Fig. 49.

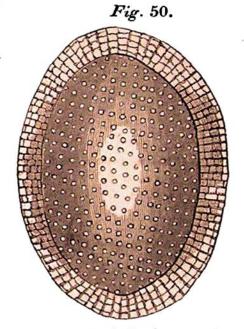




lular tissue of the same substance as the parietes; and that the shield incloses, under a shell of the same nature as the rim, a glutinous cellular tissue, the cells of which are filled with transparent, apparently amylaceous, granules, spread in myriads over the object-glass when the perisperm is torn. The most minute observation has been employed without success in finding any indication of an organ analogous to the embryo.

By a section parallel to the two faces the difference which exists between the structure of the rim and shield is made apparent. Of the former the coat, deprived of the tissue which it contains, is

seen to be transparent and divided into cellules arranged in rays which point towards the centre of the organ; while the resinous and woody thickness of the shield presents a great number of small globular yellowish cells disposed in quincunx. (Fig. 50.) This arrangement becomes still more apparent on boiling the ovum in alcohol, which however, no otherwise than ether, does not seem to discolour it much. Its brown colour is not owing to the presence of iron, for along soaking of the eggs in prussiate of potass sharpened with sulphuric acid has not communicated the slightest tint of blue to their surface, even when they



have been bruised previous to the maceration. Alcohol changes to a golden yellow the original brown colour of the shield. Iodine