

- Figure 1. Part of a vertical median section through a small example of the sponge; on the right the collenchymatous wall of the cloaca, on the left the ectosome, between them the choanosome; $\times 10$.
- „ 2. Tangential but slightly oblique section through the ectosome, showing on the lower margin the pore areas, and above them the ramifying subdermal cavities; $\times 10$.
- „ 3. Tangential superficial slice, showing two groups of pores; $\times 95$.
- „ 4. A single pore: the surrounding epithelium appears as a nucleated membrane, below it are scattered microstrongyles; $\times 360$.
- „ 5. Section at right angles to the surface; the darker portion represents the ectosome, the lighter the choanosome; $\times 20$.
- „ 6. Section at right angles to the surface through the roof of a chone; $\times 430$.
- „ 7. Section through the choanosome, showing the characters of the chamber system, on the right a strand of fusiform cells: the linear series of dots in the choanosome indicate *Oscillaria*; $\times 180$.
- „ 8. Part of the preceding more highly magnified; $\times 700$.
- „ 9. A nearly longitudinal section through a canal, showing the collenchymatous walls; $\times 49$.
- „ 10. A similar but transverse section; $\times 49$.
- „ 11. Part of the preceding section, more highly magnified; $\times 300$.
- „ 12. Part of the choanosome, containing parasitic cells; $\times 430$.
- „ 13. Longitudinal section through a fibrous strand; on the left epithelial cells, on the right associated *Oscillaria* are seen; $\times 360$.
- „ 14. Similar to fig. 12; $\times 430$.
- „ 15. Epithelium, showing cellular outlines, from the walls of a canal; $\times 540$.
- „ 16. Similar, but with the cells isolated; $\times 540$.
- „ 17. A section through the choanosome, showing strongyles *in situ*, with associated spongin, indicated by the darker tint; $\times 95$.
- „ 18. A cell occupying the interspace between the syzygial tubercles of two desmas; $\times 360$.
- „ 19. A desma, indicated by the untinted part with a blue outline, showing the scleroblast *in situ* over the centre; $\times 430$.
- „ 20. The young crepis of a desma seen embedded in its scleroblast; $\times 292$.
- „ 21. Similar, but the crepis still smaller, and presumably younger; $\times 292$.
- „ 22. Tissue replacing the collenchyma in some parts of the sponge; $\times 540$.