3. Oxea, long, slender, fusiform; occurring very sparingly, chiefly near the walls of the larger canals, to which they run parallel; the inner end of the spicule is sharply pointed, the outer has not been observed; more than 0.71 mm. in length by 0.004 mm. in thickness.

II. Microsclere. 4. Spirasters, these are mostly of the typical spiral form, but they vary almost indefinitely; the spire varies in form and dimensions, and the spines vary in both these characters and in number; sometimes the spines become much reduced in number, enlarged and produced into secondary spines, sometimes with an increase in size and reduction in number of the spines, the spire becomes thickened into a stout fusiform body, and variation in this direction may proceed so far that at length a minute fusiform centrotylote oxea, such as is represented by an accidentally unnumbered figure placed immediately above fig. 18, Pl. XXXIV., may be produced. The commonest form of spiraster is about 0.02 to 0.024 mm. long, with spines 0.005 mm. in length.

Throughout a great part of the ectosome a number of problematical hollow rods occur, thickly distributed, lying with their long axes variously orientated, but parallel to the surface; they consist of a thin siliceous shell, cylindrical in form, with rounded closed ends, hollow, and apparently empty within; 0.071 mm. long by 0.0065 mm. in diameter. As they are not present in all parts of the ectosome, and as they are quite unlike any known form of cylindrical sponge spicule, they can hardly be regarded as spicular components of the sponge; they may possibly be Diatoms like those met with in Anthastra pyriformis (p. 148).

Colour.—Yellowish-white.

Habitat.—Station 122, off Pernambuco, September 10, 1873; lat. 9° 5′ S., long. 34° 50′ W.; depth, 350 fathoms; bottom, red mud.

Florida, 152 to 228 fathoms, and 7½ fathoms (O. Schmidt).

Remarks.—So far as one can judge from Schmidt's very imperfect description, the single specimen above described belongs to the species Corallistes typus, O. Schmidt. Schmidt's specimens were obtained from Florida at a depth of 152 to 228 fathoms, though one fragment was labelled 7½ fathoms, as Schmidt thinks by mistake. That which he figures closely resembles our sponge both in form and size; but certain irregularly bent uniaxial spicules which are represented as distributed through it are certainly not present in ours. These spicules, however, have probably been introduced, as Carter affirms, by some parasitic sponge.

The Challenger specimen is 29 mm. in height, 35 mm. in width, and 13 mm. in thickness. The oscules, which are from 0.5 to 1.0 mm. in diameter, lead into excurrent canals, which immediately branch into the substance of the sponge; the pores lead into incurrent canals, which descend perpendicularly through the ectosome and open into longi-

¹ Carter, Ann. and Mag. Nat. Hist., ser. 4, vol. xii. p. 443, 1873.