, Dominion Skyways Limited, Quebec Airways, Wings Limited, Starratt Airways and Transportation Company.

The component companies of Canadian Pacific Air Lines flew 6,813,907 revenue miles in 1946. This compares with 5,373,403 miles in 1945 and 5,984,602 miles in 1944. Passengers carried totalled 175,461 in 1946, 125,110 in 1945 and 104,166 in 1944. Freight transported totalled 16,514,741 lb. in 1946, compared with 9,419,556 lb. in 1945; and mail carried amounted to 1,722,733 lb. in 1946 compared with 1,253,537 lb. in 1945.

Independent Air Lines.—Although many of the principal operating companies have been absorbed by C.P.A., there still remain independent organizations in this field. Maritime Central Air Lines operates a mail, passenger and express service between Moncton, Saint John, Blissville, Summerside, Charlottetown and New Glasgow; the M. and C. Aviation Company operates a licensed air-mail, passenger and express service from Prince Albert to northern Saskatchewan points. There are also the Northern Airways Limited, located at Carcross, Yukon, and Leavens Bros. Air Services Limited at Toronto.

Non-Scheduled and Charter Operations.—A large portion of commercial flying in Canada is made up of non-scheduled and charter operations and by June 30, 1947, some 200 licences had been issued to operators coming under this classification. Scheduled operations are, for the most part, confined to the populated and industrialized areas where air transport is an adjunct to other transportation facilities. In the great hinterland of Canada, the aircraft is the only means of rapid and safe long-distance travel.

The installation of air navigation aids along established air routes into the far north with terminals at Dawson in the Yukon; Aklavik at the mouth of the Mackenzie River; Coppermine on Coronation Gulf and Goose in Labrador, have facilitated the use of larger types of aircraft and have made both regular and charter carrier services faster and safer.

Revenue passengers carried by scheduled, non-scheduled and charter operators in the first four months of 1947 numbered 180,864 as compared with 147,804 in the same period of 1946; freight carried amounted to 10,932,083 lb. as compared with 5,687,194 lb. These figures do not include passengers and goods carried to and from foreign countries.

Five operating certificates have been issued to foreign scheduled services flying into Canada: four to United States air lines and one to British Overseas Airways Corporation with Canadian terminal at Montreal Airport, Dorval.

Trans-Atlantic Air Service.—The first flight of the Canadian Government Trans-Atlantic Air Service between Canada and Great Britain took place on July 22, 1943. From then until Mar. 31, 1947, this service carried 8,370 passengers, 215,000 lb. of goods and 2,403,500 lb. of mail.

Trans-Canada Air Lines, operating under the name of Trans-Canada Air Lines (Atlantic), is now flying ten round trips per week between Prestwick and Montreal, and between Shannon, Ireland, and Montreal, using North Star aircraft. These aircraft are a Canadian development of the original DC-4, using British Rolls-Royce engines.

Canoes for use in Northern Canada being loaded on aircraft at Edmonton, Alta.





A T.C.A. hostess serving refreshments to passengers.

The northern route, either by way of Gander, Newfoundland, or Goose, Labrador, is followed during the summer months. Treaty agreement with Newfoundland requires that all transatlantic services, with the exception of Trans-Canada Air Lines, shall use Gander, weather permitting.

By treaty agreement with Portugal, T.C.A. has the right to land in the Azores, should weather conditions make the operation of the northern route undesirable.

The radio-communications system for transatlantic air operation, with headquarters at Moncton, N.B., is operated by Trans-Canada Air Lines, as agent for the Department of Transport.

The Canadian Meteorological Service now has stations at both Gander, Newfoundland, and Goose, Labrador, as well as at Montreal, which are largely for transatlantic operations. The Dominion-wide radio range system extends from Montreal through intermediate points to both Goose and Gander.

International Civil Aviation Organization.—In accordance with the provisions of the Interim Agreement, the first Interim Assembly of the Provisional International Civil Aviation Organization was convened at the city of Montreal, on May 21, 1946. At this meeting, Canada (Montreal) was chosen as the permanent seat of the organization. Since that meeting, the Interim Council and Air Navigation Committee have been in almost constant session.

Technical experts from member states were brought together at divisional and regional air navigation meetings for the purpose of preparing standards and procedures for the safe and efficient operation of international air service. Up to June 30, 1947, there were 15 such meetings: 10 were held at Montreal, Canada; one at Washington, U.S.A.; one at Paris, France; one at Cairo, Egypt; one at London, England; and one at Melbourne, Australia.

Canada was represented at all of these meetings, with the exception of the regional navigation meetings held at Paris and Cairo, and sent

more than 50 delegates who were representative of all phases of aviation. These meetings prepared the ground for the first assembly of the International Civil Aviation Organization, which was convened at Montreal on May 6, 1947.

The Canadian air regulations are being amended, where necessary, to conform with the International Civil Aviation Organization in all matters having a bearing on international aviation.

Telegraphs

Six telegraph systems are operated in Canada, four in conjunction with the railways, one by the Dominion Government and one small system that is owned and operated independently. One United States company uses lines across Canadian territory; one private Canadian company operates a wireless system; and three cable companies, in addition to the telegraph companies, operate cables from Canadian stations. In all, there are 22 cables between Canada and England, Azores, Australia, New Zealand, Newfoundland, St. Pierre and Miquelon, and Bermuda, and two cables between North Sydney and Canso, N.S.

These systems have 395,545 miles of telegraph wire in Canada, 5,436 miles outside of Canada, and 32,813 nautical miles of submarine cable between Canada and other countries. Multiple circuits normally produce 844,558 miles of channels for telegraphic use. During 1946 a total of 18,441,841 telegrams and 1,845,539 cablegrams, excluding messages between foreign countries, were handled by these systems.

Telephones

There were 3,151 telephone systems in Canada in 1945, with 6,333,761 miles of wire and 1,848,794 telephones. The estimated number of conversations during the year was 3,210,280,400 or 1,736 per telephone. The transfer from manually operated telephone switchboards to automatic has continued, although it has been somewhat restricted by scarcity of equipment since 1941. In

Switchboards in a long-distance telephone centre.





The economic problem of making telephone service available in remote areas was solved recently in the Laurentian village of Lac Supérieur by the installation of a system that utilizes power wires to carry the telephone current. The illustration shows the testing of the equipment that superimposes the relatively weak telephone current on the power circuit.

1945, 56 p.c. of all telephones were dial telephones; 93 p.c. of these were in urban centres of over 10,000 population, where they comprised 78 p.c. of the telephones in use.

Radio

On Feb. 9, 1932, the Judicial Committee of the Imperial Privy Council, to whom the matter had been reported, ruled that the control and regulation of radio-communication rested within the jurisdiction of the Dominion Parliament. The enactment of the Canadian Radio Broadcasting Act of 1932, by which power was vested in the Canadian Radio Broadcasting Commission to control and regulate radio broadcasting in Canada, followed. At this time the Commission was without a transmission system of its own but proceeded to carry out its responsibilities under the Act in regard to the control of privately owned stations. The nucleus of a nationally owned system was secured in 1933 on the acquisition and operation by the Commission of three stations of the Canadian National Railways at Moncton, Ottawa and Vancouver. The present Canadian Broadcasting Corporation succeeded the Canadian Radio Broadcasting Commission in 1936.

The responsibilities of the CBC as laid down in the Canadian Broadcasting Act of 1936 are to formulate regulations controlling the establishment and operation of networks, the character of any and all programs broadcast

in Canada and the proportion of time that may be devoted to advertising in broadcast programs.

All radio stations in Canada come under the Department of Transport, Radio Division, for technical administration including frequency, operating power, etc., and are licensed by this authority.

At Apr. 1, 1947, there were operating in Canada 120 standard broadcast band stations, of which 11 were Canadian Broadcasting Corporation stations and 109 privately owned stations; also 33 short-wave stations, of which 25 were Canadian Broadcasting Corporation stations and eight privately owned stations.

The number of radio receiving sets in Canada is probably not far below 3,000,000, or about one for every four persons in the population. Private receiving licences number about 1,800,000, many of which cover more than one set. New receiving sets, impossible to purchase during the later war years, are now on the market in considerable quantity.

Canadian Broadcasting Corporation.—With the return to peacetime conditions, the Canadian Broadcasting Corporation has been able to resume work on its plans for national coverage which were determined in 1936. A new 50 kw. transmitter is being built near Lacombe, Alta., and a site for a similar 50 kw. transmitter has been chosen near Carman, Man. Both transmitters will operate in clear-channel frequencies under the provisions of the North American Regional Broadcasting Agreement. The power of Station CJBC, Toronto, is to be increased to 50 kw. and CBJ, Chicoutimi, Que., to 10 kw. When present construction operations are completed, the CBC will have 13 amplitude-modulation stations—seven of them with 50 kw. transmitters—providing service to nearly all the people in Canada.

The CBC has been active in the development of frequency modulation. Two experimental FM transmitters have been in operation at Montreal and a third at Toronto, and arrangements are being made to establish FM transmitters at Ottawa, Winnipeg and Vancouver. CBC engineers are also making an intensive study of television to determine the conditions under which it can best be introduced in Canada, and observers have been sent to the United States and Great Britain to note latest developments in this field.

Organization of the CBC.—The Canadian Broadcasting Corporation is operated as a national public service. Policy is determined by a Board of nine Governors who act as trustees of the national interest in broadcasting.

A youth program being broadcast over a private commercial station.





The nerve centre of CBC's Toronto studios—the master control room: 38 programs can be controlled simultaneously on this "board".

The Governors are appointed by the Governor General in Council for three-year terms, and the Chairman is required to devote his full time to performance of his duties. They are chosen to give representation to the main geographical divisions of Canada and various facets of Canadian life. Direction of policy, day-to-day operations, and management of the system are the responsibility of the General Manager and Assistant General Manager. Revenue is derived from an annual licence fee of \$2.50 paid by listeners, and income from commercial operations.

As constituted under the Act, the CBC is designed to operate in the public interest. It is responsible to Parliament as a whole through a Minister of the Crown and from time to time the work of the Corporation is reviewed by a special Committee of the House of Commons.

Operations.—The CBC operates all radio networks in Canada; the Trans-Canada and Dominion Networks serve English-speaking listeners from coast to coast, and the French Network serves French-speaking listeners in the Province of Quebec. The Networks are made up from 11 CBC-owned and 101 privately owned stations located across Canada. The Trans-Canada has a maximum outlet of 62 stations; the Dominion a maximum of 37; and the French Network a maximum of 13. For occasional broadcasts of national interest the three networks are joined to form the National Network. In addition to these outlets, the CBC has pioneered in the development of low-powered repeater stations, which operate automatically with the Network, in remote areas of Canada. French-speaking listeners in northern Quebec and on the western prairies are served by short-wave stations, and another is used to reach listeners in the northern coastal regions and interior of British Columbia.

Short-wave receiving stations are maintained at Dartmouth, N.S., at Ottawa and Toronto, Ont., mainly for the reception of British Broadcasting Corporation transmissions. In order to improve reception from Australia and

points in the Pacific area, a new short-wave receiving station is being built at Point Grey, near Vancouver, B.C. As noted above, CBC FM transmitters are operating at Montreal and Toronto.

Program Service and Development.—During the year ended Mar. 31, 1947, 59,705 programs were broadcast, taking up 17,843 hours of broadcast time, on the three CBC networks. Of the total hours, 80.6 p.c. was non-commercial service, an increase of 514 hours over the previous year. The CBC originated and produced 78.4 p.c. of all network broadcasts, private stations originated 2.3 p.c. and the remaining 19.3 p.c. were made up of exchange programs from the British Broadcasting Corporation and United States networks.

Light and semi-classical music occupied the greatest number of hours, followed in order by news, dramatic and feature productions, classical music, agricultural programs, informative talks, educational and religious programs. Children's programs, broadcasts of sports events and sports résumés took up the remaining network time, in that order.

Network broadcasting in Canada is made more complicated by the fact that the Dominion lies across five of the world's time zones. In order to bring news broadcasts and other programs to listeners in each of the time zones at suitable hours, CBC administrative, program and engineering headquarters and newsrooms are maintained at Halifax, Toronto, Winnipeg and Vancouver. Decentralization also makes it possible for CBC producers to cater to varying tastes in the five regions, and to employ and develop local talent. The emphasis, however, is on national radio, with the objective of supplying a good balance of entertainment and information to a nation-wide audience.

Educational Programs.—A large portion of broadcast time is devoted to programs of an educational nature for both children and adults, in English and French. Each year the CBC presents a series of National School Broadcasts including, during the 1947-48 season, a complete dramatization of Shakespeare's *Hamlet*, with specially composed music. In addition, the CBC co-operates with Provincial Departments of Education in broadcasting special programs related to the courses of study in provincial schools. School broadcasts on the CBC French Network are heard under the title *Radio-Collège*. Programs of an educational nature for adults are presented in a wide variety of discussion-forums, commentaries, talks and semi-dramatized programs.

CBC International Service.—Since its inception in February, 1945, the CBC International Service has expanded until now the *Voice of Canada* is heard abroad in ten languages. Built and operated on behalf of the Canadian Government, the transmitters of the International Service, located near Sackville, N.B., send out the strongest signal heard in Europe from North America. During the meetings of the General Assembly in New York, the United Nations continued to use the CBC transmitters for 90 minutes daily, directing reports to Czechoslovakia, Russia, Turkey, Norway, Switzerland, the Netherlands, Poland, France, Greece and Egypt.

Operations during the fiscal year ended Mar. 31, 1947, involved 3,275 hours of broadcasting, made up of more than 10,000 program periods. In addition to areas already served, it is planned to begin regular transmissions to South Africa in the near future.

The Post Office

During the year ended Mar. 31, 1947, mail volume showed continuous expansion and gross postal revenue amounted to \$86,400,951, an increase of \$2,637,945 over the previous fiscal year. Money orders payable in Canada were issued to the value of \$321,728,206 and those payable abroad to the value of \$7,829,498. Post offices in operation on Mar. 31, 1947, numbered 12,033.

Much was done in 1946 and 1947 to restore and improve international mail services which had been disrupted or impaired during the war years. The Canadian Post Office was represented at the Congress of the Postal Union of the Americas and Spain, held at Rio de Janeiro, Brazil, in the summer of 1946; at Lake Success, N.Y., later in the year, when the subject of closer international mail relations between the Universal Postal Union and the United Nations Organization was discussed; and also at the Twelfth Congress of the Universal Postal Union held at Paris, France, in the late spring of 1947. Previous to these conferences, there had been no meetings of representative Postal Administrations since the summer of 1939.

The immediate result of the first of the above-mentioned meetings was that Canadian air-mail postage to many countries was reduced by 50 p.c., and in some cases by more than that amount, effective Nov. 1, 1946. This reduction was made possible because the Congress had confirmed the establishment of an air-mail unit of weight of 5 grammes, which enabled Canada to base its international air-mail postage rate on the quarter-ounce weight unit in place of the half-ounce.

During 1946-47, parcel-post service was restored and improved to numerous countries overseas. Just before the 1946 Christmas mailing season the 20-lb. maximum-weight limit on gift parcels, including those containing food, to the United Kingdom was restored. British authorities also agreed to remove the wartime restrictions which had limited the quantity of any one food mailed in a parcel and the frequency with which such parcels could be sent to an addressee.

Following negotiations with the Postmaster General of the United Kingdom, parcel-post rates were considerably reduced, effective Jan. 1, 1947. To encourage the mailing of parcels of food to individuals in the United Kingdom, steps were taken, in co-operation with the British postal authorities to provide for their quick handling through the customs overseas. A yellow label, affixed by the mailer, certifies that the parcel is from a private individual and contains only bona fide, unsolicited gifts of food.

New air-mail routes were opened in 1946-47 and frequencies increased both on a national and international scale. Services were extended to several countries in Europe and Asia, including Germany and Japan. In October, 1946, transatlantic air-mail service between Dorval Airport, Montreal, and Prestwick, Scotland, and London, England, was increased to daily in each direction. A special delivery service for both air mail and surface mail between Canada and the United Kingdom became effective on Apr. 1, 1947.

During 1946-47 improved air-mail schedules were also effected over the main trans-Canada air-mail system, including a fourth direct flight daily (each way) between Toronto and Vancouver. New services linked Canadian centres with Chicago, Washington, Seattle and other United States points, and there was considerable air-mail development in the Maritimes, Central

Canada and the West. Air stage-service was further extended along the eastern shore of Hudson Bay. On July 1, 1947, Sault Ste. Marie and Fort William, Ont., were included on the main trans-Canada air-mail route when the "Great Lakes" short route was inaugurated between Toronto and Winnipeg; Swift Current, Sask., and Medicine Hat, Alta., were also placed on the system.

Miles flown with mail in 1946-47 reached the peak of 20,104,976, but the weight of mail carried by air was 5,626,241 compared with 7,473,152 in 1945-46 and 8,224,230 in 1944-45. The drop in volume is accounted for by the tapering off in the volume of military mail.

<i>Year ended Mar. 31—</i>	<i>Miles Flown No.</i>	<i>Mail Carried lb.</i>
1939.....	3,711,987	1,822,309
1940.....	5,769,257	2,351,172
1941.....	8,330,121	2,842,367
1942.....	10,021,579	3,541,625
1943.....	10,799,670	5,373,021
1944.....	12,799,218	7,220,554
1945.....	13,581,053	8,224,230
1946.....	15,215,816	7,473,152
1947.....	20,104,976	5,626,241

The Post Office commemorated the centenary of the birth of the inventor of the telephone, Dr. Alexander Graham Bell, with a special 4-cent stamp issued on Mar. 3, 1947, the first day cover service being given at Brantford, Ont., his former home. The philatelic demand for this issue broke all records. On July 1, 1947, 80th Anniversary of Confederation, a special "Citizenship" 4-cent stamp was issued. A 4-cent stamp will be issued Jan. 15, 1948, to commemorate the marriage of H.R.H. the Princess Elizabeth, Duchess of Edinburgh, and H.R.H. Prince Philip, Duke of Edinburgh.



Domestic Trade

Prices and Price Control

Cost of Living

THE exchange of commodities produced from the mines, forests, rivers and seas, and processed in the factories, together with the services for which people pay, collectively come under the designation of domestic trade. This, together with prices and the cost of living, is a measure of the nation's internal economy.

★ *Domestic Trade*

The diverse resources of the various parts of the country have led to a vast exchange of products and the task of providing goods and services where they are required for consumption or use by a population of 12,582,000, very unequally distributed over half a continent, accounts for a greater expenditure of economic effort than that required for the prosecution of Canada's great volume of foreign trade, high though the Dominion ranks among the countries of the world in this field.

Domestic trade is broad and complicated, including as it does the transportation and distribution of goods within the country through the medium of railways, steamships, warehouses, wholesale and retail stores, and other agencies. It also includes all services such as those performed by doctors, hospitals, theatres, schools, banks, insurance companies, and innumerable others. All such activities, even if not productive of material goods, add substantially to the national income.

Unfortunately, owing to the many ramifications of domestic trade, its statistical measurement presents great difficulties. Nevertheless, some idea of its extent may be gathered from the fact that, in 1946, the national income arising from productive operations was estimated at \$11,417,000,000, while the value of domestic exports was \$2,312,000,000 in that year.

Merchandising and Service Establishments

Every ten years, a Census of Merchandising and Service Establishments is taken, which embraces the fields of wholesale and retail trade as well as that of service and repair establishments catering to the public needs. Comprehensive surveys such as these provide complete analyses of the operations of establishments in each of these fields. The latest complete census was that for 1941.

The magnitude of the task of covering such a wide range of business activity precludes any attempt to repeat the surveys annually. Current



A freight train leaving Mink Tunnel on the north shore of Lake Superior, Ont.

information is prepared, therefore, through the medium of partial surveys designed to afford some indication of trends in business and to examine certain significant aspects of the operations when the occasion justifies.

Wholesale Trade.—Wholesale trade, for census purposes, has been taken to include all agencies of distribution between the producer on the one hand and the retailer, or industrial or other large user, on the other hand. It does not include manufacturing plants, so that those goods which reach the retailers' shelves or the consumer directly from the producer do not enter the wholesale picture. But it does include manufacturers' sales branches or offices operated at locations apart from plants. In addition to regular wholesalers (including exporters and importers), agents, brokers and commission merchants have been included, as well as assemblers of primary products, such as co-operative marketing associations, grain elevators, and city or country buyers of primary products. The wholesale census also includes the bulk tank stations operated by distributors of petroleum products. It should be noted, however, that many of these types of wholesalers transact business with other wholesalers, with the result that the total volume of business transacted by all types contains duplications to the extent of this inter-trading within the field.

Of all the various types of wholesalers included in the Census, the group designated as "wholesalers proper" constitutes the main distribution

channel for consumer goods to retail merchants. From among these regular wholesale merchants, nine lines of trade, including the principal consumer goods, have been selected to provide a measure of current trends in wholesale trade. The trades on which the composite index of wholesale sales is based are: automotive equipment, drugs, clothing, footwear, dry goods, fruits and vegetables, groceries, hardware, and tobacco and confectionery.

Between 1941 and 1946, the general index of wholesale sales rose 72 p.c., while the index for 1946 was 19 p.c. higher than that for 1945. Trends in all individual trades were up between 1941 and 1946, although the degree of increase in dollar volume varied considerably. Between the years 1941 and 1946, sales of wholesale dealers in fresh fruits and vegetables increased 122 p.c. A high level of purchasing power together with certain price increases contributed somewhat to this rise. With new motor-vehicles withheld from the market, the necessity of maintaining those already in operation was no doubt a factor in raising the dollar volume of sales of automotive parts and equipment to a level 112 p.c. above that for 1941. On the other hand, staple commodities, such as dry goods, clothing and groceries, which were under more rigid price control and were more limited in supply, showed smaller though substantial increases in dollar volume of sales throughout the war years. The result of the lifting of price controls and some improvement in supply was evident in the sales of these trades in 1946 when the increases over the preceding year were greater than in any other year since 1941. Sales in the hardware trade, which showed only a moderate gain of 37 p.c. between 1941 and 1945, increased 31 p.c. between 1945 and 1946 as more hard goods and builders' supplies became available.

Indications are that the 1947 level of dollar sales will be higher again than that for 1946, although the margin of increase is narrowing. Cumulative sales for the first nine months exceeded those for the corresponding period of 1946 by 10 p.c. The greatest gains over 1946 were registered in those trades which had experienced least expansion during the war years, namely, dry goods, hardware, groceries and clothing. Fruit and vegetable wholesalers' sales dropped 6 p.c. below the high peak of 1946, while a gain of 7 p.c. was registered by wholesalers of automotive equipment.

Retail Trade.—The final stage in the distribution of consumer goods is effected through a great number of retail stores, ranging in size from small stores with meagre daily takings to large enterprises whose sales are reckoned in millions of dollars. The trend toward large-scale merchandising started early in the present century when larger individual establishments, chiefly of the department-store type and associated in some cases with extensive mail-order business, came into being. This was followed by a rapid expansion in the chain-store type of distribution which was the outstanding development during the 1930's.

Results of the Census of Merchandising for 1941 showed a total of 137,331 retail stores with sales of \$3,440,901,700. These stores provided employment for 297,047 full-time employees in that year, of whom 188,658 were male and 108,389 were female. Salaries and wages paid to these employees amounted to \$289,379,500. In addition, 95,561 part-time employees received \$25,058,000 in wages. In 1941, department stores transacted 11 p.c.

of the total retail trade of the country, including their mail-order business. Chain companies, whose operations extend into many of the 118 kind-of-business classifications used, accounted for 19 p.c. of all retail trade.

The impact of war had affected merchandising to only a slight degree in 1941, although it had increased consumer income to the point where sales volume was rapidly expanding. Control measures and restrictions, which became numerous and extended over many commodities during subsequent years, did not bring about any decline in retail trading. The diversion of certain materials to war production was a deterrent to expansion in a few fields; radio, household appliance and automobile dealers experienced a substantial contraction in their sales for quite some time. Nevertheless, in spite of increased income-tax rates and the withdrawal of large segments of consumer income as war savings in the form of Victory Bonds, the general direction of retail trading moved constantly upward during the entire war period. The main purpose and result of control regulations was to ensure as equitable distribution of the available goods as possible.

By 1945, the volume of retail business had reached \$4,591,885,000 and was one-third higher than at the time of the 1941 census. Chain-store sales in that year were \$877,896,000 and remained at 19 p.c. of the total, although the number of individual outlets has tended to become reduced. The following table shows the relative expansion in sales that took place between 1941 and 1945 for the major groups.

Retail Store Sales, by Kind-of-Business Groups, 1941, 1944 and 1945

Group	1941 ¹		1944 ²	1945 ²
	Stores	Sales	Sales	Sales
	No.	\$	\$	\$
Food.....	48,468	786,247,300	1,017,541,000	1,110,314,000
Country general.....	11,917	214,747,800	321,308,000	351,684,000
General merchandise.....	3,794	525,971,000	654,954,000	722,804,000
Automotive.....	16,867	594,719,500	351,942,000	424,301,000
Apparel.....	12,601	295,211,600	397,458,000	435,894,000
Building materials.....	5,801	174,203,400	247,723,000	281,418,000
Furniture—household—radio.....	3,498	118,356,900	107,056,000	123,520,000
Restaurants.....	8,821	131,181,000	202,463,000	210,465,000
Other retail stores (including second-hand).....	25,564	600,263,200	822,706,000	928,485,000
Totals, All Stores.....	137,331	3,440,961,700	4,123,151,000	4,591,885,000

¹ Census results.

² Estimates.

Relaxation of wartime restrictions began early in 1945, even before the termination of hostilities. By the end of 1946 most of them had been removed, but controls affecting distribution were not completely discarded until November, 1947, with the termination of sugar rationing.

The transition stages from a wartime to a peacetime economy did not disturb the prevailing direction of retail trade. Employment has continued at a high level throughout the post-war period, some rise in wage levels has come about, family allowance payments and gratuities have helped to swell the fund of consumer purchasing power. These factors, coupled with the accumulated demand for numerous products which were scarcely obtainable during the War, enabled retail trade to extend its advance through 1946

and at an accelerated rate. The greatest expansion in recent periods has taken place in sales of radio and electrical stores, automobile dealers, hardware and furniture stores.

Official estimates of the total retail trade of Canada in 1946 are not yet available. On the basis of material presently at hand, it would appear that dollar sales were in the vicinity of \$5,475,000,000 for that year, an increase of about 20 p.c. over 1945. In the first nine months of 1947, the rate of increase moderated slightly, results for fourteen trades revealing an average increase of 10 p.c. over 1946. If the current margin of increase is sustained through the remaining three months of the year, volume of sales should approximate \$6,000,000,000 during 1947. Emphasis continues to be concentrated on durables to some extent, although other consumer necessities such as apparel and food continue to share in the expansion of retail business. Only in those trades that specialize in the sale of luxury or semi-luxury goods, such as jewellery, candy and furs, have sale declines become evident in recent months.

Retail Services.—In addition to the retail merchandise stores in operation in 1941, there were 49,271 service establishments with total receipts of \$254,677,900 recorded in the results of the Census of Merchandising and Service Establishments. These figures cover a wide range of establishments of various types located generally in the retail marketing sections of urban areas and whose revenue represents receipts from services rendered rather than from the sale of merchandise. Professional services, transportation services, and services related directly to the building trades, masonry, plumbing, etc., are not included. The provision of amusement and personal services of various kinds forms a large proportion of the total. Figures estimated for the years 1942 to 1946 reveal an expansion in motion-picture theatre attendance and receipts. There were 227,538,798 paid admissions in 1946, while box-office receipts amounted to \$59,888,972. Dominion and provincial amusement taxes amounted to an additional \$15,052,994.

Chain Stores.—Chain stores captured a slightly larger share of the total trade in 1945 than they obtained in 1944. The proportion of chain store sales to total sales increased from 18.8 p.c. in 1944 to 19.1 p.c. in 1945. There were 426 chain companies operating 6,725 stores in Canada in 1945 with sales of \$877,895,900, whereas 1944 totals showed 435 companies with 6,829 stores and sales of \$774,088,400. Included in these chain figures are all retail organizations operating four or more retail outlets, excluding department stores which are classified as independents regardless of the number of stores they operate.

Co-operative Associations

During recent years Canadian co-operatives have expanded in many directions and the movement has been strengthened by provincial and national federations and international affiliations. The various co-operative wholesales in Canada have joined to form Interprovincial Co-operatives Limited to facilitate interprovincial co-operative trading in products of the various provinces. Five large co-operative wholesales in Canada belong to National Co-operatives Incorporated of the United States, whose main business is in dairy equipment, farm, household and automotive chemical preparations.



A modern self-service grocery.

Co-operative Business Organizations.—In 1946 there were more than 1,900 co-operative associations in Canada with total assets amounting to \$163,467,434, of which the depreciated value of plant and equipment was \$46,775,158. The members' equity amounted to \$92,455,174, consisting of paid-up share capital of \$19,580,322 and surplus and reserves of \$72,874,852. This was an increase of \$8,681,023 in members' equity over 1945. The relation of members' equity to total assets increased from 49 p.c. in 1945 to 57 p.c. in 1946, accounted for by a decrease in grain on hand with an offsetting decrease in bank loans. Working capital increased from \$40,725,825 in 1945 to \$45,680,016 in 1946.

The value of farm products marketed during the 1945-46 crop year was \$454,564,927. This was a decrease of \$46,000,000 from the previous year which had been the record year to date. The value of grain and seed marketed co-operatively fell about \$64,000,000 as a result of the small grain crop in 1945.

There was little change in the proportion of farm products marketed co-operatively. It is estimated that about 28 p.c. of the main farm products was again handled by co-operatives at some stage of the marketing process. During 1946, 1,080 associations reported the marketing of farm products and 1,446 associations purchased merchandise and supplies for their members. The value of supplies handled was \$95,603,311, an increase of more than \$14,000,000. This increase in purchasing occurred in all provinces.

In 1946 there were 545 consumers' co-operative stores with 166,030 members and retail sales of \$45,893,742.

Credit Unions.—This is a form of co-operative banking which was introduced in the Province of Quebec in 1900 and spread to the other provinces from 1930 onwards. In 1946 there were 2,422 of these co-operative credit institutions throughout the Dominion with a membership of about 690,000. Total assets were over \$187,000,000 and during 1946 loans were made in excess of \$53,000,000. Quebec leads all provinces in the number of such unions, membership and assets. It is estimated that the credit unions in Canada are about equally urban and rural.

In Quebec these "caisses populaires" are an extremely important factor in the rural economy, since loans are made mostly to farm people for agricultural purposes. In that Province over 900 caisses lent approximately \$30,000,000 to members in 1946.

Insurance.—Mutual fire insurance is one of the oldest forms of co-operation in Canada. At the end of 1945 there were over 400 such mutuals with insurance at risk amounting to \$1,554,000,000. Net losses paid in 1945 amounted to over \$3,000,000. The Co-operative Life Insurance Company, recently organized under the Saskatchewan Life Insurance Act, is the first venture into the field of life insurance.

Miscellaneous.—At the end of 1945 there were 2,368 co-operative telephone systems in operation across Canada with an investment in excess of \$21,000,000 and 99,851 connected telephones. Other services are now being provided in a co-operative way, including housing, lodging and boarding facilities, transportation and funeral services. Perhaps two of the most important recent developments of this type are the county medical services in Ontario and rural electrification in Quebec. Co-op. Vegetable Oils Ltd., organized several years ago by the sunflower growers at Altona, Manitoba, commenced crushing operations in March, 1946, and during its first season produced over 5,000,000 lb. of sunflower seed oil and meal and more than 1,000,000 lb. of linseed oil and meal.

*** Wholesale Prices**

The general wholesale price index (1926=100) stood at 72.3 in August, 1939, and at 130.8 in August, 1947. This represents an increase of 81 p.c. for the War and immediate post-war periods. The index is strongly affected by the increase in wholesale prices of Canadian farm products, which rose from the relatively low point of 58.4 in August, 1939, to 120.0 in August, 1947, an increase of 105.5 p.c.

The index includes approximately 500 articles, each of which is priced at several sources. The articles are largely basic commodities, produced by Canadian farms, mines, forests, fisheries and manufacturing industries, although a considerable number of semi-manufactured and finished goods are also included. Weights used correspond to the importance in domestic markets of the various items marketed, whether they are imported, exported or for domestic consumption.

The nine-year increase of 81 p.c. in the Canadian wholesale price index compares with a United Kingdom increase of 97 p.c. and a United States increase of 101 p.c. for the same period.

Monthly Index Numbers of General Wholesale Prices and Wholesale Prices of Canadian Farm Products, 1946 and 1947¹

(1926 = 100)

Year and Month	General Wholesale Prices	Canadian Farm Products	Year and Month	General Wholesale Prices	Canadian Farm Products
1939			November.....	111.6	113.8
August.....	72.3	58.4	December.....	112.0	113.9
1946			1947¹		
January.....	104.6	109.6	January.....	114.2	114.4
February.....	105.3	110.3	February.....	118.1	115.5
March.....	105.6	110.3	March.....	120.4	116.4
April.....	108.4	110.7	April.....	122.9	116.9
May.....	109.0	111.4	May.....	125.3	118.5
June.....	109.3	112.7	June.....	127.8	119.2
July.....	109.7	113.8	July.....	129.1	120.1
August.....	109.3	111.5	August.....	130.8	120.0
September.....	109.2	110.9	September.....	133.8	120.4
October.....	111.0	113.3	October.....	139.3	122.9

¹ Subject to revision.

★ *The Period of Price Decontrol**

Under the general price ceiling established in December, 1941, and administered by the Wartime Prices and Trade Board, the prices of most goods, important services and rentals were frozen at the levels prevailing in the basic period Sept. 15-Oct. 11, 1941. While a few commodities were at first exempt from control, it was eventually found necessary to establish maximum prices for most of them. As the stabilization program developed, standardized specific prices replaced individual basic-period price ceilings more and more and, as the number of price adjustments increased at the manufacturing level, a standard method of controlling price increases at distributive levels was evolved. For a wide range of commodities maximum wholesale and retail percentage markups over costs were established.

As far as practicable, the same price-quality relationships, and the same proportionate volume of production in each price range as in the basic period were maintained and as far as possible scarce goods were fairly distributed among the various regions and the dealers within those regions. Rationing, allocation of materials, direction of production, and other controls were also necessary accompaniments to price control.

Higher costs, the inevitable result of the War, were to some extent offset by higher volume of sales and various cost-reducing measures designed to keep down the prices paid by consumers, and were partly absorbed by producers, importers and distributors. In some cases subsidies were paid or price increases were authorized.

It was recognized that price and related controls were temporary measures that had to be relaxed and removed as promptly as the emergency conditions which brought them into being were alleviated and corrected. October, 1946, to October, 1947, comprised by far the most important period in

* The operations of the Wartime Prices and Trade Board and problems of the war years have been discussed in previous editions of this Handbook.

decontrol and readjustment.* By the beginning of that period substantial progress had already been made in the withdrawal of controls and the readjustment of the economy to post-war conditions.

The pace of this development was considerably accelerated in the sixth year of price control. Canadian production reached very high levels and many shortages were overcome. All circumstances were not favourable, however, and it was recognized that in some cases decontrol would be followed by price increases. Nevertheless, it was felt that there was little justification for indefinitely prolonging controls that isolated the Canadian economy from conditions abroad, particularly in the United States where the long expected decline in prices had not materialized.

The first decontrol step during this period was taken on Jan. 13, 1947. By that time disruptions arising from industrial disputes in both the United States and Canada in 1946 and from the cessation of United States price control in November, 1946, had subsided. Further major steps followed in April, June and July, and finally on Sept. 15, 1947, price ceilings were lifted on the majority of the remaining goods and services still under control.

The action of Sept. 15 reduced the list of articles still under the price ceiling to a very small number of key or very scarce items. The principal commodities included sugar, molasses, dried raisins, currants and prunes, meat and meat products except poultry,† wheat, feed grains (whether whole or ground),‡ the principal oil-bearing materials (flaxseed, sunflower seed and rapeseed), the more important oils and fats except corn oil and olive oil, soaps, primary iron and steel products, tin and alloys containing more than 95 p.c. tin. Among services, price control was retained on the supplying of meals with sleeping accommodation for a combined charge (except when supplied by employers to employees), on manufacturing processes performed on a custom or commission basis and entering into the production of goods still under price control and on custom or commission packing charges for goods still under control.

The principle underlying the removal of subsidies was that it was clearly undesirable to maintain subsidies that were offsetting cost increases, which showed little indication of declining in the immediate future. At the same time the process of reduction and removal had to be a gradual one. The paring down of subsidy commitments went on continuously during the year and after Sept. 15 practically the only remaining items eligible for subsidy were oils and fats for the manufacture of soap and shortening.

Among those eliminated were the subsidies on butterfat for the manufacture of creamery butter and on milk entering into the production of cheddar cheese. These were withdrawn on Apr. 30, 1947, and superseded by price increases which in the case of butter also included an allowance for other increased costs of production. Another important food subsidy cancelled during this period was the drawback that, since 1942, had been paid to maintain the price of wheat to millers and other processors at the basic-period level of 77½ cents per bu., basis No. 1 Northern in store at Fort William. There was clearly no prospect of an early return of wheat prices

* Authority to continue needed emergency controls until approximately Mar. 31, 1948, was embodied in the Continuation of Transitional Measures Act assented to May, 1947.

† On Oct. 22, 1947, ceiling prices were removed on meat and meat products except lard and tallow and on barley, oats and screenings.

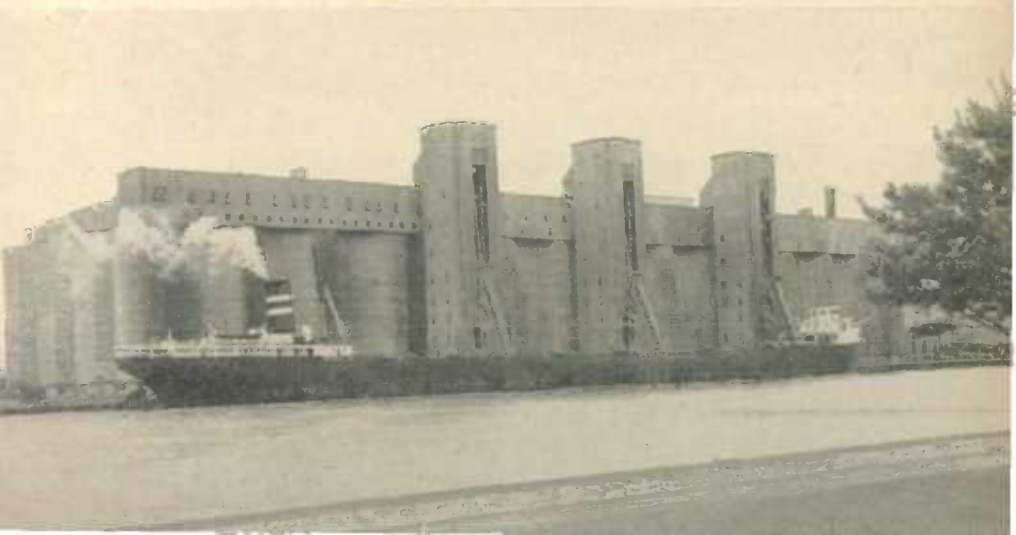
to such a low level and it was considered no longer justifiable to continue to hold flour prices by subsidizing wheat prices to a depression level. This subsidy was therefore cancelled on Sept. 15, and at the same time ceiling prices were removed on flour and bread.

The important textile subsidies were also removed. In January, 1947, all remaining wool subsidies were cancelled, by February virtually all rayon subsidies had been withdrawn and in the same month the base price of raw cotton for subsidy purposes was again raised. Generally, the reduction or removal of these subsidies necessitated price adjustments on yarns, fabrics and, eventually, finished goods. In the case of cotton goods, maximum prices of imported fabrics were raised in line with the new domestic ceilings and import subsidies were correspondingly reduced. Various cotton goods were declared ineligible for import subsidies on Apr. 30, and again on June 2 at which time the subsidy base price of raw cotton was again raised. Finally, on Sept. 15, all remaining textile items (except used bags) were released from the price ceiling and cotton subsidies were cancelled. Inventories of subsidized cotton goods were such that prices were not expected to rise above the old ceiling levels for some considerable time.

A great many other commodities were affected by the removal of subsidies or by reduction in trading losses in cases where the goods were bulk-purchased. These included molasses, rice, coffee, cocoa and cocoa products, corn products, bindertwine, hides and skins, coal, petroleum, tin and antimony.

A substantial number of important price adjustments occurred in the course of the year. Many of these were the result of the removal of subsidies and trading losses as described above. Increased costs other than those arising from subsidy changes were reflected in other adjustments; in many cases higher labour costs were a factor. In the case of some products normally exported in large volume, such as copper, lead and zinc and pulp and paper products, consideration was given to the wide spreads between domestic and export prices as well as to the financial position of the producers concerned. There were also adjustments designed to maintain or expand the production of needed commodities. The items on which price increases were

A Great Lakes freighter, carrying a load of grain from Fort William, discharges its cargo at Port McNicoll, Ont., for rail shipment to the seaboard or to eastern flour mills.



authorized included beef, pork, lard and shortening, tea and coffee, sugar, restaurant meals, wheat, oats and barley, leather and footwear, hardwood flooring, softwood lumber, coal, refrigerators, stoves and furnaces, motor-vehicles, nails, steel and steel scrap.

The remaining supply and distribution controls associated with the stabilization program were gradually withdrawn and after Sept. 15, 1947, only a few important ones were left. Rent and eviction controls continued in effect and sugar rationing was maintained. Export controls were retained to prevent an undue drain of scarce goods to external markets and thus avoid the forcing up of domestic prices of these goods to high world levels.

The Board's policy of equitable distribution governing goods in short supply was further modified in January, 1947. Moreover, the coverage of this control was continually diminishing, since goods released from price control automatically ceased to be subject to it, as also did those goods which were no longer in short supply. Regulations respecting the extension of credit to consumers were also withdrawn in January, 1947. In the textile field, the production directives designed to secure the largest practicable output of essential garments, were terminated at the end of 1946 with the exception of a few which were continued until Mar. 31, 1947. The program under which each discharged service man received priority in the purchase of a civilian suit was wound up late in 1946.

Probably one of the most important changes was the removal of meat rationing on Mar. 27, 1947. The rationing of meat imposed for the second time in September, 1945, involved a whole mechanism of control from the slaughtering of the live animals down to the distribution of meat to consumers, and was an expensive and difficult operation from both the standpoint of Government administration and the task imposed upon commercial slaughterers, meat distributors and consumers. It was particularly important, therefore, not to prolong it any longer than was absolutely necessary, and in March it was decided to discontinue the rationing of meat at the consumer level and substitute a modified type of control to maintain meat exports to the United Kingdom. The regulations requiring Tuesdays and Fridays to be observed as meatless days in public eating places were retained for a time. In June, however, they were relaxed to permit the serving of weiners at exhibitions, fairs, picnics and similar gatherings, and they were completely withdrawn on Aug. 15, 1947.

The termination of butter rationing was announced on June 9, 1947. Butter production was then at its seasonal peak and stocks were improving. In these favourable circumstances it was decided to release butter from price control and discontinue rationing. A number of other controls affecting dairy products had been withdrawn in April—those prohibiting the sale of whipping cream, limiting the monthly sales of cream distributors and controlling the disposition of cheddar cheese.

While sugar rationing remained in effect, the ration was considerably liberalized both by actual increases and by the derationing of preserves. Canned fruits were removed from the list of rationed preserves in December, 1946, followed shortly by maple products, corn and cane syrups, and in June, 1947, by jams, jellies, marmalade and honey. Sugar supplies began to improve rapidly in the spring and early summer as an exceptionally good Cuban



Freight yards at Winnipeg, Man., the "gateway to the West".

crop was harvested. The consumer ration and the allocations to industrial and other quota users were substantially increased. In addition, three pounds of sugar was added to the individual canning allowance, bringing it to 13 pounds per person for the 1947 season. Extra sugar was also allocated to commercial fruit canners.

Important changes in rental and eviction controls occurred during 1947. While the scarcity of accommodation remained acute it was necessary to make some progress toward decontrol and to alleviate where practicable certain cases of particular hardship resulting from the operation of controls. For the first time since rent control was imposed, general increases were authorized in maximum rentals of both housing accommodation and commercial accommodation.

In the field of commercial accommodation, controls were revised in March and June and after these changes freedom of bargaining prevailed with respect to a substantial proportion of commercial space. Furthermore, it was announced by the Minister of Finance in June, 1947, that the Government did not propose to maintain rent and eviction control over commercial accommodation beyond the expiration of the Continuation of Transitional Measures Act, Mar. 31, 1948. A measure of financial relief was extended to landlords of commercial accommodation in March, 1947, when provision was made for an increase of 25 p.c. in maximum rentals provided a two-year extension of the lease was agreed upon by the landlord and the tenant.

Controls respecting housing accommodation also underwent substantial change. In April, 1947, provision was made for a 10 p.c. increase in maximum rentals of housing accommodation provided the landlord was willing to give the tenant a two-year extension of the lease. An additional 10 p.c. was available upon application for sub-letting by the tenant, and subject to certain conditions. The basis for the adjustment of anomalously low rentals

was also broadened and liberalized in April, 1947. The rental increase allowed at this time was not applicable to housing accommodation newly built or reconverted since Jan. 1, 1944, since the basis of maximum rentals on new buildings took into account the increase in construction costs.

On some types of housing accommodation controls were completely removed. Thus, in March, rentals of rooms in holiday resort boarding houses and hotels were decontrolled, and in the following month rent control was terminated on all hotel accommodation. Then, in June, both rental and eviction controls were lifted on all new houses, apartments, duplexes and other self-contained buildings completed on or after Jan. 1, 1947. This was considered a desirable step to alleviate the shortage of accommodation by encouraging the construction of new housing for rental.

Eviction controls affecting housing accommodation were modified in some respects. Thus, in March, 1947, steps were taken to provide relief to those landlords of housing accommodation who had incurred hardship as a result of the freezing of leases on such accommodation in July, 1945. Landlords of housing accommodation purchased between Nov. 1, 1944, and July 25, 1945, were allowed to apply for permission to recover such accommodation. The tenant might oppose the application and the Court of Rentals Appeal, in making a decision, would give consideration to the relative needs of the landlord and the tenant. Similar but more extensive action was taken in August when provision was made for the relief of certain landlords of tenanted dwellings who with their families were suffering grievous hardship as a result of being restrained by eviction controls from occupying their own homes. The term "grievous hardship" was given a narrow interpretation and, in cases where the landlord's application was granted, a special order was issued by the Board requiring the landlord to refrain from selling or renting the accommodation for a period of one year.

★ *Cost of Living*

By December, 1947, the Dominion Bureau of Statistics' cost-of-living index had moved up to 146.0. This represented a price increase of 46.0 p.c. over the average cost in the five pre-war years (1935-39) of a typical urban wage-earner family budget of that time. If the price increase of this budget were reckoned on the August 1939 base, when the index stood at 100.8, it would amount to 44.8 p.c.

The cost-of-living index budget does not represent a minimum standard of living; it is a budget based upon actual living expenditure records of typical wage-earner families. The index measures price changes only. Increases in quantities consumed are not taken into account. Items that have gone up a great deal in price, as have many articles of food and clothing, are averaged with articles that have not gone up so much, such as rent and electric light and carfare. But the correct amount of importance is given to each of these items. The weights to be attached to them were determined by a very careful study of urban wage-earner family expenditures, undertaken in 1938.

Quality deterioration is carefully watched by a full-time staff of field representatives who report their findings regularly. If an article now lasts only half as long but costs just as much as heretofore, this is counted as a

doubling of price. Articles in short supply, especially those in the lower price ranges which have disappeared entirely, are similarly accounted for. For example, if a set of dishes which formerly cost \$6.95 is now unobtainable, the field representatives obtain the next cheapest price, say \$8.95, and this is counted as a price increase and given its due representation in the index.

One hundred and fifty of the most important articles of consumption are priced each month. Each one is priced in several cities (from 10 to more than 60 cities in the case of foods), and in several stores in each city so that more than 60,000 individual quotations enter into the calculations. Although a considerable proportion of these quotations is collected directly by field representatives a careful check of all price records is made after reports are received in the main office and before the tabulation stage of index calculation is reached.

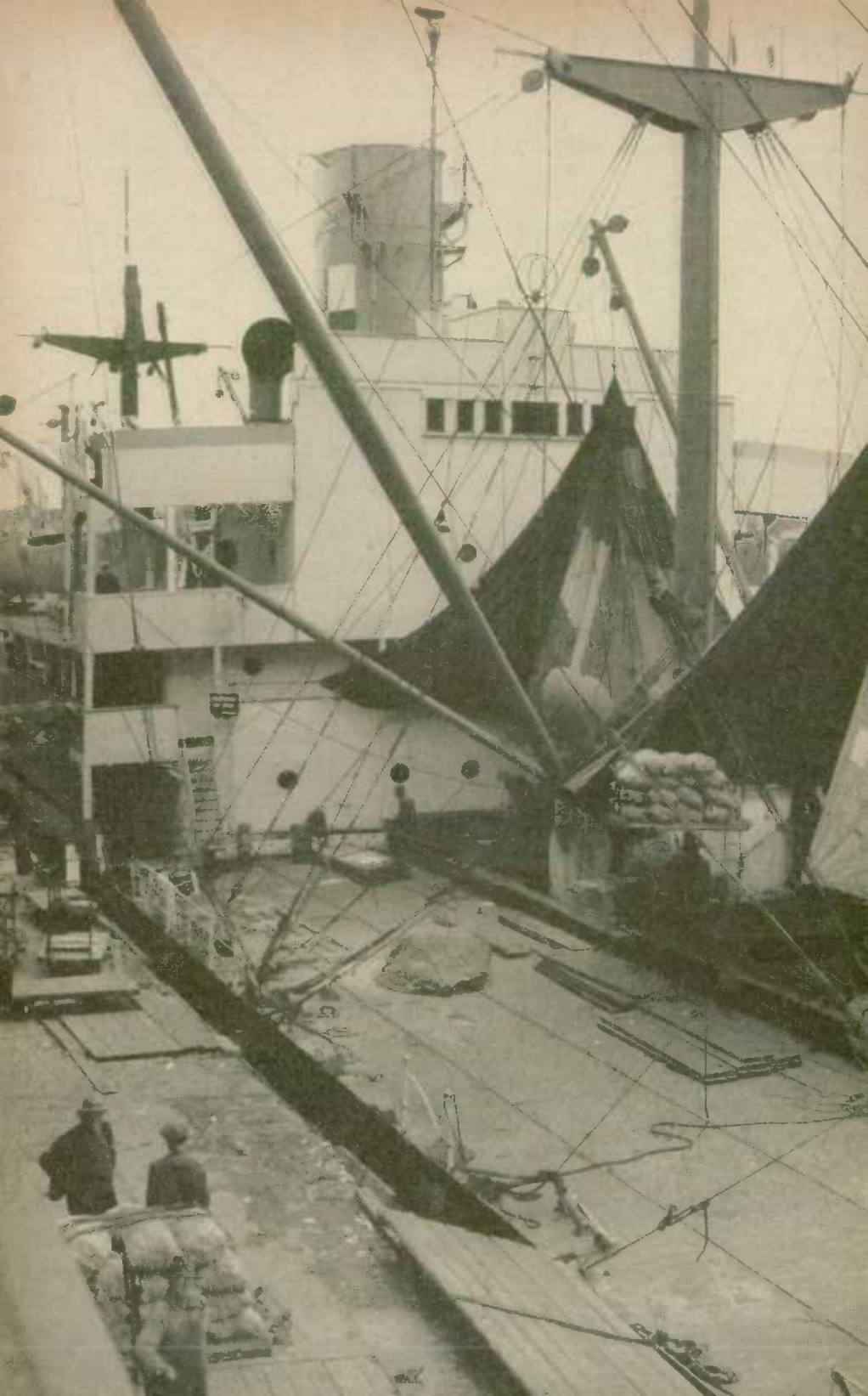
Index Numbers of Living Costs, 1939-46, and by Months, 1947

(Av. 1935-39 = 100)

Year and Month	Food	Rent	Fuel and Light	Clothing	Home Furnishings	Sundries	Total
1939.....	100.6	103.8	101.2	100.7	101.4	101.4	101.5
1940.....	108.6	106.3	107.1	109.2	107.2	102.3	105.6
1941.....	116.1	109.4	110.3	116.1	113.8	105.1	111.7
1942.....	127.2	111.3	112.8	120.0	117.9	107.1	117.0
1943.....	130.7	111.5	112.9	120.5	118.0	108.0	118.4
1944.....	131.3	111.9	110.6	121.5	118.4	108.9	118.9
1945.....	133.0	112.1	107.0	122.1	119.0	109.4	119.8
1946.....	140.4	112.7	107.4	126.3	124.5	112.6	123.6
1947—							
January.....	145.5	113.4	109.0	131.5	129.8	114.7	127.0
February.....	147.0	113.4	109.1	131.9	130.9	115.5	127.8
March.....	148.7	113.4	109.1	133.1	133.6	116.0	128.9
April.....	151.6	113.4	109.1	136.9	137.2	116.3	130.6
May.....	154.9	115.4	116.2	140.0	138.6	116.8	133.1
June.....	157.7	117.8	116.7	142.4	139.8	117.1	134.9
July.....	159.8	117.8	117.3	143.2	142.5	117.2	135.9
August.....	160.6	117.8	118.6	145.5	143.7	117.2	136.6
September.....	165.3	117.8	121.1	152.0	147.4	117.5	139.4
October.....	171.3	119.9	121.9	154.2	149.9	117.6	142.2
November.....	173.6	119.9	122.6	157.0	151.1	118.2	143.6
December.....	178.7	119.9	120.3	159.3	154.9	119.8	146.0

The "Princess Norah" unloads supplies at Banfield cable station. Many British Columbia coastal communities depend on ships to connect them with Vancouver and other large markets.





Foreign Trade International Payments

CANADA'S wartime position as the world's third largest foreign trader was maintained during 1946 and 1947, with the total value of her 1946 trade in excess of \$4,200,000,000 and with 1947 imports and exports approximating \$5,000,000,000 in total value.

The growth and development of Canadian foreign trade to such a high level is a result of the combination of unique geographic and economic conditions. Canada is richly endowed with resources of a specialized nature. The development of these resources has required enormous capital investment which is profitable only when the resources are exploited on the largest possible scale and the initial costs can be offset by mass production. In normal times, Canada can sell wheat in competition with other parts of the world not only because of the industry and ability of the farmer but also because of the capital invested in railways, shipping and farm machinery. These facilities could not be economically employed without the intensive development of the wheat industry and without continued high production. The pulp and paper and base-metal industries have required similar heavy capital investment in plant, transportation facilities, and hydro-electric developments. A population of twelve and a half million people could not begin to absorb the total production of these specialized industries, and it is only by exporting that efficient low-cost production of these basic commodities can be maintained.

At the same time, Canada is not self-sufficient in many commodities required by modern industry or in commodities that have come to be regarded as essential to a high standard of living. The table on p. 190, listing principal imports, indicates the wide variety of articles that are produced, if at all, in insufficient quantities to meet domestic demand. Coal and machinery, automobiles and parts, cotton and wool, oil and gasoline, sugar and fresh fruits, tea and coffee, all are used in quantity by Canadian industry or needed to fill the wants of the Canadian consumer. These commodities are paid for by the sale of Canadian goods abroad.

The maintenance of a large volume of trade is therefore of two-fold importance to Canada. It is only by exporting on a large scale that she can obtain the economies of large-scale production and maintain employment in the export industries, and her needs for the many goods that cannot be produced in Canada can be satisfied only if sufficient Canadian products are sold on the international market to pay for the imports. Government and private business have, since the War, been co-operating to adjust the flow of Canadian goods abroad and foreign imports to Canada in order that Canada's international balance of payments may be kept within bounds.

Imports, Exports and Total Trade of Canada, 1926-47

(Millions of Dollars)

Year	Imports	Exports			Total Trade	Excess: Imports (-) Exports (+)
		Domestic Produce	Foreign Produce	Total		
1926	1,008.3	1,261.2	15.4	1,276.6	2,284.9	+ 268.3
1927	1,087.1	1,210.6	20.4	1,231.0	2,318.1	+ 133.9
1928	1,222.3	1,339.4	24.4	1,363.8	2,586.1	+ 141.5
1929	1,299.0	1,152.4	25.9	1,178.3	2,477.3	- 120.7
1930	1,008.5	863.7	19.4	883.1	1,891.6	- 125.4
1931	628.1	587.7	11.9	599.6	1,227.7	- 28.5
1932	452.6	489.9	8.0	497.9	950.5	+ 45.3
1933	401.2	529.5	6.0	535.5	936.7	+ 134.3
1934	513.5	649.3	7.0	656.3	1,169.8	+ 142.8
1935	550.3	725.0	12.9	737.9	1,288.2	+ 187.6
1936	635.2	937.8	12.7	950.5	1,585.7	+ 315.3
1937	808.9	997.4	14.7	1,012.1	1,821.0	+ 203.2
1938	677.5	837.6	11.4	848.7	1,526.2	+ 171.2
1939	751.1	924.9	11.0	935.9	1,687.0	+ 184.8
1940	1,082.0	1,178.9	14.3	1,193.2	2,275.2	+ 111.2
1941	1,448.8	1,621.0	19.5	1,640.5	3,089.3	+ 191.7
1942	1,644.2	2,363.8	21.7	2,385.5	4,029.7	+ 743.3
1943	1,735.1	2,971.5	29.8	3,001.3	4,736.4	+ 1,266.2
1944	1,758.9	3,440.0	43.1	3,483.1	5,242.0	+ 1,724.2
1945	1,585.8	3,218.3	49.1	3,267.4	4,853.2	+ 1,681.6
1946	1,927.3	2,312.2	27.0	2,339.2	4,266.4	+ 411.9
1947 (7 months)	1,483.5	1,565.0	19.8	1,584.8	3,068.3	+ 101.3

Exports

Details of the composition and destination of Canada's exports over various periods of time will be found in tables on succeeding pages. The decline of exports in 1946 from the previous year was due to the abrupt cessation in the shipments of war materials, which was only partially compensated for by the reopening and expansion of peacetime trading channels. On this account, it is more reasonable to compare 1946 and 1947 exports with the aggregates in the years before the War than with the inflated wartime figures. Exports in 1946 were valued at two and one-half times the 1939 total; 1947 exports have been running at about three times the 1939 level.

Although Canada's export trade since the end of the War has been running at a much higher level than anything experienced prior to 1939, the composition of the goods shipped abroad has remained relatively stable. Historically, primary products have always dominated Canadian export trade and, to this day, the greater part of goods shipped abroad from Canada fall into that general category. From the list of principal exports at p. 186 it will be seen that ten of the first eleven principal products exported in 1946 were products of Canadian farms, forests, fisheries or mining and metallurgical industry. These same eleven commodities, in a slightly different order, were likewise the first eleven items in the 1939 list of principal exports, and also leading exports for the first seven months of 1947. The continuing importance of this small group of primary products is emphasized by the fact that these eleven items made up 57 p.c. of total exports in 1939, 56 p.c. in 1946 and 60 p.c. in the first seven months of 1947.

Despite this dominance of the primary commodities listed in Canada's export trade, the products of Canadian manufacturing industries during and since the War have been sold abroad on an unprecedented scale. Exports

Grain for the
United Kingdom
being loaded at
Churchill, Man.



of farm machinery in the first seven months of 1947 alone were nearly four times as great as in the calendar year 1939. Shipments of electrical apparatus and machinery in 1946 and 1947 have been running about six times the level of 1939. Locomotives and railway cars, a negligible item in export trade before the War, were exported to the value of \$50,000,000 in 1946.

The geographical alignment of Canadian export trade is similar to the pre-war pattern, with the United States and the United Kingdom the principal buyers of Canadian goods. Their relative importance to the total, however, has declined somewhat since 1939, falling from 77 p.c. in that year to 64 p.c. in 1946 and to 63 p.c. in the first seven months of 1947. The shift has taken place primarily in the direction of increased exports to Europe, due in part to the credits granted by the Canadian Government, and in substantial increases in exports to Latin America.

Canadian exports to the United States in 1946 aggregated \$888,000,000. Of this total, forest products made up over one-half; in fact, exports of one item, newsprint paper, to the United States were valued at \$225,000,000. Exports to the United Kingdom in the same period exceeded \$597,000,000, two-thirds of which were food products, with lumber, newsprint and base metals also shipped on a large scale.

European countries formed the group third in importance in 1946, and comprised principally countries whose purchases from Canada were financed largely by Canadian loans or credits or by UNRRA. Relief and rehabilitation needs dictated the type of commodities shipped to these countries. It is therefore not surprising to find food leading the list of exports, although industrial machinery, railway equipment, clothing and base metals were also in great demand.

Fourth in importance were the shipments to countries of the British Empire, other than the United Kingdom, the total value of which exceeded \$300,000,000. South Africa, India, British West Indies, Newfoundland, Australia and New Zealand are the principal Empire buyers of Canadian goods.

Exports to these countries were well diversified and represented a broad cross-section of Canadian export trade. The natural Canadian exports of food, newsprint and lumber predominated, but manufactured goods were shipped in quantity, with railway locomotives and cars, automobiles and textile products constituting important items. Exports to Latin America, although the last of the groups in dollar value, were an important source of hard currency to Canada. The total value of exports exceeded \$90,000,000, with Brazil, Argentina, Venezuela and Mexico ranking in that order. Newsprint, wheat, flour, trucks and rubber products figured prominently in the exports to this area.

The same general geographic pattern of trade was maintained in the first seven months of 1947, although some minor changes should be noted. The proportion of goods shipped to the United States dropped from 38.4 p.c. in 1946 to 36.0 p.c. in the first seven months of 1947; the corresponding United Kingdom proportions showed an increase from 25.8 p.c. to 27.0 p.c. Shipments to Europe fell off slightly, as the loans and credits were used up and UNRRA exports ceased, to be replaced in part only by the recovery of normal commercial channels of trade. Exports to Empire countries other than the United Kingdom and to Latin America increased slightly in proportion to the total, with the greatest relative increases shown in shipments to the Union of South Africa, Australia, British West Indies, New Zealand and Argentina.

The following table shows the percentage changes in exports, in regard to degree of manufacture, from 1926 to 1946. The percentage of partly and fully manufactured exports has increased greatly in this period.

Exports, by Stage of Production, 1926-46

(Values in Millions of Dollars)

Year ¹	Raw Materials		Partly Manufactured		Fully or Chiefly Manufactured		Total Value
	Value	P.C. of Total Exports	Value	P.C. of Total Exports	Value	P.C. of Total Exports	
1926.....	594	46.1	189	14.7	506	39.2	1,289
1927.....	572	45.9	183	14.7	490	39.4	1,245
1928.....	571	46.9	189	15.5	459	37.6	1,219
1929.....	649	48.0	195	14.5	507	37.5	1,351
1930.....	395	36.4	213	19.6	478	44.0	1,086
1931.....	295	37.8	134	17.2	352	45.0	782
1932.....	213	37.8	87	15.4	264	46.8	563
1933.....	201	42.7	67	14.2	203	43.1	470
1934.....	209	36.2	124	21.5	244	42.3	577
1935.....	234	35.7	137	20.8	285	43.5	656
1936.....	259	34.1	178	23.3	324	42.6	761
1937.....	374	38.2	220	22.5	384	39.3	978
1938.....	277	28.4	269	27.5	430	44.1	977
1939.....	231	27.8	221	26.6	379	45.6	831
1939 ¹	274	29.6	247	26.7	404	43.7	925
1940.....	261	22.1	337	28.6	581	49.3	1,179
1941.....	322	19.9	427	26.3	872	53.8	1,621
1942.....	300	12.7	488	20.6	1,577	66.7	2,364
1943.....	519	17.5	498	16.7	1,955	65.8	2,971
1944.....	764	22.2	488	14.2	2,188	63.6	3,440
1945.....	858	26.7	536	16.6	1,824	56.7	3,218
1946.....	603	26.1	512	22.1	1,197	51.8	2,312

¹ Figures for 1926 to 1939 are for the years ended Mar. 31; those for 1939 to 1946 are for calendar years.

Exports, by Leading Countries, 1939 and 1945-47

NOTE.—Countries arranged in order of importance in 1946.
(Thousands of Dollars)

Country	1939	1945	1946	1947 (Seven Months)
United States.....	380,392	1,196,977	887,941	564,113
United Kingdom.....	328,099	963,238	597,506	422,083
France.....	6,973	76,917	74,380	41,331
British South Africa.....	17,965	31,593	68,633	45,343
Belgium.....	7,261	34,618	63,626	28,913
British India.....	5,166	307,461	49,046	21,815
China.....	2,636	6,573	42,915	22,206
Newfoundland.....	8,596	40,515	38,229	26,846
Australia.....	32,029	32,226	38,194	35,726
Netherlands.....	7,357	39,970	33,883	37,221
Brazil.....	4,407	16,748	24,602	13,538
Poland.....	1,280	9,249	22,501	11,243
Italy.....	2,231	89,470	20,387	22,245
Norway.....	10,904	7,842	19,267	13,829
Trinidad.....	4,211	16,433	19,140	17,337
Russia.....	275	58,820	17,705	4,360
New Zealand.....	11,954	19,102	16,110	16,328
Jamaica.....	4,313	14,404	15,500	10,514
Egypt.....	369	36,417	15,086	7,622
Argentina.....	4,117	6,003	14,039	19,211
Yugoslavia.....	20	11,711	12,030	4,532
Venezuela.....	1,702	4,053	11,086	8,294
Mexico.....	3,001	8,165	10,536	6,675
Czechoslovakia.....	181	6,717	9,871	8,415
Greece.....	271	25,563	9,739	3,617
Sweden.....	4,284	4,169	9,133	10,964
French Africa.....	105	16,908	8,945	3,252
Colombia.....	1,781	5,011	8,930	6,410
Philippine Islands.....	1,819	2,153	8,901	7,931
Switzerland.....	1,850	10,922	8,636	7,069
Other British West Indies.....	1,608	6,865	8,341	6,968
Ireland.....	3,597	14,278	7,956	10,154
British Guiana.....	1,586	6,418	7,109	6,408
Germany.....	7,869	2,725	6,867	5,417
Netherlands East Indies.....	1,057	856	6,833	3,655
Barbados.....	1,604	4,750	6,205	5,740
Cuba.....	1,497	4,535	5,270	3,836
Malta.....	382	4,740	4,671	2,928
Hong Kong.....	1,463	99	4,362	3,136

Pedigreed cattle
travel from Can-
ada to Argentina
by aircraft.



Exports, by leading Countries, 1939 and 1945-47—concluded

(Thousands of Dollars)

Country	1939	1945	1946	1947 (Seven Months)
Bermuda.....	1,369	2,511	3,805	3,148
Austria.....	¹	²	3,679	1,723
Chile.....	957	2,562	3,565	2,620
Palestine.....	230	2,866	3,562	3,773
Totals, Above 43 Countries.....	878,681	3,153,153	2,248,722	1,508,489
Grand Totals, Domestic Exports.....	924,926	3,218,331	2,312,215	1,565,033
British Countries.....	430,806	1,486,848	904,701	656,464
Foreign Countries.....	494,120	1,731,483	1,407,514	908,569

¹ Included with Germany.

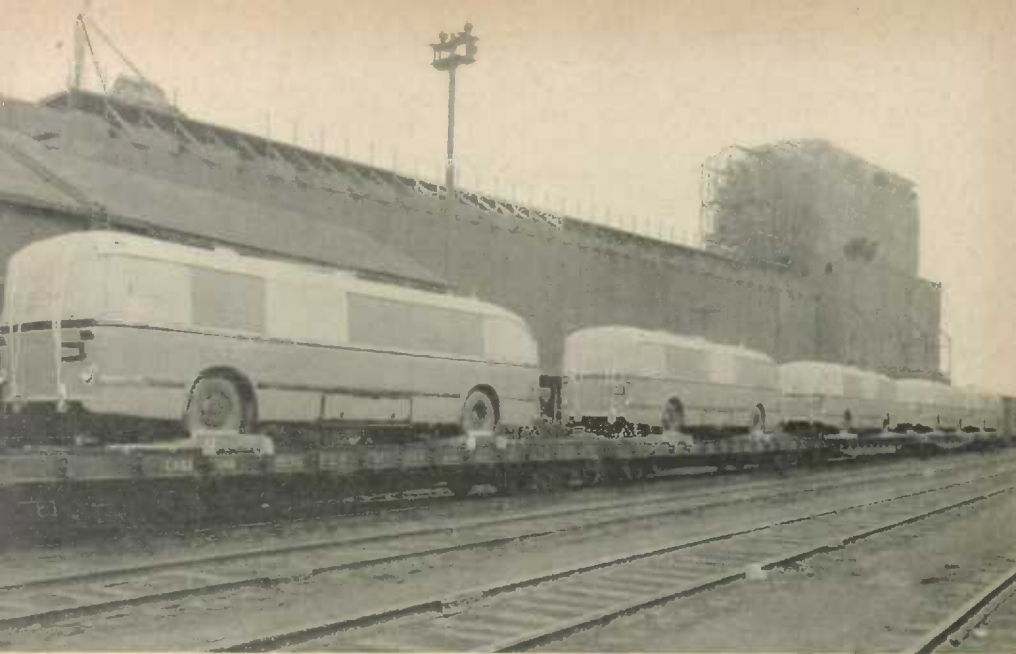
² Less than \$500.

Principal Exports, 1939 and 1945-47

NOTE.—Commodities arranged according to value in 1946.

(Thousands of Dollars)

Commodity	1939	1945	1946	1947 (Seven Months)
Newsprint paper.....	115,686	179,451	265,865	192,211
Wheat.....	109,081	475,787	250,306	161,764
Meats.....	37,445	166,974	128,936	66,126
Wheat flour.....	16,378	97,855	126,733	121,389
Planks and boards.....	48,829	98,935	125,391	106,867
Wood-pulp.....	31,001	106,055	114,021	97,969
Fish.....	27,742	80,224	86,486	44,125
Automobiles and trucks.....	22,551	206,795	57,194	47,871
Aluminium.....	25,684	133,567	56,030	36,468
Nickel.....	57,944	54,778	55,205	34,840
Copper.....	40,232	40,860	37,005	30,058
Vehicles, other than automobiles and trucks.....	407	51,242	33,773	6,506
Fertilizers, chemical.....	9,179	30,428	32,108	20,343
Raw furs.....	14,130	28,521	30,928	17,314
Gifts and donations.....	Nil	39,421	30,163	6,908
Whiskey.....	7,914	22,977	29,650	13,279
Engines and boilers.....	259	22,654	28,764	14,561
Pulpwood.....	11,901	23,882	28,731	14,818
Farm implements and machinery.....	6,975	20,196	28,662	25,006
Zinc.....	9,922	20,373	27,769	17,847
Eggs.....	311	44,120	26,772	18,607
Asbestos.....	14,365	22,184	24,481	18,201
Oats.....	4,142	47,660	23,108	10,078
Cheese.....	12,249	27,909	21,948	1,522
Automobile parts.....	2,992	94,852	21,110	11,766
Electrical apparatus.....	3,229	60,957	20,939	11,818
Wool and manufactures.....	1,523	19,559	18,945	4,785
Ships and vessels.....	486	15,591	18,822	6,503
Cattle.....	15,353	12,257	18,015	7,586
Lead.....	9,850	9,177	16,846	17,187
Machinery, except farm.....	10,873	19,869	15,535	22,102
Platinum concentrates.....	6,137	13,298	15,409	7,931
Ferro-alloys, pigs, ingots, iron.....	5,168	19,431	12,815	15,514
Abrasives.....	4,568	12,153	12,182	8,089
Veneers and plywoods.....	1,609	12,365	12,026	10,926
Shingles, wood.....	8,225	8,001	11,211	11,380
Milk, processed.....	3,295	12,985	10,677	6,014
Cotton and manufactures.....	3,536	10,141	10,551	6,013
Settlers' effects.....	2,382	5,366	9,712	5,797
Barley.....	7,882	24,101	9,688	991
Leather, manufactured.....	1,248	3,748	9,282	4,707
Apples, fresh.....	5,853	3,457	9,282	3,483



Canadian-built trolley coaches on their way to Bogotá, Colombia.

Imports

On pp. 189-190 will be found tables showing Canada's imports in recent years by principal commodities and by countries. Totals for 1946 and for the first seven months of 1947 indicate a much higher level of imports than existed prior to the War. The 1946 figure of \$1,927,000,000, and the aggregate of \$1,484,000,000 for the first seven months of 1947, may be contrasted with average annual imports of \$685,000,000 in the 1935-39 period.

The volume of imports into Canada is closely related to the level of national income and domestic prosperity. In 1946 and 1947, with national income at a level close to the peak of the war years, and with the wartime restraints on spending largely eliminated, consumer spending reached an all-time high. This increased demand for goods was reflected in the import figures, for not only were consumer goods of foreign manufacture in great demand but the pressure on Canadian manufactures in turn resulted in larger imports to meet their requirements. The rapid increase in prices that occurred also had a considerable influence on the totals, and in making comparisons with previous years, due allowance should be made for this factor of price inflation.

The United States continued to be the chief supplier of Canadian imports and in 1946 73 p.c. of Canada's total purchases abroad came from that country. In 1947, despite the increased availability of goods from other countries, the proportion of United States goods in the import total increased to approximately 78 p.c. The list of imports from the United States covers a very wide range of products; for most of the items in the table of principal imports on p. 190 the United States is the main, and in some instances the only, source of supply.



British Columbia
apples arriving in
Singapore.

As will be evident from the table, commodity imports may be divided into four principal groups: (1) fuels for industry, heating, power and transportation; (2) semi-manufactured goods for further processing; (3) capital goods for agriculture and industry; (4) goods ready for final consumption, mainly foods and manufactured consumer goods. The largest increases have occurred in imports of cotton fabrics, fresh fruits, coal, farm implements and machinery, industrial machinery and raw cotton, although there are few commodities in the 1946 and 1947 list that are not much higher in value than in 1939.

Imports from the United Kingdom in 1946 were valued at \$141,000,000 (excluding Canadian military equipment returned from the United Kingdom). This represented an increase in dollar value of approximately 16 p.c. over 1945 and 14 p.c. over the 1935-39 average. Imports from the balance of the Empire amounted to \$139,000,000, also an increase of 6 p.c. over the previous year. The principal countries, with the chief items of imports from each, are listed below:—

Country	Value \$'000,000	Item
India	27.9	Jute fabrics, tea, rugs.
Australia	19.8	Wool, raisins, rabbit skins.
British Guiana	12.2	Bauxite ore, sugar.
New Zealand	12.0	Wool, sausage casings.
Jamaica	10.5	Sugar, bananas, rum.

Latin American imports, valued at \$126,000,000 in 1946, showed the greatest relative increase of any of the groups, 45 p.c. higher than 1945 and a six-fold increase over the 1935-39 average.

Trends in 1947 show no pronounced changes, with the exception of the very large increase in dollar value of imports from the United States, approximately 57 p.c. higher than in the same period of 1946. Commercial imports from the United Kingdom in the first seven months increased 34 p.c. over the first seven months of the previous year. The 1947 increase in imports from other Empire countries arose principally from the revival of trade with British Malaya and a 50-p.c. increase in imports from India. Latin American imports in the first seven months of 1947 increased by 15 p.c. over the corresponding period of 1946, with heavy imports of vegetable oils from Argentina and crude petroleum from Venezuela. Canadian purchases in 1947 from European and other foreign countries showed large percentage increases, although the dollar value of such purchases was relatively small.

Imports, by Leading Countries, 1939 and 1945-47

NOTE.—Countries arranged in order of importance in 1946.
(Thousands of Dollars)

Country	1939	1945	1946	1947 (Seven Months)
United States.....	496,898	1,202,418	1,408,297	1,149,822
United Kingdom.....	114,007	140,517	201,433	102,346
British India.....	9,808	30,568	27,877	23,644
Venezuela.....	1,943	17,267	26,886	23,994
Australia.....	11,260	17,180	19,754	9,915
Honduras.....	17	8,017	15,573	5,106
Mexico.....	479	13,508	14,610	7,887
Argentina.....	4,406	7,333	14,372	9,862
Brazil.....	1,111	7,601	14,018	6,874
Cuba.....	889	7,512	13,228	10,134
British Guiana.....	6,891	9,338	12,187	5,117
New Zealand.....	4,266	9,276	11,956	6,025
Switzerland.....	3,459	7,863	11,149	7,084
Jamaica.....	4,357	9,273	10,484	3,218
Columbia.....	5,437	11,678	9,708	5,994
Newfoundland.....	1,955	16,600	9,268	3,188
British South Africa.....	3,991	8,433	7,892	1,633
San Domingo.....	16	6,201	7,127	3,099
Straits Settlements.....	13,145	Nil	5,871	11,180
Barbados.....	3,874	5,466	5,548	5,784
Gold Coast.....	251	6,367	5,381	5,079
Nigeria.....	54	3,422	4,772	1,653
France.....	6,027	273	4,610	5,120
Spain.....	663	4,353	4,484	2,004
Belgium.....	6,778	1,380	4,429	6,371
Trinidad.....	2,668	3,101	4,137	4,139
Ceylon.....	3,562	5,682	3,745	6,158
Sweden.....	2,289	1,093	3,681	1,610
British East Africa.....	2,626	1,539	3,603	3,521
Netherlands West Indies.....	270	830	3,186	3,480
Fiji.....	2,777	1,607	3,123	1,671
Guatemala.....	164	1,779	2,928	5,539
Italy.....	2,354	1	2,704	2,309
Netherlands.....	3,795	401	2,497	1,843
Salvador.....	45	1,502	2,428	1,217
China.....	2,776	1,658	2,321	1,845
Portugal.....	275	1	2,188	800
Philippine Islands.....	451		2,058	6,494
Totals, Above 38 Countries.....	726,043	1,570,037	1,906,513	1,463,659
Grand Totals, Imports.....	751,056	1,585,775	1,927,279	1,483,548
British Countries.....	183,901	271,668	340,501	196,914
Foreign Countries.....	567,155	1,314,107	1,586,778	1,286,644

¹ Less than \$500.

Principal Imports, 1939 and 1945-47

NOTE.—Commodities arranged in order of importance in 1946.
(Thousands of Dollars)

Commodity	1939	1945	1946	1947 (Seven Months)
Machinery, except farm.....	42,829	92,781	130,287	116,422
Coal.....	41,579	102,432	120,354	71,632
Petroleum, crude.....	39,677	72,412	89,547	67,910
Fruits, fresh.....	15,384	61,338	69,587	32,007
Farm implements and machinery.....	20,917	50,435	68,352	61,972
Automobile parts.....	25,308	67,855	66,453	54,815
Cotton fabrics.....	10,935	34,944	54,163	58,853
Rolling-mill products.....	32,334	55,049	53,376	43,702
Electrical apparatus.....	13,752	43,052	47,788	40,665
Cotton, raw.....	16,425	39,153	42,812	37,210
Sugar for refining.....	20,226	28,950	32,416	22,414
Automobiles.....	15,674	4,876	31,702	39,876
Books and printed matter.....	15,152	21,445	30,737	18,040
Engines and boilers.....	7,606	28,040	29,462	23,946
Furs.....	7,133	21,205	27,292	12,444
Vegetables, fresh.....	6,151	21,252	25,748	16,743
Glass and glassware.....	7,915	16,098	23,258	18,217
Wool fabrics.....	10,408	14,194	20,115	17,125
Nuts, except coconuts.....	3,508	12,251	19,140	8,573
Paper.....	8,654	13,376	18,834	13,712
Wool, raw.....	4,509	12,327	18,707	10,858
Clay and clay products.....	7,935	13,681	17,825	13,577
Coffee.....	4,603	9,156	16,162	8,270
Oils, vegetable.....	9,415	11,479	15,062	13,560
Gasoline.....	7,998	9,571	14,911	9,798
Stone and products.....	7,612	9,888	14,676	9,636
Leather fabrics.....	4,014	11,039	14,474	11,571
Fruits, dried.....	5,723	7,127	13,921	8,518
Scientific and educational equipment.....	4,767	9,216	13,820	10,196
Rubber, fully and partly manufactured.....	3,371	8,154	13,717	8,364
Synthetic resins.....	1,700	7,632	13,681	10,649
Beverages, alcoholic.....	6,540	8,292	12,911	6,566
Wood, manufactured.....	4,659	8,483	11,467	10,928
Naïls, tops, and waste, wool.....	6,072	6,875	11,118	6,740
Coke.....	3,916	11,368	10,888	5,520
Tea.....	10,091	17,729	10,208	10,876
Tools.....	2,377	7,945	10,135	7,371
Artificial silk fabrics.....	2,024	8,410	9,833	10,281
Aircraft.....	5,550	16,001	9,448	6,604
Paints and varnishes.....	4,662	8,660	9,437	7,594
Drugs and medicines.....	3,989	9,440	9,371	7,814
Dyeing and tanning materials.....	6,257	8,297	9,209	6,158
Cotton yarns.....	3,057	7,208	9,197	10,827

Canadian Balance of International Payments

All of Canada's commercial and financial transactions with other countries are summarized in statements of the Canadian balance of payments. These statements focus attention upon the exchange and financial problems arising out of Canadian trading relations with other countries. The geographical directions and the characteristic unbalance in the flow of Canada's international trade with different countries and currency areas have led to distinct patterns of trade. Canadian exports are predominantly to the British countries and to other overseas countries, and imports are mainly from the United States. Thus there is a customary lack of balance in Canada's trade with the United States in which Canadian imports normally exceed Canadian exports. At the same time the predominant movement of Canadian exports to the United Kingdom and Europe gives rise to another dominating characteristic in Canada's accounts with the rest of the world, a large excess of exports over imports with overseas countries. This pattern of trade in which



Passing under Jacques Cartier Bridge, Montreal, inbound from London, is the "Beaverlake", one of the Canadian Pacific's fleet of four fast cargo-liners which maintain an express freight service between Canada and the United Kingdom.

exports are predominantly to overseas countries, and imports are mainly from the United States, did not in pre-war periods give rise to special problems of financing because surplus income from exports to overseas countries could be freely converted to cover Canadian purchases in the United States. It did lead, however, to close relationships between the Canadian dollar and sterling and the United States dollar because of the normal dependence on sales of sterling to produce United States dollars to cover Canadian expenditures in the United States.

The degree of unbalance in Canada's accounts with the two larger areas, the sterling countries and dollar countries, has been accentuated in the post-war period by the abnormal reconstruction needs of Europe and the slowness in recovery throughout the world compared with the more rapid recovery of the United States, and the dependence upon sources of supply in that country.

Because of the commercial and financial problems arising during the recent war and continuing in the post-war years the Canadian balance of payments must be divided into distinct divisions. These divisions are the balance of payments between Canada and the Sterling Area, which covers all British countries except Canada and Newfoundland and several foreign

nations as well, and the balance of payments between Canada and the rest of the world with which Canada's dealings are on a United States dollar basis and finally, that portion of export trade with other foreign nations which in recent years has been financed out of export credits or by other special means.

Before the War the surplus receipts which Canada normally had from export trade with Britain could be used in meeting Canada's own deficit from current expenditures in the United States. This was possible because the sterling income from exports to Britain was freely convertible into United States dollars. But since 1939 Canada's sterling income has no longer been freely convertible into United States dollars, consequently there is the need for special methods of financing exports to Britain. There is also the need for providing for exports and aiding in reconstruction during the transitional years in the case of many other allied nations whose economies were adversely affected by the War. Without the credits received from Canada for financing exports, these countries would have insufficient current dollar resources to meet expenditures in Canada. During the War, Mutual Aid was the principal form of financing abnormal exports. Later, the loan of \$1,250,000,000 to the United Kingdom and Canada's export credit program under which export credits of \$594,000,000 had been authorized to the end of 1946 became the principal special method of financing overseas purchases in Canada. In addition, considerable amounts of exports from Canada have been financed out of Canada's contribution to UNRRA. Because of these special arrangements, very large proportions of Canadian exports to overseas countries have been financed by the Canadian Government.

In 1946, Canada had an excess of \$458,000,000 of exports of goods and services to all countries over imports of goods and services, but the credit balance with overseas countries was much greater than this balance with all countries because there was at the same time a large deficit in Canada's current account with the United States. The credit balance from trade with all overseas countries amounted to \$1,061,000,000 in 1946, while the current deficit with the United States was \$603,000,000. But almost all of the credit balance with overseas countries was financed by loans and advances by the Canadian Government, which, together with official contributions of relief and aid, totalled about \$969,000,000. The latter form of aid made up \$107,000,000 of this government financing of exports, the remainder being distributed as follows: drawings on loan to the United Kingdom, \$540,000,000, net interim advances to Sterling Area, \$112,000,000, and net export credits and advances to countries receiving export credits \$210,000,000.

The large Canadian deficiency with the United States which reached record proportions was mainly met by increases in net indebtedness to the United States. These changes in position took the form of a reduction in Canada's official reserves of gold and United States dollars of \$263,000,000, and capital inflows of various kinds of \$103,000,000. The remainder of the deficit with the United States was met by \$227,000,000 of gold and convertible exchange received from overseas countries. As a result of these diverse changes during 1946 there was a net outflow of capital from Canada of only \$351,000,000, this being the balance on current account after excluding official relief. Thus while Canada acquired foreign assets in the form of loans extended to overseas countries, these were partly offset by the reduction in Canadian assets in the United States, and by increases in liabilities to the United States

Dollar Area. While the balance of Canadian indebtedness to all countries was therefore reduced, there were appreciable changes in the composition of Canada's external assets and liabilities.

One of the principal changes which occurred in the current account of the balance of payments in 1946 was the re-emergence of a current account deficit with the United States of unprecedented size. Canadian payments for goods and services purchased in the United States exceeded receipts from all sales of goods and services to that country by \$603,000,000. A substantial growth in Canadian imports from the United States accompanied by a decline in receipts from exports was the principal factor contributing to the current deficit. The high levels of income in Canada, rising prices in the United States, and improving supplies of merchandise in that country following the rapid reconversion from wartime to peacetime production, were at the back of this substantial increase in Canadian imports. Canadian incomes were at record peacetime levels. All the main factors contributing to gross national expenditure were exceptionally high—with a large program of private investment and heavy consumption, combined with a current account credit balance and with government expenditures which continued to be large during the reconversion and rehabilitation period. While the rise in imports with the United States was very great, there was also a large decline in receipts from exports, mainly due to the virtual end of sales of war supplies, and to the decline in sales of grain, which had been large in 1945 and earlier years.

But, accompanying the growth of the merchandise deficit with the United States, there were heavier expenditures for other current purposes as well. A great gain in Canadian travel to the United States followed the end of the War with improving transportation conditions, more leisure, higher incomes and improving supplies of merchandise. This was enough to offset practically all of the gain in United States tourist expenditures, with the result that the balance of receipts from the tourist trade in 1946 was just about the same size as in 1945, even though United States expenditures in Canada increased very greatly. At the same time much larger withdrawals of dividends by United States parent companies from Canadian subsidiaries led to a notable growth also in the net payments of interest and dividends to the United States. Withdrawals of earnings accumulated during the War and higher corporate incomes contributed to this rise in income payments. The merchandise deficit also made for larger net payments on freight account by Canada. Although there was some decline in ocean shipping costs paid to United States operators of vessels, there were important increases in inland freight on rail shipments, while Canadian revenue from inland freight carrying Canadian exports to the United States declined. Other current payments to the United States were also heavier and net exports of non-monetary gold failed to rise in value.

Tourist Trade

Canada's tourist trade during 1947 compared very favourably with that during 1946. Poor weather conditions experienced during the first half of the year were not conducive to travel, but new records were established in July and August. The number of tourists who entered the country by automobile, bus, boat and aircraft was well in excess of that in all pre-war years, though slightly fewer entered by train in 1947 than in 1946. Over 1,600,000 foreign



Trout fishing, Maligne Lake, Jasper National Park, Alta.

automobiles, principally from the United States, came into Canada on tourist permits as compared with the previous record of 1,492,000 entering in 1946. Increased production of passenger cars in the United States contributed substantially to the volume of motoring tourists.

The millions of short-term visits in both directions across the International Boundary, while not of great importance financially, are invaluable in the interests of international friendship and harmony. The number of such visits from the United States, encouraged by lower prices of numerous commodities in Canada, soared to new heights in 1947. Probably 23,000,000 persons crossed the border into Canada, but over three-quarters of them remained for only a day or so.

On the other hand, with the removal of travel restrictions, a larger number of United States citizens visiting Canada in 1946 and 1947 came from distances farther removed from the International Boundary. There was a notable increase in the entries from California, New Jersey, Connecticut, Florida, Texas and many other States during those two years. Before the War, nearly half of Canada's visitors came from the northeastern States, principally New York and Pennsylvania; about one-third were residents of States bordering on the Great Lakes, mainly Michigan; and the west coast States supplied the bulk of the remainder, or about 12.5 p.c. of the grand total.

One of the basic reasons for United States tourist travel to Canada is to visit friends and relatives. It is estimated that no less than 5,000,000 United States citizens are connected with Canada either by birth or marriage.

In addition to the goodwill and friendly social relations that the tourist trade brings, the monetary returns contribute an important entry on the credit side of the national ledger—both as an impetus to employment, consumption of products and services, and as a source of United States dollar exchange, since the bulk of tourist receipts are from visitors from the United States. Such visitors contributed \$216,100,000 of the total of \$222,700,000 in 1946. Receipts from overseas travel, which are normally less than one-tenth of the total, dropped to negligible proportions during the War. In 1946, despite abnormal conditions of travel, overseas traffic began to resume significant proportions and in 1947, aided by a fast-growing transatlantic air service, it will probably regain its pre-war position.

The balance of payments on travel account between Canada and all countries for the years 1937 to 1946 is given in the following statement. While returns are not yet complete for 1947, it is apparent that new records of tourist expenditures in Canada and of expenditures of Canadians travelling abroad will be established.

<i>Year</i>	<i>Credits</i>	<i>Debits</i>	<i>Net</i>
	(Millions of Dollars)		
1937.....	166	87	+79
1938.....	140	86	+54
1939.....	149	81	+68
1940.....	105	43	+62
1941.....	111	21	+90
1942.....	82	27	+55
1943.....	89	37	+52
1944.....	120	60	+60
1945.....	166	83	+83
1946.....	223	135	+88

An analysis of expenditures of travellers to Canada from the United States classified by means of travel, illustrates the recovery from the effects of wartime restrictions.

<i>Means of Travel</i>	<i>1941</i>	<i>1942</i>	<i>1943</i>	<i>1944</i>	<i>1945</i>	<i>1946</i>
	(Millions of Dollars)					
Automobile.....	54.0	26.0	17.0	24.4	56.9	98.0
Rail.....	28.0	32.0	49.0	67.2	64.3	61.4
Boat.....	7.0	4.0	6.0	7.9	14.0	17.3
Through bus.....	7.0	6.0	5.0	6.3	12.9	15.8
Aircraft.....	3.0	3.0	3.0	3.2	5.6	10.3
Other (pedestrian, local bus, etc.).....	8.0	8.0	7.0	7.5	10.6	13.3
TOTALS.....	107.0	79.0	87.0	116.6	163.3	216.1



Construction

THE exigencies of war curbed activities in all phases of peacetime construction. A shortage of houses developed and the remedying of this and other construction deficiencies is necessarily a lengthy process. This chapter treats of the progress made and the means employed to bring about normal conditions in the industry.

★ *Government Assistance to the Industry*

There are three Acts of Parliament in effect at the present time under which it is possible to obtain help from the Federal Government for the purpose of building houses: The National Housing Act, 1944; the Farm Improvement Loans Act; and the Veterans' Land Act. The first two are outlined below, together with a statement on the work of Wartime Housing Limited, a Crown company created in 1941 to erect temporary homes for rental purposes in order to relieve housing pressure in congested areas. The Veterans' Land Act is dealt with under the Chapter on Veterans Affairs, p. 66.

Efforts to meet the housing deficit and to set higher standards call for co-ordination on a national scale. To provide that co-ordination, Central Mortgage and Housing Corporation, a Crown company, was incorporated by Act of the Twentieth Parliament (December, 1945). Its purpose and functions are, briefly: (a) to administer the National Housing Act, 1944; (b) to provide facilities for the rediscounting of mortgages by the lending institutions; and (c) to administer the Emergency Shelter Regulations.

As a result of consolidation of the Federal Government's operations in the housing field, the Corporation also directs the activities of Wartime Housing Limited and, in addition, the non-farm or small holdings operations carried on under the Veterans' Land Act are referred to the Corporation.

National Housing Act

The National Housing Act, 1944, was the third general housing Act to be proclaimed in Canada. The first, the Dominion Housing Act, 1935, was superseded by the National Housing Act, 1938, which in turn was followed by the present Act. The National Housing Act covers virtually the entire housing field.

Joint Loans.—Loans are made jointly by the Corporation and approved lending institutions to prospective home-owners or to builders of houses for sale to occupants. Houses must be constructed according to sound, prescribed standards. Loans to purchasers of houses built under the Integrated Housing



Filling and grading a road-bed. The "filler" is dumped from the tipple cars and graded by the bulldozer.



A stretch of road being surfaced with asphalt. Thousands of miles of Canada's highways are bituminous-paved in this manner. The machine, fed by tilted truck in the rear, is adjusted to lay down an asphalt blanket of required thickness.

Plan or by builders for sale at a price approved in advance by the Corporation are based on the following percentages of lending value: 95 p.c. of the first \$3,000, 85 p.c. of the next \$3,000 and 70 p.c. of the remainder. In computing loans for the purchase of houses without a fixed sale price, the percentages are: 95 p.c. of the first \$2,000, 85 p.c. of the next \$2,000 and 70 p.c. of the remainder. Twenty-five per cent of the money borrowed is furnished by the Corporation; interest payable by the borrower is $4\frac{1}{2}$ p.c. per annum, calculated semi-annually. Term of the loan may be up to 30 years. Payments of principal, interest and taxes are made in monthly instalments comparable to rent. Joint loans may be made for rental-housing projects on much the same terms, except that the loan must not exceed 80 p.c. of the lending value and that the maximum term is 30 years.

In the first seven months of 1947, a total of 6,650 units were financed under the joint loans section of the Act, involving \$31,955,500, or an average

loan per unit of \$4,805. These figures compare with 5,597 units, involving \$25,396,080, or an average loan of \$4,537 per unit in the same period of 1946.

Loans to Limited-Dividend Housing Companies.—Loans may be made directly by the Corporation to a limited-dividend housing company to assist in the construction of a low-rental housing project. Such loans may be for 90 p.c. of the lending value of the project at an interest rate of 3 p.c. per annum. Their period of amortization may be extended to 50 years. Life insurance companies under Dominion jurisdiction are authorized to invest up to 5 p.c. of their Canadian assets in a low- or moderate-rental housing project, and are guaranteed a net return of $2\frac{1}{2}$ p.c. per annum on such investments.

In 1945, several life insurance companies operating in Canada joined together and formed a mutual institutional holding company in the name of Housing Enterprises of Canada, Limited. Through limited-dividend operating companies, Housing Enterprises is building rental housing in some 35 cities involving the construction of approximately 3,300 units. It is expected that this program will be completed in 1947.

Loans to Primary Producers.—The Corporation is authorized to make direct advances to mining, lumbering, logging and fishing companies in outlying areas to assist in providing homes for their employees. Loans are made to, or are guaranteed by, the company concerned; the term of the loan may be as long as 15 years, the rate of interest is 4 p.c. and the company cannot earn on its investment in the housing project more than 4 p.c. interest. The maximum loan is 80 p.c. of the lending value.

Farm Loans.—Loans may be made on the following terms to assist in the construction of houses on farms; (a) where a farm is clear of encumbrance, a loan will be the least of \$5,000, the cost of building the house, or two-thirds of the appraised value of the farm; (b) where a farm is already mortgaged, a loan will be the least of \$8,000, the aggregate of the cost of building the house and the amount necessary to discharge all encumbrances on the farm, or two-thirds of the appraised value of the farm. The rate of interest is $4\frac{1}{2}$ p.c.; the term of the loan up to 20 years.

Home Extension Loans.—Loans may be made by banks or approved instalment credit agencies for home improvement and home extension purposes. These loans are intended to assist home-owners to finance additional dwelling units in existing houses. They bear interest at 5 p.c. The section dealing with home improvement loans is not in force owing to the shortage of building materials.

Home Conversion Plan.—One of the first measures designed to help relieve the housing shortage, the Home Conversion Plan, was established by a series of Orders in Council beginning with P.C. 2641 of Apr. 1, 1943. These gave the Government authority to lease buildings in certain cities, to convert them into multiple housing units and to sublet them to suitable tenants. Conversions completed total 260, providing 2,108 housing units.

Integrated Housing Plan.—The purpose of the Integrated Housing Plan is to encourage the building of houses for sale, preference being reserved for veterans of the Second World War and their dependents. The main features

of the Plan are: (a) a predetermined maximum sales price; (b) priority for materials; (c) a Government guarantee to purchase in the event of non-sale; and (d) sales preference to veterans.

Research and Community Planning.—The Corporation is authorized to deal with the investigation of housing conditions and measures to be taken for their improvement, the preparation of plans of low-cost homes, public education on the subject of community planning and all other aspects of research of this kind.

Slum Clearance.—The Corporation has taken over administration of the National Housing Act in full, except for grants for slum clearance. In this instance, the Corporation advises the Minister of Reconstruction and Supply, but the grant itself is made by the Minister. However, slum clearance is not considered to be opportune at the present time. The need for shelter is too great to permit the destruction of living accommodation of any kind.

Land Assembly.—Because of the shortage of serviced land in almost every Canadian municipality, approved lending institutions are now enabled under the National Housing Act, but only with approval of Central Mortgage and Housing Corporation, to purchase raw land to be used for housing development and to install the necessary services such as roads, sewers and water. The price of the land to the builder or home-owner will be fixed to assure that the home-owner receives full benefit of the economies effected by this method of land assembly.

Wartime Housing Limited

Wartime Housing Limited, a Crown company, was formed in the spring of 1941 to build houses for families and living accommodation for single men and women employed in essential war industries. To the end of 1944, 17,218 houses had been completed, together with 200 other buildings such as staff houses, schools, community halls, etc. Many of these latter units have now served their purpose and have been disposed of through the War Assets Corporation.

With the return of service men the demand for housing increased tremendously. The low-cost rental field opened by the veterans' needs was too great for ordinary handling and the construction activities of Wartime Housing Limited was renewed. The first veterans' housing program was started in 1944 and by the end of August, 1947, a total of 28,445 units had been constructed and occupied in 133 projects across Canada. Other units were under construction.

Each municipality in which these veterans' houses are built co-operates by providing a fully developed lot for \$1. Wartime Housing pays, in lieu of taxes, amounts of from \$24 to \$30 per annum for each house plus \$1 per house for street lighting. Rentals are from \$22 to \$40 per month. At the end of an agreed period, the municipality will be permitted to buy the houses at \$1,000 each.

Farm Improvement Loans Act

The Farm Improvement Loans Act, 1944, is designed to provide short-term and intermediate-term credit to farmers. Under its provisions, the Federal Government authorizes the chartered banks of Canada to make



Modern homes in Victoria, B.C. These are typical of homes being built in the rapidly expanding suburban areas of other cities.

loans over a three-year period and up to \$250,000,000 under a 10 p.c. Government guarantee against loss. The maximum of an individual loan is \$3,000, the interest rate is 5 p.c. simple interest, and the repayment periods are from one to ten years, depending upon the amount borrowed and the purpose for which the loan is obtained. The Act restricts loans to farmers.

There are two broad aims behind this legislation, the first of which is the improvement and development of farms. Loans will be made for the installation of modern, labour-saving equipment, more and better live stock, and for other improvements necessary to maximum farm production. The second is the improvement of living conditions on farms, such as the provision of electrification, refrigeration, heating systems, water systems, and all those things that make for comfort and convenience in living and that do so much to eliminate drudgery for the farm housewife.

There are seven classes of Farm Improvement Loans: (1) purchase of agricultural implements; (2) purchase of live stock; (3) purchase of agricultural equipment or installation of a farm electrical system; (4) alteration or improvement of a farm electrical system; (5) fencing or drainage; (6) construction, repair or alteration of, or addition to, farm buildings; and (7) general improvement or development of the farm.

As at July 31, 1947, 29,808 loans had been taken out under this Act for an amount of \$22,581,424.

★ Construction Statistics

Housing.—In 1945, as a result of increasing emphasis on the urgent need for shelter, the Dominion Bureau of Statistics initiated a series on new residential buildings and dwelling units completed in Canada. Reports on new residential construction were obtained from municipal offices of 623 municipalities, covering housing construction from Jan. 1, 1945. This group of municipalities includes all metropolitan areas, urban centres of 5,000 or over population, and a further selected number chosen on the basis of scientific sampling technique. On a population basis the sample of incorporated localities covers approximately 66 p.c. of the Dominion total—85 p.c. of the urban population and 36 p.c. of the rural population.

During 1946 completions of new dwellings were 41 p.c. above completions in 1945. The percentage of completed single-dwelling units was larger than the preceding year.

Dwelling Units Built, by Type, 1945 and 1946

Type	Urban			Rural ¹			Total		
	1946		1945	1946		1945	1946		1945
	No.	p.c.	No.	No.	p.c.	No.	No.	p.c.	No.
Single dwellings.....	28,051	68.0	17,189	22,406	86.0	15,492	50,457	75.0	32,681
Semi-detached or double..	1,532	3.7	1,168	926	3.6	632	2,458	3.6	1,800
Row or terrace.....	359	0.9	208	151	0.6	27	510	0.8	235
Duplex.....	1,636	4.0	1,688	112	0.4	206	1,748	2.6	1,894
Triplex.....	669	1.6	1,032	21	0.1	12	690	1.0	1,044
Apartment or flat.....	1,974	4.8	2,551	234	0.9	414	2,208	3.3	2,965
Other.....	1,510	3.6	916	904	3.8	250	2,504	3.7	1,166
Conversions and reconversions.....	5,536	13.4	5,337	1,204	4.6	645	6,740	10.0	5,982
Totals.....	41,267	100.0	30,089	26,048	100.0	17,678	67,315	100.0	47,767

¹ Includes provincial unorganized areas as well as Yukon and the Northwest Territories.

Residential Construction, by Type, 1945 and 1946

Type	1946		1945	
	No.	P.C.	No.	P.C.
Wood frame and wood siding.....	37,510	68.3	23,025	63.5
Wood frame and brick veneer.....	4,807	8.8	4,011	11.0
Wood frame and stucco on lath.....	6,559	11.9	4,387	12.1
Cinder or cement blocks and stucco.....	1,629	3.0	731	2.0
Solid masonry.....	1,427	2.6	1,108	3.0
Solid brick.....	1,891	3.4	1,797	5.0
All other types.....	1,114	2.0	1,221	3.4
Totals.....	54,937	100.0	36,280	100.0
Summer cottages.....	1,568	—	903	—

About 34 p.c. of the dwelling units built in 1946 were constructed in the 12 major metropolitan areas containing 32 p.c. of the population of the Dominion. There were fewer dwelling units per building in 1946 than in 1945, both in the metropolitan areas and in the country as a whole.

Comparison of Dwelling Units and Buildings in 12 Metropolitan Areas, 1946

Metropolitan Area	Dwelling Units		Buildings		Dwelling Units per Building
	No.	p.c.	No.	p.c.	No.
Halifax.....	935	1.4	632	1.2	1.48
Saint John.....	413	0.6	239	0.4	1.73
Quebec.....	1,179	1.8	578	1.0	2.04
Montreal.....	3,956	5.9	2,524	4.6	1.57
Ottawa.....	1,608	2.4	1,331	2.4	1.21
Toronto.....	4,447	6.6	3,988	7.3	1.12
Hamilton.....	689	1.0	565	1.0	1.22
London.....	852	1.3	616	1.1	1.38
Windsor.....	814	1.2	728	1.3	1.12
Winnipeg.....	2,417	3.6	1,928	3.5	1.25
Vancouver.....	4,523	6.7	3,448	6.3	1.31
Victoria.....	964	1.4	748	1.4	1.29
Totals, 12 Metropolitan Areas	22,797	33.9	17,325	31.5	1.32
Totals, Canada	67,315	100.0	54,937	100.0	1.23

All Construction.—The value of work performed by the construction industry in Canada in 1946, according to reports received from 23,793 general, trade and sub-contractors, municipal authorities, the Harbours Board, and Federal and Provincial Government Departments amounted to \$868,661,403. This represented an increase of 59.8 p.c. over the total for 1945.

Construction in Ontario, which accounted for over 40 p.c. of the total in 1946, increased by 60.5 p.c. over 1945. Quebec accounted for about 26 p.c. of the total in 1946 and showed an increase of 50.2 p.c. over 1945. British Columbia and Yukon increased 87.5 p.c. in the same comparison.

Statistics of the Construction Industry, 1939-46

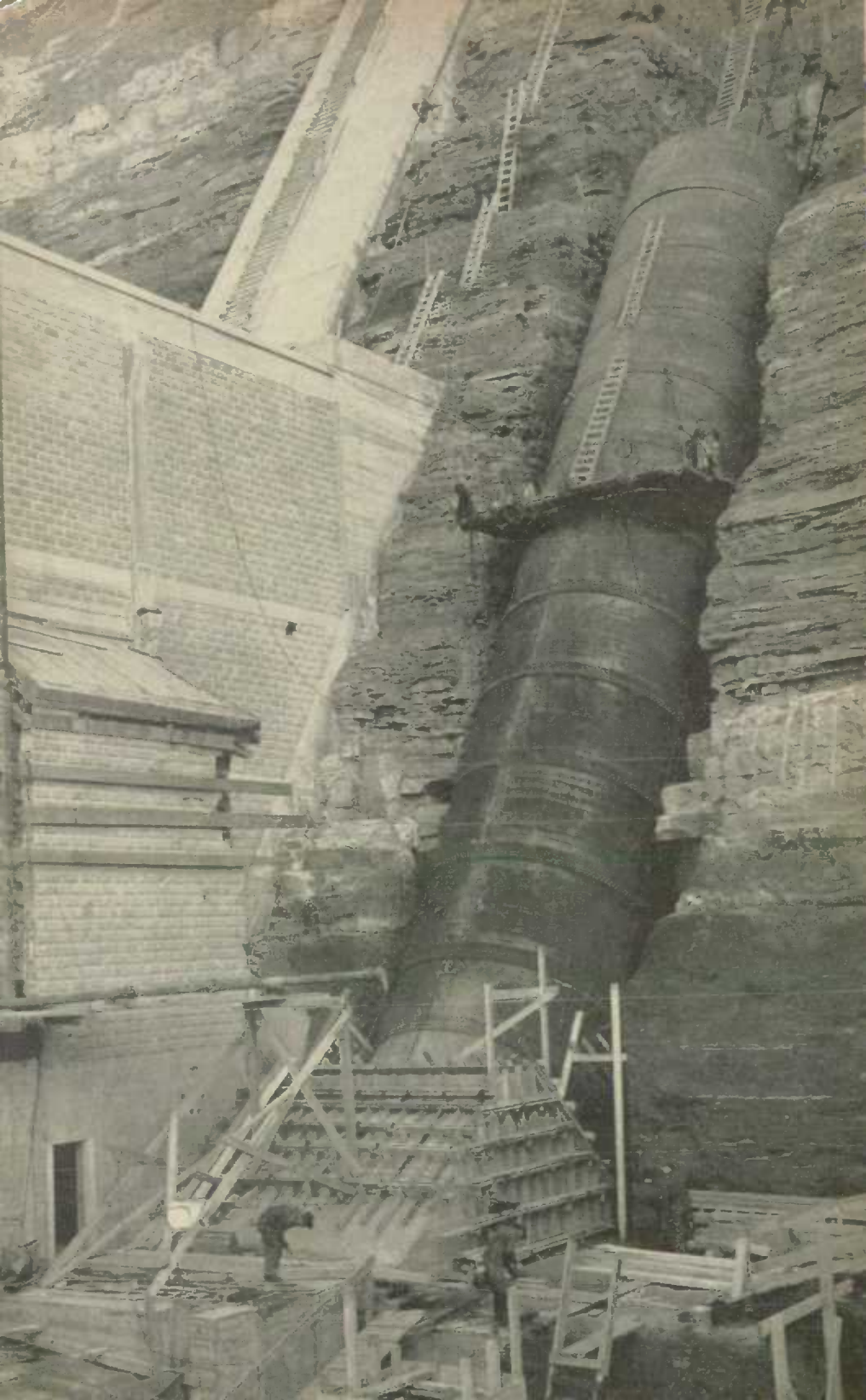
Year, Province and Group	Persons Employed	Salaries and Wages Paid	Cost of Materials Used	Value of Work Performed
	No.	\$	\$	\$
1939.....	148,414	153,442,443	189,497,342	373,203,680
1940.....	149,830	180,229,498	267,228,786	474,122,778
1941.....	176,358	235,631,781	370,188,739	639,750,624
1942.....	175,267	262,043,471	324,732,380	635,649,570
1943.....	155,300	246,836,035	278,888,384	572,426,551
1944.....	123,892	197,703,984	200,801,042	449,838,059
1945.....	146,530	233,991,454	275,621,996	543,579,833
1946.....	198,851	344,893,057	459,965,741	868,661,403
1946				
Prince Edward Island.....	541	833,780	1,415,018	2,381,620
Nova Scotia.....	12,577	18,118,652	19,104,088	40,858,319
New Brunswick.....	7,340	11,272,121	13,351,512	27,761,110
Quebec.....	53,802	90,661,720	124,253,737	225,582,288
Ontario.....	76,870	138,664,306	184,351,191	347,616,749
Manitoba.....	8,868	15,428,929	23,526,454	43,462,500
Saskatchewan.....	5,999	10,093,724	15,421,703	29,277,215
Alberta.....	10,207	18,068,674	26,402,440	51,573,396
British Columbia and Yukon.....	22,557	41,751,142	52,139,598	100,148,206
Contractors, builders, etc.....	165,518	295,282,864	426,800,935	775,452,420
Municipalities.....	12,505	19,438,388	12,526,339	34,082,081
Harbour Commissions.....	660	1,139,705	532,777	1,797,187
Provincial Govt. Depts.....	15,427	20,972,861	15,220,591	43,943,196
Dominion Govt. Depts.....	4,741	8,059,239	4,885,099	13,386,519

The value of residential construction, which accounted for 22.3 p.c. of the total building construction, showed an increase of 54.3 p.c. over the previous year. The value of other building construction increased by 82.6 p.c. in the same comparison, jobbing trades in connection with building by 46.8 p.c., while engineering increased by 48.9 p.c.

The number of persons employed in the industry increased from 146,530 to 198,851, while salaries and wages rose from \$233,991,454 to \$344,893,057.

Values of Construction, by Types, 1944-46

Type of Construction	1944	1945	1946	Increase or Decrease 1945 to 1946
	\$	\$	\$	\$
Residential	83,927,360	125,524,346	193,626,880	+68,102,534
Institutional	21,005,720	30,449,556	48,623,956	+18,174,400
Commercial	29,233,965	42,873,383	88,081,972	+45,208,589
Industrial (includes factories, warehouses, mine buildings, etc.)	71,131,759	82,800,022	151,305,541	+68,505,519
Other (includes armouries, barracks, hangars, etc.)	15,001,136	6,445,275	8,769,191	+ 2,323,916
Totals, Building Construction	220,299,940	288,092,582	490,407,540	+202,314,958
Streets, highways, etc.	68,381,994	78,585,511	110,861,127	+32,275,616
Bridges, watermain, sewers, dams, reservoirs, etc.	22,020,560	27,427,629	46,069,313	+18,641,684
Electric stations and transmission lines	19,919,488	24,704,582	48,952,056	+24,247,474
Docks, wharves, piers, etc.	5,819,364	7,693,748	7,226,246	- 467,502
Other engineering (includes landing fields, parks, canals, dredging, pile driving, etc.)	36,982,396	20,496,195	23,381,995	+ 2,885,800
Totals, Engineering Construction	153,123,802	158,907,665	236,490,737	+77,583,072
Air conditioning	513,688	952,690	2,039,877	+ 1,087,187
Bricklaying	1,811,055	2,220,631	2,891,622	+ 670,991
Carpentry work	3,179,213	4,478,934	6,266,898	+ 1,787,964
Commercial refrigeration	1,589,733	1,498,645	2,279,357	+ 780,712
Concreting and cement work	1,407,353	2,269,312	3,557,533	+ 1,288,221
Electrical work	9,279,276	14,192,659	20,881,652	+ 6,688,993
Elevators, service	2,722,284	3,384,424	5,589,845	+ 2,205,421
Excavating	1,288,359	1,704,024	1,960,159	+ 256,135
Flooring	965,064	1,061,667	1,723,436	+ 661,769
Glass and glazing	1,071,510	1,084,288	1,808,563	+ 724,275
Lathing, plastering and stucco	1,505,376	1,895,120	2,687,108	+ 791,988
Masonry and stone work	244,857	353,628	816,766	+ 463,138
Ornamental iron work	242,436	274,164	768,506	+ 494,342
Painting and decorating	10,937,163	12,611,152	17,503,072	+ 4,891,920
Plumbing, heating and sanitary engineering	24,460,765	29,295,962	43,990,329	+14,694,367
Roofing, sheet metal	1,045,041	1,758,835	2,618,415	+ 859,580
Roofing, all other	3,536,472	4,209,906	5,544,855	+ 1,334,949
Sheet metal work, other than roofing	3,524,171	4,013,399	6,331,509	+ 2,318,110
Sprinkler installation	660,460	1,269,521	1,460,891	+ 191,370
Structural steel work	1,710,662	1,600,345	1,987,364	+ 387,019
Tiling, marble and terrazzo	953,238	1,236,601	1,766,240	+ 529,639
Weatherstripping and insulation	3,447,242	4,409,072	5,146,336	+ 737,264
Wrecking and demolition	221,227	469,490	1,297,548	+ 828,058
Unspecified	97,677	335,117	845,245	+ 510,128
Totals, Building Trades	76,414,317	96,579,586	141,763,126	+45,183,540
Grand Totals	449,838,059	543,579,833	868,661,403	+325,081,570



Building Permits.—Since 1940 the Dominion Bureau of Statistics has collected monthly statistics showing the anticipated cost of building represented by the permits taken out in 204 municipalities. Building permits in 1946 registered an increase of 95 p.c. compared with 1945.

Building Permits Issued by 204 Selected Municipalities, Classified by Types and by Provinces, 1946

NOTE.—Additions include alterations and repair.

Type of Construction	P.E.I.	N.S.	N.B.	Que.	Ont.
	\$	\$	\$	\$	\$
Residential.....	94,350	4,192,860	3,372,353	49,828,141	77,170,996
New construction.....	83,500	3,358,801	2,907,850	45,131,490	69,826,625
Additions, etc.....	10,850	834,059	464,503	4,696,641	7,344,371
Institutional.....	125,000	450,043	241,500	10,050,133	6,611,429
New construction.....	—	297,210	204,100	5,432,100	3,985,210
Additions, etc.....	125,000	152,833	37,400	4,618,033	2,626,219
Commercial.....	221,900	2,362,919	2,356,853	29,116,171	40,849,350
New construction.....	164,850	1,506,262	1,571,003	22,352,780	27,590,145
Additions, etc.....	57,050	856,657	785,850	6,763,392	13,259,205
Industrial.....	10,000	364,025	441,947	21,619,619	24,761,238
New construction.....	10,000	281,900	413,000	15,944,580	15,243,595
Additions, etc.....	—	82,125	28,947	5,675,039	9,517,643
Other building.....	—	72,940	24,900	1,201,274	1,127,154
New construction.....	—	72,110	23,700	742,338	498,714
Additions, etc.....	—	830	1,200	458,936	628,440
Totals, All Permits.....	451,250	7,442,787	6,437,553	111,815,328	150,520,167
New Construction.....	258,350	5,516,283	5,119,653	89,603,297	117,144,289
Additions, etc.....	192,900	1,926,504	1,317,900	22,212,031	33,375,878
	Man.	Sask.	Alta.	B.C.	Canada
	\$	\$	\$	\$	\$
Residential.....	10,320,776	11,619,902	18,612,875	25,479,064	200,691,307
New construction.....	9,708,426	10,648,913	17,334,208	23,736,512	182,733,325
Additions, etc.....	612,350	973,989	1,278,667	1,742,552	17,957,982
Institutional.....	997,225	2,137,800	2,168,866	881,829	23,663,825
New construction.....	894,025	1,040,300	1,870,781	695,121	14,418,847
Additions, etc.....	103,200	1,097,500	298,085	186,708	9,244,978
Commercial.....	3,824,200	3,730,746	7,511,830	10,291,412	100,265,381
New construction.....	2,298,600	2,461,775	5,496,129	5,257,082	68,691,634
Additions, etc.....	1,525,600	1,268,971	2,015,702	5,034,330	31,573,747
Industrial.....	1,062,240	394,927	1,050,241	5,051,386	54,761,625
New construction.....	769,550	314,412	820,839	3,731,976	37,529,852
Additions, etc.....	292,690	80,515	229,402	1,325,410	17,231,771
Other building.....	104,900	131,572	395,138	1,156,684	4,214,562
New construction.....	85,115	119,905	294,923	931,957	2,768,762
Additions, etc.....	19,785	11,667	100,215	224,727	1,445,800
Totals, All Permits.....	16,309,341	18,014,947	29,738,950	42,866,375	383,596,698
New Construction.....	13,755,716	14,582,305	25,816,879	34,345,648	306,142,420
Additions, etc.....	2,553,625	3,432,642	3,922,071	8,520,727	77,454,278

Railways.—The expenditures of railways on maintenance of way, and structures and equipment are not included in the figures of the construction industries given at pp. 203-204 and are therefore summarized here. For steam railways, expenditures for these purposes in 1946 amounted to \$215,606,439 as against \$213,826,233 in 1945. For electric railways the total for 1945 was \$14,543,278 as against \$12,824,535 in 1944. Expenditures on new lines of steam railways totalled \$3,512,581, and additions and betterments showed a net expenditure of \$35,342,456 in 1946, compared with a total of \$26,662,342 in 1945.

Labour

MODERN labour is protected by law and the organizations that labour has itself set up or called into existence. This chapter treats of working conditions, the number of strikes and lockouts that take place, wage rates, hours of labour, and unemployment figures.

Legislation

Both the Parliament of Canada and the Provincial Legislatures have enacted laws for the protection of workers in their place of employment. The Dominion and Provincial Departments of Labour administer these and other labour laws but special boards are responsible for workmen's compensation statutes and Mines Departments administer the Acts protecting miners.

Co-operation between the Dominion and the Provinces before and during the War has resulted in fairly uniform principles being applied throughout Canada for the settlement of industrial disputes. Financial assistance from the Dominion has stimulated vocational training and apprenticeship in all provinces.

The Government of Canada provides unemployment insurance through a nation-wide system of employment offices which are concerned with both the payment of claims and the placing of workers in jobs. The Dominion regulates working conditions of its own employees and provides compensation for them in case of accident during employment. Observance is required of specified wage-and-hour conditions by contractors for Dominion public works and equipment and supplies. Dominion laws govern employment on railways and in the mercantile marine, permit peaceful picketing, and prohibit employment on Sunday except under certain conditions. The Dominion Government provides, too, facilities for the purchase of annuities up to \$1,200 a year per individual (see p. 59).

In all provinces, except Prince Edward Island where there is little industrial employment, there are laws for the inspection of mines, factories, shops, and other work-places and for the regulation of wages, hours of work, employment of women and children, apprenticeship and workmen's compensation. Laws have also been enacted to protect freedom of association, to require employers to bargain with the representatives of employees or with trade unions and to prohibit any strike or lockout until after an inquiry. Prince Edward Island in 1945 enacted laws to promote collective bargaining and to prohibit the employment in industry of children under 15 years of age.

Labour Organizations

Before the middle of the nineteenth century there were in Canada only a few local unions of craftsmen. After 1850, organization was stimulated by increased industrial activity and by the marked progress of the union

movement in both Great Britain and the United States. The recently formed national unions in the United States, beginning with the printers and moulders, began to accept the "cards" of Canadian union men seeking work in that country and the Canadian unions took in United States craftsmen. The next step was for the Canadian local unions to affiliate with the national unions. Thus began the "international unions", the Canadian membership of which makes up so large a part of Canadian trade unions. At the present time, the majority of local trade unions are branches of international organizations, either craft or industrial, with headquarters in the United States.

Trade unions in Canada are now divided into four principal groups: (1) those affiliated in Canada with the Trades and Labour Congress of Canada and in the United States with the American Federation of Labor; (2) those affiliated with the Canadian Congress of Labour and in the United States with the Congress of Industrial Organizations; (3) those unions in the Province of Quebec that are linked with the Canadian and Catholic Confederation of Labour; and (4) the railroad brotherhoods of men in train and engine service in the United States and Canada.

At the end of 1946 there were 831,697 union members reported to the Department of Labour, an increase of 120,580 over the 1945 figure. During the calendar year 1945 there had been a decrease of 13,071 in the number of union members due mainly to the drop in employment in certain large war plants. The increase during 1946 reflects, to some extent, the conversion of some war plants to peacetime production, but a large part of it was the result of more active organizing work in certain industrial groups such as "wood and wood products" and "foods". The number of local unions in Canada increased from 4,329 in 1945 to 4,635 in 1946.

According to the reports submitted by the headquarters of the national and international unions, supplemented by reports submitted by the Congresses and Federations of unions and also by independent local unions, there were, at the end of 1946, 356,121 members of unions affiliated with the Trades and Labour Congress, 314,025 affiliated with the Canadian Congress of Labour and 70,367 with the Canadian and Catholic Federation of Labour.

Unemployment in Trade Unions.—Reports from trade unions indicated little change in the percentage of unemployment among their members during 1946, the average for both that year and 1945 being 1.4 p.c. The only years since the record was begun in 1919 which showed a lower percentage of unemployment were 1943 and 1944 when wartime production was at its peak. At the end of June, 1947, reports from 2,409 local branches of labour organizations, of which the total membership was 468,269, showed 3,961 or 0.8 p.c. as unemployed; on the corresponding date in 1946 the percentage was 1.3, but increased to 1.5 at the end of the year. The highest level of unemployment indicated by union returns was at the end of 1932 and the beginning of 1933 when the percentage was 25.5, while the period of lowest unemployment was the summer of 1944 when the percentage was 0.3.

Strikes and Lockouts

Improvement in industrial relations in 1947 as compared with 1946 was indicated by the strike statistics for the first eight months of the year. However, the time-loss for this period was greater than for the full twelve months



Completed sections of trackwork being assembled in the yard of the shop before being moved to final location.

of any other year in the record except 1919 and 1946, in each case the first year following the end of war. The year 1946 had been marked by an unusually large number of strikes of exceptional length involving relatively large numbers of workers and resulting in a time-loss of more than 4,500,000 man-days. The corresponding figure for 1919 was 3,400,000 man-days. More than 80 p.c. of the 1,580,000 days of lost time in the first eight months of 1947 was due to a strike of coal miners in the Maritime Provinces. By far the most important single cause of strikes in 1947, as in 1946, was the demand for increased wages, often linked with demands concerning other conditions. The number of strikes during the eight-month period in 1947 was 146, and the number of workers involved 52,823. For the similar period in 1946 the number of strikes was 180 and the number of workers involved, 127,417.

Collective Bargaining and Industrial Disputes.—The Wartime Labour Relations Regulations, 1944, were designed to facilitate collective bargaining and to aid in settling disputes. Made under the War Measures Act and retained by the Continuation of Transitional Measures Act, they apply now only to transport and communication agencies extending beyond the bounds of any province and to such industries as may be declared by Parliament to be for the general advantage of Canada. Other industries are within the scope of somewhat similar laws enacted by the provinces.

Employers are required to negotiate with the properly chosen representatives of their employees. The National and Provincial Labour Relations Boards, except in Prince Edward Island, each representing employers and employed equally, provide machinery for certifying such representatives where there is a difference of opinion, and for a conciliation officer

or conciliation board to assist the parties in coming to an agreement. Pending settlement in Saskatchewan, and in case of failure to agree in the other provinces, for an additional 14 days after a report of a conciliation board has been received by the parties, there may be no strike or lockout.

These laws forbid, too, any interference by an employer with a trade union or an employee organization, refusal to employ a person because he is a member of a union or employee organization, and intimidation with a view to preventing a worker joining or refusing to join a trade union or employee organization.

Wage Rates and Hours of Labour

Index numbers of wage rates, compiled by the Department of Labour, show the general movement of wage rates for the main industrial groups as well as for individual industries, but cannot be used to compare rates in one industry with those in another. The statistics are average straight-time wage rates or average piece-work straight-time earnings and therefore do not include overtime or other premium payments. From 1930 to 1933 there was a considerable decrease in wage rates, but increases have been general each year since that time. During the period 1939-46, the rise in wage rates amounted to 54.6 p.c.

Index Numbers of Wage Rates for Certain Main Groups of Industries, 1901-46

(Rates in 1939=100)

Year	Logging	Coal Mining	Metal Mining	Manufacturing	Construction	Water Transport	Steam Railways	Electric Railways	Telephones	General Average ¹
1901...	51.4	47.4	61.2	—	35.3	43.9	33.7	32.8	—	38.1
1905...	57.0	49.5	58.7	—	42.8	44.7	36.5	37.7	—	43.1
1910...	64.0	54.0	62.5	—	50.9	48.4	44.1	44.0	—	49.9
1915...	61.1	58.7	66.2	50.1	59.4	54.0	49.8	50.2	—	53.2
1920...	142.5	113.3	102.9	102.4	106.0	105.2	108.2	99.7	92.2	107.0
1925...	95.2	96.1	93.3	92.3	99.8	90.4	91.2	96.4	89.1	93.8
1930...	97.5	97.1	93.0	95.5	119.1	97.2	100.0	102.3	94.7	99.9
1935...	73.1	95.0	92.6	87.0	93.6	81.1	90.1	94.3	93.0	88.4
1936...	80.9	95.1	94.9	89.1	91.2	82.4	90.1	95.2	93.8	90.0
1937...	93.9	95.6	99.1	96.1	96.9	92.0	96.0	97.8	98.5	96.7
1938...	101.8	100.0	99.6	90.2	99.2	90.1	100.0	99.4	99.7	99.6
1939...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1940...	104.9	102.1	102.8	104.3	104.5	105.2	100.0	103.9	101.3	103.9
1941...	114.0	109.4	112.2	115.2	111.6	113.3	109.4	109.1	106.4	113.1
1942...	125.9	113.1	118.7	125.5	118.6	125.8	114.8	115.8	112.0	122.5
1943...	143.1	124.8	123.1	136.8	127.7	138.8	125.5	121.2	121.9	133.7
1944...	146.1	146.0	125.2	141.4	129.6	142.2	125.5	125.7	122.4	137.9
1945...	153.3	146.2	128.2	146.5	131.1	144.6	125.5	126.6	125.6	141.8
1946 ² ...	168.2	146.5	135.7	161.0	143.1	162.3	142.3	139.7	125.2	154.6

¹ Includes laundries.

² Preliminary.

In 1946 the standard working hours ranged usually from 44 to 55 in textile mills, 40 to 48 in clothing factories, 44 to 48 in pulp and paper mills, 44 to 55 in paper products, 44 to 60 in woodworking plants, 44 to 55 in metal products plants, 44 to 55 in boot and shoe factories and 45 to 50 in rubber factories. In logging, a 10-hour day was common in all provinces except British Columbia. The eight-hour day prevailed in construction in cities, on steam railways and in mining.

Towards the end of 1944, a statutory 48-hour week became effective in Ontario, as it had been in British Columbia for some years. In 1946, however, British Columbia adopted a 44-hour week, and the next year Saskatchewan stipulated that no person could be employed for more than 44 hours unless an over-time rate of time and one-half was paid. These statutes exempt a few classes and permit exceptions to be made by the administrative authorities.

Vocational Training

The Training Branch of the Department of Labour is responsible for the administration of the Vocational Training Co-ordination Act, 1942, which makes available to the provinces moneys for various types of training under certain conditions. Agreements between the Federal and the Provincial Governments set out the conditions to be observed. The Director of Training at headquarters is assisted by a Regional Director in each province. An Advisory Council representing workers, veterans, employers, etc., advises the Minister on policy and procedure in connection with training projects.

The Youth Training Agreements, concerning young people between 16 and 30 years, have been renewed with all provinces, and the Dominion appropriation of \$500,000 is distributed among them, expenditure being shared equally by the Federal and Provincial Governments. Financial assistance is provided for university students and nurses; in addition, thousands of young people, particularly in rural areas, have benefited by training applicable to agricultural pursuits.

An acetylene - water torch removes buckles or dents in the plates of a sleeping car under construction. This is one of the many time-saving gadgets developed during the War.





Employee training makes jobs more interesting and provides opportunities for self-development. Many key industries are appreciating the benefits of providing such training for their staffs.

There are Apprenticeship Acts in all provinces. In seven provinces apprenticeship training in skilled trades is aided by the Federal Government under agreements that have been in effect for nearly three years. In these provinces over 11,000 apprentices were registered on June 30, 1947. The funds made available by the Dominion have been used to provide class training of a practical and technical nature. The bulk of the class training is carried out in the building trades and motor-vehicle repair trade.

The training of industrial supervisors and foremen is being carried out in three provinces. Under the present plan the provinces pay one-half of the costs of this training.

The training of industrial workers over 16 years of age, who have previously been gainfully employed and are unable to obtain employment in the occupation for which they are qualified, has not developed to any great extent up to the present time. This type of training was provided for in order to expedite the conversion of war industry into peacetime employment. As a result of the high level of employment there has not been any great demand for training under this plan.

Vocational and technical training on the secondary school level is being assisted in each province for a ten-year period. A \$10,000 annual grant is made to each province and, in addition, if the province appropriates an amount equal to the Dominion contribution, a sum of \$1,910,000 is available to the provinces each year. This amount is divided in proportion to the population in each province between the ages of 15 and 19 years. On the same basis, a special Dominion contribution of \$10,000,000 has been allotted for capital expenditures incurred prior to Mar. 31, 1949.

The vocational and pre-matriculation training of former members of the Armed Forces has been the largest task of Canadian Vocational Training during the past year. Enrolment from the inception of the program to Sept. 30, 1947, totalled 130,000. The peak of veterans' training has now passed. Courses have been amalgamated in most provinces and several training centres have been closed. In many instances, the equipment that was used in the

training centres has been taken over by the provinces for educational purposes and many members of the veteran training staff are now in the employ of the provinces. In this way a permanent benefit to vocational education has resulted.

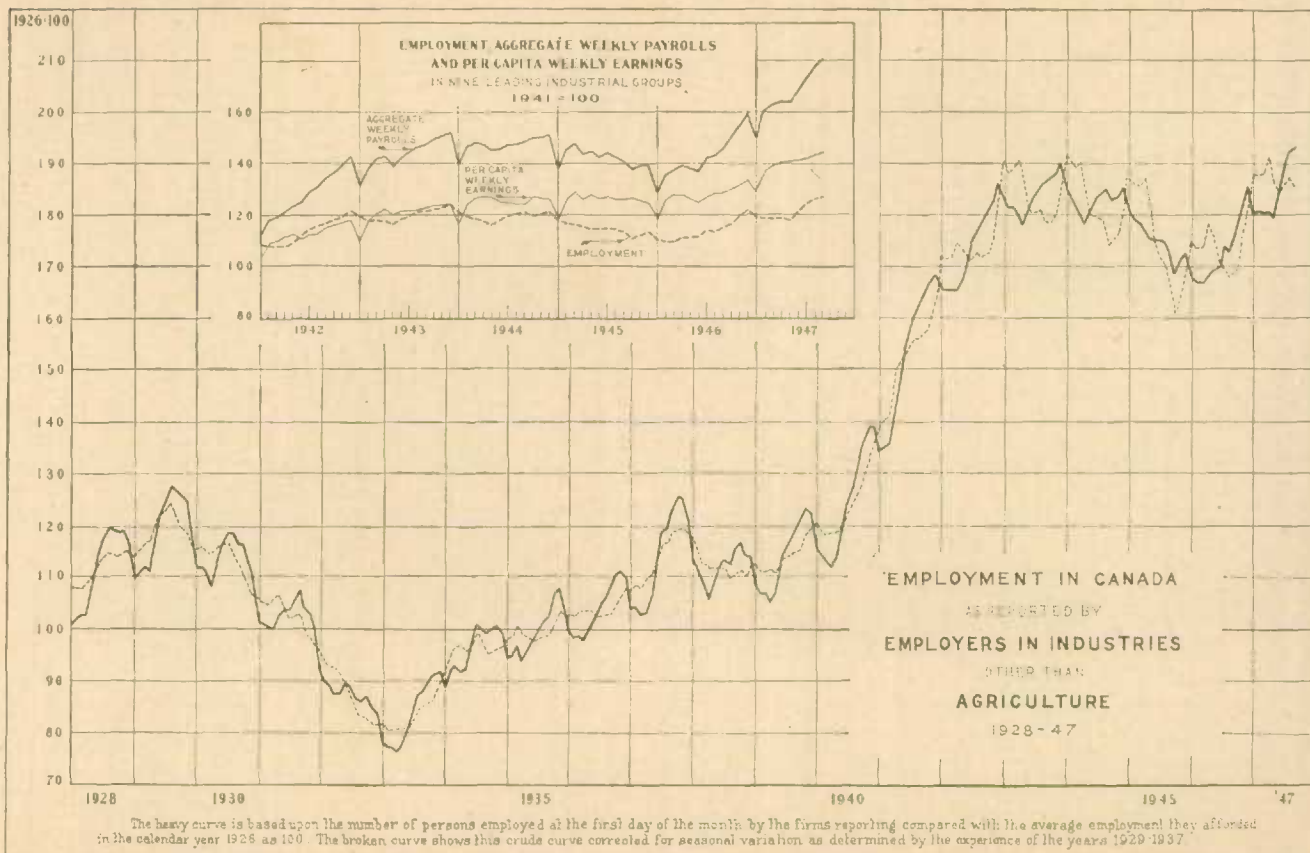
Employment in 1947

At Sept. 1, 1947, industrial employment reached a new height, according to data reported by establishments employing 15 or more persons in the following industrial groups: manufacturing, logging, mining, transportation, communications, construction and maintenance, services (hotels and restaurants, laundering and dry-cleaning plants) and trade; the index (1926=100) was then 192.9, compared with the previous peak of 190.5 at Dec. 1, 1943, when war activity was at its height. The index of employment for the first nine months of the year averaged 184.6, as compared with 170.3 for the same period of 1946, 182.4 in 1943, and 110.9 in 1939. Labour relations during the first nine months of 1947 were more satisfactory than in the same period in the preceding year, when industrial disputes had had a serious effect upon the situation; the strikes that were called during the months under review did not have such a far-reaching effect on the economy as a whole. At the same time, shortages of material in many industries were greatly alleviated.

The appreciably upward trend of employment during the first nine months of 1947 is clearly depicted in the chart on p. 214. The seasonal recession at Jan. 1, though substantial, was below the average for that month in the past 26 years. The index remained fairly constant until June, when it began to climb. The expansion in employment then indicated was greater than at June 1 in any other year since 1941, and considerably exceeded that noted a year earlier, when industrial activity had been seriously affected by labour-management disputes. Between June 1 and Sept. 1, 1947, the general index of employment increased by 4.6 p.c.

In the first nine months of 1947, the Dominion Bureau of Statistics tabulated data from an average of 17,590 of the larger employers, with an average working force of 1,900,000 persons, whose weekly salaries and wages averaged \$67,659,000. The increase of 8.4 p.c. in the index of employment in the period Jan. 1-Sept. 1, 1947, over the same months in 1946, was accompanied by an increase of 20.7 p.c. in the index of aggregate weekly payrolls. The much greater rise in the latter index than in that of employment resulted largely from the payment of higher wage rates in many industries and establishments, although the loss in working time occasioned by industrial disputes in 1946 seriously lowered earnings in that year. The per capita weekly figure in the months under consideration was \$35.59, exceeding by \$3.57 or 10 p.c. the average in the same period of 1946. The latest figure is the highest in the record of six years.

Industrial activity generally was high in all provinces at Sept. 1, 1947, when employment exceeded that reported at the same date in 1946. Especially large gains were made in Ontario, British Columbia, and the Prairie Provinces; the indexes for these provinces were also well above those indicated when wartime activity was at its peak, at Oct. 1, 1943. Although employment in the Maritimes and Quebec showed marked expansion during the past year, the increases were not enough to bring their indexes to the 1943 level.



The improvement noted at Sept. 1, 1947, as compared with a year earlier was general in all of the principal cities. The expansion was particularly marked in Quebec, Hamilton and Windsor. In the case of the latter two cities, industrial disputes had greatly affected the situation at Sept. 1, 1946.

The index of employment in manufacturing in Canada as a whole increased by 8.6 p.c. during the period under consideration, while there was a gain of 13.5 p.c. in recorded employment in the non-manufacturing industries, taken as a whole. The variation in these rates of increase resulted in a more normal distribution of non-agricultural employment as between the two classes than has existed since the early years of the War.

***Distribution of Persons in Recorded Employment in Manufacturing,
Sept. 1, 1939, 1943, 1946 and 1947***

Industrial Group	1939	1943	1946	1947
Durable manufactured goods.....	38.7	56.7	45.2	46.4
Non-durable manufactured goods.....	58.2	41.7	52.5	51.0
Central electric stations.....	3.1	1.6	2.3	2.6
All Manufacturing Industries.....	100.0	100.0	100.0	100.0

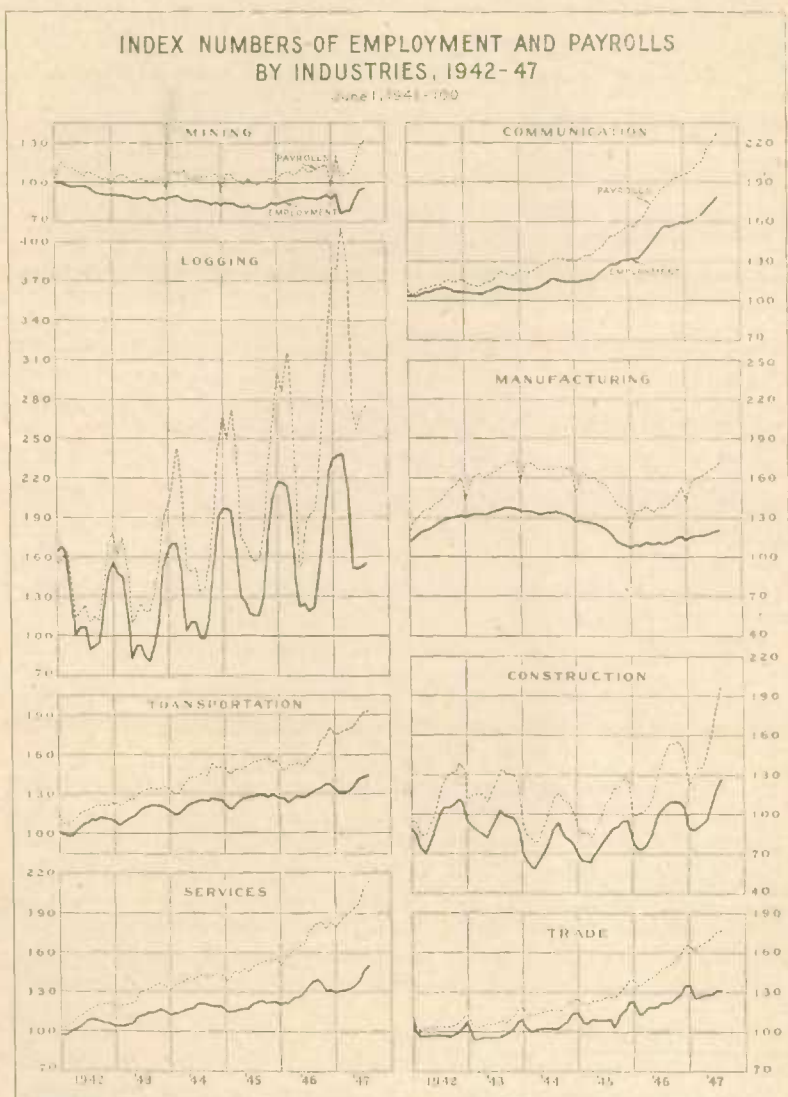
There were pronounced increases in employment in all industries at Sept. 1, 1947, as compared with one year earlier. In the case of manufacturing, the index showed an advance of 8.6 p.c. in comparison with the same period in 1946, when employment generally, but particularly in the manufacturing industries, was greatly affected by labour disputes and resulting material shortages, within this large group of industries. A noticeable shift in the distribution of the workers brought about a closer approximation of the pre-war distribution of recorded employment as between the heavy and the light manufacturing classes than had been indicated for many years; the trends in this respect can be clearly seen in the above table. It is nevertheless noteworthy that establishments in the durable goods industries employed in 1947 an appreciably larger proportion of the total workers reported by the co-operating establishments than in 1939. This is an indication of Canada's growing industrial capacity and the continued heavy demand for new equipment and machinery as well as for replacements unobtainable during the War.

Employment at Sept. 1, 1947, in all non-manufacturing industries, with the exception of mining, reached an all-time maximum for that time of year and each of these industries showed a marked gain over Sept. 1, 1943, when war activity had neared its peak. Although the expansion was still impeded by a shortage of labour, the index of employment for logging was higher by 25 p.c. than at Sept. 1, 1946, standing at 241.9. The continuing demand for pulp and paper and lumber products ensures an unusually active winter.

The number of employees reported in the construction industry increased during 1947, in spite of continued shortages of labour and materials in certain areas. The index advanced by 26.4 points in the year, to reach 178.7 at Sept. 1, 1947. Expansion in employment in mining and transportation was not as great as that in other industries in the 12-month period. The situation in the former industry was greatly affected by the dispute in the Maritime

coal mines during the period February to May, 1947. Employment in communications, trade and hotels and restaurants and dry-cleaning plants showed further improvement, reaching all-time highs during 1947.

Statistics showing the sex distribution of persons in recorded employment have been collected monthly since Feb. 1, 1946, replacing the semi-annual inquiries of 1945 and 1944, and the annual returns for 1943 and 1942. At Oct. 1, 1944, 261 of every 1,000 persons in recorded employment in the eight leading industries were women. By Sept. 1, 1947, this ratio had



Rotary drill operators
screwing in another
length of pipe as the
oil well is deepened.



declined to 208, as the shift from industry to the home continued. The decline, although extending to all groups, varied in extent from industry to industry. Manufacturing, communications and trade, in which major expansions in the number of women workers had been shown during the war years, were the industries in which the ratios declined most noticeably in 1947.

Unemployment Insurance

The Unemployment Insurance Act, 1940, providing a co-ordinated program of unemployment insurance and employment offices, is administered by an Unemployment Insurance Commission, consisting of a Chief Commissioner and two Commissioners (one appointed after consultation with employees and one after consultation with employers).

All employed persons are insured unless specifically excepted. Exceptions include certain employments, such as agriculture, fishing, domestic service, which present difficult administrative problems, workers paid weekly who are employed at a rate of more than \$3,120 a year, and those paid monthly or semi-monthly who are employed at a rate of more than \$2,400.

On June 30, 1947, the number of registered employers with insured employees was 178,572 and the number of insured persons 2,736,177.

Contributions to the Unemployment Insurance Fund became payable on July 1, 1941. Employers and their insured workers make contributions according to a graded scale, but in the country as a whole they contribute approximately equal amounts. The Federal Government adds one-fifth of the total amount contributed and, in addition, pays the cost of administration.

War veterans who enter employment are deemed to have been in such employment throughout the period of their war service and contributions are paid on their behalf by the Government.

Rates of contribution and benefit under the Unemployment Insurance Act are related to the insured person's average earnings over the two-year period preceding the date of his claim. Weekly rates of contribution and selected weekly benefit rates are set forth in the table below. Contributions are made (usually) by means of the employer attaching a stamp in the employee's book. The stamp combines the employer's and employee's shares (the employer then deducting the employee's share from his earnings) and the weekly stamp is perforated so that it can be divided into six equal parts for the purpose of recording contributions for periods of less than a week. The daily rate of contribution is one-sixth of the weekly rate.

The daily rate of benefit for an insured person without a dependent is 34 times, and for a person with a dependent 40 times, the individual's daily average contribution in the two years immediately preceding the date of his claim. Daily benefit rates are adjusted to the nearest five cents. The weekly rate is six times the daily rate. The weekly rates of benefit presented in the table are calculated on the assumption that the beneficiary has contributed at the corresponding rate shown in the table during the preceding two years.

Weekly Rates of Contribution and Benefit under the Unemployment Insurance Act

Class	Earnings in a Week	Weekly Contributions		Denomination of Stamp	Weekly Benefits	
		By Employee	By Employer		Single Person	Person with One or More Dependents
		\$	\$	\$	\$	\$
(1)	Less than 90 cents daily (or under 16 years of age)	1	0.27	0.27	1	1
1	\$ 5.40 to \$ 7.49	0.12	0.21	0.33	4.20	4.80
2	\$ 7.50 to \$ 9.59	0.15	0.25	0.40	5.10	6.00
3	\$ 9.60 to \$11.99	0.18	0.25	0.43	6.00	7.20
4	\$12.00 to \$14.99	0.21	0.25	0.46	7.20	8.40
5	\$15.00 to \$19.99	0.24	0.27	0.51	8.10	9.60
6	\$20.00 to \$25.99	0.30	0.27	0.57	10.20	12.00
7	\$26.00 or more	0.36	0.27	0.63	12.30	14.40

[†] Workers in this class make no contributions and are not eligible for benefit. They may, however, accumulate benefit rights on the basis of employer contributions.

From July 1, 1941, to June 30, 1947, \$474,951,926 was deposited in the Unemployment Insurance Fund. This amount included contributions from employees, employers and the Government, with interest. Employer and employee contributions to the fund were \$372,340,576 and Federal Government contributions \$74,470,263.

From the first date on which claimants could qualify for benefit, Jan. 27, 1942, to June 30, 1947, the amount paid in benefit was \$91,537,870. In this period, 1,162,298 initial and renewal claims were received by insurance officers for adjudication, 904,358 of which were allowed, 248,727 not allowed, and

9,213 were pending. In this period the number of appeals by claimants to Courts of Referees and the number of cases referred to such Courts by insurance officers was 43,541, of which 29,579 were disallowed.

***Persons Insured under the Unemployment Insurance Act,
by age Groups and Sex, as at Apr. 1, 1946***

(Based on 10 p.c. Sample)

Age Group	Male	Female	Age Group	Male	Female
No.	No.	No.	No.	No.	No.
Under 20.....	111,770	102,270	50-59.....	205,070	34,750
20-29.....	329,520	263,310	60-69.....	117,300	9,850
30-39.....	343,700	118,540	70 or over.....	21,700	1,010
40-49.....	276,460	75,840	Not given.....	88,260	29,350
			All Ages.....	1,493,780	634,920

National Employment Service

The Unemployment Insurance Commission operates a free employment service under authority of the Unemployment Insurance Act, 1940.

In the first eight months of 1947, Employment Offices received 1,055,898 applications for employment, were notified of 1,077,196 vacancies and effected 511,488 placements. During the same period of 1946, 1,302,785 applications, 1,232,723 vacancies and 560,177 placements were reported.

The need for speed and accuracy in compiling records of commercial and financial houses has developed a class of skilled operators who, with the aid of modern machines, make labour more efficient and so help to raise the standards of living for all.



National Accounts

Public Finance

SINCE governments have existed, no topic has produced more controversy than that of taxation and government expenditures. As shareholders in the national business, Canadians should know the sources of revenue, their national expenditures and what progress is being made. In this chapter the national income and Dominion and Provincial revenues and expenditures are presented.

★ *National Accounts*

Net National Income at Factor Cost and Gross National Product at Market Prices.—Estimates of gross national product and expenditure and national income indicate the tremendous expansion that has taken place in the Canadian economy since 1938. The gross national product was \$11,417,000,000 in 1946; in 1938 it was only \$5,141,000,000. National income is estimated at \$9,464,000,000 in 1946 and \$3,972,000,000 in 1938. It must be noted, however, that this expansion reflects increases in prices as well as in the volume of production of goods and services.

Gross national product is defined as the market value of all goods and services produced by the labour, capital and enterprise of Canadian residents in a specified period, in this case a year, measured through a consolidated national accounting of all *costs* involved in their production. These costs include factor costs, that is, salaries, wages, interest, rent and profits and, in addition, indirect taxes less subsidies and depreciation and similar business



Two operators bend a steel engraved plate to fit the cylinder of a postage-stamp printing press.

charges. The aggregate of salaries, wages, interest, rent and profits by itself is known as net national income at factor cost or, more briefly, national income. Thus national income measures the aggregate earnings of residents of Canada from current production of goods and services. Salaries and wages combined with military pay and allowances accounted for 63 p.c. of national income in 1938 compared with 57 p.c. in 1946.

Investment income, that is, corporate profits before tax, government trading profits, interest and rent, rose from 17 p.c. of total national income in 1938 to 20 p.c. in 1946. Net income of agriculture and other unincorporated business, a mixture of labour income and investment income, was 20 p.c. of the total in 1938 and 23 p.c. in 1946.

Net National Income at Factor Cost and Gross National Product at Market Prices, 1938-46

(Millions of Dollars)

Item	1938	1939	1940	1941	1942	1943	1944	1945	1946 ¹
Salaries, wages and supplementary labour income	2,476	2,565	2,922	3,555	4,219	4,703	4,869	4,859	5,113
Military pay and allowances	9	32	193	386	641	910	1,068	1,132	315
Investment income	687	776	1,120	1,480	1,717	1,723	1,755	1,911	1,885
Net income of agriculture and other unincorporated business	800	901	1,001	1,123	1,696	1,605	1,904	1,742	2,151
Net National Income at Factor Cost	3,972	4,274	5,236	6,544	8,273	8,941	9,596	9,644	9,464
Indirect taxes less subsidies	630	726	826	1,048	1,073	1,126	1,123	1,060	1,204
Depreciation allowances and similar business costs ²	560	582	655	755	900	929	881	792	803
Residual error of estimate for reconciliation with following table	-21	-1	+23	+56	+241	+248	+220	+178	-54
Gross National Product at Market Prices	5,141	5,581	6,740	8,403	10,487	11,244	11,820	11,614	11,417

¹ Preliminary. ² Includes an estimate of "capital outlay charged to current account", which has also been included under "Gross home investment in plant, equipment and housing" in the table on p. 222.

Gross National Expenditure at Market Prices.—Gross national expenditure is defined as the market value of all goods and services produced by the labour, capital and enterprise of Canadian residents, in a year, measured through a consolidated national accounting of the *sales* of these goods and services, including changes in inventories. Thus it measures the same total as gross national product but in a different way. Incompleteness or inconsistency of available statistical sources, however, is necessarily reflected in a difference between these aggregates when they are measured independently. The difference between the totals obtained by measurement of gross national product and gross national expenditure is divided equally under the heading of "Residual error of estimate" in the two tables.

Gross National Expenditure at Market Prices, 1938-46

(Millions of Dollars)

Item	1938	1939	1940	1941	1942	1943	1944	1945	1946 ¹
Personal expenditure on consumer goods and services.....	3,714	3,817	4,334	4,979	5,508	5,822	6,235	6,782	7,495
Government Expenditure—									
War—Goods and services, excluding Mutual Aid, etc.....	36	70	549	1,129	2,222	3,096	3,410	1,876	672
War—Mutual Aid, UNRRA and Military Relief.....	—	—	—	—	1,002	518	960	1,041	187
Non-war.....	685	690	633	647	661	685	735	841	974
Gross Home Investment—									
Plant, equipment and housing ²	576	554	713	995	931	828	756	865	1,241
Inventories ³	7	329	368	218	333	-42	-83	-294	475
Exports of goods and services ⁴	1,359	1,449	1,792	2,458	2,347	3,443	3,566	3,576	3,170
Imports of goods and services.....	-1,257	-1,328	-1,626	-1,967	-2,275	-2,858	-3,539	-2,895	-2,850
Residual error of estimate for reconciliation with preceding table.....	+21	—	-23	-56	-242	-248	-220	-178	+53
Gross National Expenditure at Market Prices	5,141	5,581	6,740	8,403	10,487	11,244	11,820	11,614	11,417

¹ Preliminary.

² See footnote 2 of preceding table.

³ Includes grain held by the Canadian Wheat Board.

⁴ Excludes Mutual Aid, UNRRA and Military Relief.

Gross national expenditure can be divided into four main components: (1) Consumer expenditure; (2) Government expenditure; (3) Gross home investment; and (4) Net foreign expenditure.

Consumer expenditure (personal expenditure on consumer goods and services) comprises expenditure of Canadian residents on consumer goods and services as ordinarily understood except that expenditure on housing is excluded and added to gross home investment. Other consumer durables such as automobiles and refrigerators are included in consumer expenditure. In 1938 consumer expenditure thus defined was \$3,714,000,000 or 72 p.c. of gross national expenditure. In 1946 the figure was \$7,495,000,000 or 66 p.c. of gross national expenditure.

Government expenditure was \$721,000,000 in 1938 or 14 p.c. of gross national expenditure; in 1946 the figure was \$1,833,000,000 or 16 p.c. of gross national expenditure. The 1946 figures reflect a substantial decline from 1944 when government expenditure was \$5,105,000,000, or 43 p.c. of gross national expenditure. It should be noted that these figures include only government expenditure on goods and services. Government outlays for goods and services, family allowances, war service gratuities and similar items are excluded by definition.

Gross home investment includes expenditure on new machinery, residential, commercial and industrial construction, as well as net changes in inventories. In 1938 the figure was \$583,000,000, while in 1946 it had risen to \$1,716,000,000.

Exports of goods and services were maintained in 1946 at the high level of \$3,170,000,000. In 1938 the corresponding figure was \$1,359,000,000.

Sales to consumers, to business, to government and to foreigners include the value of goods and services imported from abroad. In so far as imports are the product of the labour, capital and enterprise of foreigners and not of Canadian residents, they must be excluded from gross national expenditure. This is accomplished by subtracting the value of current imports of goods and services from the preceding items. Thus only the net foreign balance on current account is included in gross national expenditure. In 1946 imports of goods and services were \$2,850,000,000 and in 1938 \$1,257,000,000.

Personal Income and Its Disposition.—Personal income is defined as the sum of current receipts of income of persons, whether in cash or in kind. Personal income differs from national income in that it excludes all current earnings not paid out to persons, such as undistributed profits and government trading profits, and includes receipts that have not been earned in the course of production, that is, transfer payments. Personal income increased from \$4,031,000,000 in 1938 to \$9,383,000,000 in 1946.

In 1938, 3 p.c. of personal income was paid in direct taxes, 92 p.c. was spent on consumer goods and services, and 5 p.c. was saved (including net changes in farm inventories). In 1946, the proportions were 8 p.c., 80 p.c. and 12 p.c., respectively. The percentage of personal income saved in 1946 marked a decline from 19 p.c. saved in the war years 1943 and 1944.

The disposition of personal income falls logically into three main groups. A portion is taken in taxes by government. Direct taxes on personal incomes, succession duties and the personal share of motor-vehicle and other licences, permits and fees, are included here. A portion is spent on consumer goods and services. Expenditures on consumer durables such as refrigerators and automobiles are included here but expenditure on housing is excluded. The third portion is saved. Personal saving is reflected in a change of the various assets and liabilities held by persons.

Personal Income, by Sources, 1938-46

(Millions of Dollars)

Source	1938	1939	1940	1941	1942	1943	1944	1945	1946
Salaries, wages and supplementary labour income.....	2,476	2,565	2,922	3,555	4,219	4,703	4,869	4,859	5,113
<i>Deduct:</i> Employer and employee contributions to social insurance and government pension funds.....	-33	-35	-38	-68	-111	-125	-134	-136	-145
Military pay and allowances.....	9	32	193	386	641	910	1,068	1,132	315
Net income of agriculture and other unincorporated business.....	800	901	1,001	1,123	1,696	1,605	1,904	1,742	2,151
Interest, dividends and net rental income of persons	511	553	594	618	683	717	765	805	833
Transfer Payments to Persons—									
From government.....	263	250	225	198	227	217	264	553	1,103
Charitable contributions of corporations.....	5	6	7	10	12	12	11	12	13
Personal Income.....	4,031	4,272	4,904	5,822	7,367	8,039	8,747	8,967	9,383

¹ Preliminary.

Comparative Dominion, Provincial and Municipal Expenditures (Capital and Current), Selected Years 1933-44

NOTE.—Figures are for fiscal years ended nearest to Dec. 31. Inter-governmental transfers, subsidies and payments under the Dominion-Provincial Taxation Agreement Act are excluded. SOURCE: Comparative statistics of Public Finance prepared for the Dominion-Provincial Conference on Reconstruction.

Year	Dominion ¹	Provincial and Municipal			Total
		Provincial	Municipal	Total	
		Expenditures			
	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000
1933.....	389,587	218,864	301,770	520,634	910,221
1937.....	444,599	359,689	296,288	655,977	1,100,576
1939.....	571,198	354,883	304,580	659,463	1,230,661
1941.....	1,718,787	311,260	292,517	603,777	2,322,564
1942.....	4,102,441	293,637	295,128	588,765	4,691,206
1943.....	4,907,475	300,997	300,379	601,376	5,509,051
1944.....	4,803,049	339,531	316,825	656,356	5,459,405
Percentage Distribution					
1933.....	42.8	24.1	33.1	57.2	100.0
1937.....	40.4	32.7	26.9	59.6	100.0
1939.....	46.4	28.8	24.8	53.6	100.0
1941.....	74.0	13.4	12.6	26.0	100.0
1942.....	87.4	6.3	6.3	12.6	100.0
1943.....	89.1	5.5	5.4	10.9	100.0
1944.....	88.0	6.2	5.8	12.0	100.0
Index of Change (1939 = 100)					
1933.....	68.2	61.7	99.1	78.9	74.0
1937.....	77.8	101.4	97.3	90.5	80.4
1939.....	100.0	100.0	100.0	100.0	100.0
1941.....	300.9	87.7	96.0	91.6	188.7
1942.....	718.2	82.7	96.9	89.3	381.2
1943.....	859.2	84.8	98.7	91.2	447.6
1944.....	840.9	95.2	104.0	99.5	443.6

¹ Includes war expenditures.

Combined Debt.—As shown in the table on p. 227, the combined total of direct and indirect debt (exclusive of inter-governmental debt) of all governments in Canada amounted to \$18,591,201,000 at the close of their fiscal years ended nearest to Dec. 31, 1944. Large increases in the Dominion debt as a result of war financing have overshadowed reductions in both provincial and municipal debt. However, this increase has been largely in bonds outstanding, and represents additions to internal rather than external debt, as the Dominion was able to finance the War during this period without recourse to the issue of foreign-pay bonds. Dominion direct and indirect foreign-pay bonds have declined by more than \$750,000,000 in the period 1940-44, largely as a result of the repatriation of sterling issues.

Buoyant revenues resulting in over-all surpluses, together with curtailed capital expenditure programs, necessitated partly by wartime restrictions, have made it possible for Provincial Governments to reduce their outstanding debt, some by fairly substantial amounts. Similarly, the general curtailment by municipalities of capital undertakings and works requiring debenture financing, and increased tax collections resulting from general improvement in economic activity, have resulted in progressive reductions in municipal debt.

Combined Dominion, Provincial and Municipal Direct and Indirect Debt, 1942-44

NOTE.—Figures for fiscal years ended nearest to Dec. 31.

Item	1942	1943	1944
	\$ '000	\$ '000	\$ '000
Direct Debt—			
Dominion.....	8,676,110	11,784,569	15,104,888
Provincial.....	1,892,182	1,827,213	1,805,770
Municipal.....	1,101,077	1,031,429	980,695
Totals.....	11,669,369	14,643,211	17,891,353
<i>Less Inter-governmental Debt.....</i>	<i>217,447</i>	<i>216,602</i>	<i>248,686</i>
Combined Direct Debt.....	11,451,922	14,426,609	17,642,667
Indirect Debt—			
Dominion.....	885,203	822,904	737,668
Provincial.....	189,980	192,310	189,180
Municipal.....	49,830	48,497	46,686
Totals.....	1,125,013	1,063,711	973,534
<i>Less Inter-governmental Debt.....</i>	<i>59,555</i>	<i>56,541</i>	<i>25,000</i>
Combined Indirect Debt.....	1,065,458	1,007,170	948,534
Grand Totals, Direct and Indirect Debt.....	12,517,380	15,433,779	18,591,201

Dominion Finance

The Budget presented by the Minister of Finance on Apr. 29, 1947, disclosed, for the year ended Mar. 31, 1947, a surplus greater than the accumulated total of all previous surpluses.

Despite the problems of reconstruction and transition, high levels of income and employment were maintained throughout the year and were reflected in the Dominion's accounts. Revenues of the Federal Government were only slightly below the peak level attained in the previous year, although substantial reductions in income-tax rates had been made.

Canada Savings Bonds,
printed on high-grade
rag paper, roll off
the press.



Expenditures fell to about one-half the level of the previous year as the heavy requirements for war, demobilization and reconversion purposes slackened off.

One of the most interesting aspects of Dominion finance to the ordinary citizen is the growth in the net debt of Canada and, in this regard, the following table is of particular interest since it shows the trend from Confederation down to the latest year, 1947. At Confederation the total net debt of Canada was only \$76,000,000 and represented \$21.58 per head of the population. The First and Second World Wars caused staggering increases; the net debt which was \$336,000,000 in 1914 increased to \$2,341,000,000 in 1921, or from \$42.64 per capita to \$266.37 per capita. By the end of the Second World War in 1946, net debt had reached the stupendous total of \$13,421,000,000 or \$1,092.95 per head of the population.

Dominion Finances, 1868-1947

Year Ended Mar. 31—	Total Revenue	Per Capita Revenue ¹	Total Expenditure	Per Capita Expenditure ¹	Net Debt at End of Year	Net Debt Per Capita ¹
	\$	\$	\$	\$	\$	\$
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	268,480,004	49.99
1911.....	117,884,328	16.36	122,861,250	17.05	340,042,052	47.18
1921.....	436,292,184	49.65	528,302,513 ²	60.12	2,340,878,984	266.37
1931.....	357,720,435	34.48	441,568,413 ²	42.56	2,261,611,937	217.97
1939.....	502,171,354	44.57	553,063,098 ²	49.09	3,152,559,314	279.80
1940.....	562,093,459	49.39	680,793,792 ²	59.82	3,271,259,647	287.43
1941.....	872,169,645	75.79	1,249,601,446 ²	108.59	3,648,691,449	317.08
1942.....	1,488,536,343	127.73	1,883,066,055 ²	161.75	4,045,221,161	347.11
1943.....	2,249,496,177	190.44	4,387,124,118 ²	371.41	6,182,849,101	523.44
1944.....	2,765,481,945	240.34	5,322,717,737 ²	462.58	8,740,084,893	659.57
1945.....	2,687,334,709	221.75	5,245,611,924 ²	432.84	11,298,362,018	932.29
1946.....	3,013,185,074	245.37	5,136,228,505 ²	418.26	13,421,405,449	1,092.95
1947.....	3,007,876,313	249.06	2,634,227,412 ²	209.36	13,047,756,548	1,037.02

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

Revenue from taxation accounted for 80.7 p.c. of total revenues in 1946-47 compared with 73.1 p.c. in 1945-46. Non-tax revenues were slightly higher than in the previous fiscal year, while special receipts and credits declined by 35.5 p.c.

The drop in war, demobilization and reconversion requirements more than accounted for the decrease in total expenditures in 1946-47 as compared with the previous year. Ordinary expenditures at \$1,236,234,650 increased by 16.4 p.c. Important items included in that amount were interest on public debt, \$464,394,876, compensation to provinces under taxation agreements, \$94,380,510, and family allowance payments \$245,140,532. Capital expenditures increased from \$4,508,240 to \$11,200,247, and expenditures for government-owned enterprises from \$1,333,417 to \$10,681,863, mainly because of the deficit incurred by the Canadian National Railways in 1946.

**Summary of Total Revenues and Expenditures, Years Ended
Mar. 31, 1943-47**

Item	1943	1944	1945	1946	1947
	\$'000	\$'000	\$'000	\$'000	\$'000
Revenues					
Customs Import Duties.....	118,963	167,882	115,091	128,876	237,355
Excise Duties.....	138,721	142,124	151,922	186,726	196,044
Income Tax.....	860,189	1,036,757	977,758	932,729	939,458
National Defence Tax.....	434,581	428,718	341,305	426,696	442,497
Excess Profits Tax ¹	242,929	304,915	209,390	212,247	298,228
Sales Tax.....	94,553	118,912	98,164	41,198	338
War Exchange Tax.....	186,784	237,503	260,997	273,886	313,741
Other taxes.....					
Totals, Revenues from Taxation.....	2,066,720	2,436,811	2,154,627	2,202,358	2,427,661
Non-tax revenues.....	116,079	133,283	145,471	160,804	160,870
Totals, Ordinary Revenues..	2,182,799	2,570,094	2,300,098	2,363,162	2,588,531
Special receipts and other credits.	66,697	195,388	387,237	650,023	419,345
Totals, Revenues....	2,249,496	2,765,482	2,687,335	3,013,185	3,007,876
Expenditures					
Ordinary expenditures.....	561,251	630,381	767,376	1,061,902	1,236,235
Capital expenditures.....	3,276	2,622	3,164	4,508	11,200
War, demobilization and reconversion expenditures (special)...	3,724,249	4,587,023	4,418,446	4,002,949	1,314,798
Other special expenditures.....	31,288	37,496	7,506	17,358	31,926 ²
Government-owned enterprises...	1,248	1,307	1,358	1,334	10,682
Other charges.....	65,812	63,889	47,762	48,177	29,386
Totals, Expenditures..	4,387,124	5,322,718	5,245,612	5,136,228	2,634,227
Deficits or Surplus....	-2,137,628	-2,557,236	-2,558,277	-2,123,043	+373,649

¹ Net after deducting refundable portion of the tax amounting to \$50,000,000, \$115,000,000, \$95,000,000, \$5,000,000 and \$24,000,000 in the fiscal years 1943, 1944, 1945, 1946 and 1947, respectively.

² Net after deducting refundable portion of the tax amounting to \$20,000,000, \$40,000,000, \$124,500,000, \$67,500,000 and \$6,200,000 in the fiscal years 1943, 1944, 1945, 1946 and 1947, respectively.

³ Includes \$20,562,264 for deficits in certain special accounts of the Canadian Wheat Board.

The 1947-48 Budget.—The Budget for the year ending Mar. 31, 1948, was presented in Parliament on Apr. 29, 1947. The chief features of the Budget were substantial reductions in the rates of personal income tax, to take effect from July 1, 1947, and the termination of the excess profits tax at the end of 1947. (See p. 230.)

After taking account of the tax changes, revenues for the 1947-48 fiscal year were estimated at \$2,290,000,000. Expenditures were estimated at \$2,100,000,000, and the prospective surplus at \$190,000,000.

Borrowings.—Total borrowings during the year ended Mar. 31, 1947, excluding the renewal of treasury bills, deposit certificates and short-term notes held by the Bank of Canada, amounted to \$888,600,000. Of this total, \$400,000,000 was obtained from an issue of four-year 1½ p.c. bonds which were sold to the Bank of Canada and the chartered banks, and the balance from Canada Savings Bonds sold to the general public.

Redemptions of funded debt, including the issues reconverted by the four-year bonds mentioned above, amounted to \$1,042,000,000.

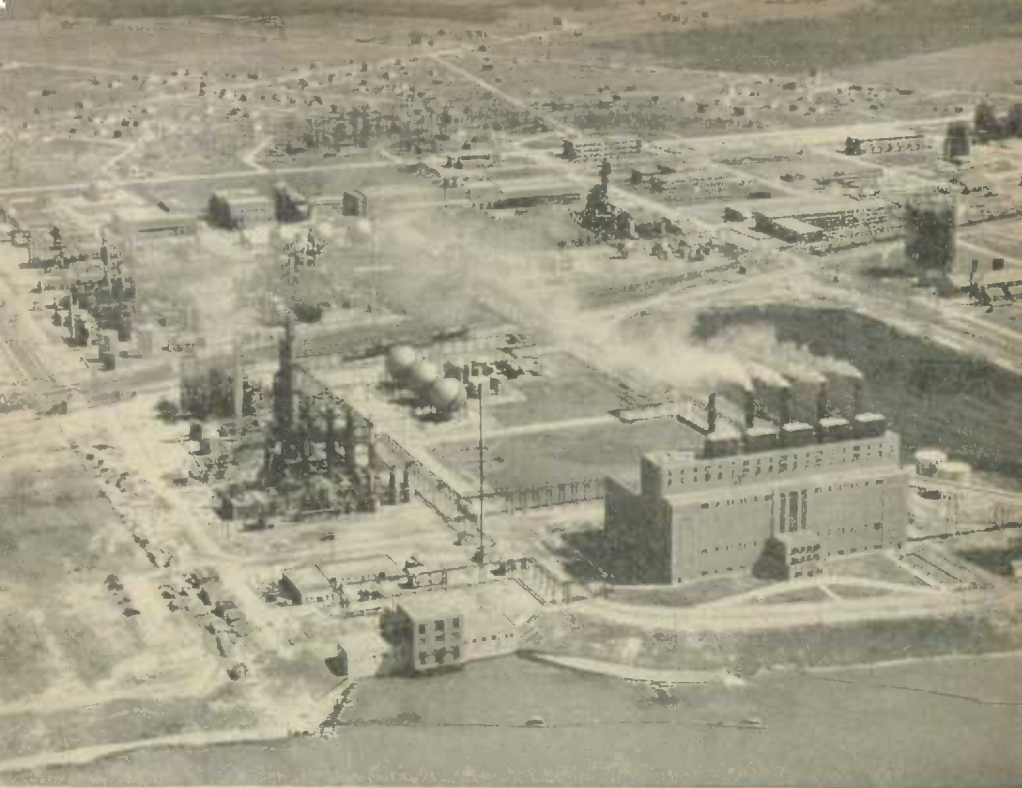
Income Tax.—The Income War Tax Act was introduced during the War of 1914-18 as part of what was known as war-tax revenue. However, it was a war tax in name only, for even before the outbreak of the Second World War it had become a permanent and important part of the taxation structure, and the chief means of raising ordinary revenue.

In order to secure as much revenue from taxation as was desirable for the prosecution of the Second World War, the income tax base was broadened and the rates increased. By 1942 the minimum exemption for single persons had been reduced to \$600 from \$1,000 prior to the War and to \$1,200 from \$2,000 in the case of married persons. Rates of tax on income above these exemptions reached a peak in 1943, but a portion of the tax payable was made refundable after the War and, when the refundable feature was dropped in July, 1944, the immediate cash burden on individual taxpayers was reduced. A further reduction of 4 p.c. was made in 1945 and of 16 p.c. in 1946. A new general tax structure for 1947 was introduced in the 1946 Budget which raised the minimum exemptions to \$750 for single persons and \$1,500 for married, coupled with a reduced schedule of tax rates. A further reduction in tax rates became effective in July, reducing the tax burden for the whole of 1947 by approximately 32 p.c. from the preceding 1946 level. Although reductions of income tax have been made in each succeeding year since 1943, the 1948 tax level still remains substantially above the pre-war 1939 level.

Before the outbreak of war the burden of income tax was shared by approximately 250,000 persons; this was expanded to about 2,546,000 by 1946 and is expected to decline to approximately 2,100,000 under the 1947 schedule. The lowering of exemptions was, of course, the prime influence in expanding the body of Canadian income taxpayers but the higher level of employment and of wage scales also had an important effect.

Substantially higher taxes were also levied during the War on business profits. The rate of corporation income tax was raised from a pre-war 15 p.c. to 18 p.c. in 1940. The main wartime medium for taxing business profits, however, was the Excess Profits Tax Act, 1940, which, when taken together with the 18 p.c. income tax, combined, in effect, to levy a 40 p.c. tax on all profit plus an additional 60 p.c. on excess profits. A portion of the tax on excess profits was made refundable to the taxpayer after the War. Effective at Jan. 1, 1947, the tax on business profits was reduced to a straight corporation income tax of 30 p.c. plus a tax of 15 p.c. on excess corporation profits. Wartime agreements with the provinces expired at the end of 1946 and new agreements came into effect on Jan. 1, 1947, whereby a 5 p.c. tax was collected on behalf of seven of the provinces. A 7 p.c. tax was levied by the two provinces remaining outside the agreement. The excess profits tax terminated on Dec. 31, 1947.

Collections of individual and corporation income and excess profits tax for the taxation (calendar) years 1939 to 1947 are shown in the following table. These figures represent taxes collected in respect of income earned in the years enumerated and therefore differ from the table on p. 229 where revenues are shown by government fiscal years.



The Polymer Corporation plant at Sarnia, Ont., a Crown-owned company in which every Canadian has a stake. This Corporation was first established in 1942 to produce synthetic rubber for wartime use and has now expanded its output to include basic chemicals never before manufactured in Canada. It produces the raw materials from which thousands of rubber and plastic articles can be made and has begun supplying utilities to the first of millions of dollars worth of private industries now under construction or soon to be built in its area.

Collections of Income and Excess Profits Tax, Taxation Years 1939-47

Taxation Year	Individuals and Individual Businesses			Corporations		
	Income Tax	Excess Profits Tax	Total	Income Tax	Excess Profits Tax	Total
	\$	\$	\$	\$	\$	\$
1939...	54,781,130	—	54,781,130	90,498,381	—	90,498,381
1940...	152,245,616	4,533,451	156,779,067	151,394,634	102,518,315	253,912,949
1941...	329,333,512	10,148,521	339,482,033	224,471,245	252,371,160	476,842,405
1942...	391,194,438	18,543,654	409,738,092	270,204,989	396,478,331	666,683,320
1943...	825,781,811	25,375,690	851,157,501	278,507,805	458,896,881	737,404,686
1944...	809,113,007	27,850,327	836,963,334	231,004,405	431,502,987	662,507,392
1945...	662,708,893	24,850,993	687,559,886	236,358,608	429,078,091	665,436,699
1946...	582,137,856	5,567,628	587,705,484	182,022,563	277,930,113	459,962,676
1947...	77,585,639	36,083	77,621,722	19,516,761	25,469,189	44,985,950

¹ The accounts for these taxation years are not yet closed and the figures are therefore not complete. There will be a small change in the 1945 account and substantial additions to the 1946 and 1947 accounts.



An engraver at the Royal Canadian Mint working on the dies for the Canadian Volunteer Service Medal, which is to be distributed to the more than 1,000,000 men and women who served in the Armed Forces and Merchant Marine during the Second World War.

Estimated Number of Taxpayers, Total Income and Tax Collected Thereon, by Income Classes, 1946

Income Class	Taxpayers	Total Income	Total Tax
	No.	\$	\$
Below \$1,000.....	443,000	365,501,000	17,133,000
\$1,000- 2,000.....	1,314,050	1,976,330,000	130,216,000
2,000- 3,000.....	542,825	1,284,044,000	129,110,000
3,000- 4,000.....	124,450	423,383,000	63,282,000
4,000- 5,000.....	45,740	202,919,000	38,335,000
5,000-10,000.....	57,770	385,883,000	97,060,000
10,000-25,000.....	15,490	215,855,000	83,462,000
Over 25,000.....	2,484	113,201,000	65,819,000
Totals.....	2,545,809	4,967,116,000	624,423,000

Estimated Number of Taxpayers, Total Income and Tax Collected Thereon, by Marital Status and Number of Dependents, 1946

Class	Taxpayers	Total Income	Total Tax
	No.	\$	\$
Single, no dependents.....	954,400	1,286,063,000	196,905,000
Single, one dependent.....	54,043	92,138,000	15,207,000
Single, two or more dependents.....	19,399	51,011,000	11,650,000
Married, no dependents.....	587,980	1,335,545,000	187,188,000
Married, one dependent.....	423,520	962,228,000	103,098,000
Married, two dependents.....	294,616	699,801,000	66,538,000
Married, three dependents.....	142,524	341,938,000	28,250,000
Married, four dependents.....	48,672	129,786,000	9,511,000
Married, five dependents.....	14,093	42,837,000	3,034,000
Married, six or more dependents.....	6,562	25,769,000	2,142,000
Totals.....	2,545,809	4,967,116,000	624,423,000

Provincial Finance

During 1945 (being the fiscal years ended nearest to Dec. 31, 1945), the provinces continued to show an improved financial condition as was the case throughout all the war years.

Gross Ordinary Revenues and Expenditures of Provincial Governments, by Provinces, 1943-45

NOTE.—Figures are for provincial fiscal years ended nearest Dec. 31.

Province	Gross Ordinary Revenues			Gross Ordinary Expenditures		
	1943	1944	1945	1943	1944	1945
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Prince Edward Island.....	2,993 ¹	2,564	2,904	2,972 ¹	2,907	3,203
Nova Scotia.....	20,957	22,526	24,367	18,039	20,252	23,187
New Brunswick.....	16,773	17,875	19,454	15,029	17,318	18,981
Quebec.....	116,856	122,308	137,617	106,180	118,306	122,929
Ontario.....	141,268	140,627	159,665	128,923	139,503	151,729
Manitoba.....	24,446	25,669	28,259	20,025	20,641	22,628
Saskatchewan.....	37,454	37,551	41,570	27,743	29,607	34,810
Alberta.....	30,528	32,560	40,651 ²	22,721	25,002	28,034 ²
British Columbia.....	44,496	47,295	53,468	37,158	40,619	45,607
Totals.....	435,771	448,975	507,955	378,790	414,155	451,108

¹ Fifteen months. ² Exclusive of cash collected re Debt Reorganization Program.

The details of combined net ordinary and capital revenues for 1945 show that the greatest single item of provincial revenues continued to be derived from the Federal Government, chiefly as a result of the provisions of the Dominion-Provincial Taxation Agreement Act, 1942. The greatest single item in the net combined ordinary and capital expenditures for 1945 was public welfare.

Net Ordinary and Capital Revenues of Provincial Governments, 1943-45 with Combined Details for 1945

Province	1943	1944	1945	Item	1945		
					Amount	P.C. of Total	P.C. of Total
	\$'000	\$'000	\$'000		\$'000		
P.E.I.....	2,617 ¹	2,183	2,529	Taxes—			
N.S.....	16,937	17,810	19,207	Corporation (arrears)....	903	0.21	0.20
N.B.....	13,724	14,246	15,605	Gasoline.....	58,075	13.59	12.55
Que.....	99,997	103,281	117,236	Income of persons			
Ont.....	117,483	115,712	132,911	(arrears).....	349	0.08	0.16
Man.....	19,995	21,325	24,199	Retail sales.....	20,827	4.88	4.76
Sask.....	30,931	31,002	34,992	Succession duties.....	25,217	5.90	6.26
Alta.....	25,920	27,416	34,490	Other taxes.....	23,447	5.49	5.69
B.C.....	39,019	40,962	46,057	Motor-vehicle licences.....	31,800	7.44	8.32
				Liquor control.....	99,659	23.33	18.77
				Dominion of Canada.....	105,412	24.67	28.79
				Other revenue.....	61,547	14.41	14.50
Totals.....	366,623	373,937	427,226	Totals.....	427,226	100.00	100.00

¹ Fifteen months. ² Exclusive of cash collected re Debt Reorganization Program.

Net Ordinary and Capital Expenditures of Provincial Governments, 1943-45 with Combined Details for 1945

NOTE.—Figures are exclusive of debt retirement.

Province	1943	1944	1945	Item	1945		
					Amount	P.C. of Total	P.C. of Total
	\$'000	\$'000	\$'000		\$'000		
P.E.I.	2,546	2,769	3,323	Legislation	4,167	1.09	0.91
N.S.	13,429	15,156	18,301	General government	20,405	5.33	5.32
N.B.	12,137	15,901	17,352	Protection to persons and property	17,411	4.55	4.71
Que.	94,701	107,928	110,970	Highways, bridges and ferries	78,306	20.47	18.28
Ont.	102,292	113,486	124,777	Public welfare	84,887	22.19	21.57
Man.	14,465	14,572	16,958	Education	71,978	18.81	18.11
Sask.	20,219	22,707	27,851	Agriculture	14,061	3.67	4.55
Alta.	19,890	22,623	23,480	Public domain	23,192	6.06	5.86
B.C.	30,505	34,773	39,505	Debt charges	56,959	14.89	16.79
				Other	11,248	2.94	3.90
Totals	310,184	349,915	382,617	Totals	382,617	100.00	100.00

† Fifteen months.
Program.

* Exclusive of payments and expenditures re Debt Reorganization

Reference to the following table of debt statistics shows the variation between provinces as well as between provincial direct and indirect debt.

Direct and Indirect Liabilities of Provincial Governments (less Sinking Funds), 1943-45 with Combined Details for 1945

Province	1943	1944	1945	Item	1945
	\$'000	\$'000	\$'000		\$'000
Direct Debt—				Direct Debt—	
P.E.I.	9,118	9,667	10,415	Funded debt	1,641,663
N.S.	88,859	86,400	93,204	Less Sinking Funds	195,062
N.B.	93,397	93,403	99,128		
Que.	376,440	376,082	366,429	Net Funded Debt	1,446,601
Ont.	666,757	646,715	639,547	Treasury bills	210,149
Man.	106,320	99,897	94,122	Savings deposits	48,438
Sask.	196,907	205,441	194,463	Temporary loans	25,790
Alta.	148,543	147,519	159,042	Due to trust	23,134
B.C.	140,793	140,749	147,985	Accrued expenditure	18,238
				Accounts payable and other liabilities	31,975
Totals, Direct Debt	1,827,134	1,805,873	1,804,335	Total, Direct Debt	1,804,335
Indirect Debt—				Indirect Debt—	
P.E.I.	209	162	92	Guaranteed bonds	135,134
N.S.	2,702	2,729	2,721	Less Sinking Funds	4,627
N.B.	2,033	2,256	1,866		
Que.	30,107	36,814	38,157	Net Guaranteed Bonds	130,507
Ont.	122,888	127,734	117,705	Loans under M.I.A. Act	5,317
Man.	2,758	2,531	2,313	Guaranteed bank loans	8,790
Sask.	16,217	1,824	1,852	Other indirect liabilities	30,915
Alta.	6,509	6,254	1,935		
B.C.	8,797	8,877	8,908		
Totals, Indirect Debt	192,310	189,181	175,549	Total, Indirect Debt	175,549
Grand Totals	2,019,444	1,995,054	1,979,884	Grand Total	1,979,884

† Including 2,399,000 Sinking Fund held by the Nova Scotia Power Commission.



About one-fifth of total Provincial Government expenditures is spent for public health and welfare services. Here personnel are at work in the main bacteriological laboratory maintained by the Manitoba Government. This is typical of other Provincial Government laboratories where examinations are made to aid in the diagnosis of communicable diseases, etc., and where research into medical problems is conducted.

The gross provincial bonded debt is still largely payable in Canada as has been the case since 1941.

Gross Provincial Bonded Debt, Analysed by Currency of Payments, 1942-45

Payable in—	1942	1943	1944	1945
	\$'000	\$'000	\$'000	\$'000
Canada only.....	964,860	978,401	979,545	967,965
London (England) only.....	45,681	45,530	45,413	37,215
London (England) and Canada	27,477	25,609	20,214	16,314
New York only.....	16,025	19,519	33,905	31,905
New York and Canada.....	371,907	348,835	355,426	353,205
London (England), New York and Canada.....	265,943	261,652	238,963	230,423
Other.....	4,736	4,736	4,736	4,736
Totals.....	1,696,629	1,684,282	1,678,202	1,641,663

Municipal Finance

Under the provisions of the British North America Act, the several provinces have jurisdiction and control over their respective organizations of municipal government. Requirements for incorporation vary among the provinces, but there is a distinct division of urban from rural. The former are classed as cities, towns and villages; the latter have various designations—townships in Ontario, districts in British Columbia, municipal districts in Alberta; counties in New Brunswick, municipalities in Nova Scotia, parishes and townships in Quebec, and rural municipalities in Manitoba and Saskatchewan. In addition there are counties in Ontario and Quebec; these

include local towns or villages, and rural municipalities, which provide funds for county administration. Nova Scotia and New Brunswick counties are essentially rural municipalities. Some non-incorporated rural areas in Saskatchewan, Alberta, Manitoba and Ontario are organized into "Improvement Districts" administered by the Provincial Governments. In 1945 there were 3,966 incorporated municipalities in Canada.

Municipal Assessments and Tax Levies.—Municipal revenues in Canada are derived almost entirely from direct taxation, chiefly of real property. Tax levies increased from 1940 to 1945, while improved economic conditions were reflected in an increase in tax collections, particularly in the Prairie Provinces. As a result, total taxes receivable and property acquired for taxes were reduced in this period.

Municipal Revenues.—Municipal revenues for 1945 have been estimated at \$364,600,000 of which \$266,600,000, or 73.1 p.c. represented taxes on real

The removal of snow and the maintenance of street traffic during the winter months constitutes a major problem for most Canadian municipalities. The illustration shows snow scrapers clearing Connaught Place in the heart of Ottawa's business district. The huge piles along the curbs are later loaded into trucks (as shown in the inset) and dumped.



**Municipal Assessed Valuations, Tax Levies, Collections and Receivables,
by Provinces, 1945, with Totals for 1940-44**

Year and Province	Valuations on which Taxes were Levied	Tax Levy	Tax Collections (Current and Arrears)	Percentage of Levy	Total Taxes Receivable and Property Acquired for Taxes
	\$'000	\$'000	\$'000		\$'000
Totals, 1940.....	7,703,973	270,437	230,029 ¹	101.2 ²	245,065
Totals, 1941.....	7,859,415	272,458	237,680 ¹	104.6 ²	237,133
Totals, 1942.....	7,892,698	275,983	239,110 ¹	105.0 ²	208,406
Totals, 1943.....	7,906,826	278,697	298,196	107.0	196,523
Totals, 1944.....	7,963,405	281,403	257,188 ¹	109.2 ²	157,073
1945					
P.E.I.....	14,865	377	380	100.6	147
N.S.....	193,620	10,046	10,217	101.7	3,619
N.B.....	184,406	6,709	6,545	97.6	3,375
Que.....	³	³	³	³	³
Ont.....	3,109,062	108,163	110,003	101.7	23,153
Man.....	451,851	19,907	21,666	108.8	10,441
Sask.....	822,478	24,472	26,771	109.4	27,546
Alta.....	522,419	20,127	21,983	109.2	25,151
B.C.....	420,156	20,824	21,145	101.5	12,112
Totals, 1945.....	8	3	3	3	3

¹ Excludes Quebec cities and towns. Quebec not available for 1945.

² Quebec estimated.

³ Information for

estate, \$35,400,000, or 9.7 p.c. other taxes, and the remaining \$62,500,000, or 17.2 p.c. other sources of revenue, including provincial subsidies and Tax Agreement subsidies from the Dominion.

Municipal Expenditures.—Preliminary estimates indicate that the support of local schools represented the largest single item of expenditure in 1945, amounting to \$95,300,000, or 27.3 p.c. of total municipal expenditure of \$349,100,000. Other services cost \$182,600,000, or 52.3 p.c., and debt service charges and the retirement of debt \$71,100,000, or 20.4 p.c. of the total. In 1939, total expenditures were \$329,038,000, 25.0 p.c. of which went for the support of local schools, 48.3 p.c. for other services, and 26.7 p.c. for debt service and debt retirement.

Bonded Debt and Other Direct Liabilities.—The rapid growth of municipalities, together with increased demands and responsibilities for improvements, schools and other services, has resulted in the incurring of a heavy burden of debt.

Reductions in recent years have been due to general curtailment of capital undertakings requiring debenture financing, the extension of provincial control over municipal borrowings and the fact that the greater part of the total municipal debt is represented by serial or instalment-type debentures requiring yearly repayments of principal. While the benefits of debt reduction are of course manifold, certain expenditures have been sorely needed in many communities for the rehabilitation of existing assets and for new improvements necessitated by normal expansion and development. These were sacrificed

in the earlier years in the interests of the taxpayers and later, under wartime conditions, the policy of deferment was continued in order to free the financial market to the Federal Government for war-financing needs.

Municipal Bonded Debt and Sinking Funds, Selected Years 1919-45, and by Provinces 1932 and 1945

Year	Gross Bonded Indebtedness of Municipalities ¹	Total of Sinking Funds	Province	Gross Bonded Indebtedness of Municipalities	
				1932 ²	1945 ³
	\$'000	\$'000		\$'000	\$'000
1919.....	729,715	?	P.E.I.....	2,129	3,102
1925.....	1,015,950	?	N.S.....	31,606	30,231
1930.....	1,271,390	?	N.B.....	24,753	23,610
1935.....	1,372,026	267,709	Que.....	463,614	4
1938.....	1,302,201	269,736	Ont.....	504,756	237,675
1939.....	1,280,856	272,010	Man.....	92,471	52,665
1940.....	1,244,001	259,343	Sask.....	59,238	34,249
1941.....	1,196,491	261,459	Alta.....	76,892	39,521
1942.....	1,136,897	258,064	B.C.....	129,333	103,558
1943.....	1,074,462	254,864			
1944.....	1,006,936	178,761	Totals.....	1,384,792	4
1945.....	4	4			

¹ Not entirely comparable due to incompleteness of data prior to 1939. ² Sinking fund totals not available previous to 1944. ³ Debt for rural schools in the Maritimes not included. ⁴ Information for Quebec not available for 1945.

Direct and Indirect Liabilities of Municipal Governments (less Sinking Funds), by Provinces, 1943-45, with Details for 1944

Item	1943	1944	1945	Item	1944
	\$'000	\$'000	\$'000		\$'000
Direct Debt—				Direct Debt—¹	
P.E.I.....	2,471	2,396	2,276	Debenture Debt.....	1,006,936
N.S.....	21,764	20,396	18,864	Less Sinking Funds.....	178,759
N.B.....	18,310	16,801	19,214		
Que.....	467,149	455,457	?	Net Debenture Debt.....	828,177
Ont.....	263,094	244,879	224,271	Temporary loans.....	28,565
Man.....	50,226	46,509	43,444	Accounts payable and other liabilities.....	123,952
Sask.....	76,085	71,818	60,984		
Alta.....	51,659	48,280	48,452		
B.C.....	80,674	77,158	78,877		
Totals, Direct Debt	1,031,429	980,694	?	Total Direct Liabilities (less Sinking Funds)	980,694
Indirect Debt—				Indirect Debt—	
P.E.I.....	?	?	?	Guaranteed loans, debentures, etc.....	54,719
N.S.....	856	854	699	Less Sinking Funds.....	8,033
N.B.....	360	214	199		
Que.....	3,226	2,992	?		
Ont.....	22,056	21,420	21,480		
Man.....	10,217	9,830	9,417		
Sask.....	?	?	?		
Alta.....	?	?	?		
B.C.....	11,782	11,376	11,316		
Totals, Indirect Debt	48,497	46,686	?	Total Indirect Liabilities (less Sinking Funds)	46,686
Grand Totals.....	1,079,926	1,027,380	?	Grand Total.....	1,027,380

¹ Excludes rural schools in the Maritime Provinces. ² None reported. ³ Information for Quebec not available for 1945.

Banking Insurance

THE banking system of Canada consists of the central bank, known as the Bank of Canada, which, in addition to acting as the Government's banker, managing the public debt and having the right of note issue, etc., is also the banker for the privately-owned commercial banks whose ordinary business is that of making loans for businessmen and commercial purposes. This chapter treats of these banks and of the insurance business of Canada.

★ *Banking*

Banking in Canada began to develop some of the features of a central bank system soon after Confederation. These in chronological order are:—

- (1) *Central Note Issue*, permanently established with the issue of Dominion notes under legislation of 1868.
- (2) *The Canadian Bankers' Association*, established in 1900 to effect greater co-operation in the issue of notes, in credit control, and in various other ways.
- (3) *Central Gold Reserves*, established in 1913.
- (4) *Re-discount Facilities*, made a permanent feature of the system in 1923, provided the banks with a means of increasing their legal tender cash reserves at will.
- (5) *The Bank of Canada*, established as a central bank in 1935.

The Bank of Canada.—Legislation was enacted in 1934 to establish the Bank of Canada as a central or bankers' bank. All of its stock is now vested in the Federal Government. The Bank regulates the statutory cash reserves of the chartered banks, which are required to maintain not less than 5 p.c. of their deposit liabilities payable in Canadian dollars in the form of deposits with, and notes of, the Bank of Canada. The Bank also acts as the fiscal agent of the Dominion of Canada and may, by agreement, act as banker or fiscal agent for any province. Bank of Canada notes, which are legal tender, will soon become the only source of paper money in Canada since the right of the chartered banks to issue or re-issue notes was cancelled on Jan. 1, 1945.

The Bank of Canada 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. Under the Exchange Fund Order, 1940, the Bank transferred its reserve of gold to the Foreign Exchange Control Board in which Canada's exchange reserves have now been centralized. At the same time the Bank of Canada's statutory 25 p.c. minimum gold reserve requirement against its note and deposit liabilities was temporarily suspended.



The Industrial Development Bank.—The Industrial Development Bank, which commenced operations on Nov. 1, 1944, is a subsidiary of the Bank of Canada but operates as a separate entity. Its function is to supplement the activities of the chartered banks and other lending agencies by supplying the medium and long-term capital needs of small enterprises; the bank does not engage in the business of deposit banking. The capital stock of \$25,000,000, now completely paid-up, was subscribed by the Bank of Canada. In addition, the Industrial Development Bank may borrow up to three times the amount of its paid-up capital stock and reserve fund, by the issue of bonds and debentures, thus providing total resources of \$100,000,000.

The following table shows the classifications of authorized and outstanding loans and investments as at Sept. 30, 1947.

Loans and Investments of the Industrial Development Bank, by Provinces and Industries, as at Sept. 30, 1947

Province	Author- ized	Out- standing	Industry	Author- ized	Out- standing
	\$	\$		\$	\$
Prince Edward Island	Nil	—	Foods and beverages	2,395,100	1,561,863
Nova Scotia	178,400	159,650	Textiles and products	1,781,782	1,392,702
New Brunswick	574,180	528,275	Lumber and wood products	5,706,499	3,952,489
Quebec	6,718,342	3,778,335	Machinery and metal products	3,115,126	2,765,386
Ontario	8,121,650	6,165,779	Building supplies, clay, glass and plastics	982,484	770,844
Manitoba	904,196	656,225	Chemicals	2,948,784	604,216
Saskatchewan	201,300	161,496	Refrigeration	1,284,073	949,965
Alberta	1,663,444	1,016,038	Other	1,544,189	1,332,530
British Columbia and Territories	1,396,525	864,197			
Totals	19,758,037	13,329,995	Totals	19,758,037	13,329,995

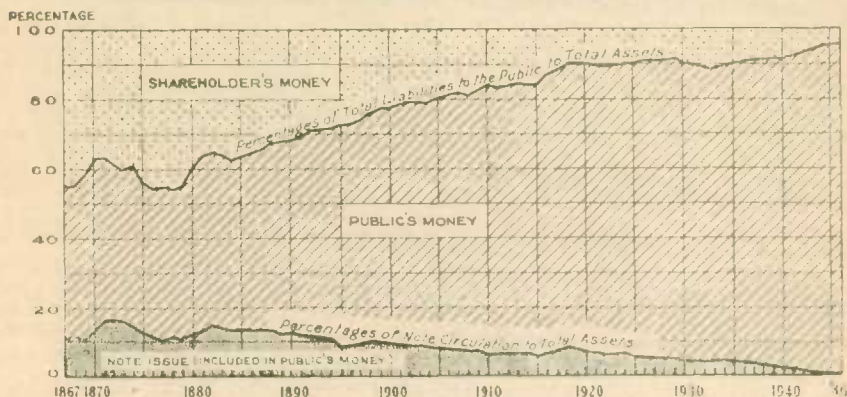
Commercial Banking.—While the aggregate supply of money is determined by the central bank, it rests with the chartered banks to provide the individual credit requirements of commerce and industry of the public generally. There are ten banks chartered under the Bank Act and only they, and two long-established savings banks, in addition to the Bank of Canada, are legally entitled to call themselves "banks" or to use the word "banking" in connection with their business.

The branch bank is perhaps the most distinctive feature of the Canadian system as it exists to-day, and for a country such as Canada, vast in area and with a small population, the plan has proved a good one. There has been no bank failure since 1923 and note holders have experienced no losses whatever since 1881.

The ten commercial banks have over 3,000 offices spread out over the Dominion, many located in small villages which would be quite unable to support an independent bank. The head offices of the banks neither take nor lend money—all the banking business is done by the branches, each branch enjoying considerable independence. But the fact that these branches are linked has a very important bearing on the country-wide economic situation.

Stringency of cash at one point may be met from another and deposits at one place not needed for local loans may be made available elsewhere. Also nation-wide information is available at all points. In addition to branches in Canada, many banks are represented in the international field. At the beginning of 1947, the different banks had among them 133 branches (not including sub-agencies) in other countries.

PERCENTAGE DISTRIBUTION OF LIABILITIES TO ASSETS



Statistics of Individual Chartered Banks as at Oct. 31, 1947, with Totals for Selected Years from 1930

NOTE.—Annual figures are averages from the respective monthly statements except in the case of the numbers of branches which are as at Dec. 31.

Bank and Year	Branches in Canada and Abroad ¹	Total Assets	Liabilities to Share- holders	Liabilities to the Public	Total Liabilities	Loans and Dis- counts	Total Deposit Liabilities ²
	No.	\$ '000,000	\$ '000,000	\$ '000,000	\$ '000,000	\$ '000,000	\$ '000,000
Bank of Montreal.....	459	1,898	80	1,817	1,897	458	1,740
Bank of Nova Scotia....	301	714	36	676	712	258	628
Bank of Toronto.....	187	383	20	363	383	116	346
Provincial Bank of Can- ada.....	131	141	6	135	141	38	134
Canadian Bank of Com- merce.....	484	1,427	60	1,364	1,424	404	1,293
Royal Bank.....	639	2,106	75	2,030	2,105	574	1,888
Dominion Bank.....	125	361	17	343	360	140	323
Banque Canadienne Na- tionale.....	219	386	14	371	385	136	363
Imperial Bank of Canada	171	415	17	397	414	171	378
Barelay's Bank (Canada)	2	34	2	32	34	3	23
Totals, Oct. 1947...	2,718	7,865	327	7,528	7,855	2,298	7,115
Totals, 1946.....	2,718	7,430	290	7,124	7,414	1,643	6,772
Totals, 1945.....	2,619	6,743	282	6,439	6,721	1,505	6,160
Totals, 1944.....	2,593	5,990	282	5,689	5,972	1,344	5,422
Totals, 1943.....	2,589	5,148	282	4,849	5,131	1,334	4,592
Totals, 1942.....	2,642	4,400	281	4,102	4,383	1,370	3,834
Totals, 1939.....	2,861	3,592	279	3,298	3,578	1,244	3,061
Totals, 1935.....	2,978	2,957	278	2,668	2,946	1,276	2,427
Totals, 1930.....	3,598	3,237	305	2,910	3,215	2,065	2,517

¹ As at Dec. 31 of previous year. Does not include sub-agencies which numbered 637 in 1945.

² Excluding inter-bank deposits.

The primary function of the bank is to provide a safe repository for savings and surplus funds and to furnish credit for carrying on the business of the country. Credit is given in a variety of ways. Direct loans are made, the proceeds of which customers use for purchasing raw materials, paying wages and other operating expenses or for the purchase of goods for resale. Letters of credit are issued to finance the importation of goods. In this way the bank exchanges its well-known and acceptable credit for the less-known credit of its customers. Apart from the deposit and loan facilities provided, the banks render innumerable services to the communities in which they serve.

Cheque Payments.—The amount of cheques cashed by the banks reached a peak in 1946, reflecting the active economic conditions obtaining during the war years. A continuous advance was shown year by year from 1938, the increase in 1946 over that year amounting to 124 p.c. Transactions of this nature amounted to \$46,670,000,000 in 1929, the culmination of the previous major economic cycle, about 33 p.c. less than the \$69,248,000,000 recorded in 1946. The total for the first ten months of 1947 was 6.7 p.c. higher than for the same months of 1946.

Cheques Cashed at Clearing-House Centres, 1942-46

Economic Area	1942	1943	1944	1945	1946
	\$	\$	\$	\$	\$
Maritime Provinces.....	1,075,736,890	1,243,762,861	1,327,660,964	1,553,590,758	1,604,018,266
Quebec.....	12,751,093,627	15,373,881,025	17,222,287,360	19,309,332,983	20,749,359,813
Ontario.....	22,136,161,250	24,681,702,142	26,902,944,561	31,843,361,615	30,401,955,884
Prairie Provinces.....	6,722,376,622	9,199,963,592	11,488,439,812	11,562,164,231	11,124,679,682
British Columbia.....	2,840,882,813	3,297,405,107	3,735,621,710	4,416,363,574	5,367,593,788
Totals.....	45,526,254,202	53,796,714,727	60,676,954,407	68,384,813,161	69,247,607,433

It is estimated that about 80 p.c. of Canada's business transactions are financed by cheques, payments in notes and coin being of relatively minor proportions. Thus, the amount of cheques paid through the banks and charged

Bank records are kept up to date by the use of modern machines. These machines can post 450 items per hour in the ledgers, which are balanced daily.

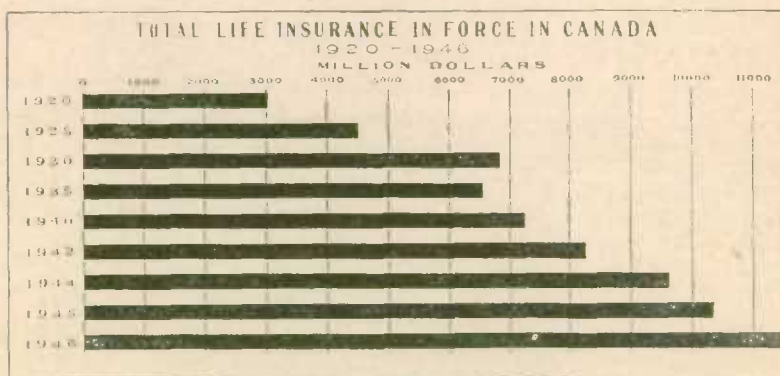


to deposit accounts is widely used as a measure of the volume of financial transactions. A record of such payments is available for the principal commercial centres for a period of more than 20 years.

★ 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 competing for the available business in Canada, as against 41 active companies registered under the Acts of Canada and a few provincial companies in 1946. Of the 41 active companies so registered, 28 were Canadian, 3 British, and 10 foreign.

As a result of the adaptation of life insurance policies to the needs of the public and of the growing wealth of the country, the increase in the amount of life insurance in force has been remarkable. The life insurance in force in Canada in 1869 was less than \$36,000,000 as compared with over \$11,500,000,000 at the end of 1946, the latter figure including \$281,000,000 carried by provincial life companies and \$17,000,000 by fraternal benefit societies. Thus the total life insurance in force in Canada at the end of 1946 was approximately \$934 per capita. The premium income from such business increased from \$97,000,000 in 1920 to \$230,000,000 in 1930, and to \$299,000,000 in 1946.



Fire Insurance.—As at Dec. 31, 1946, there were 270 fire insurance companies registered under the Insurance Acts of Canada and doing business in Canada, of which 59 were Canadian, 73 were British, and 138 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 78 p.c. of the total number is a very marked point of difference between fire and life insurance in Canada, the latter being carried on very largely by Canadian companies.

The enormous increase that has taken place throughout the years of record in the amount of fire insurance in force is due partly to the growth



Sun Life Building, Dominion Square, Montreal, Que.

of the practice of insurance; 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. In 1869 the amount was \$200,000,000, by 1900 it had increased to nearly \$1,000,000,000, by 1920 to just under \$6,000,000,000, by 1940 to over \$10,700,000,000, and by 1946 to over \$17,000,000,000; with the business of provincial companies and the business in Canada of Lloyds added, the 1946 figure exceeded \$19,000,000,000.

Casualty Insurance.—Casualty insurance includes: accident (personal accident, public liability and employers' liability); combined accident and sickness; aircraft; automobile; boiler and machinery; credit; earthquake; explosion; falling aircraft; forgery; guarantee (fidelity and surety); hail; inland transportation; live stock; personal property; plate glass; real property; sickness; sprinkler leakage; theft; weather; and windstorm. In 1946 there were 273 companies transacting such insurance, of which 58 were Canadian, 72 British and 143 foreign.

Of the classes of business mentioned those accounting for the largest and the most rapidly increasing premium income are automobile, personal accident and sickness (including combined accident and sickness), and personal property for which the premiums written were less than \$36,000,000 in 1941 and over \$66,000,000 in 1946. In the same period the premiums for all the casualty classes increased from \$48,340,334 to \$87,464,737. Premium income of provincial companies and Lloyds brings the total to \$96,602,868.



Education Science Culture

FORMAL education, under the British North America Act, was assigned to provincial control with few reservations. Indian schools have always been a charge of the Federal Government, as has education in the penitentiaries. The Federal Government has supported education in the Armed Forces, including such institutions as the Royal Canadian Naval College, and the Canadian Officers Training Corps, University Air Training Corps, University Naval Training Division and some Cadet Training. In a more indirect way the interest of the Federal Government is observable in the educational work of the Canadian Broadcasting Corporation and National Film Board, etc., much of which is planned in co-operation with representatives of the Provincial Governments and intended for use in the schools. Otherwise each of the nine provinces by itself or through co-operation with other provinces administers its own school system.

The Canadian public is taking an unprecedented interest in education, particularly in the extension of secondary education to that third of the products of primary schools that does not enter high school, and in the improvement of the curriculum, so that more than half of those who enter high school will not drop out before having completed their course. Vocational-guidance directors have been established in most provinces, and vocational guidance is becoming an integral part of the high-school curriculum. Increasing reliance is being placed on the 'composite high school' in provinces other than Quebec, where there have always been more distinct types of schools—academic, technical, agricultural, etc. In the Maritime Provinces the location and construction of composite rural high schools is an important part of the recent reorganization into larger administrative areas. Although awaiting the recommendations of the Royal Commission on Education, Ontario has already organized half the Province into township areas for elementary schools, and had organized 39 larger high-school districts by 1946. Saskatchewan is well advanced with the establishment of large administrative areas and Alberta, where the larger areas were adopted several years ago, has been experimenting with dormitories and school buses. British Columbia has recently undergone complete reorganization into larger units.

Teacher Supply.—The shortage of teachers, which became acute during the later war years, is still a major problem. Figures for 1946 show a return to teaching of about 2,000 of the 5,000 men who left the profession



Elementary school pupils learn the use of the jig-saw in a wood-working class.

during the war years. But the number of teachers without the minimum professional qualifications normally demanded increased in 1946 to more than 5,000 (or 1 in 10) in eight of the provinces (Quebec excepted).

In the matter of salaries an average increase of about \$100 yearly for each of the three preceding years was maintained in 1946, making an average salary of \$1,308 for all teachers, men and women, in the eight provinces. The changes of the war years substantially reduced the disparity between country and city salaries. In 1939 the teachers in one-room rural schools received an average salary of \$607, while city teachers received \$1,613; in 1946, rural teachers in the corresponding group were paid \$1,181 and city teachers \$1,926. But rural teachers continue to be a comparatively transient group, the majority moving from one school to another (or out of teaching altogether) every two years or less. The average tenure of city teachers by comparison is about ten years.

To aid the teachers who have returned after an absence from the profession and to help those who are doing their best with little knowledge and less preparation, the Departments of Education have tried various expedients. Special supervisors have been appointed. Inspectors and superintendents have been requested to stress supervision. Institutes are held, library books are made available, and permit teachers have been encouraged to take summer-school training or to enter Normal Schools.

Exchange of teachers is being carried out under an interprovincial committee of the Canadian Education Association. For the year 1947-48 about 40 exchanges were arranged between provinces, 64 between Canada and

the United Kingdom, and 4 between Canada and the United States. The Canada-United States Committee on Education, set up in 1944, has assisted or encouraged the operation of international workshops for teachers, exchange of teachers, lecturers, students, correspondence, and educational films and broadcasts. It has attempted to discover what Canadian students learn of United States history and what United States students learn of Canadian history. Its report shows that, with few exceptions, United States writers of history texts have not felt obliged to deal in any significant way with the history of Canada. Canadian text-books devote more space to United States history, but fail to deal adequately with Canadian-United States relations.

Health and Education.—The results of physical examinations necessary to obtain men for the Armed Forces drew attention to the substantial percentage of Canadian youth who could not meet the required standards for mental or physical health. Attention has consequently been focused increasingly on physical education and mental hygiene in the schools.

The Canadian Education Association and Canadian Public Health Association, with financial support from the Canadian Life Insurance Officers Association, have set up a National Committee for School Health Research. The Minister of Health and the Minister of Education for each province have appointed a Provincial Committee for School Health Research. Preliminary surveys have revealed unsatisfactory conditions in a large proportion of the rural schools.

The use of health-teaching aids varies greatly from school to school and leaves considerable room for improvement. Perhaps the organizing of Junior Red Cross Branches has been the greatest single factor in the encouragement of healthful living habits and interest in health services. The St. John Ambulance Association has also promoted health teaching.

Education of Exceptional Children.—The meeting of the International Council for Exceptional Children was held at Ottawa in 1947. This has added impetus to the work of providing services for those children who are not able to benefit fully from the usual classroom instruction, the deaf, blind, crippled, or otherwise handicapped, mentally retarded and mentally bright.

Pupils in a technical high school receiving their first lesson on connecting up starters of alternating current motors.



In Canada there are eight schools for the deaf in addition to a number of special classes in the larger cities. Some 1,171 pupils were enrolled in the schools for the deaf in 1944, while several hundred others benefited from similar instruction in special classes. In the schools for the deaf, pupils may learn to enjoy music, dance, play games, become skilled workers, become socially minded and in every way be prepared to take their place in the outside world. The correction of speech defects is emphasized in many Canadian Normal Schools, and specially prepared teachers conduct speech-correction classes for those who stutter, lisp, or have other impediments.

Those who have imperfect vision or who are totally blind provide an equal challenge to educators. The provinces have established six residential schools where some 500 pupils learn Braille, participate in regular school classes, learn trades, and become socially competent. After long diligent practice, many gifted blind pupils attain proficiency in music and piano-tuning, but the majority learn home economics, weaving, basketry, woodwork, broom-making and allied trades. Supplementing these schools is a number of sight-saving classes for pupils with partial vision, both in the schools for the blind and in some city public schools.

Handicraft and other opportunity classes are provided for students who are not suited to the usual academic courses. While it is often assumed that the bright are capable of looking after themselves, a number of classes for gifted children have been in existence for ten or more years in Canada.

Classes are also established for pupils of normal mentality who are crippled, or confined in hospitals or sanatoria. Institutional classes are organized for children in shelters, orphanages, etc. Home instruction classes are undertaken by visiting teachers for pupils who are confined to their homes for periods up to three months and orthopaedic classes for crippled or otherwise disabled children. Others are held for custodial cases of delinquents in reform and industrial schools.

Correspondence courses are now available in all provinces which supplement formal education in regularly organized classes. They were first introduced to provide instruction for children living in rural districts who were qualified but unable to enter high school. Later they were extended for pupils in elementary grades. Recently the number in use has increased greatly. Unqualified or partially qualified teachers use them as lesson helps, or the pupils follow them and get what assistance they can from a supervisor where no teacher is available.

Adult Education.—More than 96 p.c. of adult Canadians are literate, in the sense of being able to read and write. But there has been increasing recognition in the past few years that mere literacy is not enough, that there must be provision for citizenship education in adult years, and several Provincial Governments have recently established adult education agencies. Some of these operate as a branch of the Department of Education, others as independent boards financed by public money. In other provinces, inquiries have been proceeding with a view to comparable developments. The movement is assisted in all provinces by the services of the Canadian Association for Adult Education.

Higher Education.—The academic year 1946-47 represents the peak year for enrolment of ex-service students. Some 40,000 veterans were registered



A group of first-year university students in Arts hear a lecture on psychology.

in special courses and the regular sessions of the universities. Applications for training had to be made within 15 months of the date of discharge. This focalized the entrance date of a large majority of trainees within the period 1946-47. With the exception of a few authorized deferments, it is estimated that more than 95 p.c. of the candidates who applied for education benefits had been accommodated in various schools and colleges by 1947.

The humanities and social sciences, after experiencing a considerable slump during the years of the War, report higher registration. This is due in some measure to overcrowding in the schools of engineering, medicine and science, but in part, too, to the work of veterans' counsellors.

Subjects of study cognate to the problems of industrial relations record increased enrolment at both under-graduate and post-graduate levels. In 1947, the Canadian Social Science Research Council called a conference of university personnel concerned with teaching and research in these fields.

Instruction for the most part is centred in the Departments of Economics and Psychology, but a few of the universities have Departments or Institutes of Industrial Relations.

University teacher-training courses have regained and exceeded the pre-war levels of enrolment. Schools of nursing report capacity enrolment, and there has been some increase in the number of theological students.

Extensive school construction programs, accompanied by wide-scale campaigns for increased capital funds and larger government grants, are under way. It is estimated that at least \$30,000,000 will be required for essential building during the next ten years. A major part of this sum is for medical and science buildings. Some \$10,000,000 is to be spent for new library buildings or extensions, and a substantial sum for recreational and cultural facilities.

Summary Statistics of Education, 1945

Type of School or Course	Institutions	Pupils	Teachers	Expenditure
	No.	No.	No.	\$
Provincially Controlled Schools—				
Ordinary and technical day schools...	31,644	1,997,883	78,167	160,192,284
Evening schools.....	400	68,238	—	
Correspondence courses.....	9	34,292	—	
Special schools.....	21	4,811	464	
Normal schools.....	85	7,952	911	
Privately Controlled Schools—				
Ordinary day schools.....	784	101,122	5,748	7,731,000
Business training schools.....	173	29,478	773	
Dominion Indian Schools.....	337	16,438	415	2,155,611
Universities and Colleges—				
Preparatory courses.....	56	25,059	1,652	24,900,000
Courses of university standard.....	160	59,114	6,078	
Other courses at university.....	22 ¹	26,719	—	
Totals.....	33,691	2,371,106	94,208	194,978,895

¹ Affiliated institutions additional to classical and junior colleges included under institutions of university level.

Science and Research

The war years demonstrated in the most forceful manner the importance of scientific research in the life of the modern nation, its necessity in fact for survival. The principal lesson to be learned from these and earlier years has been expressed by one writer, Professor J. B. Brebner, as follows: "Canada needs to detect, train, encourage, and retain every scholar she can find, for they will constitute the principal group who will keep Canada up with a rapidly changing world, who will bring Canadian brains and experience to bear on Canadian problems, and who will pass on to youth and to the nation at large the vital tradition from the past".

There has been considerable evidence of desire to apply the lesson in the past two years. From the employer's standpoint the action of the Federal Government in establishing in 1946 a Royal Commission on Administrative Classifications in the Public Service may be cited. To attack the problem from the side of training, the National Conference of Canadian Universities established a Committee on Post-Graduate Training in 1945. In June, 1946, the Bureau of Technical Personnel in the Department of Labour launched

an inquiry, on instructions from a Committee of the Cabinet and with the assistance of an Inter-departmental Advisory Committee, on requirements throughout Canada for professionally trained persons in the next five years.

The field of scientific research in Canada is exceedingly broad. Certain Federal and Provincial Government Departments, as well as many private industrial concerns, maintain trained permanent scientific staffs for investigation and research in their own fields. The universities have shown great initiative in research, but with the limited facilities at their disposal the task of carrying their discoveries to a conclusion is not always easy. However, Government and industrial laboratories are often able to pick up where the universities leave off. A special field of research is also covered by such institutions as the Ontario Research Foundation, the Banting Research Foundation and the Rockefeller Foundation.

The 'Shopmobile' carries machine-shop facilities and instruction to rural schools in Nova Scotia. Each unit accommodates twelve pupils at one time and each class receives half a day's instruction per week during the school year.



The National Research Council.—The National Research Council, founded in 1916, to provide a central organization for the conduct of research on problems of national scientific interest, has grown steadily. In November, 1947, the staff comprised over 2,300 persons, half of them scientists, and laboratories included the main building at Ottawa (Physics, Chemistry and Applied Biology), Aeronautical and Hydrodynamic Laboratories on the Montreal Road, the Atomic Energy Project at Chalk River, and the Prairie Regional Laboratory at Saskatoon. A Maritime Regional Laboratory is to be established at Halifax.

The Division of Medical Research, continuing activities organized during the War, is sponsoring fundamental medical research through grants and fellowships in Canadian medical schools. The Division of Building Research is working closely with the Central Mortgage and Housing Corporation in a comprehensive program of investigations designed to improve housing and to promote the knowledge and best use of building materials. To serve the smaller industries in the provision of technical advice on materials and processes, a Division of Information Services has been created in which the work of the Research and Development Branch of the Department of Reconstruction and Supply, including their field staff of some fifty district representatives, has now been merged.

Direction of the Council's activities is carried on by the President, two Vice-Presidents and seventeen other members of the National Research Council. Ministerial responsibility for the Council's work is vested in the Committee of the Privy Council on Scientific and Industrial Research, of which the Minister of Reconstruction and Supply is Chairman.

Encouragement of scientific research on a national basis has been one of the continuing functions of the National Research Council of Canada. From its inception the Council has maintained a system of post-graduate scholarships for the assistance of brilliant students who have shown promise of research ability. These scholarships have also provided a measure of aid for the development in Canada of trained scientific personnel to meet the academic and industrial needs of the nation in the prosecution of fundamental and applied research. More than 1,800 graduate research workers have been trained by this means.

A further measure of assistance has been through financial grants-in-aid to heads of science departments in Canadian universities, who have been enabled thereby to provide facilities for research that holders of post-graduate scholarships and other advanced students could do in various fields.

Co-operation of the National Research Council with Canadian industrialists has led to the development of new industries for the production of essential metals and the improvement of processes in existing plants. Close and satisfactory relationships thus established have created a valuable liaison between industry and science.

The Social Sciences and Humanities.—The Social Science Research Council was created in 1940 to improve the liaison among those doing research in the several fields and to promote research in various ways. Such associations as the Canadian Agricultural Economics Society, the Canadian Committee of the International Geographical Union, the Canadian Institute of International Affairs, the Canadian Education Association, the Canadian



Atomic energy development, Chalk River, Ont. The President of the National Research Council has described this development as "the most heart-warming" of Canadian scientific achievements since 1939. It is the biggest thing Canada has done alone and has "set the seal of manhood on Canadian science".

Psychological Society and the Royal Society of Canada endorsed the project. The Council in its last report stated that its activities had been marked by an increasing concern with the major problems of the academic world, particularly in the universities where research has been hampered by the heavier teaching loads necessarily imposed on professors by the post-war demand for university training. Then, too, it has become very difficult to accommodate all those students who wish to take advanced courses. A co-ordinated effort is being made with the Canadian Universities Conference and the Humanities Research Council to deal with these problems. An expansion of graduate work in institutions across Canada is anticipated, an expansion that should increase the possibilities for effective research in such subjects as political science, sociology and anthropology.

The Humanities Research Council was organized in 1942 to strengthen the position of the humanities in higher education. Its constitution envisages an *ad hoc* body of active research scholars, representative of as many disciplines and universities as possible. There are now sixteen members drawn from the staffs of fifteen universities who have, with aid from the Rockefeller Foundation, directed an extensive survey of the conditions of the humanities in Canada. Its report, which deals with the position of the humanities in secondary education and at various levels in the universities, indicates a need for concerted effort on the part of Canadian academic institutions if the traditional standards of culture are not to be impaired.



An artist and expert wood carver at work in a Nova Scotian crafts centre.

School broadcasts on Canadian art were inaugurated in 1945 in co-operation with the Canadian Broadcasting Corporation, and films dealing with Canadian painting have been made in collaboration with the National Film Board. Silk screen prints, made at the Gallery and distributed widely, have made some Canadian works of art known in many parts of the world and these, together with other reproductions, are in considerable demand in Canadian schools.

The Gallery also helped to organize the magazine *Canadian Art*, an important channel for publicizing the work and methods of Canadian artists.

In all these ways the National Gallery has fulfilled the terms of its charter in caring for its collections and in "the encouragement and cultivation of . . . artistic taste and Canadian public interest in the fine arts, the promotion of the interests generally of art in Canada".

The Canadian Arts Council.—The Canadian Arts Council was established in December, 1945, following briefs to the Special Committee of the House of Commons on Reconstruction and Re-establishment by constituent associations. Among other things the briefs pictured a Canadian society in which the arts would become more closely integrated with the life of the Canadian people.

It was proposed to establish "a government body to promote a national cultural program and provide music, drama, art and film services for all our people" in order to remedy a situation in which the people do not benefit from the arts, and whereby the artists function in such a narrow field "that they are forced into activities unsuited to their talents". Other proposals considered improvement in industrial design, housing and town planning.

The following list of the sixteen bodies constituting the Council gives some idea of its breadth of interest:—

The Royal Canadian Academy of Arts
The Royal Architectural Institute of Canada
The Sculptors' Society of Canada
The Canadian Society of Painters in Water Colour
The Canadian Society of Painter-Etchers and Engravers
The Canadian Group of Painters
The Canadian Society of Graphic Arts
The Federation of Canadian Artists
The Canadian Authors' Association
Le Societe des Ecrivains Canadiens
The Music Committee
The Canadian Society of Landscape Architects and Townplanners
The Dominion Drama Festival
The Canadian Handicrafts Guild
The Canadian Guild of Potters
The Arts and Letters Club.

Mass Media of Communication

Radio.—There are in Canada about three million radio receiving sets, or about one for every four persons in the population. Private receiving licences number about 1,800,000, many of these covering more than one set.

The Canadian Broadcasting Corporation.—A broadcasting system may be a powerful national instrument for education in the broadest sense. In the department of public information and adult education it utilizes such forms as talks, commentaries, interviews, forum and discussion programs, either in documentary or semi-dramatized educational form. Subject-matter may range from amusing yarns to discussions on world government, from modern art and Canadian literature to home economics and popular science. Broadcasts are in French or English and are intended for various groups of listeners. The CBC also carries international exchange programs and a number of commercial programs. The CBC has two national networks and provides coverage for most of Canada. Several stations have been operating with increased voltage during the past few years.

The operations of the CBC are given in more detail at pp. 161-163.

The producer-director of the CBC drama series "Stage 48" speaks to the cast from the control room during rehearsal.



Motion Pictures.—There were 1,477 motion picture theatres operating in Canada in 1946 with box office receipts (including amusement taxes) amounting to \$74,941,966 for the year, or \$6.15 per capita of the population. The average admission price was 32.9 cents, allowing for 19 shows per capita.

The National Film Board.—The duties of the Board, which consists of two Cabinet Ministers, three members of the Civil or Defence Services and three members outside the Civil Service, are: to advise on Government film activities, to co-ordinate National and Departmental film programs, to direct the distribution of Government films in Canada and abroad, and to co-ordinate and develop information service to supplement this distribution. Its primary duty is to present the Canadian scene, at home and abroad, in documentary films, still photographs and related graphic materials. Through these media, Canadians will be encouraged to learn more of the work and ways of their fellow citizens, and of Canada's relationship to other nations. In Canada the Board's films are distributed through 325 theatres, where they are seen by more than 2,000,000 people each month, and through 160 rural circuits, 155 film libraries and 200 community film councils to a monthly audience exceeding 5,000,000. Outside Canada, films are distributed through the Board's offices and through Canadian trade and diplomatic representatives and other agencies to 40 countries, in six different languages.

During the year ended Mar. 31, 1947, the National Film Board completed 214 film productions. The post-war emphasis is on educational and cultural films, based on domestic subjects.

The Press.—There are nearly 100 daily newspapers published in Canada, counting morning and evening editions separately. The circulation of English-language dailies is reported to be approximately 2,400,000 and French-language about 550,000. There are also 4 Chinese and 2 Yiddish dailies published in Canada.

French daily newspapers have, as would be expected, a wide circulation in the Province of Quebec and some of the larger of these papers have been established in the Province for over 60 years. Ten of the 11 French-language papers are published in that Province, the other being in the adjoining Province of Ontario. Over 93 p.c. of the total circulation of the English and French dailies is in the urban centres of 20,000 population or over.

Weekly newspapers have a somewhat wider circulation; only 61 p.c. of the stated circulation of weekly English-language newspapers is in cities of 20,000 population or over and about 77 p.c. of the French-language weeklies.

Foreign-language newspapers are more generally published as weeklies or semi-weeklies. In 1946 these newspapers had a stated circulation of about 200,000, Ukrainian papers accounting for 65,000, German 32,000, Yiddish 28,000 and Polish 15,000.

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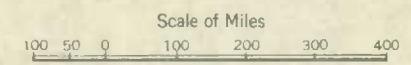
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CANADA

(Exclusive of northern regions)



- REFERENCE
- Dominion Capital
 - Provincial Capital
 - Railway Main Lines
 - Trans-Canada Air Lines
 - Canadian Pacific Air Lines
 - Other and Connecting U.S.A. Routes

DISTANCES BETWEEN PRINCIPAL POINTS IN CANADA.*

NOTE.—Generally, the distances given are the shortest by railway.

A knowledge of distances in miles between principal points constitutes very useful information in these days of wide travel, but when an attempt is made to compile such data difficulties are at once encountered. Railway distances are the logical choice, even though road distances are of increasing interest to a vast body of travellers by automobile and are a useful alternative. Railway distances represent usually the shortest practicable land distances between two points and even to-day the bulk of freight and passenger traffic is by rail. Again, distances by air (sometimes called 'bee-line' distances) are only useful in practice to those who travel by air. This is a growing phase of transportation, of course, but has not yet assumed such proportions that its tabulation should displace the more usual one. Again, it is not a difficult matter to estimate air-line distances from a map made to convenient scale, whereas the ordinary reader is not able to obtain railway distances easily.

Even though it be decided to adopt railway distances as most useful, it is necessary to decide whether the most travelled route between two places or the shortest railway route should govern. In the tables given below, the distances between points are the shortest distances by railway and not necessarily the most travelled routes or the routes by which main trains travel. They are compiled principally from the railway time tables. The main table includes the capital of each province and some of the main shipping points chosen principally, but not altogether, by population; the subsidiary tables include distances of local importance. Included in the distances from Charlottetown is the distance from Borden to Cape Tormentine, over which the trains are transported by ferry; similarly, the train ferry distance between Mulgrave and Point Tupper is included in the distance from Halifax to Sydney. In the main table all the distances from Victoria include the distance travelled by boat from Victoria to Vancouver. However, wherever possible, railway distances only are used. In certain distances from Three Rivers and from Quebec it is possible, by the use of ferries, to travel by shorter routes than those given in the tables, the rail route only being taken in these cases.

Where boat routes are given, the best approximation of the distance travelled is used. The air-line distances used are not necessarily the straight-line distances between points, but are the distances over the routes usually travelled by aeroplanes in good weather.

Place.	Halifax.	Moncton.	Charlottetown.	Saint John.	Fredericton.	Quebec.	Montreal.	Sherbrooke.	Three Rivers.	Ottawa.	Kingston.	Toronto.	Hamilton.	London.	Windsor.	Fort William.	Winnipeg.	Brandon.	Churchill.	Regina.	Saskatoon.	Calgary.	Edmonton.	Vancouver.	Victoria.	Prince Rupert.
Halifax.....	0	189	239	278	292	662	747	646	740	858	920	1081	1120	1196	1306	1716	2012	2146	2991	2367	2483	2834	2813	3475	3560	3769
Moncton.....	189	0	126	89	104	473	558	457	551	669	731	892	931	1007	1117	1527	1823	1957	2802	2178	2294	2645	2624	3286	3371	3580
Charlottetown.....	239	126	0	215	230	606	684	583	677	795	857	1018	1057	1133	1243	1653	1950	2084	2929	2305	2421	2772	2751	3413	3498	3767
Saint John.....	278	89	215	0	67	426	476	375	503	587	649	810	849	925	1035	1445	1776	1910	2755	2131	2247	2598	2577	3239	3324	3543
Fredericton.....	292	104	230	67	0	403	454	353	481	565	627	788	827	903	1013	1423	1753	1887	2732	2108	2224	2575	2554	3216	3301	3519
Quebec.....	662	473	600	426	403	0	169	127	78	280	342	503	542	618	728	1079	1350	1484	2329	1705	1821	2172	2151	2813	2898	3107
Montreal.....	747	558	684	476	454	169	0	101	95	111	173	334	373	449	559	969	1353	1486	2331	1707	1823	2174	2153	2815	2900	3109
Sherbrooke.....	646	457	583	375	353	127	101	0	196	212	274	435	474	550	660	1070	1454	1587	2432	1808	1924	2275	2254	2916	3001	3210
Three Rivers.....	740	551	677	503	481	78	95	196	0	206	268	429	468	544	654	1064	1448	1581	2426	1802	1918	2269	2248	2910	2995	3205
Ottawa.....	858	669	795	587	565	280	111	212	206	0	112	247	286	362	472	858	1242	1375	2220	1596	1712	2063	2042	2704	2789	2998
Kingston.....	920	731	857	649	627	342	173	274	268	112	0	161	200	276	386	908	1292	1426	2270	1647	1763	2113	2093	2754	2839	3049
Toronto.....	1081	892	1018	810	788	503	334	435	429	247	161	0	39	115	225	811	1207	1340	2185	1562	1677	2028	2008	2670	2755	2964
Hamilton.....	1120	931	1057	849	827	542	373	474	468	286	200	39	0	80	190	850	1246	1379	2224	1601	1716	2067	2047	2709	2794	3003
London.....	1196	1007	1133	925	903	618	449	550	544	362	276	115	80	0	110	926	1322	1455	2300	1677	1792	2143	2123	2785	2870	3079
Windsor.....	1306	1117	1243	1035	1013	728	559	660	654	472	386	225	190	110	0	1036	1432	1565	2410	1787	1902	2253	2233	2895	2980	3189
Fort William.....	1716	1527	1653	1445	1423	1079	969	1070	1064	858	908	811	850	926	1036	0	419	552	1397	774	889	1240	1220	1882	1967	2176
Winnipeg.....	2012	1823	1950	1776	1753	1350	1353	1454	1448	1242	1292	1207	1246	1322	1432	419	0	133	978	355	470	821	801	1463	1548	1757
Brandon.....	2146	1957	2084	1910	1887	1484	1486	1587	1581	1375	1426	1340	1379	1455	1565	552	133	0	937	221	384	688	715	1330	1415	1671
Churchill.....	2991	2802	2929	2755	2732	2329	2331	2432	2426	2220	2270	2185	2224	2300	2410	1397	978	937	0	845	813	1217	1144	1859	1944	2100
Regina.....	2367	2178	2305	2131	2108	1705	1707	1808	1802	1596	1647	1562	1601	1677	1787	774	355	221	845	0	163	467	493	1108	1193	1449
Saskatoon.....	2483	2294	2421	2247	2224	1821	1823	1924	1918	1712	1763	1677	1716	1792	1902	889	470	384	813	163	0	404	330	1046	1131	1287
Calgary.....	2834	2645	2772	2598	2575	2172	2174	2275	2269	2063	2113	2028	2067	2143	2253	1240	821	688	1217	467	404	0	194	642	727	1150
Edmonton.....	2813	2624	2751	2577	2554	2151	2153	2254	2248	2042	2093	2008	2047	2123	2233	1220	801	715	1144	493	330	194	0	761	846	956
Vancouver.....	3475	3286	3413	3239	3216	2813	2815	2916	2910	2704	2754	2670	2709	2785	2895	1882	1463	1330	1859	1108	1046	642	761	0	85	1158
Victoria.....	3560	3371	3498	3324	3301	2898	2900	3001	2995	2789	2839	2755	2794	2870	2980	1967	1548	1415	1944	1193	1131	727	846	85	0	1243
Prince Rupert.....	3769	3580	3707	3533	3510	3107	3109	3210	3205	2998	3049	2964	3003	3079	3189	2176	1757	1671	2100	1449	1287	1150	956	1158	1243	0

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* Prepared under the direction of F. H. Peters, Surveyor General and Chief, Hydrographic Service, Department of Mines and Resources, Ottawa.

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