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## A Quebec Hive of Industry

Cheap Electric Power in abundant Quantity is the Basis of the amazing Industrial Development in St. Maurice Valley District which is now attracting world wide attention

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For romantic beauty and for scenic grandeur the Falls at Shawinigan have always enjoyed widespread renown. But, from the standpoint of a manufacturing centre, the St. Maurice Valley district, in which the Falls are situated, was a dozen years ago, practically a negligible quantity. Today this district is recognized as one of the most important industrial sections in Canada—important by reason of its present progress and prosperity, and far more so by reason of its future potentialities.

There is one supreme factor which accounts alike for the amazing industrial strides which the St. Maurice Valley district has made in the past few years and for the almost illimitable opportunities which undoubtedly lie before it in the years to be. That factor is, of course, cheap electric power in abundant quantities. The use of power is the most important element in our complex modern civilization. The cost of the power derived from the use of coal is mounting rapidly, while, at the same time, every horse-power so derived lessens the coal reserves upon which the world can draw.

Water is the other main available source of power. The supply of water, unlike that of coal, is limitless and inexhaustible. In a locality where the material advantages are so supreme as to permit of the development of water-power at a relatively low cost, there is present, in addition the further advantage of having all the primary elements of the cost of production fixed instead of being subject to the uncertainties in the cost of production to which steam plants are exposed on account of fluctuations and variations in the price of coal. Such a locality is the St. Maurice Valley district where the waters of the turbulent St. Maurice river have been triumphantly harnessed to the service of mankind.

### Amount And Source Of Power.

It was in 1898 that, in order to utilize this water-power for industrial and commercial purposes, the Shawinigan Water and Power Company was organized and a charter obtained. Shawinigan, it should be mentioned, is situated about midway between Montreal and Quebec City. It lies about twenty miles back from the city of Three Rivers where the St. Maurice River enters the St. Lawrence River, and is distant above nine miles from town of Grand'Mere, the remaining town in the St. Maurice Valley district. The Valley has a population of something like 100,000 people, of whom about 14,000 are located in Shawinigan, 25,000 in Three Rivers, and 8,000 in Grand'Mere.

The main power developments of the Shawinigan Water and Power Company are at Shawinigan Falls, (200,000 horse-power), at Grand'Mere where it controls the power from the development owned by the Laurentide Power Company, (125,000 horse-power), and at Gres Falls, four miles below Shawinigan Falls, where it owns a power site capable of cheap development for 75,000 horse-power. At present the combined generating capacity is about 330,000 horse-power. But, with the flow of the St. Maurice river regulated by the great storage basin at La Loutre Dam, and the future development at Gres Falls, the combined generating capacity will be raised to over 600,000 horse-power. This large concrete dam was built by the Quebec Government and a very large addition to the power which can be developed at the low water stages of the river is obtained by its means.

### General Shipping Facilities.

The St. Maurice Valley industrial district is most favorably placed as regards general shipping facilities. The territory is well served by the Canadian Pacific Railway, the Grand Trunk Railway and the Canadian National Railways. Extensive ocean transportation is available within a few hours reach either at Montreal or at Quebec City. In the winter-time export shipping is carried on from St. John or Halifax. There is an excellent seaport at these rivers, it being claimed for that harbor that it is one of the finest on the

American continent. Transportation road is constantly improving, and at the present moment the Quebec Government has in course of progress an extensive roadway building program.

### The Electro-Chemical.

As is well known, there are certain chemical industries that can be carried on satisfactorily, only where there is an abundance of cheap electric power. In attracting world-wide attention as the electro-chemical centre of Canada, there being numerous electro-chemical industries located there. These include the Canada Carbide Company, which manufactures calcium carbide and acetylene gas; the Canadian Electrode Company, which manufactures the larger sizes of carbon-electrodes; and the Canadian Electro-Products Company which manufactures acetic acid and acetone from the acetylene gas supplied by the Canada Carbide Company; these three concerns being subsidiary companies of the Shawinigan Water and Power Company. Then there is the Northern Aluminum Company, a branch of the United States Aluminum Company, which reduces to Aluminum American refined bauxite that is brought in by rail and which has also a wire drawing and cabling plant, and, in fact, manufactures all the aluminium wire that is made in Canada. Another electro-chemical industry at Shawinigan is the Canadian Caloxite which manufactures carborundum or carbide of silicon, which is the best known of the artificial abrasives and which also turns out a large amount of high-grade silicon. The Prest-O-Lite Company also operates at Shawinigan a compressing plant for acetylene gas which is purchased from the Canada Carbide Company. The Shawinigan Foundries have an experimental electric furnace plant for the manufacture of various kinds of steel and for general experimental purposes.

### Great Diversity Of Manufactures.

The part which Canadian industry, as represented at Shawinigan, played in winning the war is a very notable and honorable one. It is gratifying, too, to learn from those on the spot, and in a position to know whereof they speak, that the plants erected during the war to supply war needs are finding that they have an equally important part to play under peace conditions. An excellent start has been made from which it is confidently anticipated that a great commercial future from the chemical standpoint will result.

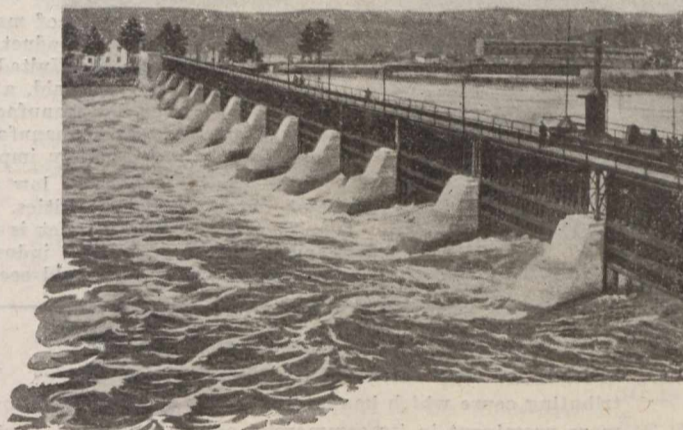
On a visit to the St. Maurice Valley district, one cannot fail to be profoundly impressed with the diversity of the industries that are carried on there. Some more detailed account of these industries and the plants that are operating them will be given in future articles dealing specifically with the three centres of industry in the district, namely: Shawinigan, Three Rivers and Grand'Mere. For the moment, suffice it to indicate their range in general terms. There are important cotton mills both at Shawinigan Falls and at Three Rivers. At both these places, too, there are iron and steel plants. Some of the largest pulp and paper mills in the Dominion are located in the St. Maurice Valley district. The lumber industry is a thriving one. A ship-building plant, prepared to build ships, either passenger or freight,

up to 10,000 tons, and with an engine shop equipped to construct marine engines of any sizes, is in full blast at Three Rivers. At that city, too, there has just been erected and opened to the public a grain elevator and public warehouse, the elevator itself having a capacity of 40,000 bushels of bulk grain. The mere mention of these facts will serve to give some idea of the varied nature of the industries which, within the last decade or so, have established the St. Maurice Valley district as one of the notable manufacturing sections of Canada and with prospects of future development second to none. Electric power, relatively cheap and abundant for all present needs and which can readily be added to as fast as plants can be erected to utilize the increase, is the link that binds all these diverse industries together in one home. Informed opinion take the view that this diversity makes for the stabilization of labor.

### Fine Manufacturing Location.

At both Three Rivers and Shawinigan Falls, suitable sites for large manufacturing plants, with water and railroad facilities, are available at very favorable prices. In short, it is not too much to say, that the manufacturer catering to a world-wide market and requiring cheap power and advantageous shipping and railroad facilities, as well as a supply of raw materials, the two places named offer a location that is almost ideal.

Reference has already been made to the excellence of the power situation and of the shipping and railroad conditions—conditions which put this industrial section of Quebec in touch with the world and which go a long way to solve for the manufacturer the problem of getting those raw materials that are required for particular processes. With regard to other raw materials, there is little fault to be found with the supply. Bituminous coal in normal



Dam and Control Gates at Shawinigan Falls.