

then conveyed by means of the duct to the nose.

A very common disease of the eye is simple Ophthalmia or conjunctivitis. This proceeds from many causes; the most common is the introduction of foreign bodies into the eye, as a lash with a whip, chaff or hay seeds, also caused by foul stables, especially in hot weather, when there is a great quantity of ammoniacal gas generated, arising from the decomposition of the urine, &c.; this disease also occurs sometimes as an accompaniment of catarrh or inflammation in the head.

The symptoms of simple ophthalmia are more or less closure of the eyelid, watery eye, with copious secretion of tears, the conjunctiva is swollen and in some cases attendant upon external injuries, there is a protrusion of the conjunctiva beyond the eyelids, also of the haw, and generally more or less cloudiness of the cornea, owing to the nutrition of the part being interfered with.

The treatment of this disease depends much on the cause, hence the necessity of careful examination. If caused by a foreign body it must be removed, which can be done either by the introduction of a feather or removing it with forceps. The first layer of the cornea is covered with scaly epithelium, and chaff, hayseeds, &c., are very liable to become embedded there; in some cases these require a little force to tract them. After the offending agent is removed, the application of cold water to the eye is useful, also some mild astringent, as the sulphate of zinc, also a small dose of laxative medicine conjoined with low diet, and place the animal in a cool, darkened and well ventilated horse box.

The cornea is very liable to be injured from blows or tears, and these injuries are always accompanied by symptoms of conjunctivitis. The tears may simply occur on the outer layer they may go through the whole coat, when aqueous humour escapes. In injuries from blows, cold cloths kept close to the eye are useful; this keeps the eyelids closed, supports ulcerated parts, and also prevents the action of the air on the wound. By such treatment, even when the aqueous humour has escaped, it is astonishing how soon it will form again.

In all wounds of the cornea lymph is poured out, giving the cornea a dull leaden appearance. When the eye has this dull appearance and no bloodvessels appear, there is a probability of its being removed; if changing to a dirty whiteness, there is little chance of ever getting rid of it. After the inflammation has subsided stimulants must be applied, as the use of silver, the sulphate of zinc, &c. In young dogs the cornea is subject to ulceration, as a sequel of distemper. The first symptom of this disease is a slight opacity in the centre of the cornea; this opacity is followed by the appearance of a small hole or

ulcer, which, if left alone, gradually extends over the whole cornea. This ulceration depends on the nutrition of the cornea being destroyed, followed by disintegration. It is best treated by a solution of the nitrate of silver, about fifteen grains to the ounce of water.

## ROARING IN HORSES

Roaring is usually the result of structural alterations within the larynx or upper part of the windpipe bordering on the trachea; in mild cases of roaring, we usually find a thickened state of the membrane, lining the upper portion of the respiratory passage, and when roaring is occasioned by thickening of this membrane, its degree depends on the ratio of decrease in the calibre of the tube breathed through.

Roaring is a very aristocratic disease; many of the very best and fastest horses in England were and are now, notorious roarsers. Flying Childers, as fast a horse as ever wore horse shoes, was one of the worst roarsers ever known; the story runs that when Childers was at full speed his roaring resembled juvenile thunder!—he could be heard when distant half a mile!

The worst form of roaring (as Paddy says) is whistling. This is the sharp shrill note only occasioned by the thickening of the lining membrane of the primary passages of respiration, but by alterations in the form and structure of the larynx—the larynx being, in popular language, known as the “voice box.”

Roaring is more prevalent among stallions than mares and geldings, and the kind of horse most subject to it is the one having a thick chunky neck, and having the angles of the jaws in very close proximity with the neck.

Roaring scarcely, if ever admits of a radical cure, and when of hereditary or congenital origin a cure is impossible. A roarer should never be encumbered with a check-rein, for it has the effect of causing undue pressure on the larynx, and thus augments the difficulty.

Roaring can however be relieved by an operation known as tracheotomy, which is performed at a point a few inches below the larynx.

At a late meeting of the Imperial and Central Society of Veterinary medicine, M. Leblanc read a communication on tracheotomy which was performed on a carriage horse. “The operation had been performed because the horse was a severe roarer, and he wore the tube eighteen years and a half, doing fast work all the time. The animal was destroyed at twenty three years of age, the owner not desiring to make further use of him nor to sell him. Since the operation, Leblanc had not observed any change in the horse, except a depression of the bones of the face. After death, the larynx was found very narrow, the mucous membrane and submucous cellular tissues were thickened, the epiglottis deformed, very obtuse, and everted at its free margin. The changes in the larynx were the original cause of roaring. The depression