dance of its boulders and pebbles: the unaltered limestones which occur *in situ* immediately beneath; the dark grey siliceous greywacké above described; compact hard blue limestone; gneiss syenite and granite; crystalline dark, grey and mottled and porphyritic diorites; slaty and jaspery banded hæmatites, compact siliceous magnetites, sometimes consisting of pure ore and fine-grained quartzite in thin alternate layers; quartzites of different shades; hard red sandstones and conglomerates; chloritic and hornblendic schists; dull red jaspers with oolitic structure like those of the Manitounuck or the Animikie series, or mixed with streaks and small disseminated spots of the peroxides of iron; compact amygdaloids; breceiated hard blue limestone; drab-coloured clay ironstone.

Extent of palæozoic rocks.

From our present knowledge of the distribution of the flat-lying palæozoic rocks west and south-west of James' Bay, it is pretty certain that they occupy an area as extensive as the whole region between the Ottawa River and Lakes Ontario, Erie and Huron. The contours of the outer margins of this basin, as well as those of the different horizons within it, as far as they have yet been determined, indicate that its geological centre or highest point is under James' Bay, off the mouth of the Albany River. In such an extensive and undisturbed basin, the occurrence of Carboniferous rocks might appear possible, and if they existed at all it would probably be near this centre. But the total absence of any trace of them in the drift which has come from that direction, and spread itself over the extensive region alluded to, leaves very little hope of finding such rocks in this part of the Dominion. The Devonian rocks no doubt underlie a great part of James' Bay, and they probably occupy a still greater area of the extraordinarily level bottom of the main body of Hudson's Bay itself, and here there would be a greater probability of the occurrence of Carboniferous rocks than in James' Bay. Yet no evidence of their existence has so far been afforded by the drift of the shores of the larger bay, or in any part of the surrounding country which has been examined.

Absence of Carboniferous rocks.

Source of the drift.

Judging from the approximate distribution of the rocks in Hudson's and James' Bays, and the courses which were probably followed by the drift, as indicated by the glacial striation all around these bays and in the great interior regions to the south-west of them, the drift of the country to the west and south-west of James' Bay would be derived from the bottom and east side of this bay, or it may have partly come originally from the site of Hudson's Bay, and thence been transported over the floor of James' Bay to the country referred to.

On the Kenogami, at six miles by the stream above the mouth of the large southern branch called the Bagutchewan, the river makes a