ground. There is here indubitable evidence of the deposition of the terrace in the presence of a tongue of ice lying in the Hudson gorge as Gilbert some years ago suggested.[1]

On the opposite side of the river below Cold Spring, a terrace of glacial gravels forms a counterpart to the terrace at the parade ground. It also, rests on and covers over the ancient rock bench at this point. Traces of the gravel of this stage exist in Cold Spring on the north bank of Foundry brook near the mills.

Gravelly water-laid drift also mantles the rock terrace both north and south of Highland Falls, and flattish deposits of the same character are not wanting on the rock terrace above Garrisons on the east bank of the river.

The West Point terrace is but the last and lowest of a series of deposits marking the dwindling away of the ice tongue which filled and pressed through the Highland canyon. Ascending the road passing from the soldiers quarters at West Point westward along the base of Crow's Nest mountain, one arrives within a distance of ½ mile at a small frontal moraine at an elevation of 400 feet. This deposit, mostly flat topped, is mounded on the east and though no section is shown it is probably composed in part of outwashed gravel and shoved or dumped materials coming from the ice sheet when the ice still rose to this hight in the valley.

Going westward to a junction with the Highland Falls road, then ½ mile southeast from the junction, this road traverses a distinct moraine forming a spur on the northern side of the valley. The deposit is convex downstream and is probably due to a lobelet of the ice pushed through this valley to this point prior to the halt at the 400 foot contour above West Point. These details are mentioned as showing the evidence of successive stages in the melting of the ice in the valley.

So far as the terraces at the West Point stage are concerned, their close approximation in level with the hight of the old rock terrace, the filling of spaces in the river bend upstream from the projection of the old rock terrace, and the thin veneer of the wash of this stage over the old rock terraces on both sides of the river suggest that the rock terrace controlled the hight of

[1]Cited by Dr F. J. H. Merrill, in Am. Jour. Sci. 1896. 41:461.