

plain valley. I have taken the level from the local contour of the Willsboro quadrangle.

Shore lines and deltas about Port Kent. By reference to the topographic map, plate 21, giving a part of the Plattsburg quadrangle, it will be seen that shore lines and deltas are to be found from Port Kent back to Keeseville on the Ausable river.

Trembleau mountain on the south is thinly covered with drift particularly on the lakeward slope from 500 feet downward. Much of the steeper slope immediately west of Trembleau point has been stripped of drift by wave action. Heavy till deposits farther inland occasion the northern slope in the form of the broad spur extending from the 600 foot contour line down to the 400 foot line. Till again appears near the lake shore in Port Kent village; though on top of the hill on the border of the streets as laid out on the map a well was sunk some 12 feet in coarse waterworn materials containing cobblestones up to 10 inches in diameter, probably waveworn materials.

Shore lines begin to appear first, as one descends Trembleau mountain, at about 590 feet. The deposits of this stage suggest the presence of ice, either floating or pan ice, by reason of the angular blocks in the rude but essentially horizontal, often spitted, beachlike deposits which can be traced where shown by the line on the map. Definite wave-heaped beach ridges appear a few feet lower at probably 580 to 585 feet in the elliptic hill crest shown on the map. The stones are subrounded in this deposit inclosing a shallow saucer-shaped depression in the center—the old lagoon of this offshore wave-heaped shoal. From this level traces of wave marks in parallel roads or occasional lines of waterworn pebbles (as along the road from Port Kent to the lowest notch in the crest of the mountain) appear down to at least the levels of the two churches in Port Kent.

Near the old tollgate site, $1\frac{1}{2}$ miles west of Port Kent, the spur of till before mentioned is cut back in the form of a good sea cliff having a length of about $\frac{1}{2}$ mile. The base of this cliff is at about 340 feet and is confronted by one of the delta levels of the Ausable. It would appear that the heaviest and longest wave action took place locally at this level. That the escarpment in the till is due to wave cutting rather than to stream cutting during the