

strained it is the seat of what is called thoroughpin. It then passes down the back part of the shin bone beneath the other tendon already mentioned, through the loop at the fetlock to the back part of the foot bone, where it is attached. The action of these muscles are to flex or bend the fetlock and raise the hock joint in travelling.

Involuntary Muscles, or muscles which are not under the control of the will. The first we call attention to are the muscles of breathing, or respiration; they are a group situated around the chest in such a way as to enlarge the chest cavity and draw the air into the lungs—this action is called inspiration—while others in acting decreases the size of the chest cavity and forces the air out of the lungs, which is called expiration. The diaphragm is a muscular curtain which separates the chest from the abdominal cavity, and also assists greatly in drawing the air in, when it contracts; this muscle also assists in passing manure, and in the mare foaling. It separates the heart and lungs from the bowels, liver and stomach. Everyone interested should examine this muscle, which can be seen by opening any dead animal.

There is one muscle which is both voluntary and involuntary. It is situated in the penis, surrounding the urethra, or the tube, which carries the urine from the bladder to the penis in the male animal. Its action is voluntary while the animal is passing urine, or water. It acts involuntary during sexual intercourse, forcing the semen down through the penis. There is what is known by the name of fat situated between the muscles.

CHAPTER IV.

THE NERVOUS SYSTEM.

THIS system is a very important set of organs which give motion and feeling to the body, and the different senses, such as seeing, hearing, smelling and tasting. The two principal parts of the nervous system are the brain and spinal cord. The brain, being the centre of the whole nervous system, is situated in the cranial cavity, surrounded by three delicate membranes, the outer one being attached to the inner wall of the cranial cavity. The brain contains several important nerves called the cranial nerves, which are given off from the brain and passed down through the various foramen [or openings] in the