

under that peculiar organization of the blood, to which it owes its coagulating tendency. One result of the coagulation of the blood, indeed, is as obvious as it is important; namely, the prevention of hæmorrhage. If the blood did not coagulate, the existence of animals would be most precarious; as on the slightest injury, they would be liable to bleed to death.

3. *Of Respiration.*—The function of *Respiration*, or breathing, is, perhaps the most important in the animal economy: many of the other functions may be suspended; but the interruption of breathing is immediately destructive of life. When we described the phenomena of the circulation of the blood; we observed, that the blood, in passing through the lungs, is exposed to the action of the atmospheric air. Now, during this exposure of the blood to the atmospheric air, it undergoes certain changes. The blood from the right side of the heart, when it enters the lungs, is of a dark red colour: the blood is then dispersed, in a state of most minute subdivision, through the ultimate vessels of the lungs; and in these vessels is brought into contact with the atmospheric air, when it becomes of a bright red colour. In other words, the blood changes in the lungs its *venous* appearance, and assumes the character of *arterial* blood. The blood thus arterialized, returns to the left side of