

mentioned a similar peculiarity in the mesoblast; but it is proper to revert to the same subject in this place, especially as some more details are necessary in another point of view. It is to the homogeneous fluidity of the contents of the mesoblast that we would now call particular attention.

Let any one glance at a quantity of yolk cells squeezing their way among each other, and observe the easy mobility of the entoblasts as they oscillate in the mass of now constantly changing, unstable shaped matrix, flying from side to side almost as if they were thumping about in an empty space, and then say, whether the mass within the mesoblast which surrounds the entoblast is a connatural fluid, equidense throughout, or, centrifugally denser, as the collapsing upon the cell wall by aqueous reaction might suggest. To the latter view we have no inclination whatever; but to the former we must give our unqualified assent. We have characterized so particularly the movements of the entoblasts under disturbing influences, in order to render more prominent the fact that these bodies return with unerring certainty to their proper position at the centre of their parental domain, as soon as they are relieved from the contact of neighboring cells similarly affected. Whether this phenomenon is to be ascribed to the same centripetal power that influences the origin of the entoblasts in a central rather than a lateral position, we can only conjecture; but it seems natural to suppose that there must be some unknown relation between the two, and that perhaps the one may be the complement of the other. One word more in reference to the conduct of the mesoblasts, after water has burst the parent cell. Under such circumstances the mesoblasts become easily agglutinated to each other by the slightest pressure, and their parietes are totally obscured, so that one might suppose the yolk cells had contained immense irregular mesoblasts (Pl. 9, fig. 12, *c, f*).

From the time of the origin of the mesoblast up to that age when the egg measures about one sixth of an inch in diameter, the mesoblast seldom exceeds the semidiameter of the ectoblast, (Pl. 8, fig. 23d; Pl. 9, fig. 6a, *c, d, e, f, g, h, i, j*;) and often falls short of even that extent, especially just after that exceptional state, when the rather minute cells, ectoblasts, rapidly amplify their mesoblastic progeny (Pl. 8, fig. 23b and 23c) till they are nearly filled with them, and then just as quickly outstrip them in increment of bulk. At the latter end of this stage the ectoblast begins to fail in maintaining its greatly superior size, (Pl. 9, fig. 6a, *a, b*, fig. 7d, 7e,) and the mesoblast from this time forward gradually encroaches upon the fostering matrix, till the latter, in a full-grown egg, is impersonated by a moderately thin layer, resembling, in its beautiful transparency, a halo about a cluster of golden brilliants. Thus terminates the career of the mesoblast in yolk cells, as far as its activity in the life of an interovarian egg is concerned; but another more remarkable phase is still to be gone through before