

tral row of smaller ones, filled with numerous supporting rods and a rudimentary end plate.

Type species.—*A. multipes* Walsh.

This genus was established by Walsh in 1891, but it seems as if he has placed some of the specimens of *A. multipes* in another genus as *Pannychia wood-masoni* Walsh. Koehler and Vaney have rejected *Amphigygnas* and regard *multipes* as a synonym of *Synallactes wood-masoni*.

I have had the opportunity to examine only one specimen, the type of *multipes*, so I cannot decide whether *wood-masoni* is identical with *multipes* or not, but it seems to me that *Amphigygnas* is as good a genus as *Synallactes* and *Bathyplores*; it has neither the solid rod-like spire of the typical *Synallactes*, nor the long spire with the numerous cross beams of *Bathyplores*. The deposits remind one so much of those found in certain Deimatidae that at first one would be inclined to place it in that group, and it is only when one notes the presence of respiratory trees as well as of smaller tables with more or less complete spire and the long Synallactid-like supporting rods that one realizes that the genus belongs in the Synallactidae.

From the Atlantic Ocean one species is known at present.

AMPHIGYGNAS BAHAMENSIS sp. nov.

Plate 9, fig. 9; Plate 10, figs. 1-6

Two specimens examined

The type is 17 cm. in length; form slender, not able to contract much; mouth ventral, anus terminal; tentacles 20, very lobate dorsally, long stiff papillae arranged in 4 rows, the anterior overhanging the oral opening as in *Synallactes*; ventrally a lateral row of conical pedicels, and a midventral double row of smaller conical pedicels; integument thin, stiff, glasslike, the tip of the oral papillae violet.

Internally a simple calcareous ring with squarish radials, deeply incised posteriorly and with notches anteriorly; interradials low, with the typical anterior tooth; one Polian vesicle; one dorsally attached stone canal. Intestine attached as usual, third loop runs on left side of midventral muscle band. Musculature narrow, undivided. Respiratory trees small with lateral lobes, hanging free into body cavity; no rete mirabile.

Deposits.—Very large tables with disks perforated by numerous holes; spire often broken and in many cases it appears as if it is quite normally reduced; spire, when present, is slender, composed of 3 rods

and united by some cross beams; it seems never to end in distinct teeth. In ventral feet, numerous long supporting rods with dentate edge, and small tables with 3-4 short rods in spire, ending in more or less distinct teeth; no end plate. In dorsal papillae, very slender dentate rods and tables of medium size, some of them resemble the three-armed rods in *Synallactes*.

Type locality.—“Albatross” station 2,666, between Bahamas and Cape Fear; depth 480 m.

Type in United States National Museum.

Also recorded from “Fish Hawk” station 7,281. Off Florida in 304 fms.

ZYGOTHURIA Perrier 1898

Diagnosis, translated from Perrier, 1901, p. 323.—Thirteen to twenty tentacles; stone canal placed close to body wall, without penetrating it; body ovoid, integument often wrinkled; not flattened but with a well-differentiated sole; a single series (rarely two series) of feet in each lateroventral ambulacrum, placed on the margin of the sole; these appendages are widely spread; dorsally, very small papillae, not numerous, irregularly distributed and sometimes totally absent. Calcareous deposits of integument exclusively in the form of tables, either tri- or quadriradiate.

Type species.—*Z. lactea* (Théel).

This genus has been rejected by Sluiter and Hérouard, but it seems to me quite convenient to have a separate genus for this almost footless form, and the shape of the tables seems to be characteristic. Perrier mentions supporting rods in the feet of *Zygothuria*; they are few and often difficult to find, when the appendages are completely contracted, but I think their presence will prove to be a general character in the genus.

No key has been given to the species which at present are said to occur in the Atlantic Ocean, as only one species is satisfactorily known. The two other species, from the eastern part, are very little known and may probably be identical. The *Zygothuria* sp. from the West Indian region is probably identical either with one or both of the eastern forms, or it is a new species, which is at present unsatisfactorily known.

ZYGOTHURIA LACTEA (Théel)

Plate 8, figs. 8, 9

Holothuria lactea Théel, 1886, p. 183; 1886a, p. 6.

Zygothuria lactea Perrier, 1901, p. 322, pl. 17, figs. 1-6.

PLATE 9

Bathyplores natans (Sars)

Fig. 1, 2. Cross-shaped tables.

Fig. 9. Total figure (about half size).

Bathyplores pourtalesi Théel

Fig. 3, 4. Deposits from typical form.

Figs. 5-7. Deposits from untypical form (no fungiform papillae).

Amphigymnas bahamensis spec. nov.

Fig. 8. Total figure (about half size).

