

Figs. 1-14. *Cydonium magellani*,

- Figure 1. Sponge, attached to a small example of *Astrella vosmaeri*; nat. size.
- „ 2-8. Spicules—
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| Fig. 2. Oxea; × 29. | Fig. 5. Anatriene; × 29. |
| „ 3. Dichotriene; × 29. | „ 6. Sterraster; × 75. |
| „ 4. Cladal end of a dichotriene with a more cyathiform cladome; × 32. | „ 7. Somal stronglylate spheraster; × 430. |
| | „ 8. Choanosomal oxyaster; × 430. |
- „ 9. Median longitudinal section through a chone; × 35.
- „ 10. Tangential section through a part of the ectochrote; × 292.
- „ 11. Oblique tangential section, passing through the inner face of the cortex and the adjacent choanosome; the sphincters of two chones are seen as darkly stained rings; × 22.
- „ 12. Section through part of the choanosome, showing a flagellated chamber and surrounding sarcocytes; × 292.
- „ 13. Transverse section across the myocytes of a chonal sphincter; × 540.
- „ 14. Transverse section through the cortex, showing the hispidation produced by the oxeas and trienes; × 11.

Figs. 15-29. *Cydonium cosaster*,

- „ 15. Sponge; nat. size.
- „ 16-26. Spicules—
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| Fig. 16. Oxea; × 32. | Fig. 22. Spheraster; × 73. |
| „ 17. Cladal end of dichotriene; × 32. | „ 23. Spheraster; × 292. |
| „ 18. Cladal end of anatriene; × 73. | „ 24. Somal spheraster; × 360. |
| „ 19. Cladal end of anatriene; × 32. Drawn to same scale as fig. 17 for comparison. | „ 25. Choanosomal oxyaster; × 360. |
| „ 20. Cladal end of protriene; × 32. | „ 26. Choanosomal oxyaster, another example; × 360. |
| „ 21. Sterraster; × 73. | |
- „ 27. Transverse section through the sponge, showing the continuation of the chonal canals inwards, till they communicate with a deep lying concentric canal; × 11.
- „ 28. Section through the sponge, taken on one side of the medial plane; × 11.
- „ 29. Section taken longitudinally through the middle of a chone; × 73.

Figs. 30-42. *Cydonium hirsutus*,

- „ 30. Part of the sponge; nat. size.
- „ 31. Transverse section, showing the unusually thick cortex and cavernous choanosome; nat. size.
- „ 32-42. Spicules—
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| Fig. 32. Oxea; × 28. | intervening spicular substance, the axial rods of the actines are also shown; × 480. |
| „ 33. An oxea, not proper to the sponge; × 73. | Fig. 39. Tangential section of the sterraster, taken through the actines at a level exterior to that at which they become soldered together; × 540. |
| „ 34. Cladal end of dichotriene; × 28. | „ 40. Section transverse to the actines, taken deeper in; × 480. |
| „ 35. Sterraster, presenting the face bearing the hilum; × 28. | „ 41. Cortical spheraster; × 312. |
| „ 36. The same, seen from the side at right angles to that bearing the hilum; × 28. | „ 42. Somal spheraster; × 430. |
| „ 37. Surface of the sterraster; × 540. | |
| „ 38. Part of a transverse section, showing the two actines of the sterraster with | |