

five small ones, and three wart-shaped and undeveloped. The terminal polyp was bent in such a manner that it lay apparently at the dorsal side of the two uppermost lateral polyps. Then succeeded three well-developed lateral polyps on the right side, and on the left only one smaller. The dorsal polyps were six in number, five of which had tentacles, but were small, the sixth being only rudimentary. Other two rudimentary polyps were placed at the ventral side of the right lateral lower individuals.

The best developed polypidom of all (fig. 37) showed in the middle on its ventral side the terminal polyp in which the axis was not visible with the exception of its end. Two large lateral polyps appeared on both sides, and between these and the terminal individuals, but on the ventral side of the lateral, five young polyps and a rudimentary one, the position of which is well shown by the figure. On the dorsal side four pretty well-developed polyps lay between the lateral ones, two larger in the middle, one above the other, and two smaller at the sides. Besides these, two very small polyps were situated between the left dorsal, the left lateral, and the terminal polyp, and two rudimentary ones at the same place on the other side.

Taken altogether, we may say that in the younger specimens the polyps show a regular bilateral arrangement. A terminal and two lateral polyps are the first expression of it. Then new buds arise, first on the dorsal, and then on the ventral side, and these are in part also decidedly bilateral. But such buds seem likewise to grow on the dorsal middle line, which fact would alter the symmetry. It may, however, be supposed that these are also in reality lateral, and that the polyps of *Umbellula* are essentially disposed in series on both sides of the rachis, which arrangement is veiled by the shortness of their seat of attachment.

The polyps of *Umbellula huxleyi* are dark brown in their upper parts and lighter below; they have the tentacles shorter than the bodies of the polyps, and regularly beset with short pinnulæ. A peculiar fact which was new to me is, that these polyps are retractile, but this retraction takes place very seldom, and was only to be seen in one specimen.

The stalk is somewhat rich in sarcosoma, especially at its enlargements, and shows only faint traces of colour, both ends being pale. Its most remarkable feature is the arrangement of the zooids, which are most numerous on the upper enlargement, which they cover on every side, with the exception only of the dorsal and ventral middle line. From this point, the zooids throng to the polypiferous portion and pass on to the terminal polyp nearly as far as the axis, whilst they end at the bases of the other polyps entering for a certain distance in the spaces which separate them. In the interior of the bunch of polyps no zooids are present.

The zooids just mentioned are visible to the naked eye, but the microscope is required to ascertain that, as in the *Umbellula g untheri*, they are also present on the remainder of the stalk and even on its lower enlargement. As far as I could ascertain without destroy-