



FIG. 13.—UPPER CONTACT OF PALISADE DIABASE IN RAILROAD CUT EAST OF NEW DURHAM, N. J.

Looking north. Shows dike-like attitude of the trap at its western exposure, cutting up through the Newark formation.



FIG. 14.—THE PALISADES OF THE HUDSON FROM THE NEW JERSEY SIDE.

Looking south. The vertical cliff of diabase and the steep talus-covered slope are well shown.



FIG. 15.—THE PALISADES OF THE HUDSON, SEEN FROM YONKERS, N. Y.
Shows the even crest line of the plateau surface and the tree-covered talus below the cliff.

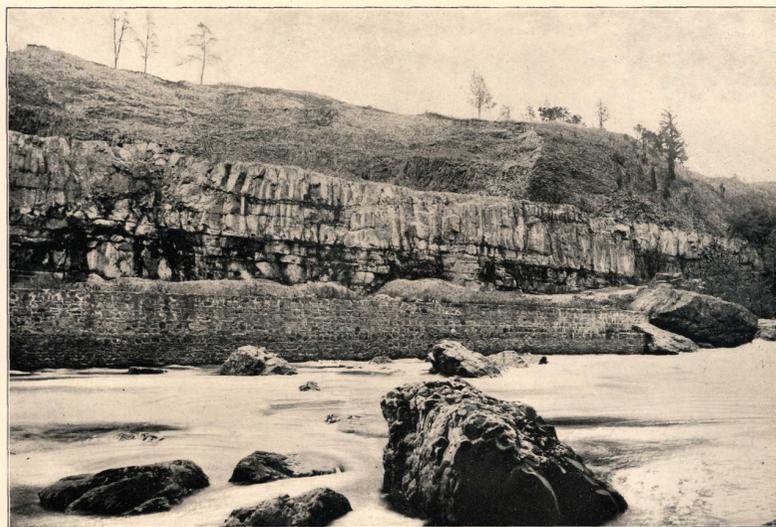


FIG. 16.—CONFORMABLE CONTACT OF BASALT OF THE FIRST WATCHUNG FLOW ON NEWARK SANDSTONES, BELOW FALLS OF THE PASSAIC, PATERSON, N. J.
The sandstone forms the base of the section immediately above the retaining wall and is overlain by massive-bedded lava, with finely columnar basalt on top.



FIG. 17.—BASALT COLUMNS OF FIRST WATCHUNG FLOW, O'ROURKE'S QUARRY, WEST OF ORANGE, N. J.
Shows a lower flow with large vertical columns overlain by another flow with small radial columns.



FIG. 18.—NEAR VIEW OF COLUMNAR BASALT AT BASE OF FIRST WATCHUNG FLOW, O'ROURKE'S QUARRY, WEST OF ORANGE, N. J.

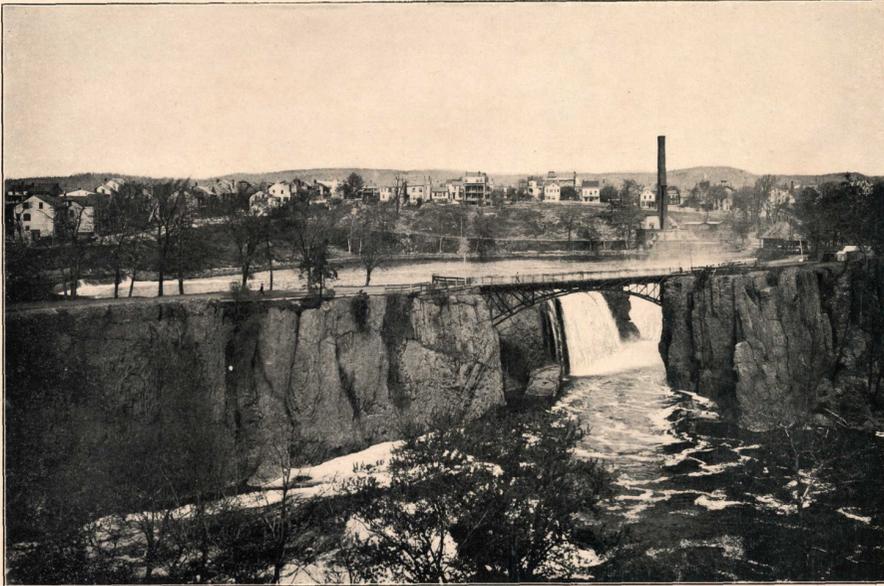


FIG. 19.—GREAT FALLS OF PASSAIC RIVER, PATERSON, N. J.

Shows the escarpment of the Watchung basalt, the wide gorge cut by the stream, and the narrow cleft into which the fall has retreated in following a major joint system.

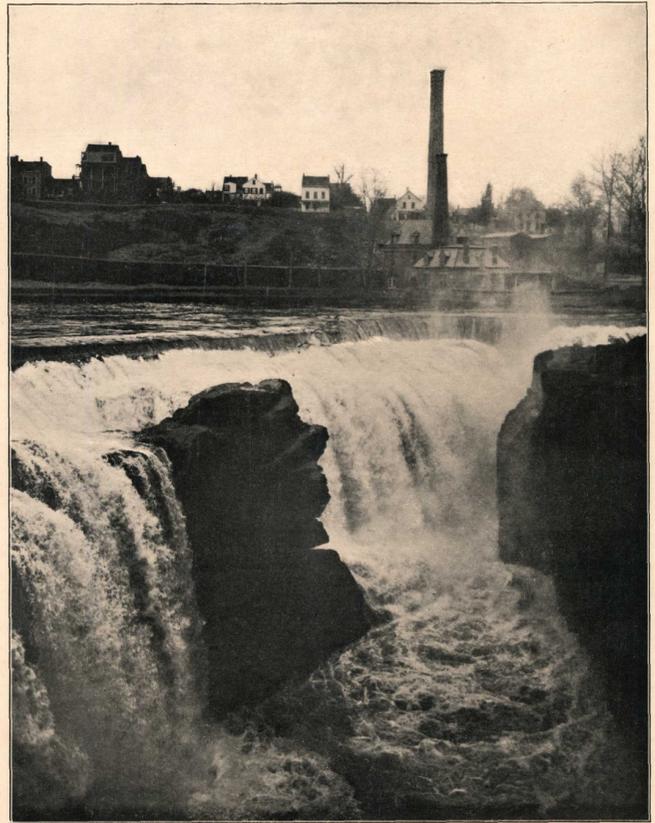


FIG. 20.—NEAR VIEW OF GREAT FALLS OF PASSAIC RIVER, PATERSON, N. J.

Looking along the narrow cleft into which the water falls.



FIG. 21.—LITTLE FALLS OF PASSAIC RIVER, AT THE TOWN OF LITTLE FALLS, N. J.

Looking up the river at a low stage. Shows the gorge cut by the river in the Watchung basalt, and the structure of the basalt.



FIG. 22.—TERMINAL MORAINE NEAR GRASSMERE, STATEN ISLAND, NEW YORK.

Looking northeast toward the heights of the island. Shows the irregular hillocks, ponds, and large boulders characteristic of the moraine.

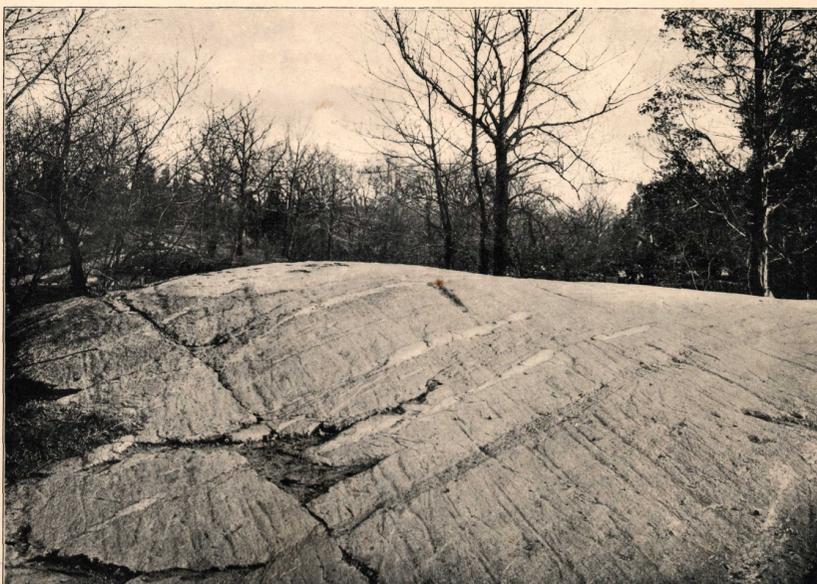


FIG. 23.—GLACIATED SURFACE OF HUDSON SCHIST, BRONX PARK, NEW YORK CITY.

Looking southeast. Glacial striae appear as grooves crossing the lamination of the schist. The rounded profile is characteristic of glacial rock masses.

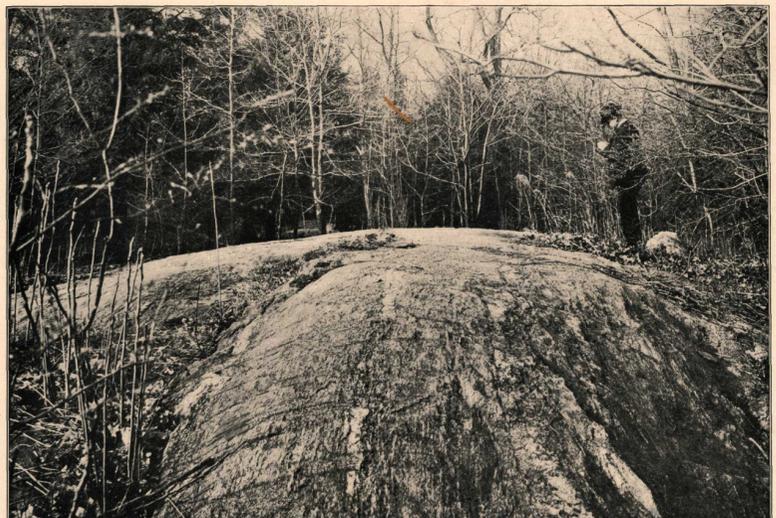


FIG. 24.—GLACIATED SURFACE OF HUDSON SCHIST, BRONX PARK, NEW YORK CITY.

Looking northeast along the lamination of the schist, which is typically developed and brought out by weathering. Glacial striae extend across the rock in the foreground. The rounded profile is characteristic of glacial rock masses.