

account of the space between the lungs and chest being air tight the lungs themselves enlarge and the air rushes in to fill up space. The act of forcing the air out is performed by these muscles which relax while others contract in such a manner as to close the chest cavity and makes it smaller, thus the lungs also become smaller and forces the air out. The act of breathing is performed in a horse in perfect health sixteen times a minute.

CHAPTER IX.

URINARY SYSTEM.

THIS system consists of the kidneys, ureters, bladder and urethra. The action of these organs is to deal with the urine or what is commonly called the water of the animal, which is a watery fluid secreted by the kidneys. It varies in color, according to the condition of the animal's blood.

The Kidneys are two in number—one on the right side and one on the left side, and are situated just below the small of the back—the right one being the furthest ahead. In shape, they are long and narrow, and resemble the liver in color. In cutting one of these kidneys open, it is found to be full of glands and tubes, which secrete the urine from the blood while it is passing through the kidneys. These tubes pass to the centre of the kidneys, where they empty the urine into what is called the pelvis of the kidneys. The glands are largely supplied with blood vessels and nerves. In examining the kidneys, one will generally find a large quantity of fat, which help to hold them to their place. The use of the kidneys are to secrete the urine from the blood, which contains a large amount of what is known as urea acid, and if not taken out of the blood by these glands, acts as poison to the system.

The Ureters are the tubes which carry the urine down from the pelvis of the kidney to the bladder. They are two in number—one situated on the right side of the pelvic or hip cavity and the other on the left side close to the walls—and they enter one on each side at the upper part of the bladder. They are only about the size of an ordinary straw.

The Bladder is situated in the pelvic or hip cavity. When it is full it sometimes stretches out into the abdominal or belly cavity. It consists of a body and neck. The body