

Although some of you may be informed on this, I make mention of it to acquaint you with the fact that a great industry has not and may not yet be free from such influences.

Power Sites

Passing to the water power resources of the province. I have only noted a few of the power sites because as yet we have little, if any, knowledge of a great portion of the province in this respect. We do know, however, that in practically every district there is a water power of first magnitude located. Beginning with the East Kootenay, on Elk River, there is a power of upwards of 10,000 horse-power awaiting development. Coming west in the vicinity of Nelson are the developments at Bonnington Falls by the West Kootenay Power Company and Nelson city. At this location the river may be developed at a number of places. As a direct result of the development of Bonnington Falls we have the cities of Trail and Grand Forks and their smelters. In the first-mentioned is to be found one of the largest on the continent and I am informed the only one turning out silver, gold, zinc, lead and copper and a number of by-products.

South, we have two small developments in the vicinity of Grand Forks, with great possibilities on the Pend d'Oreille River awaiting development. In the Railway Belt at Revelstoke the city has a small development and although there are many power possibilities here, there has, as yet, been no real investigation to determine to what extent they may be developed. In the Kamloops district there are a number of sites, Adams River, Barriere River and Myrtle Falls. Of these, the Barriere has been developed by the city of Kamloops and is now supplying power to that city and for irrigation purposes along the Thompson River, the latter use increasing from year to year. In the Lillooet district there is a great power at Bridge River which may be said to be strategic to that whole district. Coming to the coast north of Vancouver, there are many power possibilities; the important developments being Powell River, Ocean Falls and Swanson Bay. There are a great many other sites of varying magnitude, of which we have as yet little knowledge. It is most interesting in this district to note that the great lakes, which form the headwaters of the west branch of the Fraser River and the south branch of the Skeena, are at an elevation of approximately 2,700 feet and about 20 miles from tide water. We have little knowledge of the divide between these lakes and the tide water, but it is obvious that there are possibilities that are enormous. In the vicinity of Prince Rupert are to be found a large number of locations of varying size, from a few hundred horse-power up to 20,000 or thereabout. Travelling eastward from Prince Rupert along the line of the Grand Trunk Pacific, there are many locations of first magnitude, of which as yet we have few facts, and as to that portion of the province to the north of this railway, there are many sites which remain to be investigated and which in time may be made use of.

Developments Planned for Vancouver Island

On Vancouver Island a number of excellent sites are to be noted, the developed ones being Jordan River, Goldstream, Nanaimo, and the Puntledge, while the undeveloped ones of first magnitude are Stamp Falls, Campbell River and Nimpkish River. At Swanson Bay one of the pulp companies has plans under way for a paper industry similar to the Powell River, Ocean Falls and Swanson Bay, but not of the magnitude of the two former in that the power available is not quite so great. Of the possibilities on the island, too much cannot be said of Campbell

River. It is strategic to the whole island and, according to various opinions, ranges all the way from 100 to 150,000 horse-power or more, inasmuch as there are wonderful storage possibilities behind it.

Hundreds of Small Sites

Leaving Vancouver out of consideration for the present, I have briefly outlined to you the general location of power sites throughout the province, making no mention of the hundreds of small ones of which we have little knowledge, but which may be developed in a similar way to some 50 or 60 in and throughout the Kootenays—sites that produce from 50 to 200 horse-power and which are used for lighting and in the operation of mines and concentrators. It will be obvious to many of you that powers of such magnitude are of inestimable value when the time comes that here and there throughout the province industries spring up which can be operated by power from such sites.

SHIPBUILDING AT HALIFAX

SHIPBUILDING on an extensive scale at Halifax, N.S., is foreshadowed in a formal announcement by Hon. C. C. Ballantyne, Minister of Marine and Fisheries. Private interests have bought the former site of the Acadia Sugar Refinery, adjoining the drydock, and three shipbuilding berths will be erected. These berths will be large enough to accommodate boats of approximately 10,000 tons, and it is expected that ships will be launched within fifteen months. The enterprise is known as Halifax Shipbuilders, Limited, the prime movers being James Carruthers, J. W. Norcross and R. M. Wolvin. They contemplate an outlay of \$3,000,000 or \$4,000,000 on structures and equipment.

Mr. Ballantyne announced recently that he was negotiating for the erection of a modern shipbuilding plant somewhere on the Atlantic coast. It was pointed out editorially in *The Canadian Engineer* for May 9th, that Halifax is the port in Canada which needs shipbuilding the most and which nature built most ideally for the purpose. There is no other way in which a steady, plentiful and economical supply of labor can be assured for ship-repairing; and ship-repairing is essential at Halifax. Workmen can be transferred at a moment's notice from ship-building to ship-repairing jobs.

Big Help to Naval Authorities

Mr. Ballantyne says that the only assistance that the government is giving to the enterprise is the placing of a limited number of contracts at fixed prices for the construction of modern steel freighters of about 10,000 tons capacity. The government had not even indicated to the promoters any particular site upon which the yard should be established.

It is expected that the industry will employ between 3,000 and 4,000 men. The city council of Halifax has granted tax exemption to the company.

The construction of this shipbuilding plant will be a matter of great satisfaction to the naval authorities of Canada and Great Britain, who have for some time past keenly realized the advantage to their work which would accrue from the location of a large shipbuilding plant at Halifax. This plant will also be very useful after the war in providing repair facilities for modern marine machinery. There has been to date a great lack of such repair facilities at Halifax, with consequent detriment to the progress of that port.