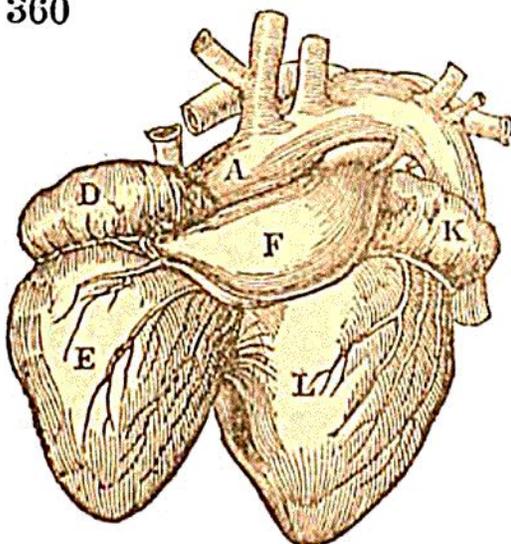


(F,) into the lungs (at H,) where it is aerated, and whence it is reconveyed by the pulmonary veins (I,) into the left auricle (K,) which immediately pours it into the left ventricle (L,) the point from whence we set out.

Both the right and the left heart have their respective auricles and ventricles; but they are all united in one envelope, so as to compose, in appearance, but a single organ:* still, however, the right and left cavities are kept perfectly distinct from one another, and are separated by thick partitions, allowing of no direct transmission of fluid from the one side to the other. These two hearts may, therefore, be compared to two sets of chambers under the same roof, having each their respective entrances and exits, with a party-wall of separation between them. This junction of the two hearts

central organ of the nervous system, requires, more than any other part, a supply of oxygenated blood for the due performance of its functions. The curious provision which is made for sending this partial supply of blood, of a particular quality, in the larger kinds of reptiles, such as the *Crocodile*, has been pointed out by many anatomists; but has been lately investigated more particularly by M. Martin St. Ange. (See the Report of G. St. Hilaire, *Revue Médicale*, for April, 1833.) It is found that in these animals, as well as in the *Chelonia*, a partial respiratory system is provided for by the admission, through two canals opening externally, of aerated water into the cavity of the abdomen, where it may act upon the blood which is circulating in the vessels. Traces of canals, of this description, are also met with in some of the higher classes of vertebrated animals, as, for instance, among the *Mammalia*, in the *Monotremata* and the *Marsupialia*.

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* A remarkable exception to this general law of consolidation occurs in the heart of the *Dugong*, represented in Fig. 360, in which it may be seen that the two ventricles, E and L, are almost entirely detached from each other. In this figure, which is taken from the *Philosophical Transactions* for 1820, D is the right or systemic auricle, E the right or pulmonary ventricle, F the pulmonary artery, K the left or pulmonary auricle, L the left or systemic ventricle, and A the aorta.