

is further remarkable, that few traces occur of any other zoophyta than such as, like the lithophyta, secreted stony supports; or like spongiadæ, had an internal horny or spicular skeleton; or like echinida, were covered with a crustaceous skin: the soft medusidæ, holothuridæ, &c., are, perhaps, sometimes recognisable by faint impressions in the rocks, but their substance has wholly vanished. The soft parts of nearly all the zoophyta are absent from the fossil state.

The recent zoophyta are either free in the sea, or attached for life after a very early period of growth: instances of both divisions occur in the earth. The fossil corals do not, perhaps, in general appear in the very place where they grew, but rather seem to have suffered some displacement before being buried in the oceanic sediments. But exceptions occur; and some of the fossil radiaria which were attached by a pedicle (crinoidea) are found in several places (near Bradford in Wiltshire), yet rooted to the limestone rock. In such cases, how vain is the supposition that the deposition of the substance of the rocks was either rapid, confused, or violent. The limestones of the silurian and grauwacke systems are so very rich in corals as to suggest to good observers the notion that these concretionary and rather irregular rocks were ancient coral reefs.

Calcareous matter composes the greater part of the hard parts of zoophyta; in a few instances besides the family of spongiadæ, siliceous spiculæ and fibres enter into the skeleton of the animal. In a fossil state corals, echinida, crinoidea, &c., are generally calcareous; rarely particular tribes of corals (as millepera, syringopora) are converted to siliceous matter: sponges are commonly siliceous, but sometimes calcareous. Occasionally nothing remains of the original body; its place in the rock is vacant, and there is left only the external impression or mould. These circumstances depend partly on the nature of the rock in which they are imbedded, and partly on the composition and texture of the original body. In limestone rocks the substance of coral is usually