

36. CORALS OF THE OOLITE AND LIAS.—The oolite, as I have previously remarked, abounds in corals, and contains beds which are decidedly coral reefs, that have undergone no change but that of elevation from the bottom of the deep, and the consolidation of their materials. The coral-rag of the oolite presents all the characters of modern reefs; the polyparia belong to *astreæ*, *caryophylliæ*, *madreporæ*, *meandrinæ*, and other genera which principally contribute to the formations now going on in the Pacific. Shells, echini, teeth and bones of fishes, and other marine exuviæ occupy the interstices between the corals, and the whole is consolidated by sand and gravel, held together in some instances by calcareous, in others by silicious infiltrations.* The corals, shells, &c. are of species not now known in a living state. Those who have visited the district where the coral-rag forms the immediate sub-soil, and is exposed to view in the quarries, or in natural sections, must have been struck with the almost identical features presented by these rocks and the modern coral-banks. We know that in our present seas all situations and circumstances are not alike favourable to the existence and growth of polyparia; in some parts of the ocean they abound, and in others are altogether wanting. In like manner in that enormous series of

* At Tisbury, in Wiltshire, a beautiful silicified coral occurs, a polished section of which is represented, Tab. 111, fig. 9; no trace of the calcareous earth of the original remains.