

Dermal triradiate spicules.—Sagittal; all rays of the same diameter, the proportion between the length and the thickness varying from 10 : 1 to 18 : 1; lateral rays curved forwards, reaching 0.5 mm. in length, each forming with basal ray an angle of about 120°; basal ray straight, its length not exceeding that of lateral rays, usually still shorter.

Stout acerate spicules.—Either spindle-shaped or of irregular form (Pl. V. fig. 3e); straight or slightly curved, some reaching over 2 mm. in length, with a diameter of 0.1 mm., most not exceeding 1 mm. in length and 0.06 mm. in diameter.

Fine acerate spicules of the peristome.—2 mm. and above in length and 0.0025 mm. in diameter, occasionally still thinner, sharp-pointed at both ends, the free end being, however, broken off in most cases.

Colour.—White.

Habitat.—Bahia; shallow water.

Anamixilla, n. gen.

Syconidæ without any special tubar skeleton, the supporting spicules of the parenchyma disposed in it like those in the Leuconidæ; in most cases, however, more or less parallel to the outer surface.¹

Anamixilla torresi, n. sp. (Pl. IV. figs. 2a–2c).

The single specimen of *Anamixilla torresi* of the Challenger collection presents a colony of tubular individuals of similar aspect to *Amphoriscus flamma*; some individuals are bare-mouthed, some mouthless. The thickness of different individuals varies from 1 to 9 mm.; the width of the walls is more constant, reaching 1 mm. on the average. The inner surface is slightly roughened by the apical rays of the gastric quadriradiate, the outer surface in a still higher degree roughened by the cortical triradiate spicules.

Skeleton.—The skeleton consists of gastric quadriradiate, of gastric triradiate, of subgastric triradiate, of parenchymal triradiate, and of dermal triradiate spicules.

Gastric quadriradiate spicules.—All rays of the same diameter (0.02 mm.); basal ray straight, either sharply or bluntly pointed, of conical form, length varying from 0.16 to 0.4 mm., occasionally rather thicker than lateral rays, forming with each of these an angle of about 115°; lateral rays curved outwards, often slightly undulating, tapering from the base to a sharp point, usual length 0.35 to 0.4 mm.; apical ray curved, sharply pointed, its length not exceeding 0.06 mm.

Gastric triradiate spicules.—Rays smooth, tapering from the base to sharp points, reaching 0.4 mm. in length, with a diameter of 0.015 mm.; basal ray straight, lateral rays slightly

¹ With the exception of the subgastric triradiate spicules, disposed like those in the genus *Amphoriscus*, if these be not an exclusive attribute of the only species of the genus hitherto known, *Anamixilla torresi*.