the parenchyma and of the basal tuft were exactly similar to those above described. The skin was unfortunately wholly absent, so that nothing further could be ascertained as to dermal skeleton.

A third specimen, which in my opinion belongs to this species, Hyalonema thomsoni, is deposited in the Berlin Zoological Museum. It is labelled as Hyalonema lusitanicum, Bocage (?), was collected by Wyville Thomson off the West Hebrides, and is numbered 405. This splendid specimen has a total length of 21 cm., and the body proper, which occupies 9 cm., has a maximum breadth of 3 cm. I have figured it in its natural size on Pl. XXXIV. fig. 1. The apical cone projects—2 cm. in length—from the centre of the truncated terminal surface, which exhibits four cruciately disposed radial septa and interjacent apertures, and resembles exactly the superior surface of the specimen figured by Marshall. Below the somewhat sharply angular projecting lateral margins of this smooth terminal surface, which is not covered by a dermal sieve-network, the body exhibits a slight annular constriction but curves outwards again below the middle, and is finally conically narrowed towards the lower end. Below the somewhat rounded off annular basal pad, there is an encrustation (6 cm. long) of Palythoa, and from this the basal tuft is prolonged downwards (Pl XXXIV. fig. 1).

In the parenchyma, besides medium-sized, smooth, regular oxyhexacts and numerous smooth, straight, or gently curved oxydiacts, with or without central nodes or tubercles, a large number of small oxyhexacts with straight, somewhat roughened rays occur, similar to those which we have already described and figured in the smaller specimens (Pl. XXXIV. fig. 4).

The dermal skeleton exhibits the same smooth hypodermal oxypentacts and somewhat long, narrow pinuli, with moderately long, slightly spinose, basal rays, as we have already described in the smaller specimens. The amphidiscs also essentially agree in size and form with those above described and figured (Pl. XXXIV. figs. 2, 3, 5, 7, 8,), and differ only in this, that the largest amphidiscs with short, narrow umbel rays have, as a rule, not six but eight rays. The substantial toothed spicules of the basal pad and the long spicules of the root-processes essentially resemble those of the above forms; occasional, slight, and inconstant differences seem to me to be simply individual, conditioned by the large size, and in no way of specific importance.

The superior terminal surface is in this specimen much better preserved than in the smaller forms, so that the essential agreement between the covering membrane and the external skin is demonstrable, except that the autodermal pentact pinuli are somewhat narrower and longer than in the former. The same enveloping layer extends for some distance into the system of efferent tubes.

Near the basal pad numerous more or less long diacts occur in the parenchyma, and do not run out at their ends into smooth points, but are somewhat thickened and spinose before finally terminating in conical points. At the middle point of