

about 31 mm. *Colour* in spirit yellow. *Texture* hard and firm owing to the extraordinarily small amount of soft tissues present. *Surface* almost smooth. *Oscula* and *pores* apparently absent.

*Skeleton*.—A band of spiculo-fibre forms the axis of the stem or root, and is continued in a looser condition to the summit of the head, there giving rise to the short, slender, projecting, spicular processes already described, each of which is composed of a single large spicule. From the centre of the head bands of spiculo-fibre radiate outwards and downwards, giving rise to the very long spicular processes which fringe the margin of the sponge. At their origin these bands are very broad, but they rapidly taper away to hair-like thinness (*vide* woodcut, Fig. 5, *a'*).

*Spicules*.—(*a*) *Megasclera*; of one kind only, viz., straight, slender styli, which may attain a length of over 3.5 mm. (*b*) *Microsclera*; (1) anisochelæ (Pl. XXI. fig. 8) of the usual *Cladorhiza* type, with the curved shaft much expanded towards the larger end, and with three teeth at each extremity; length about 0.038 mm. (2) Sigmata (Pl. XXI. fig. 10), more or less contort, of fair size, and with the ends produced into long, slender, whip-like processes, much as in *Cladorhiza abyssicola*, var. *corticocancellata*, Carter; length of spicule (from bend to bend) about 0.0756 mm.; these spicules are rather rare. (3) Amphiasters (Pl. XXI. fig. 9), large and very remarkable spicules, each consisting of a straight shaft with a rosette of five teeth at each end; these spicules vary considerably in size, reaching about 0.23 mm. in length. They form a very thick, dense layer (*vide* woodcut, Fig. 5, *c*), encrusting the entire body, both upper and lower surfaces, and the upper portions of the root and of the long radiating processes. They are confined to this external layer, in which they are very closely packed together without much order.

As regards external form this species is almost indistinguishable from a species of *Cladorhiza* obtained at Station 281, which we have called *Cladorhiza similis*, so that without microscopic examination one would at once put them down as identical; microscopic examination, however, shows the spiculation to be widely different, as will be seen by reference to the description on p. 93.

We are inclined to regard the presence of extra microsclera (if so they can be called) as a special modification introduced to suit the special requirements of the species, and hence they would be of less value in classification than the ordinary microsclera, the full complement of which is also present. The very dense external armature of spicules is doubtless a most efficient protection against the inroads of parasites or other enemies. That allied sponges are subject to such attacks will be seen by reference to the description of *Cladorhiza longipinna* (p. 93).

*Locality*.—Station 291, October 27, 1875; lat. 39° 13' S., long. 118° 49' W.; South Pacific; depth, 2250 fathoms; bottom, red clay; bottom temperature, 34°.6. Two good specimens.