After this comes a great change, not only in the yolk cells, but throughout the whole organism of the egg. The entoblasts begin to decrease in number, and lose their angularity (Pl. 9, fig. 7c, 7e); the mesoblast, as we have before mentioned, encroaches upon the hyaline area of the ectoblast; and, to crown the whole, the Purkinjean vesicle changes its complicated cellular structure (Pl. 9, fig. 5a, 5b, 5c) into one which is almost perfectly homogeneous, (Pl. 9, fig. 7a, 7b,) and this too without the least sign of any new or external influence, so far as we have been able to penetrate the process of this development.[1]

But, to return to the continuance of the entoblastic changes, let us first note the numerical decrease of the waxy crystalloid bodies as the primary indication of any signal divergence from the hitherto uniform line of conduct; and, secondly, the rounding off of their angles. It is a matter of some doubt as to whether the existence of a few entoblasts in each cell is owing to the actual decrease in the number of each cluster, or to the total dissolution of the ectoblast, mesoblast, and entoblasts, and the regeneration of new ones in their stead. Now if the latter supposition be true, it is hardly possible, that, during the evanescence of these bodies, some should not have been found in a transitory state, either a mesoblast without an ectoblast around it, or an ectoblast without mesoblast, or an entoblast totally exposed, or a mesoblast without an entoblast; and, since no such changes are noticed, we are forced to adopt the former conjecture, which has at least a certain amount of evidence in its favor. This we will attempt to support by referring to an egg (Pl. 9, fig. 7) a little older than the last, in which, amid cells as yet containing angulated entoblasts, (Pl. 9, fig. 7f, 7g,) may be seen, here and there among the largest, some cells in which the sharp edges of the entoblasts have begun to be rounded (fig. 7c, 7e) and the total number of entoblasts has considerably decreased, though they still hold their angular features; but soon these angles are lost and superseded by rounded contours embracing irregular but more equal sided masses, varying from pyramidal to cubical, (Pl. 9, fig. 8a, A, A, A,) or from oval to spherical forms (fig. 8a, B, C, C). In an egg three eighths of an inch in diameter, (Pl. 9, fig. 8,) and in which the number of entoblasts may vary from five or six

[1] In view of such a parallelism of changes, we cannot but conceive that there must be some total action, to which each special influence, in the several organisms of the egg, is secondary. However, it is not so much the presence of such a force, as its nature and origin, — whether it is inherently an idiosyncrasy of the region in which it operates, or whether it is generated by some periodic external agency, as for instance the repeated acts of copulation, — that the mind would fain decide upon. Inasmuch as the egg, at this age, is far from full-grown, but rests unspecialized among many of the same size, it cannot be advocated that it may be subject to any external influence, and that too whilst those a little smaller remain unaffected; and so we must fall back upon the former and more probable explanation, and, for want of additional facts, leave it, about as in the beginning, an unsatisfactory matter of conjecture.