

	MILES.
Southern.....	200
Toronto, Grey and Bruce	120
Toronto and Nipissing.....	90
Muskoka Junction (about).....	50
Air Line (about).....	60
Intercolonial (about).....	400
	920
Grand total.....	3,599

In addition to these there are other lines contemplated, so that—not considering the projected Pacific road—it is likely that, in about two years time there will be at least 4,000 miles of railway in Canada in operation. Up to this time the railways of Canada have cost about \$165,000,000. The total receipts last year, of 15 of the principal lines, were about \$14,000,000.

2. CANADIAN PACIFIC RAILWAY.

The following interesting information concerning Mr. Waddington's proposed route for the Canadian Inter-oceanic Railway, and the character of the country it penetrates, is compiled from a lengthy report just published by that gentleman.

LENGTH OF THE PROPOSED ROUTE.

	Miles.
From Montreal to Ottawa	115
“ Ottawa to the Mattawan	195
“ the Mattawan to Fort Garry.....	985
“ Fort Garry to the Yellow Head Pass	985
Thence to the limit of British Columbia.....	52
Route by the Upper Fraser (British Columbia) by “short cut”	445
	2,467
Total length from Montreal to the Pacific	2,777

Against 3,305 miles from New York to San Francisco, or 228 miles less.

The distances given in the pamphlet are greater than these. In the first place, because no allowance was made for the proposed short cut in British Columbia, which, in all probability, can be realised; and secondly, because they were only roughly calculated and rather exaggerated.

CLASS OF LAND.

The above distances may also be classed in three categories, as regards the nature of the soil and the country traversed, viz.:-
 1. Level, rich, arable country; 2. Rolling country, less fertile; 3. Poor, mountainous, and timbered, in the following proportions—Valley of the Ottawa, 70 miles, rolling; Montreal Valley, 69 miles, level; Clay Level Country, 250 miles, level; Laurentides, north of Lake Superior, 20 miles, level; Neepigon and Black Sturgeon district, 41 miles, level; Height of Land to White Mouth River, 335 miles, poor; Great Western Plain, 1,012 miles, level; Great Western Plain, approach to Rocky Mountains, 25 miles, rolling; Valley of the Assiniboine, 39 miles, rolling; Rocky Mountains to the Cache, 80 miles, poor; Bald, or Gold Range beyond, 110 miles, poor; along Horsefly Lake and River, 20 miles, rolling; Chilcoaten Range (the valley itself fertile), 84 miles, poor; being a total of 1,544 miles of level country, 200 of rolling, and 723 of poor.

Recapitulation.—Rich and cultivable territory, 1,744 miles; grazing, timbered, and mountainous, 723 miles; total, 2,468.

EXTENSION TO VANCOUVER ISLAND.

Since writing the above pamphlet, it has been ascertained that by constructing suspension railroad bridges over the three straits between the mainland and Stuart Island, Stuart and Valdes Islands, and Valdes and Vancouver Islands, the railway can be eventually continued down the west side of Bute Inlet and across Vancouver Island, either to the head of Kyuquot Sound or to Alberni Canal, at the head of Barclay Sound; or to Esquimalt Harbour, near Victoria. By this means all the inconveniences of an intermediate terminus, and the expense, trouble, and delay of transshipment across the Gulf of Georgia, which, as compared with San Francisco, would render the road practically useless for commercial purposes, are avoided; and secondly (this is more important in an imperial point of view), a continuous and permanent communication with the mainland is established at a point offering the greatest strategical security, and which would be impregnable; thus dispensing with the absolute necessity of passing before the disputed

island of San Juan, and very much diminishing the importance of that vexed question. With such weighty motives to carry out the scheme, it becomes interesting to know what would be the probable outlay. The following approximate calculations show it to be enormous; such considerable undertaking must, therefore, necessarily be deferred, though it points to the advisability of carrying the road to Bute Inlet, apart from other weighty considerations.

Three lines are available, of which the following would be the estimated cost:—

To Tahsish Arm, Kyuquot Sound, 195 miles, £3,665,000; to Stamp Harbour, Alberni Canal, 164 miles, £3,298,750; to Esquimalt Harbour, Victoria, 248 miles, £3,940,750.

3. RAILWAYS AND TELEGRAPHS IN EUROPE AND AMERICA.

The progress of railway construction is among the most notable facts of modern times. A very short time ago there were scarcely any of those iron ways, now looked upon as a prime necessity in every country claiming to be at all civilized. Men not yet very old remember since there were none, and since the good old stage coach with its four smart horses was looked upon as the perfection of travelling appliance, at once for comfort and speed. All that is changed. To be far from a railway is now to be out of the world, and the novelty of thirty years ago is with us among the most ordinary of conveniences. In the old world and the new, railways are almost everywhere, and the most formidable natural obstacles are found to offer no hindrance to the progress of that which has done so much to bring the distant near the cheaper, and facilitate intercourse among all nations. Of course such a vast network of railroads as is now in operation, and the management of the prodigious commerce thus created would, to all appearance, have been impossible but for the corresponding extension of the electric telegraph, so that any notice of the progress of the one implies and necessitates a reference to the other.

At the close of last year the railways in the principal countries of Europe and America, including also those in British India, stood as follows:—

	Area Square miles.	Population.	Rail-roads in miles.	Railroads Cost.	Cost per mile.
United States.....	2,992,879	39,607,171	54,686	\$2,376,010,770	\$44,255
Russia in Europe.....	1,762,791	67,260,431	8,700	1,448,356,214	166,477
German Empire.....	266,511	38,514,846	10,018	1,099,711,322
Alsace and Lorraine.....		2,720,460
France.....	207,480	36,067,694	9,934	1,570,664,892	158,714
Austria.....	227,234	35,553,592	4,429	327,369,535	73,915
Great Britain and Ireland..	119,924	30,838,210	14,247	2,511,314,435	176,260
Italy.....	107,961	26,470,000	4,325	382,580,772	93,108
Spain.....	182,753	16,301,850	3,429	18,643,672	86,317
Turkey in Europe.....	207,438	16,500,000	319	367,437,924	107,156
Belgium.....	11,267	4,961,644	1,703	14,936,551	46,629
Sweden.....	168,042	4,095,681	1,194	74,539,082	62,437
Portugal.....	36,510	3,987,867	522	52,887,474	106,987
Netherlands.....	13,464	3,735,682	851	85,034,081	97,202
Switzerland.....	15,233	12,510,594	897	78,157,928	87,134
Denmark.....	14,553	1,738,565	401	22,902,714	57,114
Norway.....	120,729	1,701,628	114	4,055,656	92,170
Greece.....	19,941	1,332,508	160	5,000,000	50,000
British India.....	1,402,203	216,157,187	4,028	423,000,000	100,500
Canada.....	403,530	4,017,526	2,352	104,741,703	70,165

Let it be noted that in 1830 there were only 23 miles of railway in operation throughout the whole of the States, and not much more in Britain; that in 1840 there were only 2,818 in the same country; while so recently as 1850 there were no more than 9,021 miles in operation, where now there are 55,000 at least. During the whole time of the civil war in the neighbouring republic there were never less than a thousand miles of new railway opened every year, while nearly twenty thousand have been opened since the return of peace. In Great Britain there were only 1,630 miles open for traffic in 1842, and the next year saw it increased by only a hundred miles; in 1852, however, the amount had risen to 7,337; in 1862 to 11,470, and in 1870 to 14,610. The progress of the two countries in railways may be seen at a glance:—

	1849.	1870.
United States.....	7,365	54,686
Great Britain.....	5,950	14,610

It is to be noted also, that in India about 10,000 miles of railway are at present in course of construction, while so late as 1860 only 849 miles of railway were to be found in all that large country. In Canada a considerable amount of work is also being done in extending a network of the same indispensable means of traffic over our new and rising country. What the next ten years will see in the