

been pointed out and confessed¹⁹ without acrimony, if, in times of revolution, mildness and moderation were possible; but an impatience of the superstition of tradition on the part of the innovators, and an alarm of the subversion of all recognized truths on the part of the established teachers, inflame and pervert all such discussions. Vesalius's main charge against Galen is, that his dissections were performed upon animals, and not upon the human body. Galen himself speaks of the dissection of apes as a very familiar employment, and states that he killed them by drowning. The natural difficulties which, in various ages, have prevented the unlimited prosecution of human dissection, operated strongly among the ancients, and it would have been difficult, under such circumstances, to proceed more judiciously than Galen did.

I shall now proceed to the history of the discovery of another and less obvious function, the circulation of the blood, which belongs to modern times.

CHAPTER II.

DISCOVERY OF THE CIRCULATION OF THE BLOOD.

Sect. 1.—Prelude to the Discovery.

THE blood-vessels, the veins and arteries, are as evident and peculiar in their appearance as the muscles; but their function is by no means so obvious. Hippocrates¹ did not discriminate Veins and Arteries; both are called by the same name (φλέβεις); and the word from which *artery* comes (ἀρτηρία) means, in his works, the windpipe. Aristotle, scanty as was his knowledge of the vessels of the body, has yet the merit of having traced the origin of all the veins to the heart. He expressly contradicts those of his predecessors who had derived the veins from the head;² and refers to dissection for the proof. If the book *On the Breath* be genuine (which is doubted), Aristotle was aware of the distinction between veins and arteries. "Every artery,"

¹⁹ Cuv. *Leçons sur l'Hist. des Sc. Nat.* p. 25.

¹ Sprengel, i. 383.

² *Hist. Animal.* iii. 3.