

north along an old channel from Georgian bay, now filled with drift, but shown to exist as a rock valley by a number of well borings. This fact implies that the region of the upper lakes and the country to the north of Toronto for at least 70 miles were free from ice and had a climate not much different from the present, for the delta deposits contain insects and trees evidently drifted down by a stream from the country to the north. The delta beds contain no glacial material, no striated stones nor calcareous clay such as we find in the stratified layers between the latter till sheets. The brick makers note the difference, since the peaty clay burns to red brick, while the upper clay rich in lime burns to gray brick. There is no reason to suppose that glaciers contributed any water to the river flowing from Georgian Bay to Scarboro.

Toronto is only 700 miles from the high of land in Labrador in latitude 53°, the region which Mr. Lowe has shown to be the center from which the Labrador ice spread out; and the country 70 miles to the north has been proved free from ice at the time. It is highly improbable that a stagnant glacial mass should have remained in central Labrador only 600 or 700 miles from the Don valley with its mild climate lasting for a much longer time than has elapsed in the recent period since the last ice sheet disappeared. There is no ice sheet in Labrador now, and it must have been even less possible during the Toronto Formation.

Whether the Toronto Formation has its equivalent north of the Hudson Bay watershed in the lignitic interglacial beds described by Bell and Parks along Moose river and its tributaries cannot yet be answered positively, though it is highly probable. The Moose river interglacial beds of stratified clay, sand and gravel, containing peaty matter and wood, resemble greatly those near Toronto. The interglacial wood has undergone about the same amount of change as that found near the Don, and the pressure of later ice sheets has flattened the trunks and branches in both to about the same degree.

Shells are seldom found in the Moose river interglacial beds, though Dr. Parks mentions marine shells below a seam of lignite on the Kwatabehegan river,¹ giving evidence of oscil

¹ Bur. Min., 1904, p. 108.