organs a part only of the mass of circulating blood. To these pulmonary arteries there correspond a set of veins, uniting in the trunks (I,) which bring back the aerated blood to the auricle of the heart (D,) where it is mixed with the blood which has returned by the venæ cavæ (C,) from the general circulation. Thus the blood is only partially aerated, in consequence of the lesser circulation being here only a branch of the greater.

Nothing is more curious or beautiful than the mode in which Nature conducts the gradual transition of the branchial circulation of the tadpole, into the pulmonary circulation of the frog. In the former, the respiratory organs are constructed on the model of those of fishes, and respiration is performed in the same manner as in that class of animals; the heart is consequently essentially branchial, sending the whole of its blood to the gills, the veins returning from which (describing the course marked by the dotted lines M, N, in the diagram,) unite, as in fishes, to form the descending aorta. As the lungs develope, small arterial branches, arising from the aorta, are distributed to those organs, and in proportion as these arteries enlarge, the branchial arteries diminish; until, on there becoming entirely obliterated, the course of the blood is wholly diverted from them, and flows through the enlarged lateral trunks (O, P,) of which the junction constitutes the descending aorta. This latter vessel now receives the whole of its blood directly from the heart; which, from being originally a branchial, has become a systemic heart.

The heart of the Chelonian reptiles, such as the ordinary species of Tortoises and Turtles, has two distinct auricles; the one, receiving the blood from the pulmonary veins; the other, from those of the body generally; so that the mixture of aerated and vitiated blood takes place, not in the auricle, but in the ventricle itself. When all the cavities are distended with blood, the two auricles being nearly of the same size as the ventricle, the whole has the appearance of a union of three hearts. The circulatory system of the Ophidia is constructed on a plan very similar to that of the Chelonia.