

wards changes into the mucous membrane as it passes up into the chambers of the head.

Nasal Chambers or Chambers of the Head.—These give passage to the air from the nostril into the larynx or Adam's apple. There are two of these chambers divided in the center by a thin partition of cartilage called the septum nasi, these communicate with the sinuses of the head. The horse cannot breathe through the mouth on account of the formation of the throat, and this compels him to always breathe through the nostrils. This is a point which should be remembered.

Larynx or Adam's Apple.—It is a box made of cartilage, or gristle, gives passage to the air and is also the organ of voice; it is situated in the floor of the gullet. This box has an opening on its upper side, which is guarded by a valve, this valve is always open except when the animal is swallowing food or water. When the food is being swallowed it passes over the valve which closes the opening while the food passes over it. This is important, for if the valve does not close properly and either food or water drop into the windpipe it causes the animal to have a fit of coughing, and is spoken of as the animal to have the food going the wrong way. On the outside of this box of cartilage is found several small muscles attached which help to hold it in its place, it is lined inside by a continuation of the same membrane, as in the chambers of the head. Along the inside of this box is found what is called the vocal chords which come into play when the animal is whinnying. These chords are not nearly so well marked as in the human being, and if they or the cartilage of the larynx become affected by disease it generally gives rise to the disease called roaring.

Trachea or Windpipe.—This is a tube which carries the air down from the larynx to the bronchial tubes in the lungs. This tube is made up of forty or fifty rings of cartilage which are united to each other by strong elastic ligaments which gives the windpipe its flexibility, that is, it can be bent in any direction almost like a piece of elastic. In tracing the windpipe from Adam's apple it is found to enter the chest where it terminates into two small tubes, one going to the right lung and one to the left lung; these are called the bronchial tubes.

Bronchial Tubes and Air Cells.—These are made up of the same material as that of the windpipe, but are only about half the