

towards its marginal region, is perforated by a series of apertures on either side of the costæ, thus resembling somewhat, in the structure of its under surface, the species of the genus *Leptopenus* (Pl. XIV.). When a specimen, hardened in spirit, is decalcified, the wall of the corallum in dissolving in the acid, becomes perforated by a similar series of apertures, yielding first at these spots. The condition of the specimens found on the siliceous bottom is no doubt due in large measure to the small supply of lime available, but thin and fragile specimens were also dredged on a bottom of Globigerina mud (as, for example, at Station 147), and one very large, and not exceptionally fragile specimen, was obtained off Banda Island, on a bottom of volcanic detritus. The larger specimens vary in very much the same manner as the smaller; some have the margins of their septa fused for long distances at their points of junction; others show little fusion of the septal margins. In some specimens (fig. 6), the fusion of the septal margins is very irregular, in one (fig. 7), a spongy outgrowth is developed from the coverings of one of the deltas. In some of the largest specimens there is scarcely any trace of a columella; in others there is a large oval one, composed, as described by Pourtalès, of a membranous expansion, through which the spines project.

In all the larger specimens, the septa are very thin, and are finely sinuous. The synapticulæ are continued as ridges, more or less on the surfaces of the septa. In some specimens (fig. 7), the synapticulæ are very little developed, in others, as in that figured in the woodcut, they are regular, and so prominent, as to divide the interseptal chambers into a succession of small, deep pockets. The wall in the larger specimens is folded into a furrow between each of the costal prominences, and is also finely plicated throughout, the sides of each intercostal furrow being plicated transversely to the length of the furrow with the folds inclined slightly towards the centre of the coral disc on each side of the furrow, to meet one another at its bottom.

After tabulating all the occasions on which this coral was dredged, I cannot succeed in establishing any relation between the size of the specimens dredged, and the conditions of depth, bottom, or temperature. No large specimen was dredged in less than from 200 to 360 fathoms, but from one of those depths, a broken specimen, which must have measured more than 30 mm. in diameter, was obtained. Small, apparently adult, specimens, of the stouter variety, measuring only 9 mm. in diameter, were dredged from such depths as 2440 fathoms, on several occasions. The greater number of very large specimens were obtained from deep water, many being brought up at one haul of the dredge, as at Station 147, in the South Indian Ocean, where twenty or thirty specimens were obtained from 1600 fathoms, curiously enough, all of them large, no young ones being found amongst them.

Diameter of the smallest specimen obtained, 3 mm. Of the largest, 40 mm.

*Bathyactis symmetrica* was found to have a wider range than any other deep-sea coral, being, in fact, apparently universally distributed in deep water. It has also a