I must finally justify my determination of the animal as Comactis flagellifera. The much shrunken specimen before me had at first sight but little resemblance to the first and only drawing of Comactis flagellifera, given by Dana in the account of his voyage, the contrast being especially marked in the shortness of the tentacles, which Dana has drawn and described as very long. This, however, becomes of less importance if we consider that we have before us a young specimen preserved in spirits. Verrill, who was able to examine spirit specimens of this species, also lays stress on the fact that their very numerous tentacles, which are of nearly equal length and placed closely together, are contracted into a compact, conical form, that they then measure only 0.25 of an inch in length, and have a very distinct terminal opening. The last characteristic becomes more important, from the circumstance that I have never met with any other Actinia in which the existence of the terminal openings could be recognised with the naked eye. (Those forms, of course, being naturally excepted in which the tentacular apparatus has undergone retrograde metamorphosis.)

Verrill's description continues thus : "The column is very short, with a fold below the margin and separated from it by a "fosse." On the outer edge of the fold the tubercles form a simple row. They are prominent, smooth, round, and nearly equal.' All this applies equally to the Actinia examined by me.

## Family, TEALIDÆ, Hertwig.

Hexactiniæ with numerous perfect septa, and very contractile, moderately long or short tentacles, which can be completely covered. Circular muscle very strong, endodermal, projecting as a thick swelling into the gastric cavity.

The systematic descriptions of former naturalists, such as Gosse, Verrill, Klunzinger, &c., included the *Tealiæ* along with the species of *Bunodes*, as "*actinines verruqueuses*" in the family of Bunodidæ, which I do not consider a happy combination. In the course of this memoir I shall have occasion to describe an Actinia, which must be placed in the genus *Bunodes*, if we keep the definition given by Gosse and others, but whose structure approaches that of *Sagartia* more closely than that of *Tealia*. If it be assumed that this single species, the only one examined in detail till now, may be taken as the paradigm for the other forms of the genus *Bunodes*, there can be no doubt that the genera *Bunodes* and *Tealia* must be widely separated systematically.

Having the possibility just mentioned in view, I considered it to the purpose to introduce the family name Tealidæ, and I took the structure of *Tealia crassicornis* as the paradigm for its definition. Two other Actiniæ, *Tealia bunodiformis* and *Leiotealia nymphæa*, of which I am about to give a detailed description, are allied to this wide-spread form, which, however, was not represented in the Challenger material.

The most important feature of the family is, I consider, the extremely characteristic