

Deposits near Pelham N. Y. Hutchinson creek is a small stream entering Long Island sound at East Chester. From Pelhamville southward to East Chester the stream is bordered by terraces of glacial material, somewhat effaced by postglacial erosion. The terraces stand at an altitude of about 60 feet at Pelhamville and descend to or near sea level at a distance of $2\frac{1}{2}$ miles. In the upper part the deposit is coarse gravel, with boulders intermixed along the contact with bordering outcrops of gneiss and schist. Below the 40 foot contour on the south the materials are conspicuously finer.

In the 20 foot terrace on the east side of the stream there is a frequent cross-bedding from 6 to 10 inches thick with the dip of the cross-beds to the southeast, and this invariably so, indicating continuous current movement such as that of a strong flowing stream of water. The entire section recalls that of the glacial outwash. The slope about 30 feet to the mile is rather steeper than the distribution of the materials would indicate for a stream flowing into the present sea level. If the water level was then at about 20 feet, the slope of the terrace back of and above this limit would accord with the slope of outwash plains.

Englewood sand plain. Salisbury in his work in New Jersey in 1894 described many ill defined but recognizable glacial outwash deposits made in succession in the retreat of the ice across the interval between the Palisades and the Orange trap range. One of the most notable of these accumulations is that extending from Highwood through Englewood, forming the divide between the waters flowing southward into Newark bay and those flowing northward through the Sparkill cut into the Hudson.

A line of kames extends northeast and southwest along the head of this deposit, turning northward along the east side of the Northern Railroad of New Jersey and merging into the drift at the base of the Palisade slope. The elevation of the plain at the southern margin of the narrow kame belt is about 60 feet. Thence the plain slopes southward to about 40 feet in Englewood Center, gradually descending to 20 feet in the southern part of that town. At one point on its eastern margin in the stream valley which borders the deposit, topset and foreset beds were seen in my visit, indicating a water level at about 30 feet.