mouth, or to a point lying eighty-one miles in a straight line, south-west from the ordinary high tide mark, at the extremity of the above tongue of land. In making a careful track-survey of this part of the Nelson River, its possible future use for the navigation of large vessels was constantly kept in view, and numerous soundings were taken, not only between Beacon Point and head of tide, but as far as the first rapid. The width of the channel, velocity of current, nature of the banks, &c., were also noted.

The width of the mouth of the river, from Beacon Point to the opposite shore, is about six or seven miles at high tide, but the extremely flat nature of the country renders it difficult to draw an exact line between the land and water. Above this, for ten miles, the width is from three to four miles, at the end of which distance it narrows gradually till the head of tide water is reached at the upper end of Seal Island, twenty-four miles from Beacon Point, where the breadth is only about one mile and a-half. At low tide the space between the banks in the estuary of the river is found to be occupied by mud-shoals scattered over with boulders, with a channel winding down the middle. This channel is rather narrow and its bottom irregular. It has an average depth of two to three fathoms at low tide as far as Flamborough Head, a prominent point 126 feet high, on the north-west side, nineteen miles from Beacon Point. At the mouth of the river, the average spring-tides amount to about twelve feet, and neap-tides to about six feet.

The foot of Gillam's Island, the first in the river, is twenty-two and a-half miles from the extremity of Beacon Point, and the head of the next, or Seal Island, much larger than Gillam's, is a mile and a-half higher up. The shallowest part of the river anywhere noted was just at these islands, the depth being only about ten feet. The bed of the river consists of shingle, resting on boulder clay.

From this shallow part, at the head of tide, the average depth of the centre of the river was found to be twenty feet, as far as I went, but sometimes the soundings showed over thirty feet. The mean velocity of the current in the middle of the river is about two and a-half miles an hour, and the general width of the stream is about three-quarters of a mile. Besides a few shingle and grassy islands, exposed only during low water, twenty-six timbered islands occur in the above distance. With the exception of a few exposures of limestone, the banks are composed of fine drift clay. In ascending from the sea they gradually rise from the level of high tide at the mouth, to an elevation exceeding 100 feet abreast of Seal Island, and this height is maintained on one side or the other as far up as I followed the stream. The banks on both sides usually rise steeply from the edge of the river or at a short distance back from it. Occasionally, the almost perpendicular banks of clay are nearly 200 feet high.

The rapid, near the highest point which I reached, is not a formidable one, and has an even descent amounting to only a few feet. It might be ascended by a steamboat of strong power, in which case an additional stretch of good navigation would be gained, which my Indians estimated at fifteen miles. At the end of this stretch, the Limestone Fall, a cascade in several steps, is reached.

Before concluding, I may be permitted to make a few remarks in regard to the proposed construction of a highway to connect the seaboard with the system of inland navigation which centres in Lake Winnipeg.

Assuming that the products of the North-West Territories can be carried to Europe and elsewhere through Hudson's Bay and Strait, the great importance of opening communication to some point at or near York Factory, as soon as circumstances will permit, must be patent to every one. The centre of the great agricultural region, lying between the United States boundary and the Mackenzie River, is more than 300 miles nearer to Norway House than to Winnipeg, and the former is 100 miles nearer to York Factory than the latter is to Thunder Bay, on Lake Superior. As to the question whether we should look forward to the construction of a canal or a railway as the most advantageous means of connecting Lake Winnipeg with Hudson's Bay, it appears evident, from the facts which I have given, that the latter is both the most practicable and desirable, for the following, amongst other reasons:—