

summit. The scattered tylostylote spicules of *Cladorhiza similis* and *Cladorhiza inversa* are replaced by styli.

Imbedded in the lower surface of the sponge was a large, spherical, hard, brown body; probably some parasite, perhaps encysted. This illustrates well the protective use of the dense external armour present in *Axoniderma mirabile*, nobis, and absent in this species.

*Locality*.—Station 264, August 23, 1875; lat. 14° 19' N., long. 152° 37' W.; North Pacific Ocean; depth, 3000 fathoms; bottom, red clay; bottom temperature, 35°·2. One specimen.

*Cladorhiza similis*, Ridley and Dendy (Pl. XX. fig. 7; Pl. XXI. figs. 5, 5a, 5b, 18).

1886. *Cladorrhiza similis*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 343.

The sponge (Pl. XX. fig. 7) has assumed the "*Crinorhiza*" form, and consists of a cap-shaped, conical head, perched on the end of a stem or root, which appears to have been broken off short, so that its proper length cannot be ascertained. From the margin of the cap project a considerable number of long spicular processes, radiating outwards and downwards. The apex of the sponge is pointed, and apparently devoid of short spicular processes. The lower surface is shallowly concave, and only just 6 mm. in diameter. *Colour* in spirit dirty yellow.

*Skeleton*.—Arranged as usual in "*Crinorhiza*" forms.

*Spicules*.—(a) *Megasclera*; (1) very long, slender styli of the usual type; (2) short, fusiform tylostyli (Pl. XXI. figs. 5, 5a, 5b), with peculiarly shaped heads; usually very sharply pointed, and with the head and neck inclined at an angle to the main shaft. These spicules vary greatly in size, measuring from 0·21 to 0·6 mm. in length, usual thickness about 0·0157 mm. They occur chiefly scattered about near the surface of the sponge, where they are very thickly placed, and apparently represent in function the large, five-toothed, special protective spicules of *Axoniderma mirabile*. They are also found in the skeleton-fibres. (b) *Microsclera*; we have seen only the anisochelæ, but in our anxiety not to destroy such a unique and so small a specimen, it is not improbable that we have overlooked the sigmata. The anisochela (Pl. XXI. fig. 18) is of the usual *Cladorhiza* type. The shaft is curved and much expanded laterally towards the larger end, and there are three teeth at each extremity. Length about 0·03 mm.

It will be seen from the foregoing description that, as regards external appearance, this species comes very close indeed to *Axoniderma mirabile*, nobis; it differs, however, in the replacement of the additional microsclera, so characteristic of the latter, by small tylostyli, and also in the absence, if they be really absent, of the sigmata. The anisochelæ are, however, almost identical both as regards shape and size in the two species.

*Locality*.—Station 281, October 6, 1875; lat. 22° 21' S., long. 150° 17' W.; South Pacific; depth, 2385 fathoms; bottom, red clay; bottom temperature, 34°·9. One specimen in moderately good condition.