impression of being constituted by four long, conical processes, webbed together by an extension of the skin. The lobe seems to possess a high degree of flexibility, and doubtless it can be thrown upwards and backwards as well as turned over the mouth and the tentacles. The skin of this specimen being very contracted and wrinkled, it is not possible to decide with certainty whether or not the dorsal surface is provided with some other minute processes. The mouth is perfectly ventral and surrounded by ten tentacles, of which only a few are left; they seem mostly to resemble those of *Peniagone wyvillii*. The pedicels appear to be five or six in number on each side, of which as usual the anterior ones are slightly larger and further apart from each other than the posterior ones. The calcareous deposits have the aspect of being very closely crowded together within the integument, and bear a strong resemblance to those of the above-mentioned species; their arms, measuring in length from 0.06 to 0.08 mm., are slightly curved and, as is the case with the four processes, minutely spinose.

The characters which distinguish this species from the preceding one are the following:—The almost black colour, the large rounded dorsal appendage, the more cylindrical form of the body, the number of pedicels, and lastly the abundance of calcareous deposits.

Peniagone horrifer, n. sp. (Pl. X. fig. 2).

Body elongated, about thrice as long as broad. Mouth anterior, ventral. Anus posterior, terminal; tentacles very long, their large terminal part with small, branched, retractile processes. Pedicels about eight along each side of the ventral surface; the anterior half of the ventral surface destitute of pedicels. The dorsal surface having an extension of the skin anteriorly, constituting a very large, flattened, almost triangular lobe, with its base in the direction of the medio-dorsal line, and with four rather large, flat, obtuse projections along the right side of its upper or rather posterior dilated concave margin; and bearing near the base of that lobe some other small papilla-like processes. Integument thin, with a great number of crowded calcareous deposits, composed of four arcuated, slightly spinose arms, diverging from the ends of a more or less elongated central part, and two to four rather long, straight spinose processes, directed outwards.

Colour in alcohol, light violet. Length about 85 to 90 mm. Breadth about 30 to 35 mm.

Habitat.—Station 157. March 3, 1874. Lat. 53° 55′ S., long. 108° 35′ E. Depth, 1950 fathoms; diatom ooze. One very incomplete specimen.

It is a great pity that I have had the opportunity of examining only a single individual of this very interesting species, and that this like the preceding forms has changed so considerably during the preservation in spirit, that it has been almost impossible to form any correct idea of its true aspect. The dorsal surface is strongly convex, the ventral surface being on the contrary flat. The large characteristic appendage of the