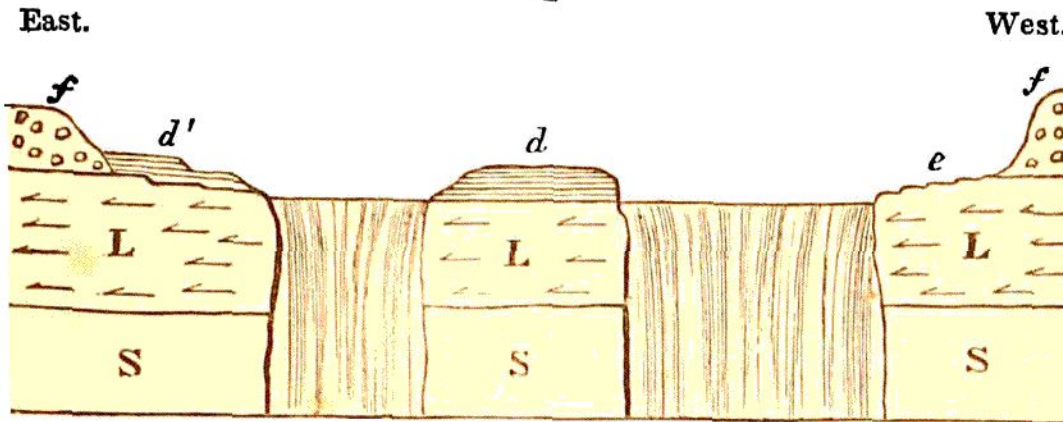


*Helix*, all of recent species, in the superficial deposit. They form regular beds, and numerous individuals of the *Unio* and *Cyclas* have both their valves united. We then found the same formation exactly opposite to

Fig. 1.



Section at Niagara Falls.

- L. Limestone 80 feet thick. S. Shale 80 feet thick.  
 d. Freshwater strata on Goat Island, above 20 feet thick.  
 d'. Same formation on the American side, containing bones of Mastodon.  
 e. Ledge of bare limestone on the Canada side.  
 f. Ancient drift.

the Falls on the top of the cliff (at *d'*, fig. 1.) on the American side, where two river-terraces, one twelve and the other twenty-four feet above the Niagara, have been cut in the modern deposits. In these we observed the same fossil shells as in Goat Island, and learnt that the teeth and other remains of a mastodon, some of which were shown us, had been found thirteen feet below the surface of the soil. We were then taken by our guide to a spot farther north, where similar gravel and sand with fluvial shells occurred near the edge of the cliff overhanging the ravine, resting on the solid limestone. It was about half a mile below the principal Fall, and extended at some points 300 yards inland, but no farther, for it was then bounded by the bank of more ancient drift (*f*, fig. 1.). This deposit precisely occupies the place which the ancient bed and alluvial plain of the Niagara would naturally have filled,