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and in some of the hillocks, fragments of ancient beaches and terraces remain.

The eastern portion of the Dundas valley is occupied by a marsh, which is separated from Burlington Bay by "Burlington Heights"—a ridge which rises abruptly from the waters (of the same level) on both sides, to a height of from 108 to 116 feet, with the breadth on the summit of only a few hundred feet. Burlington Beach, which separates the bay from the lake is the counterpart of the "Heights" and rises eight feet above the water. It is not usually more than a quarter of a mile wide. Burlington Bay is excavated out of Erie clay and is 78 feet at its greatest depth.

After this topographical description, let us now consider the elevation of the beaches and terraces, and their composition. (See Plates VI and VII.)

1. The lowest beach is that forming the present lake margin and rising to a height of eight or ten feet above its surface, of which Burlington Beach is a portion. It is composed wholly of sand and pebbles (mostly flattened) derived from the ruins of various rocks of the Hudson River formation, with a few small crystalline pebbles. The pebbles are often full of characteristic Hudson River fossils. Sometimes the rounded slabs measure more than a foot in length, though usually much less. At the western end of the lake the present beach does not contain any pebbles of the Niagara formation. The nearest exposures of the component rocks are more than twenty miles away to the northward.

2. The next terrace is 70 (to 80) feet above the lake, and consists of sand,—or, in the Dundas valley, where it forms a conspicuous flat terrace, it is composed of thin-bedded loose arenaceous clay, with some fine gravel along the margin. This terrace in the Dundas valley is the remnant of the deposits of Saugeen clay.

3. The most conspicuous of all the terraces is that at 116 feet above the lake, of which "Burlington Heights" is a portion. Its composition is precisely of the nature of Burlington Beach, and on a succeeding page, the structure will be more fully noticed in studying its origin, along with that of Burlington Beach.

4. The upper portion of an isolated conical hill, rising to 180 feet on the southern side of Dundas, is composed of stratified fine gravel, probably of the Hudson River formation, but with large stones and semi-angular slabs (sometimes a foot and a half long) composed of Niagara dolomites and other rocks of that formation.

5. On the northern side of the town of Dundas there is an old beach with the sand and fine gravel exposed from 224 to 261 feet above the lake.