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(From the Report of Alex. Murray, Esq., Assistant Provincial Geologist, dated Montreal, January 1849.)

WESTERN AND HURON DISTRICTS.

General Description of the Coast.

Of the east side of the promontory separating Georgian Bay from the main body of Lake Huron, a general description was given in the Report of last year. The west side is marked by characteristics similar to those which in the same Report were stated to belong to the south side of the great Manitoulin Island. At all parts from Cape Hurd to Rivière au Sable (north) the coast is low, rocky and rugged, and scantily clothed with a dwarfish growth of evergreen trees. It is deeply indented by numerous bays and creeks, and at intervals, bound by groups of small, low and usually barren islands of limestone. As is the case on the southern shores of the Manitoulin, these bays, though frequently capacious, rarely constitute good harbours, the approach to them being at times extremely dangerous, even for vessels of small draught, owing to the shallows which extend for a long distance out into the lake, consequent upon the low westerly dip of the calcareous strata composing the promontory. Safe and commodious places of resort, however, for vessels navigating the lake, are not altogether wanting, and among these probably the best is the harbour of Tobermory, near Cape Hurd, well known to most persons who have frequented this part of the coast. Boats can find shelter in many places, either in coves or creeks, or among the islands, and at the mouth of the Rivière au Sable (north), there is an excellent boat harbour, but a sand-bar at the entrance effectually prevents the admission of vessels drawing over three feet.

Losing its rocky nature, a decided change takes place in the character of the coast, at the Rivière au Sable (north), about the mouth of which, and for several miles south, sand dunes prevail; and farther on, a beach of sand, strewed over in parts with boulders, extends some distance beyond the Sauguine. Between the two rivers there is no harbour of any description, and with strong northerly or westerly winds, it is next to impossible to effect a landing, in consequence of the barriers of boulders which lie along the shore at considerable distances from the land, the shallowness of the approach, and a heavy surf which rolls in from the lake. Bordering the lake along the sandy tract there is no amelioration in the timber, which consists for the most part of a mixture of inferior evergreens, with small white birches and cedars, until approaching the

Sauguine, where a gradual but evident improvement in the nature of the soil is indicated by the more frequently recurring presence of good sized pines, accompanied with maple, elm and birch. The mouth of the Sauguine affords a good harbour for boats and small craft, but as is the case with all the rivers of the coast, a bar is formed across its entrance, over which a heavy sea breaks when the wind is at all strong from any point between south west and north: its entrance, under such circumstances, is difficult, and attended with considerable danger. At a very short distance up from its junction with the lake, the river becomes rapid and is no farther navigable except for canoes or small boats, and rapids occur at intervals to the highest part we reached, which might be about five miles from the mouth. In these five miles the river flows between banks of clay, gravel and sand, frequently rising boldly to heights of between twenty and a hundred feet over the water; the surface of the country on both sides is flat or gently undulating, and while in many parts it bears a heavy growth of pine timber, in others it yields maple, elm, ash, and other hardwood trees of good size. About two miles from the mouth, on the right bank of the river, there is an Indian settlement, from which a portage has been cut across the peninsula to the Indian Village of Neewash, at the head of Owen's Sound. The territory to the North of the portage being exclusively an Indian Reserve, remains in its primeval state of wilderness; and with the exception of a building which was raised some years ago by a fishing company at Caheto, or Fishing Island, there is not a single dwelling house on any part of the coast all the way to Cape Hurd, a distance of nearly sixty miles.

Following the coast south from the Sauguine, the land is low, with a beach alternately of sand and boulders, for about six or seven miles, beyond which occasional ledges of rock appear, until reaching the Little Pine River, which enters the lake to the south of Point Douglas. Beyond the Little Pine River the land becomes more elevated, and the character of its forest proclaims a still further improvement in the soil. At the outlet of a stream, dignified, though a mere brook, with the name of the Big Pine River, in which the epithet Big, however, is probably intended to qualify the wood rather than the water, the surface is thickly grown over with pine of large size, and before reaching Point Clark, some nine miles farther, the interior consists chiefly of excellent hardwood land. A beach of fine sand skirts the shore for the whole distance. From Point Clark, the coast which, from the mouth of the Rivière au Sable (north), has a general bearing about S.W. by W., turns due south, and maintaining this course to Port Frank, in the Township of Stephen, a distance of fifty miles, presents to the lake, in almost all parts, steep and lofty cliffs of clay, the summit of which spreads back into an extensive level country, producing a luxuriant vegetation of the heaviest description of hardwood trees. At Port Frank the trend of the coast changes south west, and again with the adjacent country becomes sandy, presenting innumerable sand dunes, which extend several miles back, and in many instances rise to the height of a hundred feet and more over the surface of the lake. This character prevails to the mouth the Rivière au Sable (south,) and beyond it to within a short distance of Cape Ipperwash or Kettle Point, which is about fifteen miles from Port Frank. Kettle Point displays a few flat rocks coming to the water's edge, but beyond it a fine sandy beach, with high cliffs of clay rising at a short distance back, hold the coast line to within two miles of the entrance of the St. Clair River, where the country again appears to assume an arenaceous character.

In the direction in which we proceeded along this coast;

* In the August number of this Journal we published a Geological Map of a considerable portion of Western Canada, by W. E. Logan, Esq., F.R.S. & G.S., Provincial Geologist. We now propose to furnish monthly abstracts of those portions of the Geological Reports which describe the physical structure of the country comprehended within the limits of the Map. We are induced to adopt this method of disseminating information respecting the Geology of Canada, not only on account of its intrinsic value, but also because it is a matter of extreme difficulty to meet with copies of the earlier Reports, in consequence of the destruction of the reserve during those disastrous conflagrations which destroyed the Parliament Buildings at Montreal and Quebec.