numerous small retractile processes. Pedicels rather large, ten (?), all along each side of the ventral surface. The dorsal surface with about five (?) short, obtuse, thick processes round its anterior part. Integument thin, brittle, and very rough, with a great number of larger and smaller calcareous deposits, composed of four spinose slightly curved arms of variable length, and five long, straight, spinose processes directed outwards, one running out from the centre of the deposit and the others from the arms.

Colour in alcohol, light grey. Length, about 32 mm. Breadth, about 16 mm.

Habitat.—Station 241. June 23, 1875. Lat. 35° 41′ N., long. 157° 42′ E. Depth, 2300 fathoms; bottom temperature, 1·1° C; red clay. One very incomplete individual.

The only specimen I have had at my disposal is so incomplete and contracted as to make it impossible to form a correct idea of the shape and general appearance. body seems, however, to be more or less ovate, and projects a little further than the mouth, which is thus rendered thoroughly ventral in position. The tentacles seem to be nearly of equal size, and their circular, rather large, terminal part is provided with numerous small retractile processes. It is rather difficult quite correctly to state the number of pedicels, but I believe them to be twenty in all, ten along each side of the ventral surface. They are rather large and brittle, so that they are easily broken off The integument is thin and very brittle, in consequence of a great when touched. number of calcareous deposits being closely crowded one upon another. Those calcareous deposits (Pl. XXXII. fig. 18) have an almost cross-like form, with the arms slightly curved, more or less spinose and very long, sometimes up to 0.48 mm. centre of the deposit there rises a long, more or less straight, spinose process, and a similar one proceeds from each arm, at some distance from the centre. As those processes are directed outwards from the body, the integument becomes very rough. The deposits of the pedicels and tentacles (Pl. XXXII. figs. 19, 20) are either of the same shape as those in the integument of the body or consist of unbranched, more or less spinose spicula, or they are, lastly, composed of irregular four-armed bodies, with the arms short, thick, spinose, and with or without any processes.

The polian vesicle is rounded and 5 mm. long. The madreporic canal seems to be destitute of calcareous deposits in its walls; however, I have not been able to ascertain whether it pierces the body-wall or is only attached to its anterior surface; I thought I observed the former to be the case.

Elpidia purpurea, n. sp. (Pl. VII. figs. 4-6).

Body nearly oval, or of almost equal breadth throughout, more or less depressed, little more than twice as long as broad. Mouth anterior, ventral. Anus posterior, terminal, subdorsal. Tentacles of almost equal size; their ends with small, retractile processes, those round the edge being larger than the others. Pedicels, fifteen or eighteen in number, only round the posterior half of the ventral surface. The foremost part of the dorsal surface