calcareous nodules; *b*, base of the same; *c*, *d*, shell membrane; 500 diam.; fig. 43a, a nodule seen from the outside, 500 diam.; fig. 43b, piece of a nodule in profile, 500 diam.; fig. 43c, organic matrix of nodule, the lime dissolved out; *a*, its surface; *b*, its base; 500 diam.; fig. 44, rows of nodules of a partially formed shell, 20 diam.; fig. 44a, heaps of young nodules, 500 diam.; fig. 45, inner surface of shell membrane, 500 diam. Chelydra serpentina.

Fig. 46. Openings in the egg-shell of Ozotheca odorata, 20 diam.

PLATE IXb.

[Figs. 9, 9a, and 10, from nature, by A. Sonrel; the other figures by H. J. Clark.]

Fig. 1. Egg of Nanemys guttata, nat. size, from above; from the oviduct; for age, see Pl. 11, fig. 3.

Fig. 1a. Egg of Nanemys guttata, nat. size, from above; from the oviduct, June 3d, 1854; for age, see Pl. 10, fig. 12, 13, 14, 15.

Fig. 2. Profile, and fig. 2a, from above. Chrysemys picta, nat. size; from the oviduct, June 3d, 1852; for embryo, see Pl. 11, fig. 2.

Fig. 3. Profile of an egg of Cinosternum pennsylvanicum, nat. size; from the oviduct, July 3d, 1856. Alcoholic preparation. Fig. 3a, one of the layers of albumen; *a*, the surfaces in profile; *b*, the interior; 25 diameters.

Fig. 4. Profile, and fig. 4a, from above; nat. size; from the oviduct, June 2d, 1854. Glyptemys insculpta. Alcoholic preparation; for embryo, see Pl. 11, fig. 6.

Fig. 4b. View from above of an egg without a shell, nat. size; from the oviduct. Glyptemys insculpta. Alcoholic preparation.

Fig. 5. Profile of the egg of Chelydra serpentina, nat. size; from the oviduct, June 12, 1854.

Fig. 6. Egg of Platypeltis ferox; from the oviduct, Aug. 20, 1856; nat. size. Alcoholic preparation. Fig. 6a, portion of a layer of albumen; *a*, surfaces in profile; *b*, the interior; 20 diam. Fig. 6b, albumen from the deeper layers; *a*, *b*, *c*, the oval granules, trending in three different directions; 500 diam. Fig. 6c, inner layer of shell membrane; *a*, *b*, the oval, elongated granules, trending in two different directions; 500 diam. Fig. 6d, shell membrane, just outside of the inner layer (fig. 6c); *a*, granules in strings; *b*, finer granular strings; 500 diam. Fig. 6e, *a*, *b*, *c*, three layers from the middle of the thickness of the shell membrane; 500 diam. Fig. 6f, from the middle of the membrane; *a*, separate granules; *b*, fine fibres; 500 diam. Fig. 6g, shell membrane next to the shell, 500 diam.

Fig. 7. Profile and fig. 7a, from above; nat. size; just laid, date lost. Thalassochelys Caouana. Alcoholic preparations.

Fig. 8. From above; nat. size; one week since laid; the same species as fig. 7.

In all the figures of these eggs, from fig. 1 to fig. 8, *a* designates the albumen outside of the yolk sac, a^1 the albumen inside of the yolk sac, *s* the shell, *y* the yolk, y^1 the surface of the yolk, *c* the embryonic disc, *va* the vascular area.

Fig. 9. Portion of the oviduct containing an egg, nat. size; *ma*, its mesenteric peritoneum; fig. 9a, slightly magnified portion of the oviduct to show the numerous bloodvessels, and the pigment following their courses. Glyptemys insculpta.

Fig. 10. The left ovary and oviduct, from below, nat. size; *ov*, ov^1, the oviduct; ov^2, its posterior end; *p*, the pavilion, or anterior opening; *pr*, ramifications of pigment cells; *bl*, the urinary bladder. Chrysemys picta.

Fig. 11. Right ovary and oviduct, seen from below, nat. size; *i*, the intestine; *cl*, the corpora lutea, or cicatrices; *m*, the mesenteric peritoneum of the oviduct; *p*, the pavilion; *e*, *e*, *e*, *e*, four eggs covered by the oviduct. Glyptemys insculpta; opened May 20, 1854.

PLATE IXc.

[Figs. 1, 2, 3, from nature, by H. J. Clark, the others by A. Sonrel.]

Fig. 1. The same as Pl. 8, fig. 12, on a larger scale. *a*, a^1, the two layers of the stroma; *b*, tunica granulosa; *c*, zona pellucida; *d*, embryonal membrane; d^1, profile of *d*; *es*, yolk sac; *e*, outer layer of fine yolk granules; *f*, inner layer of coarse yolk granules; *g*, Purkinjean vesicle.

Fig. 2. Diagramic profile of an egg after the albumen has become partially absorbed. The same as Pl. 11, fig. 4, 4a. *a*, the shell; *b*, shell membrane; b^1, albumen; b^{11}, innermost and densest layer of albumen; *c*, zona pellucida; *d*, embryonal membrane; *e*, germinal layer; e^1, embryonic disc; *j*, surface of the yolk; *al*, albumen within the yolk sac.

Fig. 3. Actual view of the interior of the embryo and its envelopes, seen from the front, to show the relations of the vascular system. The red color corresponds to the ventricle (*p*) and the arterial system of the body and yolk; the blue to the auricles (*r*) and the venous system of the body and yolk; the yellow to the arterial system