

more accurate index of the elevation of the coast in recent times than the measured depth of a channel whose origin is subject to some doubt.

The most important light from the immediate vicinity of the mouth of the Hudson concerning high elevation has been presented by Veatch<sup>1</sup> on the basis of borings made in the glacial deposits of Long Island. An elevation of at least 250 feet is indicated previous to the deposition of the Jameco gravels, beds seemingly near the base of the Pleistocene series, but separated from that base on Long Island by deposits tentatively correlated with Professor Salisbury's Pensauken group by Veatch. The whole history is one of alternating elevation and depression above and below the present stand of the sea in relation to the land.

As is frequently repeated in the later pages of this report, the submarine Hudson channel makes it possible to admit high elevation whenever the facts over the land on the north require such an interpretation of its history.

The Hudson gorge from New York city northward is fairly distinct, as far as the vicinity of Fort Edward, where it widens out into the Fort Edward basinlike district; yet over the floor of this basin a shallow but definite rock trench is traceable northeastward along the course of Wood creek to the head of Lake Champlain.

**Hudson rock terraces.** The excavation of the gorge below the floor of the ancient Hudson valley has left well defined rock terraces bordering the Hudson. The terraces and the gorge have alike been somewhat modified by glacial action, glacial striae being observed very generally along the river banks through the whole length of the valley except in such places as recent rock falls from the steep bank have exposed new sections of the bed rock.

The elevation of these terraces must correspond approximately therefore with the lower levels of the ancient valley floor of the Hudson. The following figures represent the present attitude of the rock terraces between New York city and Fort Edward.

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<sup>1</sup>Veatch, A. C. Diversity of the Glacial Period on Long Island. Jour. Geol. 1903. 11:762-76.