

fectly horizontal strata, the lowest portion of them 300 feet above the river and 600 feet above the sea. From this elevation to an altitude of nearly 1,200 feet the same series of strata is traceable, continuously, up the slope of the mountain, and some patches are seen here and there even as high as 1,550 feet above the sea. They are made up in great part of finely laminated silt, alternating with coarser materials, through which stones from four to five feet in length are scattered. These large boulders, and some smaller ones, are polished on one or more sides, and marked with glacial striæ. The subjacent rocks, also, of gneiss, mica slate, and quartz, are everywhere grooved and polished as if by the passage of a glacier.*

At one spot a vertical thickness of 130 feet of this series of strata is exposed to view by a mountain torrent, and in all more than 2,000 layers of clay, sand, and gravel were counted, the whole evidently accumulated under water. Some beds consist of an impalpable mud-like putty, apparently derived from the grinding down of felspar, and resembling the mud produced by the grinding action of modern glaciers.

Mr. Jamieson, when he first gave an account of this drift, inferred, in spite of the absence of marine shells, that it implied the submergence of Scotland beneath the ocean after the commencement of the glacial period, or after the era of continental ice indicated by the subjacent floor of polished and grooved rock. This conclusion would require a submergence of the land as far up as 1,550 feet above the present sea-level, after which a great re-upheaval must have occurred. But the same author, having lately revisited the valley of the Tummel, suggests another possible, and I think probable, explanation of the same phenomena. The stratified drift in question is situated in a deep depression between two buttresses of rock, and if an enormous glacier be supposed to

* Jamieson, *Geological Quarterly Journal*, vol. xvi. p. 360.