

fresh. We have no definite information as to the exact level at which the St. Lawrence became fresh in the Montreal district, but it appears probable that it was fresh at a time when it was flowing at a level which is to-day represented by the 100-foot contour.

With the return of the St. Lawrence to its former proportions, though now flowing over a bed modified by the Pleistocene deposits, the recent system of surface drainage was set up. This is not of any considerable proportions on the Island of Montreal, consisting of a few inconspicuous streams which have cut their beds into the boulder clay, Leda clay, or Saxicava sand. Details of this drainage system were several small fresh-water lakes, which have been drained since the country was occupied by man, i.e., within historic times, indeed, almost within human memory. On the floors of these lakes have been deposited shell marl, composed of the hard parts of fresh-water gasteropods, and peat, with stratified lake clays, in some cases.

The different members of the Pleistocene and Recent succession will be described in detail below, with especial reference to their mode of occurrence and modifications, sections being given to illustrate the typical, and some of the more interesting of the non-typical, developments.

TOPOGRAPHY.

The effect of the activity of the Pleistocene period has been to almost completely obliterate former topographical irregularities, leaving only minor, rounded elevations instead of higher hills of more varied form. The interspaces between the elevations have been filled in by the deposits of the Pleistocene, and so the tendency to eradication of topographical irregularity furthered still more. The Island of Montreal is characterized by an almost flat surface, due to the Pleistocene deposits. Outside of Mount Royal, the most interesting topographical features are the two outliers of Leda clay capped by Saxicava sand at the western end of the island, which have been carved out of the more continuous deposits of those materials in the Recent