

at the terminus on the Boulevard Mazas, the *Haplochili* had gasped their last, and could only be said to have just reached Paris to die. I have wondered several times since, what became of these two. They were good specimens; their colours were not as bright as if, instead of being choked or drowned in water, they had been drowned or choked in spirits; but the bottle had on it a label with their name and country, and I left it behind me in the railway carriage."

Thus my experiment failed; but I doubt not that, with a little more care, it would have succeeded; and I feel sure that ere long this pretty freshwater fish will be brought into France, and so make its way into England. The intelligent and energetic officers in charge of the mails between Réunion and Paris have many facilities for carrying this project into effect; and as there is only three days of the three weeks' journey to be accomplished by rail, the difficulties of railway transit are not insurmountable. My belief is that this little fish would become a great favourite in this country. I would commend the subject to the consideration of M. Geoffroy St. Hilaire, the able Secretary of the Jardin d'Acclimatation of Paris. With such zealous assistants as he has in my friends Capt. Rappatel of the 'Erymanthe,' and M. Richard, Agent de l'Administration des Postes, he need experience no difficulty in having brought to Paris any of the land or freshwater vertebrates to be met with in the islands off the east coast of Africa.

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LVIII.—*Descriptions of some new Genera and Species of Alcyonoid Corals in the British Museum.* By Dr. J. E. GRAY, F.R.S., V.P.Z.S., &c.

SOME years ago we received from Mr. Jukes some animals in spirits. Amongst these is a fleshy Alcyonoid, which lives on the naked axis of a *Gorgonia* apparently belonging to a genus and species that I have not before seen described. Unfortunately the specimen has no habitat attached to it, and it is not in a very good state; so I have been waiting in hope of another specimen arriving in a better condition and with its locality stated; but being now engaged in naming the undetermined species of this group, I shall proceed to describe it.

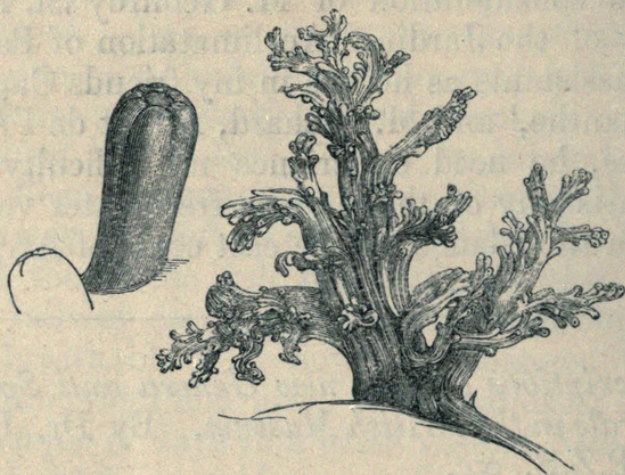
This Alcyonoid has much resemblance to the genus *Nephthya*; but it differs in the slenderness of the branches and branchlets, the distance between the polypes, and the outer surface of the polypes being entirely destitute of fusiform and other spicules.



## LEMNALIA.

Coral soft, fleshy, formed of numerous clustered, small, cylindrical tubes; the outer surface is smooth, destitute of any appearance of spicules, but showing by grooves the places of union of the different tubes that form the mass, each tube ending in a polype. The base is broad, expanded horizontally, fleshy like the coral, throwing up several stems, which are irregularly branched, the lateral branches being somewhat two-rowed, the terminal branchlets rather clustered, each branchlet ending in a short cylindrical polype, the mouth and tentacles of which are completely retractile, only leaving a central knob surrounded by eight slightly depressed radiating grooves, and entirely destitute of any appearance of superficial spicules. The whole coral is flaccid, and the larger branches appear to be more or less compressed; but this may in great part depend on the state of the specimen.

*Lemnalia Jukesii*. Fig. 1.



*Hab.* —? (J. Jukes, Esq.)

*Ammonothea thrysoides*, Hempr. & Ehrenb. (Ehrenb. Corall. r. M. 59), from the Red Sea, may be another species of this genus.

Prof. Ehrenberg, in his 'Corals of the Red Sea,' separates the genus *Ammonothea* from *Nephthya*, because the former is said not to have, and the latter to have, fusiform spicules on the polype. The types are *A. virescens* and *Nephthya Chabrolii*, Audouin, both from Savigny's beautiful figures in the great work on Egypt, t. 2. f. 5 & 6; but, if the figures are examined, it will be found that Savigny represents the polype-cells of both species as covered externally with fusiform spicules, the spicules in *Ammonothea* being only smaller than those of *Nephthya*. Prof. Ehrenberg says that he has examined many specimens



of *Ammothea*; but he does not point out the inconsistency of Savigny's beautiful figures with his generic character.

MM. Milne-Edwards and Haime, in the 'Coralliaires,' have placed *Ammothea* with the "*Alcyoniens nus*" and *Nephthya* with the "*Alcyoniens armés*;" yet, as has been pointed out by MM. Duchassaing and Michelotti (*Coral. des Antilles*, p. 9), they seem to be only synonyms of the same genus. Probably these authors were misled by Prof. Ehrenberg's characters of the genera above quoted.

#### FILIGELLA.

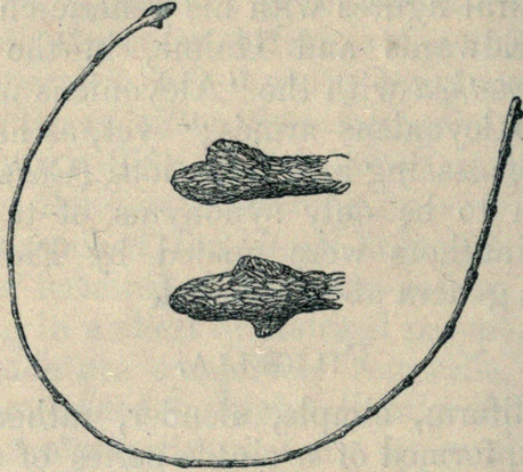
Coral free, filiform, simple, slender, rather rigid. Bark thin, transparent, formed of a single series of flattened, sub-fusiform, elongate spicules placed close together side by side, forming a hard coat; ends blunt, ovate, covered with spicules like the stem. The axis hornlike, slender, cylindrical. Polype-cells short, broad, conical, very far apart, those next each other being on different sides of the stem, forming a sub-spiral series covered with a single series of close spicules like the bark. The cells near each end of the coral are very much alike, and the ends of the coral very similar and covered with spicules; but there does not appear to be any opening for the polype: they are probably the buds by which the coral grows in length.

How the coral lives I am not able to divine. There is no appearance of either of the ends being sunk in the sand; and there is no expanded disk, which is universal in the group to which it belongs. It must live erect, or nearly so; for the polypes are placed equally on all sides of the axis. Can it climb among the branches of zoophytes or corals?

The specimens of this Gorgonoid coral I found among some *Pennatulæ* dredged up from off Cape Frio, near Rio de Janeiro. It is curious as being simple, thread-like, unbranched, and rounded off at each end; so that it must have been free. It is covered with a single regularly disposed series of small, fusiform, flattened spicules, closely applied to each other. There are a small number of very distant, short, broad, conical polype-cells, which are also covered with a single series of spicules. One of these cells is near each end, and it and the end of the coral are covered with spicules like the rest of the stem.

In the structure of the bark and the form and disposition of the polype-cells it is very much like the genus *Acis*, described and figured by Duchassaing and Michelotti (*Coral. des Antilles*, p. 19, t. 1. f. 14, 15); but it differs from that genus in being unbranched and free.



*Filigella gracilis.* Fig. 2.

The coral very slender, thread-like; the polype-cells about one inch or three-quarters of an inch apart.

*Hab.* Coast of Brazil and Cape Frio. B.M.

*Cirrhopathes filiformis.*

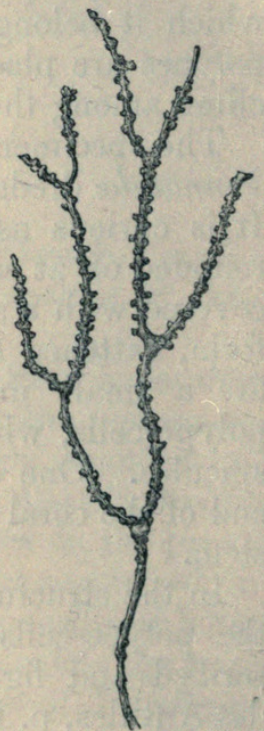
Coral very slender, thread-like, of equal diameter from end to end, pale brown, with crowded spinules on the surface; the spinules are conical, nearly transparent, and spread out nearly horizontally from the axis.

*Hab.* Australia.

This specimen was found among some reptiles &c. purchased from Mr. Higgins, from Australia.

Mr. Jukes, in 1846, presented to the British Museum some corals that were collected by him on the north coast of Australia: among others, there are two very interesting new genera allied to *Melithæa* and *Isis*. They differ from all the other genera of the group in only having a single series of polype-cells on each of the two edges of the branches and branchlets.

Fig. 3.



## ACABARIA.

The coral very slender, branched, dichotomous, expanded in a plane; branches and branchlets very slender, compressed, with short, swollen joints, more prominent on the older stems. Bark thin, hard, smooth. Cells short, broad, subcylindrical, truncated, in a single series on each edge of the branches and branchlets, rather close together. Axis calcareous, solid, red, longitudinally grooved; *Acabaria divaricata*. internodes short, swollen, spongy.



This differs from all the other genera of *Melithæadæ* in having a single series of separate well-developed polype-cells on each of the two edges of the branches and branchlets.

*Acabaria divaricata.* Fig. 3.

Coral very slender, fan-like, branched; branches rather elongate, divergent; bark red-brown; axis rose-coloured.

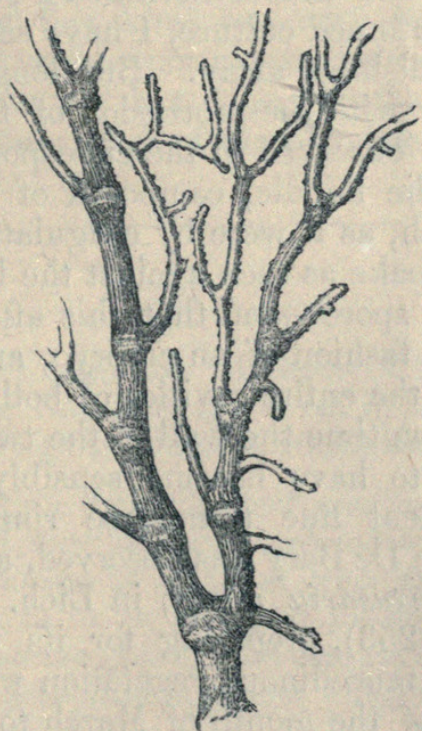
*Hab.* Australia. (Jukes, no. 2787.) B.M.

ANICELLA.

Coral fan-like, dichotomously branched; branches separate, divaricating, in the same plane, arising from the short, rather sunken joints. Bark thin, hard, smooth, longitudinally grooved. Cells minute, subcylindrical, short, produced in a narrow alternating series on each edge of the branches and branchlets. Axis calcareous, solid, with longitudinal grooves; internodes very short, contracted, bark-like.

This genus differs from *Melithæa* in the bark being smooth, and the internodes not swollen, and from *Isis* in the internodes being bark-like and not cartilaginous.

*Anicella australis.* Fig. 4.



Coral red, growing in one plane; the stem distinctly jointed; the branchlets slender, with the joints very inconspicuous.

*Hab.* Port Essington. (Jukes.) B.M.





Gray, John Edward. 1868. "LVIII.—Descriptions of some new genera and species of Alcyonoid corals in the British Museum." *The Annals and magazine of natural history; zoology, botany, and geology* 2, 441–445.

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