

the intervals between the stones were filled up and the whole made solid; and of an amygdaloidal volcanic rock on a coast having derived its little calcareous kernels or amygdules from the same source. The following additional facts are cited from Mr. Darwin's Journal (p. 588):—

“Lieutenant Evans informs me that during the six years he has resided on this island (Ascension) he has always observed that in the months of October and November, when the sand [of a calcareous beach] commences travelling toward the south-west, the rocks which are situated at the end of the long beach become coated by a white, thick, and very hard calcareous layer. I saw portions of this remarkable deposit, which had been protected by an accumulation of sand. In the year 1831 it was much thicker than during any other period. It would appear that the water charged with calcareous matter, by the disturbance of a vast mass of calcareous particles only partially cemented together, deposits this substance on the first rocks against which it impinges. But the most singular circumstance is that in the course of a couple of months this layer is either abraded or redissolved, so that after that period it entirely disappears. It is curious thus to trace the origin of a periodical incrustation, on certain isolated rocks, to the motion of the earth with relation to the sun; for this determines the atmospheric currents which give direction to the swell of the ocean, and this again the arrangement of the sea-beach, and this again the quantity of calcareous matter held in solution by the waters of the neighbouring sea.”

Mr. Darwin, speaking of a large beach of calcareous sand, composed of comminuted and rounded fragments of shells and corals at Ascension, says, “The lower part of this, from the percolation of water containing calcareous matter in solution, soon becomes consolidated; and is used as a building-stone; but some of the layers are too hard for fracture, and, when struck by the hammer, ring like flint.”

The surface of hills of drift sand-rock often has small depressions that are coated with a smooth, solid crust, as already explained.