

composed of lime and carbonic acid, and may have been precipitated from water holding lime in solution, from which an excess of carbonic acid was expelled. But a large proportion of the purest chalk appears to be in great part, if not wholly, composed of the remains of corals and shells, and in some quarries whole layers are formed of the *ossicula* of star-fish and other radiaria, with microscopic species of polyparia and shells.* The nodules and veins of flint which occur in the chalk, show that water holding silex in solution must have been very abundant during the cretaceous period. The power possessed by thermal waters of dissolving silicious earth, depositing flint, and occasioning the silicification of vegetable substances, is strikingly exemplified in the Geysers of Iceland, as I have already explained (p. 83). The perfect fluidity of the silex before consolidation, is shown by the sharp impressions which the flints bear of shells and other marine bodies; and upon breaking the nodules, zoophytes, related to sponges and alcyonia, with other organic remains, are found enveloped; the silicious matter having so penetrated the delicate structure of the originals, that polished sections display the most minute organization of the inclosed bodies.

5. FLINT NODULES.—Flints, or silicious nodules,

on the Shanklin, or Green Sands, in which many of the fossils are beautifully delineated; Geological Transactions, vol. iv. New Series.

* Mr. Lonsdale.