

- Fig. 20. Ovarian egg, natural size; fig. 20a, its yolk, 500 diam. Ch. picta.
- Fig. 21. Ovarian egg, natural size; fig. 21a, its yolk, 500 diam. Ch. picta.
- Fig. 22. Ovarian egg; *a*, natural size; *b*, the finer yolk, 500 diam.; *c*, one of the large yolk cells, 500 diam.; *d*, the same, 1100 diam.; *e*, Purkinjoan vesicle, 500 diam. Ch. picta.
- Fig. 23. Ovarian egg, natural size; fig. 23a, granular yolk, 500 diam.; fig. 23b, *a*, yolk cell, 500 diam.; *b*, the same, 1100 diam.; fig. 23c, *a*, yolk cell, 500 diam.; *b*, the same, 1100 diam.; fig. 23d, yolk cells, 500 diam.; *a*, *b*, angular mesoblasta. Ch. picta.
- Fig. 24. Egg, natural size; fig. 24a, granular yolk, 500 diam.; fig. 24b, the Purkinjean vesicle, 500 diam.; *a*, *a*, altered mesoblasts. *Nanemys guttata*.
- Fig. 25. Egg, natural size; *a*, *b*, *c*, *d*, *e*, its yolk cells, 500 diam. Ch. picta.

PLATE IX.

[From nature, by H. J. Clark.]

- Fig. 1. Ovarian egg, natural size; fig. 1a, the same, 25 diam.; *a*, zona pellucida; *b*, Purkinjean vesicle. Ch. picta.
- Fig. 2. Egg, natural size; fig. 2a, *a*, *b*, *c*, *d*, yolk cells, 500 diam. Ch. picta.
- Fig. 3. Egg, natural size; fig. 3a, *a*, *b*, *c*, *d*, *e*, *g*, yolk cells, 500 diam. Ch. picta.
- Fig. 4. Egg, nat. size; fig. 4a, its Purkinjean vesicle, 500 diam.; fig. 4b, the same as fig. 4a, burst open by water, 500 diam. *Nanemys guttata*.
- Fig. 5. Egg, nat. size; fig. 5a, Purkinjean vesicle, 40 diam.; fig. 5b, another view of the same as fig. 5a; fig. 5c, the same as fig. 5a, and fig. 5b, 500 diam.; *a*, its granular contents; *b*, yolk granules.¹
- Fig. 6. Egg, nat. size; fig. 6a, *a* to *r*, yolk cells, 500 diam.; fig. 6b, yolk cells, near the Purkinjean vesicle, 500 diam. Ch. picta.
- Fig. 7. Egg, nat. size; fig. 7a, Purkinjean vesicle, 40 diam.; fig. 7b, contents of the vesicle, 500 diam.; fig. 7c, 7d, 7e, 7f, 7g, yolk cells acted upon by water, 500 diam. Ch. picta.
- Fig. 8. Egg, nat. size; fig. 8a, A to N, yolk cells; J, K, K', L, L', 1100 diam., the others, 500 diam. In all the

¹ Some of the yolk granules which surround this Purkinjean vesicle are drawn upon its edge, between the outline and fig. 5.

figures, *a* is the ectoblast, *b* the mesoblast, *c* the entoblast. Ch. picta.

- Fig. 9. Egg, nat. size; fig. 9a, Purkinjoan vesicle, 40 diam.; fig. 9b, another view of the same; fig. 9c, the same as fig. 9a, 500 diam.;² *a*, *b*, granular contents. Ch. picta.
- Fig. 10. Egg, nat. size; fig. 10a, Purkinjean vesicle, 40 diam.; fig. 10b, another view of fig. 10a; fig. 10c, the same as fig. 10a; *a*, *b*, granular contents, 500 diam.³ Ch. picta.
- Fig. 11. Egg, nat. size; fig. 11a, Purkinjean vesicle, 40 diam.; fig. 11b, the same as fig. 11a, 500 diam.; *a*, *b*, its granular contents; fig. 11c, yolk cells around the Purkinjean vesicle, 500 diam.; fig. 11d, the same as fig. 11c; fig. 11e, yolk cells, $\frac{1}{10}$ of an inch below the Purkinjean vesicle, 500 diam.; fig. 11f, yolk cells, $\frac{1}{2}$ of an inch below the Purkinjean vesicle; fig. 11g, yolk cells, from the centre of the egg, 500 diam.; fig. 11f, yolk cells pressing against each other, 500 diam.⁴ Ch. picta.
- Fig. 12, *a*, *b*, *c*, *e*, *f*; mesoblasts, altered by water, of yolk cells of an egg from the oviduct that had its shell; *d*, *d'*, pieces of the walls of the mesoblast. Ch. picta.

PLATE IXa.

[Fig. 32, 32a, from nature, by A. Sonrel, the others by H. J. Clark.]

- Fig. 1. Yolk cells from an egg in the oviduct, 500 diam. *Chrysemys picta*.
- Fig. 2, 2a, 2d. Yolk cells, 500 diam., from an egg laid June 12, opened June 26, 1852. *Nanemys guttata*.
- Fig. 3. Yolk cells from the germinal layer, 500 diam. Egg laid June 15, opened June 16, 1854. *Chelydra serpentina*.
- Fig. 4. Yolk cells from the germinal layer. See fig. 2, 2a, 2d, for their age.⁵
- Fig. 5. Heaps of mesoblasts in the germinal layer, 250 diam.; fig. 5a, one of these heaps, 500 diam. For age, see fig. 2, etc.

² One half only of this Purkinjean vesicle is drawn; its outline passes by fig. 9c, and its contents are represented on the right side, along the frame of the Plate.

³ Here also the outline of one half only of the vesicle is drawn, passing by fig. 10c, and the contents on the right along the frame of the Plate.

⁴ The yolk cells, fig. 11d to 11h, scattered over the Purkinjean vesicle, fig. 11b, in order to save room, are, of course, out of place there, but those on its edge, fig. 11c, are in place.

⁵ This, and similar references to other figures, are intended to point out the connection between the different objects represented.