

EVIDENCE OF OWEN O'SULLIVAN, C.E., OF THE GEOLOGICAL SURVEY,  
HEARD BEFORE THE SELECT COMMITTEE, FEBRUARY 20, 1907.

Mr. O'Sullivan explained that in 1904 he was engaged as assistant to Mr. Wilson, in examining the west coast of James bay. They went up the River Kapiscau for 150 miles and surveyed it, and found mostly swampy ground, right to about the head waters of the Kapiscau, longitude 86. His impression was that the whole coast from the southern extremity of James bay at the mouth of the Hurricane, up to Cape Henrietta Maria, for an average of 100 miles in depth, is mostly swamp country. It is partly peat and wet spagnol, wet moss. There is a bluff of small spruce here and there isolated.

In 1905 he was sent to survey the coast between York Factory and Cape Henrietta Maria. The Factory is situated on the north bank of the Hayes river, which is quite close to the mouth of the Nelson. The waters of both rivers go into Hudson bay together. Unfortunately the ice stopped him at Cape Tatnam from July 1 until July 18. He could not get along the coast with his canoe and camping outfit. The ice was held there by a north wind. The wind would take it all along the bank. It was on an average of about four feet deep at that date, from July 1 to 18, 1905. It extended as far out in the bay as the eye could reach. It was floating ice, driven by the wind right up along the bank, and very dangerous. He thought a properly constructed steamer could have broken through. It was all broken up, floating ice. It was very dangerous with a canoe. Witness had to keep clear of the pieces when the tide was coming in or going out. The shore is very flat and the tide runs out three or four miles, and sometimes he would be stuck. When he would be taking his course on distance with the chronometer, his canoe would be left dry in the mud and the tide running out. He went as far as Fort Severn. That is half way between York Factory and Cape Henrietta Maria. He left there on August 4 and could still see the ice at sea.

The shore between York Factory and Cape Henrietta Maria was swampy as far inland as he could walk in two or three days.

Mr. O'Sullivan testified that during the summer of 1906, he started from Split lake on the Nelson and made for the head waters of the Little Churchill river, going down the Little Churchill to the Big Churchill. The country between Split lake and Big lake is mostly swampy.

## AGRICULTURE.

The country about Big lake is a good loamy soil with easy slopes surrounding the lakes. From Big lake to the Big Churchill the country is rocky and swampy with a good deal of good loamy soil in places—a rich clay loam. The rock is mostly granite and gneiss. It is very hard to find out whether it is suitable for agriculture on such an expedition. It is hard to know the extent of the soil, but the witness thought the climate was suitable. There were lots of boulders all through the country. It is possible to cultivate what there is of the land. There are places where the land extends to the size of a dozen townships, and then there would be three or four times that much without having in it enough land for a good sized township.

In the vicinity of Churchill there is grass in the valleys of very good quality. It occurs about half-way down the Little Churchill.

Good potatoes are raised at Split lake. Witness had a bag of potatoes grown there. They were rather small, but very tasty. That was in June, and they were grown the previous year. Split lake from the coast, by the Nelson, would be about 175 miles.