and upper St Lawrence valleys. Any refinement or revision of the problems with which this report mainly deals should be begun at Covey hill. The absence of definite shore lines on the smooth till slope of the northern face of this eminence from 570 feet to the top is in striking contrast with the wave-ribbed slopes of the Champlain valley on the south at an equal elevation. Except for one or two faint traces of parallel roads and a small delta on the north slope at an elevation not far from 800 feet the till slope of the upper half of the hill is practically as left by the ice sheet. The failure of beaches and cliffs due to the work of waves in this upper zone just where waves would be most effective had an open body of water been present to transmit the undulations of its surface against this impressionable glacial coating is one of the most conclusive arguments for the theory of glacial barriers. I have already described the corroborative evidence as to the upper limit of standing water in glacial lakes found in the abandoned spillway and waterfall of the Gulf.