

PLATE XV.

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Figs. 1-19. *Anthaster pyriformis*,

- Figure 1. Sponge; nat. size.
 „ 2. Sponge, cut through vertically; nat. size.
 „ 3-11. Spicules—
 Fig. 3. Oxea; $\times 39$.
 „ 4, 5. Dichotrienes; $\times 39$.
 „ 6. Protriene or plagiatriene; $\times 39$.
 „ 7. Anatriene; $\times 39$.
 „ 8. Cladome of an anatriene; $\times 180$.
 „ 9. Cladome of an abnormal tritene, with four
cladi; $\times 180$.
 „ 10. Anthaster; $\times 430$.
 „ 11. Chiaster; $\times 430$.
 „ 12. Part of a vertical median section, showing the ectosome and the character of the chones; $\times 15$.
 „ 13. Transverse section through the wall of a canal, showing the epithelial cells raised into
projections by the actines of the asters, which are not seen, owing to the preparation
being mounted in glycerine; beneath the epithelium granule cells are shown; $\times 400$.
 „ 14, 15. Transverse sections through the ectosome, showing a plexus of collencytes, some of which
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 „ 16. Fusiform cells, which sometimes occur wrapping round the megascleres; $\times 292$.
 „ 17. Diagram of a velum, showing collencytes radiating from the wall of the canal in which it
occurs.
 „ 18. Transverse section of the symbiotic Diatom—*Amphora archeri*; $\times 300$.
 „ 19. Longitudinal section of the preceding; $\times 300$.

Figs. 20-27. *Anthaster communis*,

- „ 20. Cribriporal roof of a subdermal cavity, lower surface seen *en face*; $\times 180$.
 „ 21. Transverse section through the wall of a canal, showing the epithelium raised into projections
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 „ 22. Two epithelial cells seen *en face*, one with a contained chiaster; $\times 360$.
 „ 23-27. Spicules—
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 „ 24. Dichotriene; $\times 49$.
 „ 25. Anatriene; $\times 49$.
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 „ 27. Chiaster; $\times 360$.

Figs. 28-32. *Pilochrota tenuispicula*,

- „ 28. Sponge; nat. size.
 „ 29-31. Spicules—
 Fig. 29. Oxea; $\times 32$.
 „ 30. Orthotriene; $\times 32$.
 „ 32. Transverse section through the cortex, in the region of a chone; $\times 7$.

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- „ 33-39. Spicules—
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 „ 34. Dichotriene; $\times 32$.
 „ 35. Cladal end of dichotriene; $\times 180$.
 Fig. 36. Cladome of dichotriene, seen *en face*;
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 „ 37. Choanosomal oxyaster; $\times 292$.
 „ 38, 39. Somal amphiasters; $\times 292$.

Figs. 40-46. *Corallistes thomasi*,

- „ 40-46. Spicules—
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 „ 41. Cladome of dichotriene seen from below;
x 180.
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 „ 43. Strongylospires; $\times 430$.
 „ 44-46. Spirasters; $\times 292$.