the question in the affirmative. In the meantime, however, we have no accurate anatomical studies of this most abundant Anthozoon.

All Antheadæ are easily recognised by their habit of body. As Verrill has already specially remarked, the first thing which strikes the eye is the numerous, extremely long tentacles, which spring from the junction of the wall and the oral disk. Their longitudinal muscles are slightly pleated, and lie in the ectoderm, as they do also in the oral disk. The circular muscle may easily be overlooked, as it is very small, and merely consists of a few folds of the circular muscular layer of the wall; hence the Antheadæ are either incapable of drawing the wall over the oral disk, or can only do so slightly, and then very slowly. The septa are very uniform, and the majority reach the œsophagus, so that only the youngest and smallest are imperfect. Whether, as I presume, they are all furnished with reproductive organs or not remains to be proved by further investigations, as I have hitherto only examined immature animals.

Comactis, Milne-Edwards.

Antheadæ with smooth body surface, with marginal spherules, which lie on a fold running outside the corona of tentacles.

Comactis flagellifera, Milne-Edwards (Pl. III. fig. 5; Pl. VI. fig. 6; Pl. VIII. fig. 9)

Actinia flagellifera, Drayton, in Dana Explor. Exped., Zooph., p. 126, pl. i. fig. 1, 1846.
Comactis flagellifera, Milne-Edwards, Hist. d. Corall., tom. i. p. 236, 1857.
Comactis flagellifera, Verrill, Comm. Essex. Inst., vol. v. p. 323, 1867.

Marginal spherules on a fold, which is separated from the tentacles by a circular depression. Tentacles moderately long, with distinct terminal opening, placed in two to three rows. Body discoid.

Habitat.—Simon's Bay, Cape of Good Hope. Depth, 25 fathoms. One specimen.

Dimensions.—Height, 0·5 cm.; breadth, 1·5–2·0 cm.

The small Actinia, which I define with some reserve as *Comactis flagellifera*, came from Simon's Bay, Cape of Good Hope, where it was dredged at the insignificant depth of 25 fathoms. As no trace of reproductive organs could be found even on minute investigation, it was, at all events, an immature animal, so that the above assertion as to size cannot be considered as the standard for characterising the species.

The wall is smooth, for although the surface in the specimen before me was repeatedly wrinkled, both transversely and longitudinally, this was plainly owing merely to the high degree of contraction of the animal. There are, moreover, two very distinct circular constrictions, a lower one caused by the action of the parietobasilar muscle, which divides the body into two equal parts, and an upper one lying close under the tentacles, and caused by the circular muscle which runs there. Outside the latter the wall-