

## PLATE XLIV.

PAGE

Figs. 1-6. *Tethya seychellensis*,

427

Figure 1. The sponge ; nat. size.

- „ 2. Portion of the external surface, somewhat enlarged, to show the character of the conules.
- „ 3. Also a part of the exterior surface, but taken from near the oscule, to show the modification which the conules undergo in this region.
- „ 4. Transverse section through the sponge ; the dark dots in the choanosome, are the ova, which occur scattered throughout it ;  $\times 6\frac{1}{2}$ .
- „ 5. Section through part of the choanosome, showing the distribution of the ova ;  $\times 32$ .
- „ 6. Section through part of the choanosome, showing the appearance presented by the flagellated chambers, and the minute characters of the ova ;  $\times 292$ .

Figs. 7-14. *Tethya japonica*,

430

- „ 7, 8. Two specimens of the sponge ; nat. size.
- „ 9. Part of the external surface, slightly magnified, to show the characters of the conules and the ridges by which the conules are united together ;  $\times 6\frac{1}{2}$ .
- „ 10. Part of the external surface of the sponge represented by fig. 8 ; somewhat enlarged.
- „ 11. Transverse section, showing the conules of fig. 7 in longitudinal section ;  $\times 6\frac{1}{2}$ .
- „ 12. A median longitudinal section through one of the swellings at the end of the conules in fig. 7, supposed to be an external bud ;  $\times 24$ .
- „ 13. A similar "bud" from *Tethya seychellensis*, showing the arrangement of the chief spicules ;  $\times 24$ .
- „ 14. A part of the section of fig. 12, more highly magnified, to show the composition of its tissues, which agree with those of the cortex ;  $\times 292$ .

Figs. 15, 16. *Tethya ingalli*,

431

- „ 15. The sponge ; nat. size.
- „ 16. Transverse section through the cortex, and adjacent choanosome ;  $\times 6\frac{1}{2}$ .

Figs. 17-19. *Tethya lynceurium*,

435

- „ 17. An oxea split at the one end under the action of a cold solution of caustic potash ;  $\times 292$ .
- „ 18. An oxea showing the axial rod passing into the protoplasm of the scleroblast ;  $\times 360$ .
- „ 19. Two spherasters, as seen in the cortex, each embedded in a scleroblast ;  $\times 292$ .