

- 5d, chorda, entire, 25 diam. Laid July 10, opened July 20, 1852.
- Fig. 5c. Chorda, near the anterior end, 500 diam. The same as fig. 3.
- Fig. 6. Blood corpuscles from the vena terminalis, 40 diam. Laid July 18, opened July 28, 1852.
- Fig. 7. Blood corpuscles; *a, b*, in a natural state; *c* to *j*, altered by water; *a* to *i*, 500 diam.; *j*, 1100 diam. About 18 days old.
- Fig. 8. Blood corpuscles from an adult; *a, b, c, d, e*, in a natural state; *h*, altered by water, and dried; the others in water; *a, b, c*, 1100 diam.; the others, 500 diam.
- Fig. 9, 10, 11, 12. Blood corpuscles; fig. 9, from the yolk; fig. 10, from the allantois; *a, b*, end views; *c, c'*, side views, showing the thickness; 500 diam.; fig. 11, from the body: *a*, 1100 diam., as thick as broad; *b*, the same as *a*, 500 diam.; *c, d*, end views; *e*, with two mesoblasts; 500 diam.; fig. 12, flat corpuscles from the allantois: *a*, 1100 diam.; *b*, 500 diam. Period of laying unknown, opened Aug. 25, 1852.
- Fig. 13 to 13c. Blood corpuscles, 500 diam.; fig. 13, flattened against each other; fig. 13a, a corpuscle squeezing between two others; fig. 13b, drawn out; fig. 13c, in a natural state, the left one seen edgewise, the middle one, from the side, the right one seen endwise. Laid June 12, opened Aug. 16, 1855.
- Fig. 14. Bloodvessel from the pia mater, 500 diam.; *a, b*, mesoblasts in profile. Hatched in Oct. 1855.
- Fig. 15. Cells of the olfactory nerve, close to the Schneiderian membrane, 500 diam.; *a, b*, nearly perfect nerve tubules. Hatched in Oct. 1855.
- Fig. 16. From the hemisphere of the brain, section in profile, 500 diam.; *a*, outer stratum; *b, c*, inner strata of the cells of the pia mater; *d*, blood corpuscles; *e*, cells of the hemisphere; the same as fig. 15.
- Fig. 16b. Cells at the surface of the hemisphere in profile; fig. 16c, cells of the hemisphere from the interior; *a*, single cells; *b, b', c, c'*, altered by water; *b*, and *c*, the same cell seen from two different points of view, and magnified 1100 diam.; the others, 500 diam. Period of laying unknown, opened Sept. 6, 1852.
- Fig. 17, 17a, 17b. Cells of the olfactory nerve, just before the olfactory lobe; fig. 17, cells at various depths; fig. 17a, at one focus, the surface of the cells; fig. 17b, a little deeper, so as to show the thickness of the walls; 500 diam.; the same as fig. 15.
- Fig. 18. Cells of the olfactory lobe; *a*, caudate cell, 500 diam.; the same as fig. 16b; fig. 18a, cells of the pia mater of fig. 18; 500 diam.
- Fig. 19. Cells of the Schneiderian membrane; *a*, in a natural state; 19, altered by water; *b*, single cells of 19: 500 diam.; the same as fig. 16b.
- Fig. 20. Cells of the medulla oblongata; *a, a*, caudate cells; *b*, nearly filled by the mesoblast; 500 diam.; the same as fig. 16b.
- Fig. 21. Cells from the spinal cord, just behind the medulla oblongata, 500 diam.; the same as fig. 16b.
- Fig. 22. Chorda dorsalis, 500 diam. Laid July 18, opened July 27, 1852.
- Fig. 23. Passage of muscles into cartilage, from the dorsal arch; *a, b*, muscle; *c*, cartilage cells; 500 diam. Period of laying unknown, opened Aug. 25, 1852.
- Fig. 24. Muscular fibre macerated in water; *a*, transverse section; 500 diam.; the same as fig. 25.
- Fig. 25. Muscular fibre from the foreleg; *a*, fibre; *b*, beaded fibrillæ; 800 diam.; the same as fig. 16b, etc.
- Fig. 26. Tendinous fibrillæ; fig. 26a, in a contracted state; 500 diam.; the same as fig. 16b.
- Fig. 27. Muscular fibre from the upper retractor muscles of the head, 800 diam.; fig. 27a, a beaded fibril, 1100 diam. Laid June 21, opened Oct. 19, 1855. No fig. 28.
- Fig. 29. Cells of the gall cyst, in profile; *a*, outer surface; *b*, single cell; fig. 29a, surface view; 500 diam. Period of laying unknown. Just hatched.
- Fig. 30. Cells of the ovary, 500 diam. Period of laying unknown. Just hatched.
- Fig. 31. Cells of the liver; *a*, group; *b, b*, single cells: 500 diam. Period of laying unknown. Just hatched.
- Fig. 32. Liver cells; *a*, single cells; 32, a group, 500 diam.; *b, c*, in water, 500 diam.; *b', c'*, 1100 diam.; the same as fig. 16b.
- Fig. 33. Contents of the gall cyst, 500 diam. Period of laying unknown. Just hatched.
- Fig. 34. Contents of the gall cyst, 500 diam. Laid June 21, opened Oct. 17, 1855; *a* to *h*, blood corpuscles, in various stages of development; *i*, decomposing globules.
- Fig. 35. First faecal discharge, 36 hours after hatching, 500 diam.; fig. 35a, crystals of uric acid in the faeces, color greenish-yellow, 800 diam.; *a, b, c, d, e, f*, various combinations of crystals.

PLATE XX.

[Drawn from nature, by H. J. Clark.]

All the figures are from *Chelydra serpentina*.

Fig. 1, 1a, 1b. Uriniferous tube; fig. 1, seen endwise; fig. 1a, seen at the bend; fig. 1b, at the side; 500 diam. Period of laying unknown, opened Aug. 31, 1853