

39a—39d)! Now it is in these latter stages that the development of the mesoblast may most readily be mistaken for the primary cell genesis;—a well matured cell for one just forming! Such an error however is excusable only in one who has taken but a glance at the yolk in certain stages of its development,—nay, hardly even then. But when the whole series of phases is followed with patient eye and thought, it is impossible to fail in recognizing the true and only prospective system of cell growth, the plan according to which each and every yolk cell has originated, advanced, and finally received the last touch, to fulfil the end for which it was intended, from the beginning, by its projector.

It is only during the beginning of its life that the mesoblast preserves uniformly any thing like a spherical shape. As soon as it has defined its outline clearly, growth ensues, and a more or less irregular, and very often angular, contour bounds its contents, throughout the interovarian life. As regards the last-mentioned shape, were it not for the peculiar reaction which water produces in its contents, causing a condensation in a network form, with less or greater meshes upon its wall, (Pl. 9, fig. 2a, *a*, *b*, *d*.) it might be mistaken for an entoblast; but the entoblast is not at all affected by such a reagent. Moreover, mesoblasts with crystalline configuration are often met with, which contain entoblasts bearing every characteristic of those observed in older phases of development (Pl. 8, fig. 23d, *c*, *k*, *l*). However, it is only at about this age, when the egg measures from one tenth to one eighth of an inch in diameter, that such an unusual angularity of the entoblasts obtains; the subsequent stages, up to those of the full-grown ovum, are characterized by irregular oval or spheroid shapes, and, rarely, with here and there a perfect sphere (Pl. 9, fig. 6a, *a*, *b*, *e*, *g*, and fig. 11i). Contemporaneously with irregularity of form it assumes also a change in color, till very soon, at about the most angular phase, it has passed from a faint to a dark yellowish tint, which it ever after retains as a characteristic complexion, distinguishing it from the brilliant, clear, golden yellow of the crystalloid entoblasts.

With reference to the reaction which water produces upon the contents of the mesoblast, we may add a few more remarks in detail, in order to bring the changes thus produced to bear upon the question of the existence, if not of a wall, at least of a denser exterior layer surrounding the entoblasts. Indeed, the presence of such a layer cannot be questioned; for, whilst it forms the basis upon which the contents collapse in wrinkles of coarser (Pl. 9, fig. 2a, *d*, 3a, *c*, *d*, 12, *a*, *b*, *c*) or finer folds, (Pl. 9, fig. 2a, *a*, *b*, 3a, *a*, *b*, *g*, 7d, 7e, 7f,) anastomosing with each other like the meshes of a network, it yet preserves exteriorly its form intact, except in some cases, where the cause of the shrinking within has distorted (Pl. 9, fig. 12, *a*, *b*, *c*) the foundation upon which it has impelled