the numerous tentacles being divided into sixteen isolated subradial bunches, so that each bunch lies in the middle between a radial canal and an intercanalar adradial rib of the exumbrella. A free auditory club is placed in the centre of each bunch upon a projection on the lower side of the umbrella margin. The margin of the umbrella appears distinctly divided by sixteen incisions (four perradial, four interradial, and four adradial), into sixteen projecting lobes, each bearing a bunch of tentacles with an auditory club. The eight mesogonia by which the umbrella cavity is divided into eight funnels are strongly developed, as in *Pectyllis*, and the numerous cæcal centripetal canals between the radial canals, by which *Pectis* is distinguished, are also wanting as in *Pectyllis*.

Pectanthis asteroides, Hæckel (Pls. VII., VIII.).

Pectanthis asteroides, Hæckel, System der Medusen, p. 267, No. 289.

Umbrella depressed to a hemisphere; two to four times as broad as high. Exumbrella with sixteen radial ribs. Stomach quadrangularly prismatic; nearly as long as the radius of the umbrella. Mouth four-lobed, extensible into an octagonal sucking-disk. Eight egg-shaped genitalia in the proximal half of the radial canal, encircling the basis of the stomach in the form of an eight-rayed star, and halved by long radial mesogonia. Umbrella margin swollen, thickened, with sixteen intercostal protuberances or marginal lobes, each bearing a subradial auditory club and a pencil-shaped tuft of twelve to sixteen tentacles. Tentacles hollow, of unequal length, the longest equal to the radius of the umbrella, generally with a sucking-disk at the end. Horizontal diameter, 5 mm.; vertical diameter, 2 mm.

Habitat.—The Mediterranean. I myself caught a living specimen of this deep-sea Trachomedusa with the tow-net in the Adriatic Sea on April 15, 1878, at a depth of 200 fathoms, some miles distant from Pola. The following description and the figures on Plates VII. and VIII. are prepared from this specimen (a mature male), which was examined alive. I also found a small specimen of the same species, which did not admit of any minute investigation, but still furnished proof of its identity in a bottom specimen from the Challenger collection from Station 4, at the entrance of the Straits of Gibraltar. Lat. 36° 25′ N., long. 8° 12′ W. 16th January 1873. Depth, 600 fathoms.

In the example which I observed alive in Pola, the umbrella in a contracted condition had an almost hemispherical bell shape. In a dilated condition, on the other hand, it appeared distinctly depressed, so that the largest horizontal diameter was three to four times greater than the largest vertical diameter. The former measured 4–5 mm., the latter 1–2 mm.

The exumbrella or the external convex surface of the umbrella is divided by sixteen