

PROCEEDINGS

OF THE

SCIENTIFIC MEETINGS

OF THE

ZOOLOGICAL SOCIETY

OF LONDON

FOR THE YEAR

1861.



PRINTED FOR THE SOCIETY,
AND SOLD AT THEIR HOUSE IN HANOVER SQUARE.

LONDON :

MESSRS. LONGMAN, GREEN, LONGMANS, AND ROBERTS,
PATERNOSTER ROW.

PARIS :

M. J. ROTHSCHILD,
14, RUE DE BUCY.

LEIPZIG :

M. J. ROTHSCHILD,
2, QUERSTRASSE.

side may obtain the same amount of heat from their bodies, which is essentially requisite, or the egg would not be brought to perfect maturity.

The eggs, it is said, "when quite fresh are delicious eating, as delicate as a fowl's egg, but much richer." The natives of the Hapace Islands, either from their rarity or from their great delicacy, look upon the eggs found in their islands as worthy to be reserved for the chief's eating; and for that reason they are denominated "Chief's Eggs." The flesh of the adult bird of some species has been pronounced to be good eating.

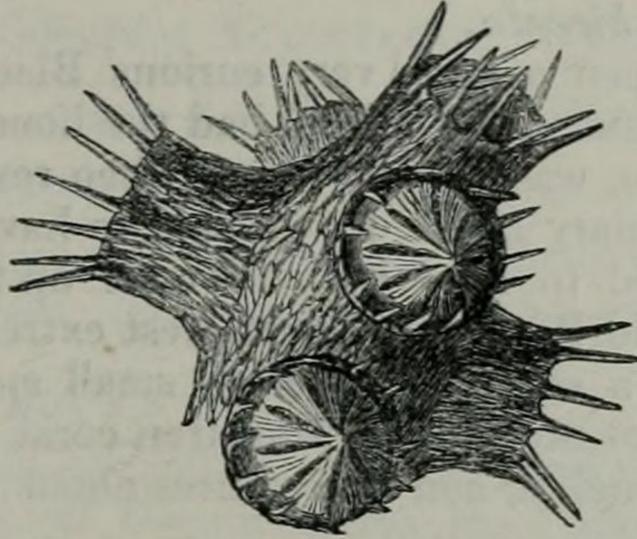
8. DESCRIPTION OF A SECOND SPECIES OF ACANTHOGORGIA (J. E. GRAY) FROM MADEIRA. BY JAMES YATE JOHNSON.

In the 'Proceedings of the Zoological Society' for 1857, p. 128, was printed a description of a new genus of *Gorgoniadæ* by Dr. J. E. Gray, founded on a specimen in the British Museum, the habitat of which was unknown. The genus was named by its describer *Acanthogorgia*, and the specimen was figured, by an inadvertence, in the 'Proceedings of the Zoological Society' for 1851 (*Radiata*, Pl. III. fig. 2), under the name of *Nidalia occidentalis*, instead of *Acanthogorgia hirsuta*, Gray. I am now in a position to state that the native place of this curious Black Coral (of which no notice has been taken by M. Milne-Edwards in his work on Coralliaria) is Madeira; for I possess one specimen, and have seen others, obtained from deep water near that island. Last winter a specimen of Black Coral fell into my hands (also obtained from the same coast), which, though evidently belonging to the genus *Acanthogorgia*, appeared on examination to be specifically distinct from the species previously described. I now proceed to lay before the Society a description of this second species, which I have named, in honour of the founder of the genus to which it belongs,

ACANTHOGORGIA GRAYI.

Colour dark brown. Branching irregularly, with a tendency to grow in one plane. Branches free, slender, flexible, having an average diameter of one-seventh of an inch; the thickest part of the stem near the base has a diameter of three-tenths of an inch; the ends of the branches are rounded, and thicker by one-half than the neighbouring portion of the branch. Axis pale brown, very slender, that of the smaller branches, when dry, being not more than the twentieth of an inch in diameter. When the coral has been a few days out of the water, the axis shrinks from the bark, and remains distinct in the middle. It is composed of fibrous matter without spicula. Caustic alkali has little or no effect upon it, even on the application of heat. Bark composed almost entirely of spicula, studded with sessile cylindrical cells, irregularly distributed on all sides. These cells have a height of from the thirtieth to the twentieth of an inch, and their diameter is about half the height. The upper halves of eight (some-

times nine) large erect spicula project round the orifice of each cell at eight angles, corresponding with the same number of slightly elevated ribs or crests on the outside of the cell formed by other spicula; the exposed portion of these projecting oral spicula is smooth. In *A. hirsuta* the exposed portions of the corresponding spicula are

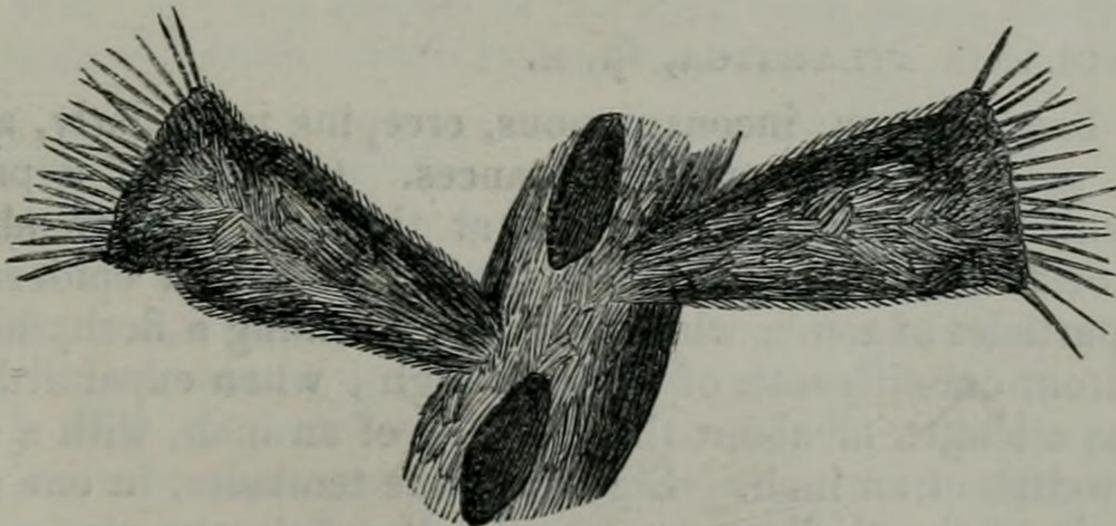


Acanthogorgia grayi.

rough. The orifice itself in a dry specimen is covered in by another series of large spicula, sixteen in number, arranged in eight pairs, the apices of which meet in the middle. At the outside of the cells the spicula are placed parallel, not crossed as in *A. hirsuta*.

The spicula are composed of calcareous matter, and are at once dissolved with effervescence on the application of a strong acid, leaving behind a formless mass of brown animal matter. The spicula which lie in the bark between the cells are fusiform, slightly bent, and for the most part very stout, some elongated, others contracted to an ovoid form; those which project round the orifices of the cells have their basal portion geniculate, flattened, and very rough, with protuberances; and not unfrequently the bases are branched. The spicula of both species are pretty objects under an object-glass of low power.

Acanthogorgia grayi differs from *A. hirsuta* (of which a figure is



Acanthogorgia hirsuta.

here given for comparison) in the much smaller size and in the form of the cells, which are cylindrical, not bell-shaped nor contracted at the

bottom. In the only specimen of the former which I have seen, the cells are not nearly so numerous as in the specimens of the latter which have come under my notice. Moreover, the orifices of the cells in *A. hirsuta* are not roofed in with spicula in the same complete and regular way as is the case with the cell-orifices of this species. Lastly, I have not noticed any branching at the bases of the large spicula of *A. hirsuta*.

The only specimen of this very curious Black Coral which has fallen in my way, and which I have had the honour of presenting to the British Museum, was brought to me when residing at Funchal in the month of February last. It was said to have become entangled in a fishing line, and to have been brought up from a considerable depth near Ponta do Pargo, the south-west extremity of the island. It was attached to a stone on which a small specimen of *Dendrophyllia ramea*, a not uncommon Madeiran coral, was seated. It has a height of 6 or 7 inches, and it measures about 10 inches across.

9. NOTES ON THE SEA-ANEMONES OF MADEIRA, WITH DESCRIPTIONS OF NEW SPECIES. BY JAMES YATE JOHNSON.

In the following notes I have given an account of such Sea-Anemones as have occurred to me after much diligent search in the neighbourhood of Funchal, the capital of Madeira. The dredge would doubtless bring other species to light, and possibly something additional would be discovered by an examination of the shore in other parts of the island. As to the nomenclature of the genera, I have considered it right to follow Mr. Gosse, to whom all students of this tribe of Zoophytes must feel much indebted for his painstaking book on the British species.

A *Cornularia* is included ; for although not, strictly speaking, a Sea-Anemone, it closely resembles one in external appearance.

Order ALCYONARIA, M.-Edw.

CORNULARIA ATLANTICA, sp. n.

Basal band narrow, inconspicuous, creeping irregularly, and bearing the polypes at uncertain distances. Column of a pale flesh-colour, subcylindrical, rather wider at the middle than above and below ; destitute of spicula, but invested by a thin epidermis containing particles of sand ; when retracted, forming a fleshy hemispherical button, one-fifteenth of an inch high ; when expanded, the column has a length of about three-tenths of an inch, with a diameter of one-twelfth of an inch. Eight pinnate tentacles, in one series, at the margin of the shallow cup forming the disk, the pinnæ of about twelve pairs, ringed, as if showing a tendency to further division. Tentacle-stem subulate, about one-fourth of an inch in length, the bases of the tentacles broadening and coming in contact one with another on each side. When the animal is fully displayed, the ten-