know how to handle oduces. The farmer e world is richer beis needed is to get a ons and possibilities.

ary. H, M.A. PLANTS. I.

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THE HORSE.

IANUARY 29, 1920

Diseases of the Respiratory Organs.—III.

ROARING.

A horse is called "a roarer" when he makes a wheezing, whistling or hoarse sound during inspiration, and in very rare cases also during expiration. In most cases respiration is performed in the normal manner when the animal is at rest, or performing slow or easy work, but when subjected to hard or fast work he makes a noise as stated; the noise being made during inspiration. The noise is due to the fact that the calibre of the larnyx has become lessened, hence, when from any cause, as hard or fast work, excitement, fear, nervousness or other causes, it becomes necessary for a large volume of air to enter the lungs, the forcing of this through the more or less constricted calibre of the larnyz causes the sound, on the same principle that forcing air into a horn or bugle causes a sound. In many cases roaring is a progressive disease, the symptoms being slight at first and gradually becoming more marked, while in others it appears suddenly. Some roarers can perform ordinary work, either slow or on the roads, without exhibiting any symptoms of being affected, while others exhibit symptoms even when performing light work. The condition is sometimes simply a symptom of some acute disease, as an acute case of laryngitis, and the symptoms disappear upon recovery from the disease. In such cases it is simply a temporary unsoundness. The trouble often appears as a sequel to some respiratory disease, as laryngitis, strangles or even a severe case of catarrh or common cold.

The cause of roaring is, however, in the majority of cases, found to be due to atrophy or shrinking and fatty degeneration of some of the muscles of the larynx, while in others it is caused by a chronic thickening of its mucous membrane, or may be caused by a lessening of the calibre of the trachea or windpipe; while either, or both sides of the larynx may be affected, the trouble is much more frequently seen on the left than on the right side. The reason for this is involved in some mystery, but by veterinarians it is generally accepted to be due to the nervous supply to the organ; the supply to the left side differing to some extent from that to the right. Roaring is not a common sequel to diseases of the organs of the thoracic cavity. When it occurs as a sequel to disease it is generally conceded that it was a disease that affected the throat.

Many roarers, whose history can be traced to birth, have never suffered from any chest affection, nor indeed from any respiratory disease except common cold, and in some cases not even from this slight ailment. Many claim that the condition is often due to hereditary pre-disposition. It is a fact that the produce of certain sires or certain dams appear much more subject to the ailment than the progeny of other progenitors, and in many cases the cause cannot be traced to attacks of other diseases. There are other cases where horses appear particularly predisposed to laryngeal or other throat affections, and the infirmity under discussion appears after an attack of such. Roaring may be due to disease of the nostrils, a growth in the nasal chambers, depression of the nasal bones, the result of fracture, closing or partial closing of the nasal chambers by false membrane or disease of bone, tumors in the posterior nares, construction of the windpipe, diseases of the pharynggal or salivary glands or any other condition pharyngeal or salivary glands, or any other condition that lessens the calibre of the nasal chambers, larynx or

In addition to the sound emitted during inspiration, the roarer may have a cough with a loud, harsh, dry sound, half cough half roar, and many of them are "grunters." At the same time, while many roarers are the too-common idea that all grunters are roarers is without foundation, as many grunters have no tendency to roar.

To test a horse for roaring, he should be ridden or driven at a fast gallop, with a free head for a considerable distance. Some horses that are perfectly sound in wind will make a noise if excited and driven fast with a tight rein, especially when driven with a curb bit, or if they have the habit of holding the head high and holding the nose inwards towards the breast. This compresses the larynx and consequently lessens the calibre. Such horses, when given a free head, will go sound.

Treatment.—If the sound can be traced to any removable cause, an operation by a veterinarian may remove it. When due to disease or altered condition of the larynx, as is generally the case, effective treatment is very difficult.

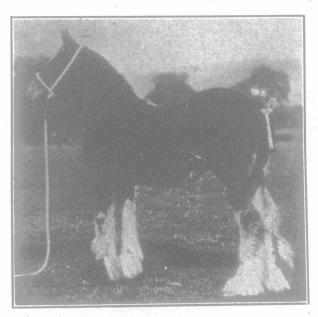
Many modes of treatment have been tried. Some claim benefit from blistering or firing the skin surrounding the organ, and in some cases it may be beneficial, but in order that it may be it must be practiced in the early stages of the trouble.

An operation is now performed that is successful in a sufficient percentage of cases to warrant its performance. It consists in cutting into the larnyx and stripping the thickened mucous membrane of a part of the side or sides that are diseased. The operation can be successfully performed only by veterinarians who have practically made a specialty of it.

The sounds can be modified by plugging the false nostrils with cotton or arranging pads on the bridle, that press upon the false nostrils, thereby preventing their expansion, hence lessening the volume of air that

In horses in which the trouble is so marked as to materially lessen their usefulness, an operation called "tracheotomy," which consists in placing and securing a tube in the windpipe, through which the horse breathes. gives fair results. The tube has to be removed and cleansed occasionally, and then replaced. Some suc-

cessful race horses have been treated in this way. A horse that roars, even slightly, is unsound. It is probable there has been, and still is, more litigation on account of this trouble, in cases of sale of horses, than on account of any other form of unsoundness. WHIP on account of any other form of unsoundness.



A Shire Foal.

LIVE STOCK.

The Secret of High Prices for British Live Stock.

EDITOR "THE FARMER'S ADVOCATE":

It is impossible to read the reports of Old Country live-stock sales and not be impressed by the uniformly high prices received at every sale. It is certain that we have not yet become able to approach the attainments of our English and Scotch friends as far as breeding and selling live stock is concerned. And yet in many breeds we are producing individuals just as near perfection, just as typical of the breed to which they belong, and really just as valuable as any produced across the water. Where then do we fail? The answer must be found in the fact that we are not as interested in the production of good live stock for the sake of producing it as we are in securing as large financial returns as we can possibly obtain. In short, we are not building up permanent flocks and herds. We continually sell our live stock to whoever will pay for it and start again to produce some more. We are satisfied to sacrifice whatever advancement we have gained by selection and good feeding for the temporary financial gains secured by the sale of our breeding animals. Until we start to build up a permanent livestock business based on generations of selection and careful feeding and breeding, we can never hope to secure a strong share of the world's market for breeding stock. That we do not figure largely in this market is indicated by the fact that the meat-producing countries such as the Argentine, were buying good live stock to build up their breeding herds, their buyers invariably went to England or Scotland to secure breeding stock, while at the same time Canadian breeders could spare good stock. The enviable reputation of Old Country breeders, along with their years of continued work along the same lines, draws the world's live-stock buyers. But this was not accomplished in a single day, nor did it result without reason. Since the standard breeds of cattle, swine and horses were originated they have been improved through the years by breeders who followed the same general lines of selection, and so lost none of the progress made by their predecessors. In many cases families of cattle were kept continually for generations within one breeder's family, the sons taking up the work where their fathers left off. While the retention of the best breeding animals in British herds was, in many cases, the result of personal good judgment on the part of the breeder individually, it was at the same time aided by wise provisions made by the different breed societies.

It was made practically impossible for a British breeder to sell for export any animal that, in the opinion of the breed society, was an invaluable asset to the breeding stock at home. And, so the best have been kept for generations. Many Canadian breeders on attempting to purchase breeding stock in Scotland have been unable to understand why they were unable to even get a price placed on some choice animal. But. until we recognize the fact that we cannot afford to sell our best, we will fail to raise either our standard of live stock or our prices. That we have not yet learned this lesson is evidenced by the fact that American

breeders come into Canada constantly and carry off our best animals, while Canadian breeders are practically compelled to secure new blood from across the water to reinvigorate and improve their herds and flocks. Even then buyers from other countries outbid Canadians in the British market. The statement of Mr. Arkell, to the effect that from the standpoint of advertisement alone, it would pay us as a country to pay high prices for a few good sires from the best herds of Britain, is very true. That continuous selection pays is demonstrated beyond a doubt by the recent report of Mr. Duthie's Shorthorn sales in Scotland. From 1892, when he held a sale of bull calves averaging £23, the when he held a sale of bull calves averaging £23, the average price was raised to £1,400 secured at his recent sale for 24 calves. While general prices have advanced in that time, the advance was not nearly as great as that secured by Mr. Duthie. The fact that he kept his best calves and stayed in the business is largely responsible for his success. While he has been remarkably successful, he is not alone. There are scores of borde actablished for years that are scores of particles. herds established for years that are securing as good results. From the standpoint of adding to the national wealth, no class of men have done more than these live-

The continued success of any individual business or of any industry depends ultimately on the integrity of those engaged in the business or industry. It is a tribute to British breeders that their integrity is unquestioned to-day. Some idea of how they have gained and maintained their present enviable reputation for straight dealing may be gathered from the following true incident. A Canadian Shorthorn breeder was desirous of securing a certain pair of bull calves included in a sale held by Mr. Duthie. He found himself in a position where he was unable to attend the sale, so he wired Mr. Duthie, asking him to buy the calves for him, when they were being sold. After they had reached him, when they were being sold. After they had reached a certain figure Mr. Duthie stopped bidding and another breeder got the calves. On explaining the matter to the Canadian breeder, Mr. Duthie said: "The calves were selling for more than I thought they were worth, so I felt that I had to protect your interests." By this action he possibly lost considerable money.

So, after all the high prices paid at British sales are justified, and we as Canadian breeders must build up a permanent business based on strict integrity if we are to improve our live stock and establish a reputation for square dealing equal to that held by our British friends.

Wentworth Co.

CHARLES M. FLATT.

Specializing in Pigs and Sheep.

There are many different systems of farming fol. lowed throughout the Province. The owner of the land, to be most successful, must study his soil and conditions in order to determine the line of farming which will give best results. Then, too, some men can make a greater success with one line of stock than with another; consequently, it is impossible to set down any hard and fast rule that will hold good in all cases. The experiences of farmers who have made a success should be valuable to many engaged in farming They show how certain lines are handled under existing conditions. William Murdock, of Wellington County, has a 250-acre farm adjoining a town, and has found it profitable to specialize in raising young pigs to sell to the commercial trade. From twenty-five to thirty brood sows are kept, and in conjunction with these a flock of from sixty to eighty ewes are handled, along with a small herd of Shorthorns. Mr. Murdock has made a specialty of raising young pigs to sell when from six to eight weeks old. It is only occasionally that he raises a litter to maturity. He finds a ready market for the pigs. His system of handling the brood sows may be of interest to some of our readers. The sows are all run together, their sleeping quarters being the basement of a barn 50 by 70 feet in dimensions. This floor, or a portion of it at least, is of concrete, and the grain is fed on it. This part of the floor is kept as clean as any trough. There is a supply of water available at all times. The sows run out on pasture during the summer, and at all times have plenty of exercise.

As farrowing time draws near, the sows are put in box stalls in the stable and are given lots of straw for bedding. This is contrary to the views of some hog breeders, but Mr. Murdock finds that this practice results in a very light mortality at farrowing time. Judging from the bed which a sow will make for hersel under natural conditions, the system is right. Many can call to mind how the sow would practically bury herself in the straw-stack and would raise larger and more thrifty litters than are generally raised when the sows are housed in the most modern pens and given the best care and attention. One will generally notice that when there is an abundance of straw the sow will make a firm bed. The young pigs are unable to wander far away from her, and thus do not get chilled. Where the bedding is scanty, the sow is continually scratching it together to make a bed, with the result that at farrowing time it is usually damp. There is not sufficient to keep the pigs from wandering, and the result is that they get to the far side of the pen and become chilled, unless someone is at hand to rescue them. Mr. Murdock's stables are a considerable distance from where he lives, and he seldom bothers with the sows at farrowing time.

For a time he noticed that he was losing a number of the pigs after they were a week or ten days old. They seemed to disappear mysteriously, and he could