

on the facts now at hand, but merely as suggestions which are indicated by these facts and which may be profitably borne in mind in future investigations.

One other point deserves mention in this connection. From Huntsville to South river the Algonquin beach rises at the rate of nearly six feet per mile.* Then from South river to Trout creek it appears to be about level. But from Trout creek to Nelson's, five miles northeast of North Bay, the beach descends northward about 75 feet in 33 miles. The Callender (C. P. R.) observation also shows the same northward descent. If the fainter forms found in the Ottawa valley are accepted as continuations of this same shore line, as they may be, then they too show northward descent and apparently a slight eastward descent also. It might be thought that the northward descent from Trout creek to Nelson's is not in reality a measure of the deformation of the Algonquin plane, but that the beaches at the two places are not the same. This is of course a possibility. But at each locality, at South river, Trout creek, Callender (C. P. R.) and near North Bay in 1893 and again in 1895, the greatest care was taken to determine the upper limit of submergence and the result was clear and satisfactory in each case. Callender (C. P. R.) is about 18 miles east of a straight line drawn from Trout creek to Nelson's. The northward component of distance from Trout creek to Callender is about 21 miles and from Callender to Nelson's about 12 miles. The altitudes of the beaches are, 1,229 feet at Trout creek, 1,170 at Callender and 1,145 at Nelson's. Thus the northward descent from Trout creek to Callender is nearly two and a half feet per mile while that from Callender to Nelson's is a little over two feet per mile. This allows nothing for a possible east-west deformation affecting Callender.

The beaches at these three localities are so situated that it can hardly be supposed that one was made and abandoned before another was begun. And the clear definition of each as the highest shore line adds much strength to the supposition of their unity as one beach.

*AM. GEOL., vol. XIV, Nov., 1894.