

Chapter 3

GLACIAL DEPOSITS OF THE MIDDLE HUDSON VALLEY

North of the Highlands the glacial features of the Hudson take on a somewhat different aspect from those seen on the south. At Newburg and Fishkill glacial clays come to the river front in the form of terraces capped by sand and gravel, but gradually give way upstream to coarser and coarser stratified deposits, till at New Hamburg on the east bank glacial gravels appear like those near Peekskill. Thence northward to near Kingston point the glacial deposits bordering the river below the 200 foot contour are mainly ill defined deposits of gravelly till or rude kames such as are laid down where large masses of ice have melted out. The molding sands of this district are perhaps of a different origin. From Kingston northward to Albany and Troy there comes in a remarkable series of clay deposits which everywhere show by their surface being free of later drift and by their sharp incision by postglacial streams that they are distinctly later than the occupation of the valley by the glacier or its remnants and that they are, in fact, the most recent of the series of deposits which are to be associated with the disappearance of the ice. It remains to set forth what has been learned concerning the retreat of the ice sheet from the Hudson valley between the Highlands and the Mohawk north of Albany.

Cornwall terrace. On the west bank of the Hudson at the northern portal of the Highland canyon is the heavy deposit of gravel which constitutes the Cornwall terrace. The materials are very well shown in the cut bluff at the railroad station near the river. The materials all show signs of strong water action but not without the presence of ice. In the road up the hill from the railroad station a boulder 6 feet long was exposed at the time of my visit. The top of the terrace slopes toward the river and is covered with coarse drift. It is difficult to arrive at any satisfactory conclusion concerning the level of standing water at this stage from the remnant of the terrace. The surface as it exists may have been shaped above the level of the water in the Hudson gorge. The altitude of 170 feet is attained by the flat surface somewhat back from the brink of the bluff. On the