

Even if a large-scale development of the iron and steel industry in Quebec seems desirable and economically possible, we must admit that nothing is being done at present in that direction. Apparently the ore will be shipped directly to the United States without any elaborate processing. Only a strong movement of public opinion might change the situation.

Up to now, the Province of Quebec has developed very rapidly. But this

expansion has already created difficult problems; very often, it has been misdirected and has not contributed enough to the welfare of the population. More than ever before, Quebec needs dynamic and rational planning in order to consolidate the progress that has been made and to expand along new lines of economic endeavour. It is to be hoped that public authorities will appreciate their responsibilities before it is too late.

Ontario: Expansion With Confidence

By HON. ARTHUR WELSH

ANY article dealing with the industrial expansion of Ontario must take into account many favourable contributing factors.

Geographically and geologically speaking the Province is in a good position, and these factors have, from the earliest times, attracted to this section of the country men and women looking for opportunities. It is a truism that nothing succeeds like success, and the successful establishment of the early settlers in our Province has been like a snowball and has gathered momentum through the years.

Many people from all over the world continue to feel that Ontario is likely to offer the biggest opportunities for their future welfare and happiness, and it is with the advent of increased population that the Province will continue to expand in every way.

The fertile and arable lands of Ontario were responsible for the success of the early settlers. Ontario's agriculture is rich and diversified, and has brought wealth and prosperity over the years. In 1947 the cash farm income was about

\$546,000,000, as compared with \$473,000,000 in 1946, and \$453,000,000 in 1945; so it can be seen that this is still a great factor in our Provincial economy.

The emphasis is shifting, however, and during the last 50 years the bulk of the great increase in population has taken place near the cities, and the Province would appear to be changing over from a mainly rural population to a mainly urban one, and from a predominantly agricultural to an important industrial Province.

Improving Transportation

Various things are making this possible—one thing, of course, is the availability of many raw materials, which are actually within our own boundaries, and those which we have not got are easily accessible to us. And in this connection, the excellent transportation facilities play a large part.

The larger centres are served by an unexcelled inland waterway system, and railways, highways and commercial air lines all serve to promote the welfare of the Province. Ontario has no fewer than 12 railroads having more than 10,000 miles of single track, or 25% of the total railway mileage in Canada.

During the past 25 years the construction of roads has been one of the principal activities of the Province and its municipalities. There are over 57,000 miles of surfaced roads throughout the Province.

The Great Lakes, together with connecting rivers and canals comprise the greatest inland water system in the world from the standpoint both of continuous passage and volume of traffic. All the main population centres of Southern Ontario have ready access to water transportation, either directly or indirectly through railways and highways connecting with the principal lake ports. Ontario has 20 lake ports, each of which handles in excess of one-half million tons of freight annually.

Air transport is playing an important role in the development of Ontario's northland, especially in the expansion of mining activity. Aircraft are also used for forest sketching, mapping and fire detection and suppression. The Ontario Government has pioneered in this work, and has a very efficient fire-fighting organization. There are over 50 licensed airports in Ontario.

New Construction

The stage thus being set, and the reasons given as to why it is natural for this Province to become highly industrialized, let us now examine what is coming out of this background.

Each of the two world wars has created great shortages of civilian goods, but when the backlog of goods in short supply is caught up with, it might seem that adjustments would occur, and the demand for the products of manufacturing industries would fall off. Experience has shown, however, that the adjustment is always on a higher level than was the case before the war began. This can be due to many reasons, one of which is the number of new plants that have entered the field, and are producing goods not produced before, either because science has made possible these new

products, or else new industries from abroad enter the Province, and bring in their wake increased population, and thus an increased demand for every type of manufactured goods.

There are some 11,000 manufacturing establishments in Ontario, and this number is continuing to grow rapidly; in trying to give a true picture of the industrial growth of the Province, it was felt that figures showing the construction activities should be a valuable guide. Increased industrial construction, when viewed as a whole will generally imply greater production, although it is realized that expansion of production, through increased efficiency, may take place without new buildings being added.

To portray with greater accuracy the increase in industrial construction from 1926 up to the present time it was realized that if these were given in dollar values of building constructed, some correction must be made for the increased or decreased value of the dollar throughout the years. A certain dollar value related to construction in 1933, will obviously not represent the same volume of construction in 1948, when the prices of construction materials have risen over 100%.

In the following table the index used to deflate the figures presented, is published by the Dominion Bureau of Statistics under the title "Indices of Wholesale Prices of Building and Construction Materials—1926 = 100."

From 1926-27 to 1940-41, the dollar cost of construction was less than the dollar value, in terms of wholesale prices in the base year. Since 1941-42 the reverse has held: the higher volume of industrial construction has been out-distanced by climbing costs, especially in the last two years. The burning question is how long these two statistical lines will continue to move in opposite directions, as they are now tending to do.

More detailed analysis of reported

expenditures for various industries fails to disclose any uniform pattern. We can, however, draw certain conclusions from the figures which are available.

TABLE I
Estimated Values of Buildings
Approved by the Factory Inspection
Branch—Dept. of Labour

Year	Value	*Index	Deflated Value
1926-27	\$20,018,950	100.0	\$20,018,950
1927-28	31,544,800	96.1	32,824,974
1928-29	35,237,150	97.4	36,177,772
1929-30	21,344,735	99.0	21,560,338
1930-31	19,097,100	90.8	21,032,048
1931-32	4,434,000	81.9	5,413,919
1932-33	2,534,000	77.2	3,282,383
1933-34	6,426,000	78.3	8,206,897
1935-36	6,238,850	81.2	7,683,313
1936-37	6,789,850	85.3	7,959,965
1937-38	9,405,225	94.4	9,963,162
1938-39	7,838,975	89.1	8,797,952
1939-40	12,375,270	89.7	13,796,288
1940-41	29,438,300	95.6	30,793,201
1941-42	34,224,030	107.3	31,895,648
1942-43	32,567,070	115.2	28,270,026
1943-44	20,394,800	121.2	16,827,393
1944-45	17,607,685	127.3	13,831,646
1945-46	33,151,685	127.3	26,042,172
1946-47	57,757,600	134.8	42,846,884
1947-48	59,407,600	166.4	35,701,683

*Index of wholesale prices of Building and Construction Materials—D.B.S., Ottawa.

Metal Industries

Construction activity in the metals industries (iron and steel, hardware, heating equipment, automobile parts, etc.) exceeded that in all other industries in the years 1940-42, 1945-46 and 1948 (dollar value). In physical volume of construction the peak was reached in 1940-41 when emphasis was being placed on the production of armaments, etc., after which a slowing down appeared until 1943-44. Since 1943-44 there has been a gradual increase in the volume of construction activity, but the 1940-41 peak has not yet been regained. Some employers have undertaken extensive improvements of working conditions to attract better types of employees. The first factory for the manufacture of roller bearings in Canada was erected in 1945. Some of the large single-occupancy war plants were converted into multiple-

occupancy plants with many varied types of factories under one roof. These factors have all contributed to the general upward trend.

It is evident that the metals industry constitutes a large and expanding element of the Province's industrial activity. Nurtured by the war, this group has attained top rank among the industries of the Province.

No story dealing with Ontario's metal industry would be complete without mention of the automobile industry, which started in Ontario 50 years ago, and which is to-day one of the greatest factors in the prosperity of our Province. Virtually the entire automotive industry of the country is centred here, and its effects reach deep into the lives of many of our citizens, who would be very surprised to have this fact pointed out to them.

Employers in the textile and upholstery fabrics, plastics, plating, insulating materials, glass, welding and stamping techniques all owe a great deal to the fact that the automotive industry needs their products. Going back still further to the basic and primary industries we realize the fact that mining, lumbering, iron and steel, chemicals are all needed in the production of automobiles, and therefore many people employed in these industries are there because of this very large and important customer.

Again, the automobile parts industry gives employment to many thousands of citizens.

Production from the automobile manufacturing plants increased 76% in value in 1947, and the average number of employees was 23,837.

Chemicals

Industries connected with the production of chemicals accounted for a relatively small proportion of the industrial expansion of the Province until 1940-41 when several explosive manufacturing factories were built in connection with

the war effort. In 1940-41 the chemicals industry was second only to the metals industry in dollar value of construction activity. In the next year this value was doubled when a number of new chemical factories were established as permanent assets to Ontario's industrial development. In 1942-43, the chemical industry led all others in value of projects and accounted for over 50% of the total. While the explosives manufacturing and shell filling programme was greatly curtailed, a large synthetic rubber plant was constructed at Sarnia and a small plant at Elmira in 1942. The first factory to produce alcohol from waste sulphite pulp liquors was put into operation during this year and the demand for gas for various types of metal treating furnaces resulted in the construction of a large coke gas plant in Hamilton. A new gas plant was also built in Sarnia to utilize gases from a nearby petroleum refinery and thereby augment natural gas supplies.

In 1943-44 the chemical industry continued to show a healthy growth. The manufacture of basic plastic materials was accelerated and at least four new plants were erected. In 1944-45 it was estimated that over one-half of Canada's chemical plants were located in the Province.

In 1945-46 the chemical industry expended the second largest amount of money on buildings. Large factories were erected for the manufacture of paint and varnish, chemical drugs, plastics and nylon fibres. Since this time to the present numerous extensions have been made to these plants, and it would appear that the chemical industry although largely promoted by the war is destined to retain an important place in the industrial structure of the Province.

Minerals

As was mentioned before, Ontario is particularly favoured geologically. Its mineral resources are vast and varied,

and all this adds considerably to the prosperity and well-being of the population, and means that many diversified industries can flourish here. A few facts regarding the mineral production of Ontario follow:

The greater part of the world's output of nickel is produced in Canada, and the source of all but a small percentage is the nickel-copper ores of the Sudbury district.

Ontario produces all of Canada's iron ore and practically all the pig iron.

Since 1934 Canada has been the world's leading producer of platinum, when she replaced Russia. Metals of the platinum group all come from Ontario.

The leading gold producing mine in Canada is the Hollinger in the Porcupine district and the second is the Lake Shore Mine in the Kirkland Lake camp. Ontario produces over half of Canada's gold.

In 1947 Ontario mines accounted for 48% of the Dominion's copper production.

Indications are that Ontario will lead the Dominion in the production of industrial minerals, and in 1947 Canada's entire output of the following minerals came from this Province:

- Arsenic
- Calcium
- Cobalt
- Iron Ore
- Magnesium
- Molybdenite
- Palladium, rhodium, etc.
- Nickel
- Platinum
- Titanium metal.

Other Manufactures

The great diversification of manufactures has already been mentioned, and this can be appreciated when it is pointed out that as well as being pre-eminent in the manufacture of automobiles, Ontario also leads in the manufacture of agricultural implements and

of starch. In the production of leather tanneries, rubber goods, primary iron and steel, electrical apparatus and supplies, iron castings, fruit and vegetable production, flour and feed mills, furniture, housing and knitted goods, it also leads Canada.

Large percentages of such other products as woollen yarn, carpets, mats and rugs, brass and copper products, jewellery and silverware, printing, publishing and bookbinding, also emanate from this Province.

Electricity

The provision of cheap electricity by the Hydro-Electric Power Commission, the well-known publicly owned power system of Ontario, has been an important factor in the outstanding development of industry in the Province of Ontario.

Great developments are under way to provide more power for the Province, and by 1952 eight post-war generating plants will be ready adding a further 1,000,000 horsepower.

The most important of these is the Des Joachims plant which will give 480,000 horsepower; half of this will be completed in 1950 and the remainder in 1951.

The St. Lawrence power project which is now under consideration will add 2,200,000 horsepower, to be divided between the Province of Ontario and New York State.

Forest Products

The forests of Ontario cover an area of 237,000 square miles, 73% of which is classed as productive, and when considering the economy of the Province it must be realized what a great part is played by the lumbering, pulp and paper and newsprint industries.

The forests of Ontario, and the primary and secondary industries to which they contribute, provide work for nearly 100,000 people, with payrolls over \$150,000,000.

This province is the third largest producer of lumber, and is exceeded only by Quebec in the production of wood pulp and newsprint.

The production of newsprint is of the first importance, and there is a great demand for this commodity all over the world. Since 1913 Canada has led the world in the exportation of newsprint, and although every mill in Canada is working to capacity, the world situation in this regard is still far from being relieved.

The Provincial Government of Ontario is encouraging the processing of pulpwood in the Province, rather than the exporting of the raw material—this has the double effect of producing more valuable exports, and also gives employment to a greater number of people.

Considering the great value of our forest products, not only to Ontario, but to the world at large, the vigorous conservation policies which are now being pursued should be whole heartedly supported by every member of the community.

Role of Government

As was shown earlier, new construction is proceeding at a rapid pace, and many new industries are entering the Province, both from the United Kingdom and from the United States. Much thought and care are being exercised to see that these industries get well established.

Active in this connection is the Trade and Industry Branch of the Planning and Development Department of the Provincial Government, which was formed in 1944, and which now offers a wide range of services to business men in other nations of the world, as well as to those in our own country and Province.

From a very modest beginning, the Branch has grown until the present demands which are made upon it provide ample evidence of the value of the service which it has already rendered, and

will render in the future to the development of the Province. The responsibility of a Government to provide such service can scarcely be questioned, since similar services have long been extended to the majority of other fields. Although the functions of the Trade and Industry Branch are unlimited, inasmuch as trade and industrial matters are concerned, the following is, briefly, a summary of the services rendered:

- (a) Co-operation with other Departments of Government, Provincial, Federal and foreign. With municipalities, industrial and business groups, associations, etc., for the purpose of approving, developing and expanding industry.
- (b) The utilization of the natural resources of the Province and the skills of its people by the establishment of new industries, the use of new manufacturing techniques and the increase in exports of the Province.
- (c) The collection and dissemination of information regarding raw materials, industrial assets of municipalities, available labour, transportation, etc.
- (d) The provision of statistics relevant to Canada, and particularly Ontario's domestic and foreign trade, and the provision of information regarding the manufacture of particular products.

- (e) Co-operation with firms or individuals interested in establishing new industries or expanding their present effort. Co-operation with manufacturers, traders and business organizations in locating sources of materials and developing new products and expanding markets.
- (f) Co-operation with the Department of Industrial Research Services of the Ontario Research Foundation in presenting research services to Ontario manufacturers.
- (g) Close co-operation with Trade and Industry Department, Ontario House, London, England, in assisting United Kingdom firms to get established in Ontario.

All the activities of the Trade and Industry Branch are provided without cost or obligation, and all inquiries and information are treated as confidential.

From the foregoing brief resume of the industrial expansion now taking place in Ontario, it can be seen that this expansion is based on a solid foundation and there are many sound reasons for the development that is going on.

That being the case, it can be assumed that the Province will continue to attract new industry, and the future can be faced with confidence, and with the feeling that a large population will lead a prosperous and varied life in Ontario.

Manitoba: A Province of Industry

By R. E. GROSSE

IT is a matter of common observance that Manitoba is rapidly achieving a place of importance in Canada as a province of industrial development. Manitobans are convinced that industrially, the trend is westward, as evidenced by the fact that the province is experiencing an industrial expansion unprecedented in its history. Leading industrialists point out that the industrial development of Manitoba exceeds that of the other Prairie Provinces and con-

fidently predict that within the next decade a considerable proportion of Canada's manufacturing will take place within the province. They base their optimism on Manitoba's strategic geographic location combined with its widespread hinterland of rich and varied natural resources, its abundant and low cost electric power, its skilled labor force, the best labor relations in the dominion, and finally—the province's vast number of untapped resources on which to base the development of manufacturing industries.

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