The phenomena shown at Nyack, so far as my observations go, afford no indication of sea level since the retreat of the ice sheet different from that now existing, though this evidence is wholly negative in regard to a recent rise of the water level.

Tarrytown delta. At Tarrytown, Pocantico brook (Gory brook on the United States Geological Survey map) has cut deeply through a deposit of sand forming its ancient delta on the margin of the Hudson gorge. At Tarrytown the eastern wall of the Hudson gorge changes its course from a few degrees east of north to nearly north, and at the same time the rocky wall advances slightly to the westward. In this angle of the bank below the brim of the ancient rock terrace on the northern edge of the town lies the deposit named.

The surface of the deposit is about 60 feet above sea level, rising in a small mound to above 80 feet. On the north it is bounded by steep slopes, in part cut back by the stream which flows at its base and in part an original depression evidently marking the presence of ice while the sands were being deposited.

Deposits south of Croton point. The ice which covered the Hudson valley south of the Hudson Highlands assumed a lobate margin at the time of its halt along the line of the terminal moraine. The axis of most rapid motion in this lobe lay on the west side of the Palisade trap ridge in the Hackensack lowland of New Jersey. East of this line the ice moved southward and eastward across the lower Hudson; west of the line the ice moved to the southwest at angles somewhat greater than the southwest course of the lower portion of the Hudson itself. During the retreat of the ice from the moraine toward the southern edge of the Highlands it is to be presumed that the same general bottom movements of the ice would have been maintained till the ice thinning over the Highlands continued to push through the Highland gorge alone and thus became restricted to a small glacier occupying the Hudson gorge.

The margin of this small glacier it is believed is found in the frontal deposits at Croton point and in the vicinity of Haverstraw; but the deposits south of this stage in the retreat pertain to the broader development of the ice sheet which had not as yet lost its marginal continuity with the ice sheet extending eastward