

The spicules measure 0·3–0·02; 0·28–0·03; 0·2–0·025; 0·15–0·025; 0·12–0·04 mm.

The colour of the colony in spirits is a greyish-white.

*Habitat*.—Station 151, off Heard Island; depth, 75 fathoms.

A quite similar form, but probably a young colony, was found by Studer at the Cascade Ridge, N.E. Kerguelen, also on the stem of a *Macrocystis*; its colour in life was noted as "pale red"; the specimen has been lost.

*Alcyonium sollasi*, n. sp. (Pl. XLII. fig. 4).

The colony presents a more or less lobulate form, which is attached to, and embedded in, a mass of hardened sand and mud. One colony measures about 75 mm. in its widest, and 65 mm. in its narrowest diameter, and is about 45 mm. in height. Another measures 90 mm. in length, by about 60 mm. in width, and is about 40 mm. in height. The basal attachment is but little wider than the rest of the colony, and only a very narrow rim is destitute of polyps. The lobes are sometimes simple, at other times they are bifid or trifid; they are short, papilliform, not finger-like; they often grow very tightly against one another, thus altering their original shape.

The polyps are numerous and very closely packed together; they are completely retractile within the body-cavities, and when withdrawn, the basal portion next to the cœnenchyma is drawn together and over the retracted portion, forming eight protuberances, which make an eight-rayed star. In dried specimens these slightly project above the cœnenchymal surface, and are from 1·5 to 2 mm. in diameter.

The spicules of the cœnenchyma are, for the most part, stachelkeulen. These form a continuous layer on the outer surface of the colony, giving it a well-marked consistency. In addition there are spiny spindles, both straight and bent, and also some spiny spindles with broad, spiny heads, resembling, but different from, the stachelkeulen.

The spicules measure:—The stachelkeulen 0·2–0·0; 0·16–0·06; 0·12–0·08 mm. The straight spiny spindles 0·22–0·04; 0·3–0·08; 0·4–0·06 mm. The curved spiny spindles 0·34–0·04; 0·34–0·06 mm. The spiny spindles with spiny heads 0·26–0·06; 0·22–0·04.

Colour in spirits, light brown.

*Habitat*.—Station 313; entrance to the Straits of Magellan; depth, 55 fathoms.

*Alcyonium haddoni*, n. sp. (Pl. XLII. fig. 6).

In this species the colony forms very variously shaped and sized masses, which grow over the dead stems of a species of Muriceid. In one specimen the colony consists of a but slightly elevated mass, about 40 mm. in length, by about 10 mm. in its widest central diameter; it is growing around the axis of a Muriceid. The edge of the colony,