http://www.geology.19thcenturyscience.org/books/Bridgewater-Treatises/index.html

ture of communication between the right and left cavities; but this aperture is soon closed, and the ventricle is now effectually divided into two. Next the auricle, which at first was single, becomes double; not, however, by the growth of a partition, but by the folding in of its sides, along a middle line, as if it were encompassed by a cord, which was gradually tightened. In the mean while the partition, which had divided the ventricle, extends itself into the trunk of the main artery, which it divides into two channels; and these afterwards become two separate vessels; that which issues from the left ventricle being the aorta; and the other, which proceeds from the right ventricle, being the pulmonary artery; and each of these vessels is now prepared to exercise its appropriate function in the double circulation which is soon to be established.*

A mode of subdivision of blood vessels, very similar to that just described, takes place in those which are sent to the first set of organs provided for aeration, and which resemble branchiæ. These changes may be very distinctly followed in the *Batrachia*;† for we see, in those animals, the trunk of the aorta undergoing successive subdivisions by branches sent off from it, and forming loops, which extend in length, and are again subdivided, in a manner not unlike the unravelling of the strands of a rope; each subdivision, however, being preceded by the formation of a double partition in the cavity of the tube; so that at length the whole forms an extensive ramified system of branchial arteries and veins. Still all these are merely temporary structures; for when the period of change approaches, and the branchiæ are to be superseded in their office, every vessel, one after another, becomes obliterated, and there remain only the two original aortæ, which unite into a single trunk lower down, and from which proceed the pulmonary arteries, conveying either the whole, or a portion of the blood, to the newly developed respiratory organs, the lungs.

* The principal authorities for the facts here stated are Baer and Rolando. See the paper of Dr. Thomson already quoted.

† See the investigations of Rusconi, and of Baer, on this subject.