APPENDIX.

By way of appendix I shall describe some forms whose systematic position I was unable to determine, as their state of preservation did not admit of an anatomical investigation of the inner parts, especially of the septa.

Two of them seemed to me to be closely related and to belong to the same genus *Porponia*, and I shall discuss them in detail as interesting species, though I have not done so in the case of the others.

Porponia, n. gen.

Actiniaria (Hexactinize?) with two œsophageal grooves, without circular muscle, with thin-walled tentacles, the bases of which are supported on the outer side by clasp-like prolongations of the wall.

Porponia elongata, n. sp. (Pl. I. figs. 1, 2).

Body elongated, sessile, wall cartilage-like, small, upper end terminated by twentyseven knobs forming supporting clasps for the outer sides of the same number of long, thin-walled tentacles; twenty-seven additional tentacles placed in an inner second row, and alternating with the outer tentacles.

Habitat.—Station 160. March 13, 1874. Lat. 42° 42′ S., long. 134° 10′ E. Depth, 2600 fathoms. Two specimens.

Dimensions.—Height, 5.5 cm.; breadth of the base, 2.5-3.5 cm.; breadth of the oral disk, 3.0-4.0 cm.; length of the tentacles, 1.5-2.5 cm.

Whilst the majority of Actinize, especially those from great depths, form a short column, and are frequently flattened into a disk, the body form of *Porponia elongata*, a new species taken from a depth of 2600 fathoms, approximates that of the elongated Cerianthidze. In both specimens examined the body, though contracted, was twice as long as high. It is broadest in the region of the oral disk, below which it becomes a little narrower, and then becomes broader again at the pedal disk, by which it is firmly attached to the bottom. It was impossible to recognise the original colour of the animal, but this was partly owing to the fact that the ectoderm was completely macerated away.

The pedal disk is thin and the insertions of the septa shine through it as whitish, radial lines. There are altogether about thirty-two to thirty-four such lines, some of which, however, only project a little way towards the centre of the pedal disk. Setting