

eggs from the embrace of the ovary to the last third of its own channel, there to be endowed with an albuminous and calcareous covering, and withal to assume the shape peculiar to each species. In reference to the shape of the eggs of various genera, it is important to mention that they vary greatly in form, and that their outline does not answer to the prevalent theory that their passage through the narrow channel of the oviduct gives them their form, since we have those which are perfectly spherical, and yet sustain as great a lateral pressure from the embracing walls of the shell-forming conduit as those which are more or less oval. We need therefore adduce nothing more against this mechanical theory beyond the statement of such an obviously conflicting fact as the one just mentioned. We would, however, refer to the plastic power which gives to the embryo its typical form while it floats in the midst of a uniformly pressing fluid, in order to answer the question as to what renders some eggs almost cylindrical, others oval, and those of certain species more or less curved, approaching even to a kidney shape, whilst others are broadly oval, and finally, some perfectly spherical.

Since no eggs were found in the oviduct before the shell membrane had already been deposited, at least partially, it might be presumed as a matter of course that the albumen also had already taken its place around the yolk. This supposition is negatived, however, by the occurrence of eggs, observed especially in one well marked instance in *Glyptemys insculpta*, which formed a series of five in one oviduct, situated at the extreme posterior end of that organ, and close to one another, presenting just as many different grades of albumen and shell-lining deposit. The albumen was thicker and the shell lining more opaque for each successively more posterior egg, showing at a glance that not only the albumen, but the shell lining, was depositing at one and the same point of the oviduct; and moreover that the albumen, in order to reach its destined position, must filtrate through the meshes of the fibrous shell lining. There is no disputing this fact, which readily proves the normality of another single case which we have noticed, showing a still greater disparity between the amount of albumen, and the shell lining by which it was covered. The egg in question was found in company with another, in the right oviduct of the same animal; it was covered by a shell lining as thick and opaque as the most posterior of the left oviduct, but the albumen was not half deposited (Pl. 9b, fig. 4b); the more tenacious and denser portion, (*a*) which clings so closely to the yolk sac (*y*) when a young egg is broken open and the more external and nearly fluid portion drops away, was all that presented itself. Now under such circumstances, in order to allow the albumen to attain its destined bulk, the very elastic shell lining must stretch to a great extent; moreover the former probably solidifies as rapidly as it infil-