

level, the streams on either side of the divide necessarily have heavy falls. The water is thrown off very rapidly and even in time of freshets these streams, for the most part, carry no great body of water. As a consequence of this lack of stream flow, driving operations have not proven very successful, and have hitherto been confined almost exclusively to a few of the larger streams, leaving whole areas of spruce, balsam, birch and cedar quite untouched by the axe. Any method, therefore, by which this vast quantity of timber might be placed on the market, either in the form of pulp or otherwise, should, and in due course must, receive the serious attention and consideration of those engaged in the lumbering industry in the province.

In the development of the plant under consideration, it is proposed to largely follow methods which have proven successful in the State of Virginia, where the president of the corporation, Mr. Robert Whitmer, of Philadelphia, has other large interests. The main line of railway running back from the mill site at Pabos Mills to the timber limits in the interior, will have maximum grades of about 3 per cent., with curves up to 20 degrees being employed. The main-line locomotives being rod engines of special design, are guaranteed to take curves of even 50 degrees, if necessary. So far as the line was located it has been found possible to have, with the loaded trains, either down or level grades, so that only the trains going back light to the woods have any up grades to encounter. This will naturally reduce the cost of operation.

The rails used are sixty lbs. with standard angle-bar connections. The main-line has been substantially built, but lacking, of course, the same degree of excellence required in a line intended for passenger traffic. From the main-line, branches will be constructed, as required, down the various gullies to the lumber camps. On these branch lines engines of a different type from those in use on the main-line will be employed. They are known as the Shea engines, and are specially constructed for climbing heavy grades, the drivers and tender wheels on one side being geared to a longitudinal shafting. There is thus no dead centre, and such engines will lift a load up grades that for ordinary rod engines would be quite out of the question. Grades of even 6 and 8 per cent. can be easily operated upon with such engines. Their speed, however, is slow, about ten miles per hour under favorable circumstances being the limit. It is for this reason that on the main-line there will be an advantage in using the ordinary type of rod engine.

The construction work on the railway this season was done entirely by day labor, but next spring some further sections may be let out to contractors. The main-line has now been constructed a distance of 4 miles into the interior, where it connects with a branch to the first lumber camp. Cutting will therefore proceed through the entire winter at this camp, the wood being brought to the mill by train.

There is a deep water wharf at Pabos Mills, with connecting siding from the mill, so that in summer, when required, shipments can be made by water. Sidings from the mill also connect with the line of the Atlantic, Quebec and Western Railway, and shipments over this railway make connections at Metapedia with the Intercolonial.

The corporation was organized early in 1913. Mr. H. W. Racey, who for some years was connected with the lumbering interests of Price Bros., Limited, Quebec, and of Mackenzie-Mann & Company interests in the far

West, is general manager. The corporation is composed of a group of capitalists, most of whom are, or have been, heavily interested in lumbering operations throughout the United States.

COAST TO COAST.

Esquimalt, B.C.—A new system of 128 lamps has been installed and put into operation by the British Columbia Electric Railway Company at Esquimalt, and has marked a new departure in the history and progress of the municipality.

Saskatoon, Sask.—The initial thirteen and a half miles of municipal street railway was set in operation on January 1st, 1913, and almost from the first showed a margin over operating expenses. This margin has increased from a negligible quantity to a gratifying profit.

Toronto, Ont.—An endeavour is being made to bring about reciprocity in boiler inspection by the public works departments of British Columbia, Ontario, Saskatchewan and Alberta. The standards of the provinces are almost identical, and no obstacle should stand in the way of the desired reciprocity.

Port Arthur, Ont.—The C.P.R. has under way an extensive piece of work at Current River. The river has been turned off to one side, and steam drills are being employed at excavation work prior to the construction of the subway under the bridge. Before the subway can be completed, a large quantity of rock must be removed, which is now part of the bed of the river.

Le Pas, Man.—A new wireless station has been built by the Marconi Wireless Company at Le Pas, in connection with the construction of the Hudson Bay Railway, and as soon as all the apparatus in connection with the station is complete, the company will be prepared to receive commercial business along this and connecting wireless chains. This new station will eventually be a link in a chain that will be perfected when the Hudson Bay and Strait have been opened to navigation.

Regina, Sask.—There now seems every likelihood that the City of Regina will enter into an agreement with Mr. A. S. Porter, which will result in a material reduction in the cost of electrical energy. Mr. Porter owns large deposits of lignite coal in the southern part of the province, and he has advanced several propositions to the city, one of which is that a company in which he will be interested will generate power from the lignite coal, and sell the power at a low rate to the city, the city to retail and distribute it. Mr. Porter is now in the city for the purpose of going further into detail with regard to the proposition. Readers will remember mention of this proposal some time ago in *The Canadian Engineer*.

St. John, N.B.—Some interesting data has been furnished concerning dredging operations, which have been in progress from April 1st up to the present, at the St. John harbor, exclusive of Courtenay Bay. The work accomplished has been the dredging at the mouth of the channel required to straighten its entrance, the removal of foul ground, the dredging of the Beacon Bar and the making of the berths at the West Side, where the new wharves are being constructed, the clearing up of the present berths, the deepening of Wellington and Nelson slips, the dredging of the Navy Island Bar in the course of the ferry boat, and the deepening of the West berth at the I.C.R. wharf. In all, these operations represent the dredging of one and a quarter million cubic yards of material.