

but sometimes tornote or oxeate, 1.0 by 0.013 mm.; tylus spherical or ellipsoidal, 0.016 mm. in diameter.

II. Microsclere. 2. *Sterraster*, ellipsoidal or reniform, 0.097 by 0.0774 mm. 3. *Choanosomal spiraster*, centrum elongate, more or less cylindrical; actines not numerous, usually from six to eight, more or less conical, bent, subdivided near the end into simple or bifid cladi; arranged spirally, but sometimes collected into a whorl at each end of the centrum, 0.039 mm. in length. 4. *Microstrongyle*, straight, cylindrical, entirely spined, spines usually short, rounded at the ends; 0.0258 by 0.0064 to 0.008 mm. 5. *Somal microstrongyle*, minute, cylindrical, sinuous, smooth or sparsely spined, 0.019 by 0.019 by 0.0039 mm.

*Colours*.—Light fawn-yellow (dried); light chocolate-brown (in spirits).

*Habitat*.—South Seas (Bowerbank); Straits of Malacca (Bowerbank). Prince of Wales Channel, Torres Strait; depth, 7 fathoms; bottom, sand (Ridley, "Alert").

*Placospongia intermedia*, n. sp.

*Sponge*.—Small, incrusting (grown upon a *Vermetus*); surface raised where the cortical plates meet, into square ridges, giving it a low, "cloisonné" appearance. Oscules and pores (?).

*Spicules*.—I. Megasclere. 1. *Tylostyle*, 0.47 by 0.008 mm.

II. Microscleres. 2. *Sterraster*, ellipsoidal 0.0645 by 0.058 mm. 3. *Spheraster*, a spherical centrum covered with small tent-like spines, 0.02 mm. in diameter. 4. *Microstrongyle*, cylindrical, straight or sinuous, smooth or spined, from about 0.0118 to 0.0157 mm. in length, very variable in thickness, on an average about 0.0035 mm. or less. When spined this spicule becomes a spiraster.

*Colour*.—Chocolate-brown.

*Habitat*.—Punta Arenas; Central America; (?) Florida, Gulf of Mexico (O. Schmidt).

*Remarks*.—This species is distinguished from *Placospongia carinata* by the presence of the spheraster, and by the absence of the remarkable choanosomal spiraster which characterises the latter species. It differs from *Placospongia melobesioides* by the absence of spherules and the presence of the minute microstrongyles which replace them. The spicules included under the designation microstrongyles present a remarkable mixture of forms, including spirasters, spirulas, spherules, and microstrongyles in the restricted sense. A few spirasters of different character to the rest are also present, they are distinguished by a short thick spire and large conical spines.

The spheraster is traceable down to a minute sphere, 0.0039 mm. in diameter, with a roughened surface; as it is never clearly actinate, it is possible that it should be regarded as a spined sphere, rather than a spheraster.