

Genus *Chondrocladia*, Wyville Thomson (Pls. XX., XXI.).

1873. *Chondrocladia*, Wyville Thomson, The Depths of the Sea, p. 188.

1880. *Cladorhiza (pars)*, Schmidt, Die Spongien des Meerbusen von Mexico, pt. ii. p. 83.

Of varying, but usually symmetrical form. Skeleton usually consisting of a central, erect axis of spiculo-fibre, which may or may not be branched, and from which arise longer or shorter processes, also composed of spiculo-fibre. The chief megasclera are stylote and often attain a great length. The characteristic microsclera are isochelæ, with three or more teeth at each extremity and a curved shaft expanded laterally near each end into wing-like processes. Sigmata may also be present.

The genus was founded in 1873 by Sir Wyville Thomson (*loc. cit.*) for his *Chondrocladia virgata*; but he gives no generic diagnosis.

The two genera *Chondrocladia*, Wyville Thomson, and *Cladorhiza*, M. Sars, appear to be closely allied, differing only in the form of the chelæ, which in the one case have the two ends unequal and in the other equal, and, as already pointed out (p. 86), Schmidt includes both under the name *Cladorhiza*.

The *Chondrocladiæ* are also deep-sea sponges, and may acquire the "*Crinorhiza*" form; they are not nearly so well represented in the collection as is the genus *Cladorhiza*.

The geographical distribution of the genus is extended by the results of the Challenger voyage from the North Atlantic to the Southern Ocean and the Pacific, and the vertical distribution to nearly 3000 fathoms.

*Chondrocladia concrescens* (?), Schmidt, sp. (Pl. XX. fig. 12; Pl. XXI. figs. 7, 7a, 12).

1880. *Cladorhiza concrescens*, Schmidt, Die Spongien des Meerbusen von Mexico, pt. ii. p. 83, pl. x. figs. 8, 9.

Want of evidence, due both to the fragmentary nature of the Challenger specimens and to the incompleteness of Schmidt's original account, makes the identification of this species doubtful.

The Challenger specimens (Pl. XX. fig. 12) consist of five stalks, four of which have their ends inserted into sockets in a thick, fleshy mass strongly resembling mammalian hyaline cartilage in appearance, while their other ends are free. The fifth stalk is separate from the others and has a lobe-like, fleshy mass adhering to one end. It is the narrower ends of the stalks which are inserted into the solid fleshy masses, while the broader ends are free, but have evidently been attached (? to the main stem) when the