



Fig. 81. Sketch of Glacier Furrows and Scratches at Stony Pt., Lake Erie, Mich. a, a, Deep water line. b, b, Border of the bank of earthy materials. c, c, Deep parallel grooves $4\frac{1}{2}$ feet apart and 25 feet long, bearing N. 60° E. d, A set of grooves and scratches bearing N. 60° W. e, A natural bridge.

A result of this wide-spread scouring and grinding of the rocks was the accumulation of vast quantities of detritus. From this source comes a large proportion of the pebbles, sand, and clay which every where underlie the surface-soil, and separate it from the bed-rock—an essential and beneficent provision, as every one knows who has observed the destructive effects of ordinary droughts upon thin soils resting on a rocky basis. Another effect of the great glacier was the destruction of all vegetation over the areas which it invaded. From season to season, and from year to year, the mighty mass marched irresistibly forward;