

deposit below sea-level is computed to be 1996 fathoms, and the mean proportion of carbonate of lime in the ooze 64.53 per cent.³⁸²

The consolidation of a soft calcareous ooze or a mass of broken shells, corals, and other calcareous organisms, effected by the percolation of water containing carbonic acid (ante, pp. 620, 762, 816), is most rapid with copious evaporation, as, for instance, on coral-reefs where exposure to the air in the interval between two tides suffices for the deposit of a thin crust of hard limestone over a surface of broken coral or coral-sand.³⁸³ Recently upraised limestone and coral-rock have in some places assumed a crystalline structure by this process, and the more delicate organisms have disappeared from them. But the calcareous deposits may acquire, even under the sea, sufficient cohesion to be capable of being broken up into blocks. On the submarine plateau off Florida, the trawl or dredge frequently brings up large fragments of the limestone now in course of formation on the bottom, consisting of the dead carcasses of the very species that live upon the surface of the growing deposit.³⁸⁴

2. Siliceous deposits formed from animal exuviae are illustrated by another of the deep-sea formations brought to light by the "Challenger" researches. In certain regions of the western and middle Pacific Ocean, the bottom was found to be covered with an ooze consisting

³⁸² Murray and Irvine, Proc. Roy. Soc. Edin. xvii. 1889, p. 82.

³⁸³ A. Agassiz, Amer. Acad. xi. 1882, p. 128.

³⁸⁴ A. Agassiz, op. cit. p. 112. An account of the upraised oceanic deposits of Barbadoes is given by Messrs. Jukes Brown and Harrison, Quart. Journ. Geol. Soc. xlviii. 1892, p. 170. Some of these deposits present a close resemblance to those ascertained by dredging to be seen in progress of accumulation in deep parts of the ocean.