

Station 157, in the Southern Indian Ocean, in about the latitude of Heard Island, but far to the east of it. Lat. $53^{\circ} 55' S.$, long. $108^{\circ} 35' E.$ 1950 fathoms.

Station 323, South Atlantic Ocean, east of the Rio de la Plata. Lat. $35^{\circ} 39' S.$, long. $50^{\circ} 47' W.$ 1900 fathoms.

Leptopenus hypocælus, n. sp. (Pl. XIV. figs. 5, 6).

The corallum is, as in the last species, discoid, but is concave beneath, and correspondingly convex above. The corallum is constructed in a closely similar manner to that of the preceding species, excepting that the perforations of the base are larger and more regular in arrangement, and that the trabeculæ composing the network between them are finer and more delicate. The margin of the disc is circular, with forty-eight very short and equal projections placed on it at equal intervals, and corresponding in position to the costal trabeculæ, of which there are a like number. The septa are much higher than in the last-described species. They are in six systems and four cycles, with rudiments of a partial fifth system. The primaries are free, whilst the remaining septa form deltoid masses. The fork formed by the tertiaries at their junction and union with the secondaries is covered in by a large area of curved laminar matter, which is extended on to the fork formed by the divergence of the outer quarternaries in each system from the tertiaries. The secondaries are continued straight to the margin of the disc, and do not branch. The tertiaries bifurcate near the margin of the disc, a small laminate expansion being developed at the fork, and the outer quarternaries in each system bifurcate also slightly somewhat farther out, thus adding septa which may be considered as part of a fifth cycle. All the septa bear long spines on their margins. From the secondary septa, at the point where they are lapped over by the laminæ in the forks formed by tertiaries, spring six very long and stout spines, one from each septum, which are directed outwards at an angle of about 45° with the horizontal plane of the corallum; beneath these monster spines, which are the only ones borne by the secondaries, these septa have smooth and even incurved free margins, which are continued up on to the spines beneath, and act as struts and supports to them. All the other septa bear spines, but much smaller ones than those of the secondaries, and much more delicate, being long and spicular-like, but all directed outwards at about a similar angle. The columella is composed of a few similar spicules connected together by lamellar matter.

Extreme diameter of the corallum, 20 mm. Extreme height from the basal plane to the centre of the columella, 5 mm.; to the tip of one of the long spines of the secondary septa, 9 mm. Length of one of the spines, 7 mm.

Only one specimen was obtained from a great depth.

Station 299. S.E. Pacific Ocean, off Valparaiso. Lat. $33^{\circ} 31' S.$, long. $74^{\circ} 43' W.$ 2160 fathoms.