Stephanactis abyssicola (Pl. II. fig. 13).

Actinia abyssicola, Moseley, Trans. Linn. Soc., ser. ii., Zool., vol. i. p. 297, pl. xlv. fig. 5.

Both parts of the wall smooth; circular swelling distinctly defined; tentacles in two alternating circles.

Habitat.—Station 46. May 6, 1873. Lat. 40° 17' N., long. 66° 48' W. Depth, 1350 fathoms. Two specimens.

Dimensions.—Length, 3.5 cm.; height, 0.5 cm.

Colour.—(Determined by Moseley in the fresh condition), the part inside the circular swelling a beautiful rose-red with a few darker radial streaks; the remainder of the wall reddish-yellow and paler, especially the circular swelling; oral disk rose-red with paler tentacles.

Of the two specimens of *Stephanactis abyssicola*, one was so much destroyed as to be of no use for anatomical examination, and I did not wish to cut up the other as it was the only well-preserved specimen of the species. *Stephanactis abyssicola* is clearly so closely allied to *Stephanactis tuberculata* that I deem a more detailed anatomical study unnecessary, and therefore confine myself to the description of its external appearance.

The body is elongated like that of *Stephanactis tuberculata*, but not prolonged into a process at either end. The pedal disk enclosed the stem of a *Mopsea* so completely that its margins were firmly joined on the lower side. The line of union is slightly undulated, and the insertions of from ninety to one hundred septa, which lie more closely compacted at the two ends of the body, shine through beside it. The spaces between the septa are larger towards the broad sides, but become narrower again towards the middle of the broad sides.

The circular swelling, which Moseley erroneously terms the muscular swelling, is, however, distinctly defined on either side. A small depression, in which rises a papilla, lies on either side close under the circular swelling in the middle of the broad side, resembling those which we have met with in the same position, but in larger number, in *Stephanactis tuberculata*. Otherwise, the wall is smooth, both in the portion lying inside the circular furrow and that lying outside. It is incompletely contracted, so that the oral disk, the oral opening, and part of the points of the tentacles are visible. As the œsophageal grooves plainly occupy the middle between the two ends of the oval oral fissure, it may be again safely assumed that the elongation of the body has taken place in the direction of the transverse axis. Numerous small tentacles (sixty according to Moseley) lie in a double row on the margin of the oral disk.

Stephanactis abyssicola is distinguished from Stephanactis tuberculata by its smaller size, by the absence of knobs on the upper part of the wall, and by the lesser number of cinclidal papillæ. These are all differences, however, which may possibly arise from difference of age, and it is quite likely that the two species might require to be united, if