pedicels. The dorsal surface with an extension of the skin anteriorly constituting a large, very broad, transverse lobe, bearing four rather large branches or processes in its upper margin; and having immediately behind that lobe two small, rudimentary processes on each ambulacrum. Integument very thin and transparent, with calcareous deposits, composed of a long, thin central part and two slightly arcuated arms, diverging from each of its ends; each arm with a large process, directed outwards.

Colour in alcohol, light grey, inclining to violet, here and there a little darker; tentacles, the oral disk and the nerve cords almost black violet. Length, about 60 or 70 mm. Breadth, about 35 mm.

Habitat.—Station 271. September 6, 1875. Lat. 0° 33′ S., long. 151° 34′ W. Depth, 2425 fathoms; bottom temperature, 1.0° C.; globigerina ooze. One very incomplete specimen.

The only individual of this species, which has been obtained by the Challenger expedition, is extremely incomplete; it wants some of the pedicels, parts of the bodywall, the madreporic-canal, and the water-vascular ring; consequently my description must be very unsatisfactory. To give an idea of the form of this species, it has been necessary to draw the figures in accordance with my opinion of its probable appearance, hence it is possible that I may have made some mistakes. Only five rather large pedicels are left along each side of the body-wall, and two extremely minute ones at the posterior end of the body; the rest are torn off, and eight, the number mentioned above, may be wrong. All the tentacles (Pl. XLIV. fig. 5) are broken, except a single one, which has the terminal part beset with a number of small rather branched, and retractile processes, two of which are largest; those processes are provided with a number of retractile, branched or unbranched, cylindrical papillæ (Pl. XLIV. fig. 7) the extremely thin walls of which seem to be destitute of deposits. The large, and broad fourbranched appendage on the anterior part of the back is made up of four large and long processes, which are arranged in a transverse row, and are webbed together by an extension of the integument leaving only their upper half free. These free ends, of which the two middle ones are largest, appear to be of an elongated conical form though rather flattened. These processes are in connection with large, elongated ambulacral cavities, of which those communicating with the largest middle processes are situated a little in front of the other ones. The appendage is very flexible and seems capable of being directed upwards, as well as of being bent downwards and forwards, thus covering the tentacles. The thin and transparent integument is covered with small papillæ, each containing a calcareous deposit of the above-mentioned shape. The four processes, running out one from each arm, are situated close to the elongated central part of the deposits. As the calcareous deposits are mostly dissolved and only the surrounding membranes are left, it is impossible to decide whether the arms and the processes are spinose or not.