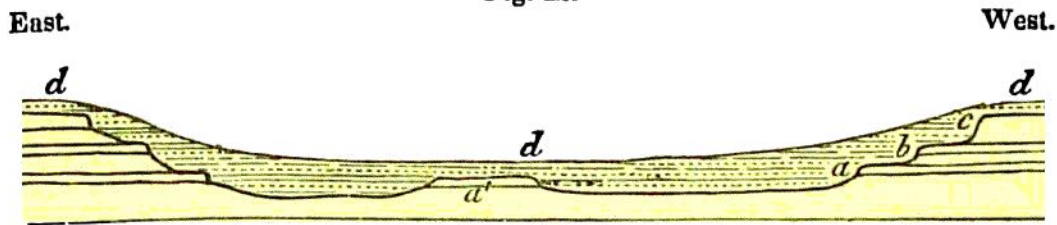


Fig. 12.



*Supposed section of drift and subjacent rocks in valley of St. Davids.*

- a. Ledge of quartzose (Medina) sandstone.
- b. Ledge of Clinton limestone.
- c. Platform of Niagara limestone.
- d. General covering of drift or boulder formation.

valley of the St. Lawrence, at elevations of more than 500 feet above the level of the sea, or nearly as high as Lake Erie, so that I consider it to be a mere local accident that none of the same are preserved, or have yet been met with in the Niagara district.

Professor Emmons has shown that, on the removal of the clay and sand containing those marine shells in the valley of Lake Champlain, the rocks beneath are polished and furrowed, and similar phenomena are observed in the region now under consideration between Lakes Erie and Ontario. If the reader will glance at the frontispiece (Pl. I.), he will see in the distance a zone of country (No. 1) bounding Lake Erie, part of which consists of an upper Silurian limestone, called in New York the Corniferous. It occurs at Black Rock among other places (see Map, Pl. III.). It is very hard, contains many corals, and has nodules of flint or chert dispersed through it in horizontal beds. The upper surface of this rock, when the boulder clay is removed, appears smoothed or polished, and usually scored with long parallel furrows. But the nodules of chert, although much rubbed down and worn, stand out slightly in relief, while narrow elongated ridges of limestone are seen