

and its pulsating venous extensions, tend to outlive the left moiety and its corresponding venous parts.

The death of the ventricle also takes place in a certain segmental order, which is virtually the same in all cases, and which is indicated by dotted lines and numbers (Plate, fig. 5).\*

It will be seen from the above figure that the left side of the ventricle dies before the right, and that the last segments to die are a superficial one, extending from the vessels downwards, and another, involving the apex and a portion extending obliquely upwards to the right of it; speaking generally, the *cavum venosum* is the last part of the ventricle to die. From what has been said, it appears that as the heart's vitality is being lowered, a more primitive condition of things is reached, *i.e.*, the heart comes to consist of the sinus, the auricle, and a simplified ventricle; or to put it otherwise, the parts least dependent on the constant supply of nourishment are those that are oldest in the development of the heart, as those also of greatest independent rhythmic power; so that observation on the order in which any heart dies may be a means of reading its developmental history. It is more difficult to study this subject on the mammalian heart, but Harvey long ago pointed out that the right auricle was the last to die, and that the left ventricle was the first, though he does not seem to have emphasized the significance of this fact.

When in the animal scale among vertebrates a second auricle is acquired, as it is first among the Dipnoi, it is small and of comparatively much less functional importance than the right.

In the sea-turtle, not only is the right auricle endowed with greater vitality than its fellow, but it is conspicuously larger, the left, however, making a certain degree of advance, as to size, on the condition existing in the Dipnoi.

The ventricle in the sea-turtle is much more sensitive to a stimulus than that of other Chelonians; it also has much less vitality, can bear deprivation of its regular nourishment

\* The plate referred to will appear in the continuation of this paper in the next No. of this Journal.