

Figs. 1-11. *Azorica crassiuscula*,

- Figure 1. The sponge, seen from the poral surface; nat. size.
 „ 2. A part of the sponge, seen from the oscular face; nat. size.
 „ 3-11. Spicules—

Fig. 3. Oxea; $\times 125$.
 „ 4. Part of a desma; $\times 180$.
 „ 5-10. A series of desmas in different stages of growth, the youngest to the left; $\times 180$.

Fig. 11. A not quite adult desma, showing the crepis; $\times 180$.

Figs. 12, 13. *Corallistes thomasi*,

- „ 12. The sponge seen from the poriferous face; nat. size.
 „ 13. The same seen from the oscular face; nat. size.

(For the spicules of this sponge, see Pl. XV. figs. 40-46.)

Figs. 14-22. *Azorica marginata*,

- „ 14-22. Spicules—

Figs. 14, 15. Desmas; $\times 63$.
 „ 16. Part of a desma, showing syzygial processes.
 „ 17. Form frequently assumed by the desma near the surface of the sponge, the upper side of the drawing is that turned towards the surface in the sponge; $\times 63$.

Fig. 18. Part of a desma, showing the syzygial ends; $\times 225$.

„ 19. A young desma, consisting almost solely of the crepis, of which the axial rod is shown; $\times 225$.
 „ 20. Desma more advanced; $\times 225$.
 „ 21. Desma after treatment with caustic soda; $\times 63$.
 „ 22. Oxea; $\times 180$.

Fig. 23. *Triptolemus cladosus*,

- „ 23. Centrotriene; $\times 225$.

Figs. 24, 25. Isolated undetermined spicules, found associated with *Corallistes thomasi*.

- „ 24. This spicule, of which numerous examples were observed, presents a straight rhabdome measuring about 0.45 by 0.04 mm., traversed by an axial rod 0.24 mm. long, with numerous short, usually bifid cladi, given off all along its length; these do not appear to be adapted for zygois, and it is doubtful whether the spicule is to be assigned to the Monaxonida or the Lithistida; it may be named provisionally *Orthorachis problematica*; $\times 95$.
 „ 25. A microsclere probably of *Corallistes thomasi*; $\times 300$.

Figs. 26-50. *Scleritoderma flabelliformis*,

- „ 26-28. The sponge; nat. size. The first two figures represent the oscular, the third the poriferous face.

- „ 29-50. Spicules—

Figs. 29-33. Various forms of the microstrongyle; $\times 360$.
 „ 34-41. The desma in various stages of growth, commencing with the youngest, $\times 95$; fig. 35 α is a more magnified representation of fig. 35; $\times 360$.
 „ 42. The epiabd of a desma, showing the crepis; $\times 200$.

Figs. 43-49. Various forms of desma; $\times 95$.
 Fig. 45 represents a form frequently assumed by desmas lying near the surface of the sponge.
 „ 50. Syzygial processes; highly magnified.