

Figure 1. Sponge; nat. size.

„ 2. Vertical median section through one lobe, showing the general character of the excurrent canal system; nat. size.

„ 3-9. Spicules—

Fig. 3. Strongyle; $\times 125$.

„ 4. Orthotriane; $\times 125$.

„ 5. Sterraster; $\times 125$.

„ 6. Somal spherule; $\times 430$.

Fig. 7. Exceptionally large somal spherule; $\times 430$.

„ 8, 9. Composite spherules, consisting of two or more united together; $\times 430$.

„ 10. Part of the section seen at the left hand upper corner of the cloaca in fig. 2, more highly magnified; $\times 4$.

„ 11. Tangential but slightly oblique section through the ectochrote, showing at the left hand side the pores, to the right the cavities into which they open; $\times 14$.

„ 12. Tangential section through the sterrastral layer; $\times 14$.

„ 13. Transverse section through the cortex and part of the choanosome; $\times 14$.

„ 14. Transverse section through the ectochrote; $\times 292$.

„ 15. Section through a part of the choanosome, showing the aphodal character of the chamber-system; $\times 180$.

„ 16. Similar, showing the spherules *in situ* (within cells not distinguishable from sarcencytes); $\times 430$.

„ 17. A flagellated chamber seen *en face*, showing the fenestrated membrane; $\times 430$.

„ 18. A young sperm cell; $\times 292$.

„ 19. A sperm-cluster, showing the residual nucleus in the midst; $\times 292$.

„ 20. A sperm-cluster; $\times 292$.

„ 21. Isolated spermatozoa; $\times 430$.

„ 22. Section showing the sarcenchyme, with spherules in some of the sarcencytes; $\times 430$.