

ELEVATIONS OF THE HUDSON ROCK TERRACES

Kings Bridge.....	200
Yonkers	350
Tarrytown	140
Sing Sing.....	160
Croton	140
Peekskill, Verplanck and Buchanan.....	140
Garrison	200
Cold Spring	220
Dutchess Junction	160
Poughkeepsie	200
Albany	220
Schuylerville	300
Mouth of the Moses kill.....	200

The rock terraces bordering the Hudson gorge are rather uniform in elevation. The terraces are higher now on hard than on soft rocks, higher in the Archaean belt of the Highlands and southward to Yonkers and over the Palisades than elsewhere; lower on the soft Hudson shales and slates and in the region of the Triassic sandstones. The lowness of the terrace on the east bank between Peekskill and Dobbs Ferry is accounted for by the former overlap of the Triassic basal beds in this region; but these differences of level are not all accounted for by differential erosion, including glaciation and weathering, as between the high in the Highlands and about Yonkers. The terrace high from Sing Sing southward to Kings Bridge appears too high, and in view of the rapid falling off of the terrace level in New York city and as marked by the decline of the Palisade ridge in Hoboken and southward to its pre-Cretaceous level, indicates a local uplift, central about Yonkers.

The narrowness and local absence of the rock terrace within the Highlands is to be taken as evidence of the slower or belated cutting through the Archaean rocks of that district. The terrace is clearly shown, however, at West Point, Highlands Station and Garrisons, and appears to have extended through the Highlands as the old floor of the Hudson valley, thus indicating the existence of a water gap here at a time as remote as the epoch of