

The precise boundaries of the retreating ice sheet are obscured by the abundant deposits of sand and clay and by the further blowing of the sands by winds in the district between Saratoga and Gansevoort, so that in spite of several days spent in the endeavor to trace the limits of retreating masses of ice I was unable to get a satisfactory idea of the precise alinement of the ice front across the valley in this field.

*Delta of the Batten kill* [see pl. 11]. The Batten kill debouches into the Hudson river at Schuylerville near the northern limit of the main body of the Albany clays. A broad delta of gravels and sands caps the clays on the east bank of the Hudson stretching back from the gorge to the low range of hills which forms the eastern border of the Hudson valley. The Batten kill passes westward through this range at Greenwich where the terraced apex of the delta rises between 340 and 360 feet. Along the western base of the hills the delta extends south of the stream as a broad plain for nearly 2 miles. Three points leveled on the inner upper margin of the deposit near the river are according to the state map at elevations of 348, 344, and 358 feet respectively, from which 350 feet may be taken as the approximate upper level of the delta. Outward the delta falls off to the 320 foot line with a very gentle slope and then descends more rapidly to the 300 foot level. North of the stream at the base of Bald mountain a considerable stretch of the delta plain lies between 300 and 316 feet above the present sea level. Since the outer margin of the delta where it falls off most rapidly is a better index of water level than the apical portion of the deposit merging into the flood plain level which was probably built above water level, it appears that the water level at this point is approximately 320 feet above sea level. Southward of the delta the clays and sands meet the base of the hills at about the same height.

Northwest from Bald mountain and between the 300 foot level and the river lies a lower plain whose surface is between the 220 and the 240 foot contour lines, a level which is well marked at several places on either side of the Hudson gorge for 5 or 6 miles north and south of Schuylerville, but one which is very close to that of broad areas of the bed rock in the immediate