

The unfortunate Servetus, who was burnt at Geneva as a heretic in 1553, is the first person who speaks distinctly of the small circulation, or that which carries the blood from the heart to the lungs, and back again to the heart. His work entitled *Christianismi Restitutio* was also burnt; and only two copies are known to have escaped the flames. It is in this work that he asserts the doctrine in question, as a collateral argument or illustration of his subject. "The communication between the right and left ventricle of the heart, is made," he says, "not as is commonly believed, through the partition of the heart, but by a remarkable artifice (*magno artificio*) the blood is carried from the right ventricle by a long circuit through the lungs; is elaborated by the lungs, made yellow, and transfused from the *vena arteriosa* into the *arteria venosa*." This truth is, however, mixed with various of the traditional fancies concerning the "*vital spirit*, which has its origin in the left ventricle." It may be doubted, also, how far Servetus formed his opinion upon conjecture, and on a hypothetical view of the formation of this vital spirit. And we may, perhaps, more justly ascribe the real establishment of the pulmonary circulation as an inductive truth, to Realdus Columbus, a pupil and successor of Vesalius at Padua, who published a work *De Re Anatomica* in 1559, in which he claims this discovery as his own.¹⁰

Andrew Cæsalpinus, who has already come under our notice as one of the fathers of modern inductive science, both by his metaphysical and his physical speculations, described the pulmonary circulation still more completely in his *Quæstiones Peripateticæ*, and even seemed to be on the eve of discovering the great circulation; for he remarked the swelling of veins below ligatures, and inferred from it a reflux motion of blood in these vessels.¹¹ But another discovery of structure was needed, to prepare the way for this discovery of function; and this was made by Fabricius of Acquapendente, who succeeded in the grand list of great professors at Padua, and taught there for fifty years.¹² Sylvius had discovered the existence of the valves of the veins; but Fabricius remarked that they are all turned towards the heart. Combining this disposition with that of the valves of the heart, and with the absence of valves in the arteries, he might have come to the conclusion¹³ that the blood moves in a different direction in the arteries and in the veins, and might thus have discovered the circulation: but this glory was reserved for William Harvey: so true

¹⁰ *Encyc. Brit.*

¹¹ *Ib.*

¹² *Cuv. p. 44.*

¹³ *p. 45.*