

needle slate structure, is almost completely bare of drift or clay. The entire knoll to the height of nearly 60 feet shows signs of water action and strong scourways exist between minor knobs at its western base. The course of the current which did this work was evidently through the open valley in which Durkeetown lies and which joins the Wood creek valley near Dunham basin. The divide in this valley east of Fort Edward is about 170 feet; and the divide in the Fort Edward channel occupied by the canal is now lower having an elevation of about 150 feet. Both channels have been swept by strong currents, but as already indicated there are evidences in this field that the eroded clays in the low grounds about these channels as well as in the gorge of the Hudson are an early glacier-disturbed series.

*Fort Edward outlet.* The next lower stage of the glacial lake must have been determined by the height of the divide in the bed of the Wood creek channel near Fort Edward. This broad almost level channel bears every mark of having been scoured by waters flowing through it. On the diagram, plate 28, I have correlated the deltas and beaches along the line E-F with this outlet. This was the lowest point of discharge on the south for glacial confined waters in the Champlain district. As shown later the marine limit appears to have fallen short of this col. In what manner the waters of the glacial lake fell to the level of the marine limit appears to be indicated by the crowded beaches along the international boundary where successive stages of lower and lower water levels are shown from about 540 feet downward. It is in this view almost necessary to suppose that the waters leaked out under or past the ice sheet along the northern border of Vermont. An examination of the country between Richford Vt., and Frelighsburg, Quebec, in 1904 failed to discover spillways. This is a question which has yet to be more fully investigated.

*Reexcavation of the Hudson gorge.* The history of the changes in the outlet of Lake Vermont in the region about Fort Edward and Schuylerville finds its parallel in the Hudson gorge farther south. Not before detailed mapping is done will it be possible to correlate all the lower terraces which record the changes which took place as the river sank toward its present bed. Some of these changes it can be shown took place very early in the southern part of the Hudson gorge and others very late in the history of