long bones are divided into a shaft and two extremities. Flat bones are found where vital organs need protection. Example: Shoulder blade and ribs, to protect the heart and lungs; pelvic or hip bones, to protect the bladder, rectum and other urinary and genital organs; also the cranial bones, to protect the vital organ called the brain. Irregular bones are found in the spinal column and in the joints, such as the knee or carpus hock or tarsus, where great strength is required.

HEAD BONES.

In speaking of the different points of importance in connection with the head bones of the horse, in making a cross or longitudinal section of the head, you will notice it is full of cavities or sinuses. The uses of these are to lighten the head and also to warm the air as it passes into the nostrils on its road down to the lungs; you will also find it is full of foramen or small holes for the nerves from the brain and various blood vessels to pass through to the organs situated in the head, such as the tongue, lips, and the various glands in and around the head.

Then we have the cavities in which the eyes are situated, one on each side of the head, called the orbital fossa. In examining this fossa you will find a small opening or foramen, through which the optic nerve passes in coming from the brain to the eye. This is the nerve of sight. Then the most important part of all to consider is the cranial cavity in which that very important organ is situated called the brain, which controls all the various functions and movements of the body.

Then we have another point, viz.: the situation of the drum of the ear. It is situated in the hardest bone we find in the whole skeleton, called the petrosal. The nerve that gives the function called hearing comes from the brain down to the petrosal bone and enters by a small foramen or hole into the drum of the ear to give hearing. This nerve is called the auditory nerve.

CERVICAL OR NECK BONES.

In considering these bones, we find seven in number. The first and second bones proceeding from the head receive special names. The first one is called the atlas, from which the head is suspended and attached to; it somewhat resembles the body of a bird with wings out. The next bone receives the name of