

all circumstances flat, as if disciform (Pl. 8, fig. 15a, *f*¹). These latter features obtain at a time when the egg is about from one eighth to one sixth of an inch in diameter; but subsequently, at no very distant period, the Wagnerian vesicles and their contents disappear, and give place to a homogeneous fluidity, which generally pervades the Purkinjean vesicle, and lasts for the remainder of its existence. However, this rarely happens in much smaller eggs; yet an egg with a diameter of one tenth of an inch (Pl. 9, fig. 1) may have a Purkinjean vesicle, (fig. 1a, *b*,) which, although perfectly free from Wagnerian vesicles, equals in size another Purkinjean vesicle containing numerous Wagnerian vesicles, (Pl. 9, fig. 5a, 5b, 5c,) and even belonging to a much larger egg (fig. 5). Respecting the presence of a wall inclosing the Wagnerian vesicle we have only to mention, that water breaks up its Valentinian vesicles into small, angular portions, which spread throughout its whole extent, though they stop within its outlines, (Pl. 8, fig. 24b, *a, a*; Pl. 9, fig. 4b,) evidently because of a resistant substance which does not yield to the reaction. This certainly is enough to substantiate the existence of a membrane, and moreover of one that has considerable stability, when we see that an hour's maceration, in one instance, did not destroy its entity (Pl. 9, fig. 4b). While speaking of the reaction produced by water, we may as well mention also, that heat applied by boiling does not seem to effect an appreciable change in the intimate constituents of the Wagnerian vesicles, but evinces its disturbing power in another manner by loosening them from the wall of the Purkinjean vesicle, and forcing the whole to cluster around the centre of the latter (Pl. 9, fig. 5a, 5b, 5c) in the form of a nebula.

The Purkinjean vesicle during all this time has been rapidly increasing in size, and becoming more and more easily recognizable externally, till, at the last-mentioned size of the egg, namely, when it has one sixth or one fifth of an inch in diameter, it may be taken from the bed of yolk in which it lies, without any other guide than the naked eye. But, on account of the excessive tenderness of the membrane of the Purkinjean vesicle, it is not possible to effect this, unless it be boiled within the egg, when the heat coagulates the albuminous contents to a sufficient consistency to allow its being lifted up on the point of a knife; but even then it hardly holds together, thus evidently evincing the presence of a smaller amount of albumen, and a greater quantity of oily substance, than can be found in older ones. In two eggs of this size that were opened after having been boiled, the side of the Purkinjean vesicle that laid next to the yolk sac was inverted slightly, (Pl. 9, fig. 5b,) probably owing to the contraction of the contents, and the pressure of the yolk. This phenomenon occurs to a greater extent in older eggs, and is obviously due to the increased amount of albuminous deposit, judging from the greater toughness of the Purkinjean vesicle when