

## PLATE VIII.

PAGE

Figs. 1-8. *Thenea fenestrata*, . . . . .

71

Figure 1. Sponge; nat. size.

„ 2-8. Spicules—

Fig. 2. Cladal end of anatriæne, with mesactinal  
cladome;  $\times 125$ .

„ 3. Cladal end of anatriæne with terminal  
cladome;  $\times 180$ .

Figs. 4-6. Plesiaster, in fig. 6 reduced to a  
microxea;  $\times 49$ .

„ 7, 8. Spirasters;  $\times 292$ .

Figs. 9, 10. *Thenea delicata*, . . . . .

60

„ 9. Transverse section through the sponge, from the exterior a short distance inwards;  $\times 49$ .

„ 10. Horizontal section through the sponge in the neighbourhood of the cloaca, showing the ex-current canals extending up to the ectosome at *a,a*, though possibly they may have been separated from it in the complete state by the membrane, *b,b*;  $\times 5$ .

Figs. 11-20. *Thenea wrightii*, . . . . .

63

„ 11. Sponge, seen from above; nat. size.

„ 12. The same, seen from the side; nat. size.

„ 13-19. Spicules—

Fig. 13. Cladal end of anatriæne;  $\times 180$ .

„ 14-19. The oxyaster and its modifications;

fig. 15, a microcalthrops; fig. 16, a microtriod;

fig. 19, a microstyle;  $\times 49$ .

„ 20. Flagellated chambers, showing the fenestrated membrane;  $\times 292$ .

Figs. 21, 22. *Thenea schmidti*, . . . . .

69

„ 21. Longitudinal median section of an external bud still attached to the parent;  $\times 49$ .

„ 22. Longitudinal median section through a young sponge taken from the radical spicules of the adult, on one of which it was seated;  $\times 49$ .

Fig. 23. *Thenea* sp., . . . . .

77

„ 23. Sponge; nat. size..

Figs. 24-39. *Thrombus challengerii*, . . . . .

275

„ 24. Sponge; nat. size.

„ 25-34. Spicules—

Fig. 25. Plagiotoriæne;  $\times 292$ .

„ 26. The same, seen from above;  $\times 292$ .

„ 27. Dichotoriæne;  $\times 292$ .

„ 28. The same seen from above;  $\times 292$ .

„ 29. Plagiotoriæne, a reduction of the plagiotoriæne;  $\times 292$ .

„ 30. Trichotoriæne;  $\times 292$ .

Fig. 31. Trichotoriæne, with two cladi suppressed;

$\times 292$ .

„ 32. Young form of plagiotoriæne;  $\times 292$ .

„ 33. Young form of trichotoriæne, seen from above;  $\times 292$ .

„ 34. Young form of dichotoriæne;  $\times 292$ .

„ 35. Section through the ectosome;  $\times 292$ .

„ 36. Part of a section through the choanosome, showing the diplodal character of the chamber-system;  $\times 292$ .

„ 37. Section showing a triæne spicule *in situ* with nuclei ranged along its sides;  $\times 292$ .

„ 38. Similar to the preceding, but with a scleroblast surrounding the spicule about the cladal origin;  $\times 292$ .

„ 39. Section through the choanosome, showing the general character of the canal-system: the canal with radiating branches is excurrent;  $\times 49$ .