

shorter than the G. T. P. via Fort George, and 243 miles shorter than the Canadian Northern Ry.

4. The route to tidewater at Bella Coola is almost equidistant from Edmonton as to Prince Rupert and Vancouver, it will be seen therefore that as a direct line to the seaboard the P. & H. B. Route has a great advantage and can compete on equal terms with the other railways for trade of country as far south as Edmonton.

GRADES.

As the grades obtainable are of extreme importance on a Railway destined for a heavy grain traffic, we are glad to report that a maximum of 26.4-10 ft. per mile is obtainable for westbound traffic at reasonable cost. For eastbound traffic there is one stretch of about 13 miles ascending from the upper Bella Coola Valley to the Plateau country where a grade of 116 feet per mile is advisable, as its use renders practically a saving of distance of 50 miles, and consequently \$2,000,000 in cost of construction; there will also be several stretches of 52.6 per mile grade ascending the Bella Coola Valley adjacent to the 116 feet per mile grade, but these grades are all confined to this portion of line, so that they can be conveniently operated by using assistant engines. Outside this stretch no grades will exceed 26.4 per mile, so that the grades throughout will compare well with the other railways through British Columbia. The Canadian Pacific Railway has at present time maximum grades of 116 feet per mile against both east and westbound traffic, they are spending millions to reduce the grades against westbound traffic to 21.1 per mile, but will still have 116 ft. per mile against eastbound traffic.

The Grand Trunk Pacific will have one grade of 52.8 ft. per mile in one stretch of 20 miles against eastbound traffic, the remainder of the grades being 21.1 ft. per mile in both directions.

The Canadian Northern Ry. will have 21.1 ft. per mile grades in both directions.

The Kettle River Valley Ry. grades are similar to those of the C. P. Ry., with four high summits to cross as a through line over the Columbia & Western Connection.

It will be seen therefore that the P. & H. B. route between Bella Coola and Fort George *compares well* in grades with the other railways, being greatly superior to the Canadian Pacific and Kettle Valley and nearly equal to the