we infer that the earliest layers of albumen were at once liquefied and drawn within the yolk sac. This view of the case seems to be warranted by the fact, that the layers of albumen still outside of the yolk sac, are, to all appearances, undisturbed and perfectly symmetrical all around the egg, even after the yolk sac has assumed an oval form. No further alteration of the yolk mass connected with the absorption of albumen was noticed in much older eggs of this species, (Pl. 10, fig. 11a, 11b,) up to the time when the embryonic area became a distinct disc (fig. 15a).

The mode of absorption of the albumen mentioned above, and the consequent change in the shape of the yolk sac, have been observed in the oval eggs of several other genera of the family of Emydoidæ, namely, in Nanemys guttata, (Pl. 9b, fig. 1a,) Chrysemys picta, and Cistudo virginea (which had the same aspect as Pl. 10, fig. 15a). In these the embryonic area was already a distinct disc, (Pl. 10, fig. 12, 13, 14,) and the albumen and shell were complete.

The yolk of the oval eggs of at least two other genera (Ozotheca and Cinosternum) belonging to another family, the Cinosternoidæ, does not assume an oval form so early as in the Emydoidæ. It does not appear even that the albumen mixes at all with the yolk in the beginning, as is the case in the eggs of Emydoidæ. At least, in all the younger eggs of the family of Cinosternoidæ which had already a shell, the albumen was arranged in perfect symmetry around the yolk mass; and the latter was perfectly globular, and to all appearances not larger than when it left the ovary (Pl. 9d, fig. 4). In the eggs of the Testudinina, Trionychidæ, Chelydroidæ, and Chelonioidæ, which have a globular shell and a globular albuminous deposit, neither an oval form nor an increase in the size of the yolk mass has been observed as long as the yolk remained homogeneous. In fact, the earliest period at which we have known the albumen to enter the yolk sac of the eggs of the families just mentioned was when the cephalic hood had already began to form (Pl. 11, fig. 1, 1a; Pl. 9b, fig. 5, 7, 7a); and then the albumen bore a very different relation to the yolk mass from that in the cases pointed out before, as will presently be shown.

Notwithstanding the infiltration of a small portion of albumen in some of them, the eggs of all Testudinata, whether their shell be oval or round, retain a homogeneous aspect till the embryonic disc has assumed a sharply defined outline (Pl. 9b, fig. 1a, *e*, 4b, *e*; Pl. 10, fig. 12, 13, 14, 15, 15a). But it is a significant fact, that, at this period, the oval egg shell of the family of Emydoidæ should contain an enlarged oval yolk mass, whilst the oval egg shell of the family of Cinosternoidæ contains a yolk mass which is perfectly globular, and not larger than when in the ovary.

We have already mentioned, that all eggs with globular shells retain, until