

as long as any chocolate tinge remains in its coloration.

The Warbler migration is now drawing to a close. The early species—the Black and White, Black-throated Green, Myrtle, and Yellow—have passed on except for such individuals as remain to breed. The later migrants of Canadian, Wilton's, Redstart, Black-throated Blue, Chestnut-sided, Parula, Tennessee, Nashville, and Bay-sided, are now passing through, and there remains but one species to come through to complete the Warbler procession for this spring—the Black-poll.

## THE HORSE.

### Persistence of the Urachus—Pervious Urachus—Leaking Navel in Foals.

A condition commonly called "Leaking Navel," technically called "Persistence of the Urachus or Pervious Urachus," is not uncommon in foals. During several months of foetal life the kidneys of the foetus are active. The urine they secrete is conveyed in the usual manner to the bladder, from which it is conveyed by a tube or canal called the urachus. This is a tube extending from the lower and front part of the bladder towards the umbilical or navel opening, through which it passes, and then expands and forms part of the foetal membranes or afterbirth. The function of the urachus is purely a foetal one. At birth its services are no longer required, as the urine will escape through the urethra or vagina according to sex, hence the canal, under normal conditions, becomes obliterated. It, however, not infrequently occurs, that from accidental causes not well understood, or as a consequence of malformations, it is only partially or not at all obliterated, and urine continues to escape in drops or in a stream from the navel opening. This condition is more frequently noticed in males than in females, and appears to be more dangerous in the former. While foals that suffer from the abnormality are usually weakly, the condition is often noticed in smart, strong subjects, but if the discharge be not checked, the patient in most cases soon becomes weak and unthrifty, but there are exceptions even to this, that is, cases where the discharge continues and the colt thrives well for a considerable length of time. The condition also is in some cases accompanied by that serious disease called "joint-ill or navel-ill," in which cases there are little hopes of successful treatment; at the same time many cases do not become complicated.

The symptoms are not difficult to recognize. The subject may or may not be weakly, but urine will be noticed escaping either in drops or a stream of greater or less volume from the navel opening. This escape may be more or less constant, or may be noticed only when the patient is making efforts to urinate. If the foal be weak and unthrifty it will be most of the time, and instead of the navel drying up and the opening healing, there will be a constant wetness of the parts and a refusal to heal. In most cases when the patient is urinating the escape of urine can be noticed both by the normal channel and the navel, but in some cases it all escapes through the latter. This indicates that the normal passage is not pervious. In some cases there is a false membrane, or possibly obstructions of other kinds, occluding the normal channel. In all cases where the condition continues the patient will sooner or later become weak and unthrifty, and eventually die.

**TREATMENT.**—Before treatment is resorted to it is necessary to ascertain whether the normal passage, is open, as if it be not, and we prevent escape of urine through the urachus it cannot escape at all, and, of course, death will be the result, either from inflammation of the parts, and exhaustion or rupture of the bladder. In cases where the foal has been seen passing urine by the normal channel, of course no further evidence is necessary, but where this has not been noticed a small catheter should be passed into the bladder to break down obstructions.

If the umbilical or navel cord protrudes below the abdomen it should be disinfected with a good disinfectant, as a 5-per-cent. solution of carbolic acid or a solution of corrosive sublimate, 15 grams to a pint of water. When the end of the urachus can be seen and taken up with a forceps it should be tied with a strong silk thread that has been disinfected in the lotion. Even when the cord is broken off close to the abdomen we can sometimes secure the vessel by holding the colt on his back. When the urachus cannot be individually secured the whole cord may be enclosed by the ligature, but it is better, when possible, to secure the urachus alone. The parts should then be dressed three or four times daily with the antiseptic until healed. The parts enclosed by the ligature will slough off in a few days, and then healing should be rapid. Clams may be used instead of a ligature, but most practitioners prefer the latter. In cases where the

canal cannot be secured as above, some authorities recommend the operation of cutting down upon it through the floor of the abdomen and securing it, but this is a critical, and in most cases an unnecessary operation, and one that requires an expert to perform, and also demands careful after attention. Manufacturers of and dealers in proprietary medicines advertise specifics for the cure of this trouble without an operation. It is not our intention to discuss the value of these preparations. In most cases the application of slight caustics or very strong astringents will be effective; whatever preparation is used must be applied directly to the end of the urachus in order that it may be effective. In order that this may be done it is necessary to have the patient held upon his back, and the dressing applied with a feather or small syringe. A mixture of equal parts of butter of antimony, and tincture of myrrh applied with a feather twice daily usually gives good results. Care must be taken to not apply this too freely or to parts other than those upon which we wish to act. In cases where intelligent treatment of this trouble is adopted early, a recovery usually takes place provided there are no complications, but when treatment is deferred or neglected until the patient has become too greatly weakened it is often unsuccessful. WHIP.

### Training for Horses.

Large, heavy, coarse-bred horses, such as those frequently used for army transport work, are not always the most enduring or capable of suffering unusual hardships; and this fact seems now to be pretty generally recognized by some of the leading military authorities on the continent. They are revising not a few of their cherished opinions. They appear to believe, however, that this is purely a matter of pluck, of natural courage, of breeding; they emphasize the truth of the old saying that "blood will tell." To a great extent that is un-

was invented. What, therefore is imperatively needed in this connection is good, hard condition, and the rest will come.—"Live Stock Journal".

### The States Denuded of Horses.

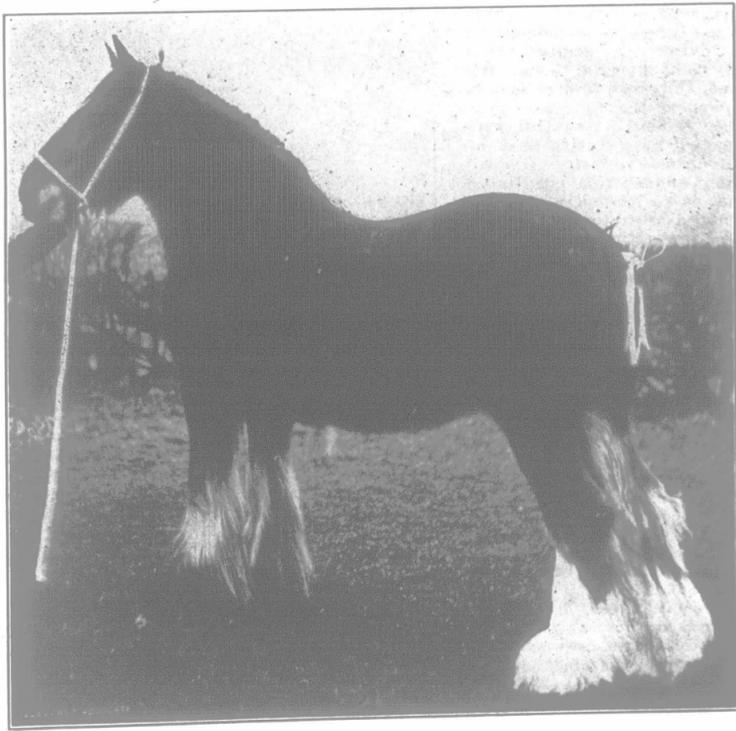
C. J. Fitzgerald, head of a leading Canadian shoe manufactory and widely known throughout the United States as President of the Brighton Beach Racing Association, when interviewed in New York city recently stated that the war had practically stripped the States of good horses. The situation in Canada, he said was a little better because purchases for the Imperial Government had ceased for a time. He expressed the opinion that a tremendous mistake was made in permitting so many mares suitable to produce cavalry and artillery horses to leave the country. About half the animals shipped were mares and many of them were in foal. At the present time, said Mr. Fitzgerald, Great Britain, France and Italy, had commissioners everywhere in the States picking up horses and the scarcity was already alarming especially in view of the general opinion that the war would last a long time. Agricultural conditions in Canada, he reported to be good and the general business situation especially in Ontario very satisfactory.

## LIVE STOCK.

### The Growth of Our Live Stock Industry.

In one sense of the word the development of the pure-bred, live-stock industry in Canada has been phenomenal. Breeds have grown up in the lifetime of many, and in that period they have been disseminated in their purity, and they have stamped their likeness in part upon a great number of the stock in Canada which are known as grades. Only as far back as 1887 the Dominion Short-horn Herd Book absorbed the Canadian Shorthorn Herd Book which was established in 1867. Some years prior to the latter date Shorthorns were imported into Canada, and they gained such favor that when the Census was taken in 1911 there were 56,614 animals registered or eligible for registration in the Dominion Shorthorn Herd Book.

Records show that in 1860 F. W. Stone, of Guelph, introduced Herefords into Canada. These low-set, thick cattle may now be seen peacefully grazing on Canadian soil from the Atlantic to the Pacific, and the Census of their numbers in 1911 revealed a total of 7,611 head, which were absolutely pure. The white-faces to be seen, however, are not all pure-breds, for so prepotent



Roycroft Forest Queen.

Junior champion Shire female, London, Eng., 1915.

doubtedly correct, yet it does not tell the whole story. Good, hard condition accounts for much in this relation, and weight does not necessarily mean proportionate strength. Mere fat is an antagonistic factor. Recent inspection of a number of cart-horses bought for transport work was satisfactory in the main except for their lack of hard condition; many of them were, in colloquial phrase, "as soft as butter." They did not look capable of doing a severe day's work without danger of collapse. They need a period of the right sort of training before they are "sent to the front," and then they would be the better able to endure such hardships of the field as are pretty sure to fall to their lot. It is a question of judicious exercise and feeding; thoroughly skilled and experienced men should be employed to get them fairly fit; what they should show is plenty of muscle, not fat. Our soldiers are adequately trained; why not, then, the horses? Of course, one need not ignore the question of breeding, yet amongst Thoroughbreds of the most aristocratic pedigree cowards are to be found, so that trainers call them duck-hearted, "welsbers," etc., and to put a little pluck into them the dope

are the sires that the white face is sure to predominate, although the offspring be only one-half, pure.

It is considered that early in the last century when Scotch settlers moved to Canada they brought with them their favored milking cow, the Ayrshire. They, too, have reproduced rapidly in this country, and in 1911 there were 17,257.

Canada is a country in which draft horses are found most useful. Since the early days Clydesdales have been popular, and since 1842, when Archibald Ward, of Markham, Ont., imported Grey Clyde (78) they have increased wonderfully, and four years ago they totalled 19,911.

Year after year importations have been made since the early days of pure breeding, and according to the Census and Statistics Monthly pure-bred horses in Canada on June 1, 1911, numbered 33,149; cattle, 123,899; sheep, 53,616, and swine, 56,457. As compared with 1901, these numbers represent increases of pure-bred horses, by 22,393, or 208 per cent.; cattle, 47,398, or 62 per cent.; sheep, 8,299, or 18 per cent., and swine, 15,628 or 38 per cent. Horses comprised not less than 22 different breeds, the principal