

not be taken as a criterion of the presence of the glacier unless independent evidence of the presence of the ice be found and even in this case the direction of the overthrusting movement shown by the clays should agree with the axis of movement of the ice margin. As this movement in the clays would be away from the ice contact terrace it should be possible to discriminate in favorable situations contortion through gravitative sliding from contortion by ice thrust. In the Croton point case, there is evidence of the presence of the ice in the morainal revetment of the remaining portion of the old ice contact terrace on the north and the contortions have

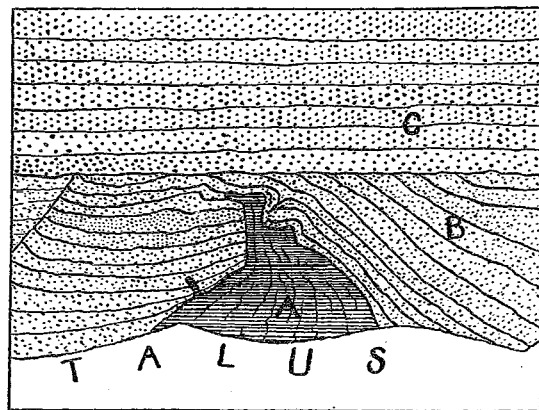


Fig. 23 Contortion and intrusion of clays in sand bank south of Port Kent railroad station, as seen July 31, 1900: A, the clay; B, the foreset sands of the delta; C, upper most undisturbed sand layers

their axial planes thrown over to the south away from the ice, hence it is possible to infer that a slight ice thrust is indicated here.

The case is described elsewhere in this report in which the ice sheet has overrun clays in the Hudson gorge between Schuylerville and Fort Edward, producing contortions of large size.

At many points where streams have constructed deltas on the margins of the clay area crumpling is to be suspected as an effect of the weight of the overlying sand and gravel. A rather marked case, probably a locality earlier observed by Ebenezer Emmons, is that of the southernmost lobe of the marine delta of the Ausable exposed in a section south of the railroad station at Port Kent on Lake Champlain. The sands which have here been deposited over the clays have resulted in the disruption of the latter in the manner of irregular dikes penetrating the overlying sands.