

*Basin of Lake Erie.* The exceedingly shallow basin of Lake Erie has its bottom as near a level plane as any terrestrial tract could be. Its mean depth, or even maxima and minima depths from its western end for more than 150 miles, scarcely varies from 12 or 13 fathoms for the greater portion of its width. The eastern 20 miles has also a bed no deeper than the western portion. Between these two portions of the lake, the hydrography shows an area with twice this depth (the deepest sounding being 35 fathoms). This deepest portion skirts Long Point (the extremity, a modern peninsula of lacustrine origin), and has a somewhat transverse course. An area of less than 40 miles long has a depth of more than 20 fathoms. The deeper channel seems to turn around Long Point, and take a course towards Haldimand county, in our Canadian Province, somewhere west of Maitland. The outlet of the lake, in the direction of the Niagara river, has a rocky bottom (Corniferous limestone).

The study of this lake at first appears less practicable than that of Ontario, but, when its former outlet and its tributary rivers are described, the writer trusts that he will have made some observations, that may help to clear the darkness that hangs about the history of our interesting lake region, before the advent of the Ice Age.

*The Dundas Valley and adjacent Cañons.* We may consider that the Dundas valley begins at the "bluff" east of the Hamilton reservoir, and extends westward, including the location of the city of Hamilton and the Burlington Bay, at least its western portion. With this definition, the width at the Burlington heights (an old lake terrace 108 feet above present level of the water) would be less than five miles. At a mile and half westward of the heights, the valley suddenly becomes narrowed (equally on both sides of its axis of direction, by the Niagara escarpment making two equal concave bends, on each side of the valley, whence the straight upper portion extends, the whole resembling the outline of a thistle and its stem), from which place it extends six miles westward to Copetown, on the northern side; and three and a half to Ancaster, on its southern side. The breadth between the limestone walls of this valley varies somewhat from two to two and a half miles. The summit angles of the limestone walls on both sides are decidedly sharp.

Dundas town is situated in this valley, its centre having a height about 70 feet above Lake Ontario, but its sides rise in