

North west of Long Lake, the country is overspread with a fine yellowish sand beneath which in some places a considerable thickness of gravel is formed, and a light colored clay underlying all.

Back from the lakes, which are numerous, the country has a rolling surface and a light sandy gravelly soil. Many of the trees are large enough to be valuable for timber. A similar country to this one is said to extend westward to Lake Nipigon and eastward to Moose River.

White River enters Lake Superior 4 miles S. of the Pic. 28 miles from its mouth is White Lake 18 miles long, and containing over 30 islands. As far as the eye could reach N. E. of this lake the country appeared low, level and well timbered.

The whole country examined north of the

hilly region around Lake Superior and east of Lake Nipigon, may, in general, be said to be level, with a sandy soil, mostly dry but with occasional swamps and low rocky ridges. The soil appears mostly rather poor and rendered worse by the burning-out of the vegetable mould by repeated fires.

The timber will prove of value in the construction of the Pacific Railway, and the country along any route through this region will afford abundance of wood for fuel.

The climate is about the same as parts of Quebec already inhabited. No difference was observed in the vegetation between Lake Superior and the Albany. Oats and barley have been cultivated at Long Lake. Hay, potatoes and ordinary vegetables thrive well. Potatoes were harvested the first week in October, and the tops had not been touched with frost.

Public Works of the Dominion.

The following particulars are taken from the Report of the Minister of Public Works of the Dominion :

CANALS.

These may be divided into three groups: canals already in operation, canals being surveyed, and projected canals.

The St. Peter's Canal connects St. Peter's Bay on the southern coast of Cape Breton, Nova Scotia with the Bras D'Or lakes. It is a little more than half a mile in length, and gives access to and from the Atlantic Ocean. Its breadth at bottom is 26 feet. There is one tidal lock, the extreme rise and fall of the tide being 9 feet. It was closed by ice on the 19th Jan., 1871, and re-opened on the 15th April. 656 vessels, loaded with coal, limestone, marble, fish and flour, passed through it, and 262 open boats.

The Chambly Canal and St. Ours Locks and Dams are on the Richelieu River, between the St. Lawrence and Lake Champlain, at St. Ours, 14 miles from the mouth of the river; it is divided by a small island into two channels. The St. Ours Lock, $\frac{1}{2}$ mile long of cut stone, and an earthwork dam of 300 feet are in the eastern channel, and a large dam, 600 feet long of crib work filled with stone, in the western. These works give a navigable depth of 7 feet to the river, for a distance of 32 miles. They were thoroughly repaired during 1871. Navigation closed on October 5, 1870, and re-opened on March 20, 1871.

The Chambly Canal is 12 miles long, 36 feet broad at bottom, and 60 at surface, and with 9 locks. Considerable repairs were made on this canal during the year. It closed on 3rd December, 1870, and was re-opened 3rd May, 1871. The largest vessels which can pass through it are 114 feet long, 23 broad, with a draught, when loaded, of $6\frac{1}{2}$ feet, and a tonnage of 30 tons.

The Lachine Canal from Montreal Harbor to Lachine is $8\frac{1}{2}$ miles long, 80 feet broad at bottom, and 120 at the surface of water. There are 5 locks with a rise of $4\frac{1}{2}$ feet. The Canal closed on the 10th December, 1870, and opened 24th April, 1871. The trade during the season of 1871 exceeded that of any previous year.

The Beauharnois Canal is on the south side of the St. Lawrence, $15\frac{1}{2}$ miles from the head of the Lachine Canal. It connects Lake St. Louis with Lake St. Francis. It is $11\frac{1}{2}$ miles long, of the same breadth as the Lachine, with 9 locks, rising $82\frac{1}{2}$ feet. It was closed on the 5th December, 1870, and opened on the 19th April, 1871. Considerable repairs were made in 1871.

The Cornwall Canal, $32\frac{1}{2}$ miles from the head of the Beauharnois, is $11\frac{1}{2}$ miles long, 100 feet broad at bottom, and 150 at surface, with 7 locks and 48 feet rise. It was closed on the 8th October, and re-opened 20th April. During the year, besides ordinary repairs, a new workshop was erected, and the canal was cleaned out by the steam dredge.

The Farran's Point, Rapide Flat, and Galops Canals, are known as the Williamsburgh Canals. The first is $\frac{1}{2}$ of a mile long, distant 5 miles from the head of the Cornwall, with one lock rising 4 feet. The second is 4 miles long, $10\frac{1}{2}$ miles from the former, with 2 locks rising $11\frac{1}{2}$ feet.

The Galops, $4\frac{1}{2}$ miles higher up, is $7\frac{1}{2}$ miles in length, with three locks rising $15\frac{1}{2}$ feet. All three are 50 feet wide at bottom, and 90 at surface. They were closed on the 10th December, and re-opened 21st April. During the year 1871 some repairs were made to the Galops Canal.

The Welland Canal consists of a main line from Lake Ontario to Lake Erie, with 3 branches, 'Welland River,' 'Grand River,' and 'Port Maitland.' The main line is about $27\frac{1}{2}$ miles long. The breadth at bottom varies from 26 to 90 feet, and at surface from 58 to 200. There are 27 locks, with a rise of 530 feet.

The Welland River branches to the Welland and Niagara Rivers, are altogether about $\frac{1}{4}$ of a mile in length, with two locks.

The Grand River feeder, by which the canal is supplied with water from that river, is 21 miles long, with two locks rising between 7 and 8 feet.

The Port Maitland branch is $13\frac{1}{2}$ miles long, with one lock rising $8\frac{1}{2}$ feet.

The entrances to the canal are Port Colborne and Port Maitland on Lake Erie, its outlet, Port Dalhousie on Lake Ontario. It was closed on the 16th December, 1870, and