resorbed at the upper side of the egg, not from within outwards, but, on the contrary, the most exterior ones first, and successively those more interior; each one, the moment it is perforated, by the loss of its substance at the point of resorption, shrinks away centrifugally, thus allowing the vitellus to rise gradually, till it finally touches the shell. In this condition, the strata appear as if cut across obliquely.

But let us return, and look a little more closely at the structure of this portion of the egg. Upon peeling off three or four strata, and viewing them perpendicularly to their surface, we instantly see that the dark lines mentioned above are the profiles of so many layers of oval granular bodies, and, more remarkable still, that the longer axis of all the oval bodies in one layer trend in the same direction (Pl. 9b, fig. 6b, *a*); whilst the longer axis of those in the next exterior or interior layer, although running parallel to each other, yet have a different direction from the last, running either at right angles, (fig. 6b, *b*,) or at thirty degrees, or with more or less divergence, from them (fig. 6b, *c*). This peculiarity holds good throughout the whole mass of the albumen; but it is not limited to this part of the egg. Before going further, we would point out the slightly nodular character of some of the oval granular bodies, which appear as if they were composed of two or three smaller ones. These bodies are very minute, comparatively, in some species, as in Glyptemys insculpta, but yet exhibit in their linear arrangement the same relation to each other in the different layers, as obtains in other species where they are much larger.

Those layers of the shell membrane which lie innermost and in contact with the albumen, hardly have a tenacity superior to the inner strata of the latter. This will not seem surprising when the structure of the two is compared, for then we find that they are scarcely to be distinguished from each other. The only difference noticeable is, that the granular bodies of the shell membrane are more elongated, and that each granule seems to be composed of a greater number of smaller granules than obtains in those of the albumen (Pl. 9b, fig. 6c). As in the latter, so also in the shell membrane, the granules of the different layers run in diverse directions, but parallel in the same layer. The distance of these layers from each other is almost nothing, just as is the case among the closest layers of the albumen; but, as there, an excessively hyaline granular film of albuminous matter fills up the interspaces.

Proceeding a little further outward, the oval granules of each layer approximate each other, and lie in contact, end to end, thus forming beaded fibres (Pl. 9b, fig. 6d); those in one horizon crossing those of another at various angles, as heretofore. Interspersed among them are minuter particles of various sizes and excessive faintness, imbedded in the albuminous film, and evidently arranged in