Bermuda and its outlying banks are thus situated on the summit of a large cone with a wide base, rising from the submerged plateau of the Atlantic, which is, in this region, three miles (2600 fathoms) beneath the surface of the sea. It is very probably an ancient volcano, now completely covered with a white shroud, composed of the skeletons and shells of organisms.

The late Sir C. Wyville Thomson was of opinion that the "red earth" which largely forms the soil of Bermuda had an organic origin, as well as the "red clay" which the Challenger discovered in all the greater depths of the ocean basins. He regarded the red earth and red clay as an ash left behind after the gradual removal of the lime by water charged with carbonic acid. This ash he regarded as a constituent part of the

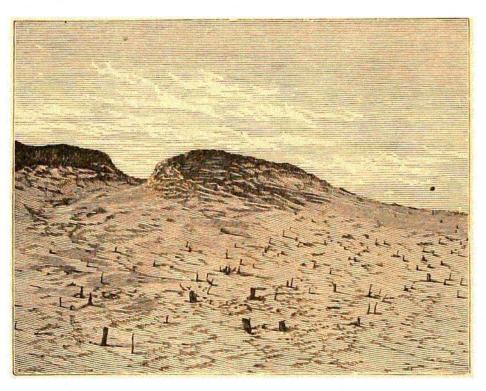


Fig. 55.—" Æolian" Limestone Beds in process of formation, showing stratification, and the remains of a grove of Cedars which has been overwhelmed. Elbow Bay, Bermuda. (From a Photograph.)

shells of Foraminifera, skeletons of Corals, and Molluscs.<sup>1</sup> This theory does not seem to be in any way tenable. Analysis of carefully selected shells of Foraminifera, Heteropods, and Pteropods, did not show the slightest trace of alumina, and none has as yet been discovered in coral skeletons. It is most probable that a large part of the clayey matter found in red clay and the red earth of Bermuda is derived from the disintegration of pumice, which is continually found floating on the surface of the sea.<sup>2</sup> The Naturalists of the Challenger found it among the floating masses of Gulf Weed, and it is frequently picked up on the reefs of Bermuda and other Coral islands. The red earth contains a good many

<sup>&</sup>lt;sup>1</sup> Voyage of the Challenger, Atlantic, vol. i. p. 316.

<sup>&</sup>lt;sup>2</sup> Murray, On the Distribution of Volcanic Débris over the Floor of the Ocean, *Proc. Roy. Soc. Edin.*, vol. ix. pp. 247-261, 1876-77.