where the anus originates at a later period, there is a deep, transverse fissure, the first indication of the posterior opening of the alimentary canal.

Another embryo, (Pl. 14, fig. 4,) to all appearances identical in development with this, has a considerably larger and much more highly vascular allantois. The allantoidian artery (*o*) is quite large, and the allantoidian vein (*l*) has already assumed that wavy course which is so characteristic in older phases. The abdominal artery and the abdominal vein are here very conspicuous along the whole length of the body, even to the end of the tail.

The embryo of another species, Nanemys guttata, (Pl. 16, fig. 6, 6a,) although not more developed than the last two, has an allantois still larger than either of them. It extends its bulk along the whole abdominal region, from the heart to the tip of the tail, and even beyond. The median constriction, which we have already pointed out in a much younger phase, (p. 555; Pl. 24, fig. 15, n^6,) is here very conspicuous, yet does not trend in the direction of the longitudinal axis of the body, *as at the time of its earliest appearance, but is twisted so as to run* obliquely across its former path. This change corresponds with the alteration in the position of the allantois, which, instead of lying symmetrically across the embryo, rests with one part of its constricted bulk next to the head, and the other part in the caudal region. This is the first indication we have of the tendency of this organ to spread over the surface of the animal. After noticing that the line of constriction of the allantois is occupied by the main vessels, arteries and veins, and referring to the youngest phase in which this constriction is visible, but without bloodvessels, it becomes evident that the path of the allantoidian arteries and veins is marked out almost from the time of the origin of the allantois.

We have already pointed out the change in the attitude of the embryo (p. 541, and 554; Pl. 13, fig. 2) from a vertical to a horizontal position, with its left side downwards; but will refer to it again now, in connection with a corresponding change which the allantois has assumed in its position. Inasmuch as the right half of the allantois cannot expand laterally, with reference to the embryo, on account of the egg shell, which is closely above, it must take another direction, and consequently the left half also is moved from its former position. It is this change in the direction of its expansion that has twisted the whole allantois upon its axis. Here, too, the sinking of the area pellucida becomes conspicuous, not only in consequence of its having fallen below the general level of the vascular area, *but also because of its bearing upon the expansion of the allantois*, to which it gives place. The boundaries of this depression are marked by a sudden bending upwards of the omphalo-mesenaic bloodvessels. The bloodvessels of the allantois are very numerous, and anastomoze with each other by a multitude