

form 0.16 mm., diameter 0.04 mm., crepidial axis 0.02 mm. in length. The zygo-se terminations of two cladi are shown in fig. 18.

2. *Oxea* (Pl. XXXV. fig. 22) slender, very attenuately pointed, 0.32 by 0.004 mm.

*Colour*.—In the dried state yellowish-white. Size, 13 mm. in height by 15 mm. in breadth, thickness of the wall 4 mm.

*Habitat*.—Station 192, off the Ki Islands, south of Papua, September 26, 1874; lat. 5° 49' 15" S., long. 132° 14' 15" E.; depth, 140 fathoms; bottom, blue mud.

*Remarks*.—This might easily be mistaken for a young specimen of *Azorica pfeifferæ*; the characters of the desma suffice to distinguish it.

*Azorica crassiuscula*, n. sp. (Pl. XXXV. figs. 1–11).

*Sponge* (Pl. XXXV. figs. 1, 2).—A somewhat thick plate (7 mm. thick), curved, so as to present an outer convex surface (Pl. XXXV. fig. 1), which grows out into irregular, sinuous ridges, and an inner concave surface (Pl. XXXV. fig. 2), which is more even. Upper margin broad, sinuous, rounded. Base attached. Oscules circular, with a very slightly elevated margin (0.32 to 0.4 mm. in diameter), scattered over the inner face. Openings of the incurrent canals (as represented in the skeleton) scattered over the outer face, circular, small (0.24 to 0.32 mm. in diameter). The incurrent and excurrent canals cross the wall transversely.

*Spicules*.—I. Megascleres. 1. *Desmas* (Pl. XXXV. fig. 11), similar to those of *Azorica pfeifferæ*; the average length of a cladus is 0.16 mm. The youngest desma (Pl. XXXV. fig. 5) observed is an almost cylindrical strongyle, only very slightly enlarged at the ends, much corroded in appearance, and measuring 0.055 mm. in length by 0.0075 mm. in diameter. The length of the crepidial axis (Pl. XXXV. fig. 11) varies in different desmas from 0.032 to 0.045 mm. There is a greater tendency to a uniaxial growth amongst these desmas than in those of *Azorica pfeifferæ*.

2. *Oxea* (Pl. XXXV. fig. 3), long, slender, fusiform, or almost cylindrical, with sharply pointed ends or with the points rounded off. The longest observed measures 1.193 by 0.012 mm.; but so few entire spicules were seen that this length may be exceeded.

*Colour*.—In the dried state, grey.

*Habitat*.—Locality not known. The specimen occurs attached to the base of *Discodermia ornata*.

*Remarks*.—The successive stages in the development of the desma are shown in figs. 4–10 (Pl. XXXV.). They present no essential points of difference from those of other monocrepid desmas.