

Wherever the hills were ascended in the region east and northeast of Georgian bay it became at once apparent that their even tops were the remains of an ancient peneplain. From the hills south of Callender (C. P. R.) Mt. Talon, 15 or 20 miles to the north and beyond the Mattawa valley, was seen rising high above the general plain as a fine monadnock. No other so prominent was noticed in this region. In the highlands south of the Mattawa the Algonquin beach marks a water level that entered the deep valleys between the hills and extended far into the interior. On the north side of the Mattawa not only is the beach depressed, but the peneplain seems to show a corresponding depression also. In short, the descent of the Algonquin beach northward from Trout creek appears to be due to deformation since the beach was made, and it seems probable, therefore, as previously stated,* that there are post-Algonquin faults between Trout creek, or rather between South river, or Sundridge and Nelson's. And this deformation appears to have been finished before the beginning of the Nipissing beach.

The upheavals which tilted and warped the plane of the Algonquin beach before the formation of the Nipissing beach have been called the Algonquin uplifts.† Whether these occurred after, or part of them during the making of the Algonquin beach is a very complex question, which is full of importance in its bearing on the lake history and the history of the Niagara gorge. There is much reason to believe that the Simcoe region, including the Trent valley outlet, was raised during the life of lake Algonquin and before the breaking of the ice dam in the Ottawa valley. Sharp warping occurs in the region east and northeast of Georgian bay, but it apparently dies out towards the southwest so that the St. Clair river and the south end of lake Huron were only slightly affected. If the Mattawa-Ottawa region was uplifted before the ice-dam broke it would follow that the surface of the lake in the region near the dam was not up to the level of the highest beaches at the time of the break, and hence that the whole lake was not lowered over 500 feet when the dam broke, as it must have been the case if that event occurred before all the uplifts. In

*Am. Jour. Sci. vol. XLIX, April 1895, footnote on page 258.

†The Inland Educator, Terre Haute, Ind., vol. 2, No. 4, p. 222, May 1896.