

truisms as 'no foot, no horse,' but those who carry the check books through the market know quite well that the thin division do not command a ready sale.

"When anyone who understands work horses at all is about in the market place, he instinctively pitches upon those which are suggestive of pith and power. Minor show-yard attractiveness is not altogether forgotten, 'the like come, like go' having to be held in view, just as it was in the days previous to studbooks.

"If a horse is come of a family of good sound constitution, and there is no absolute malformation, even if a little behind the show-yard standard as to feet and pasterns, we should hold him to be preferable. The commissioner sent out with a certain amount of money to spend has no time to talk over the points which came up at the last county show. The railway whistle shifts his ground to another country, and although the slobbering, lobbing sort may not be altogether in his mind, he knows they will fill the bill.

"A good-sized draft stallion or mare should have a well-developed knee, and fetlock joint in proportion. It is scarcely of any use trotting out the old adage, 'no hoof, no horse,' as nearly all the draft horses now have fairly good feet. Hocks, we think, should always be proportionate to stifles and quarters. They are not so, somehow, a great, thin, ill-spread, leggy sort having at times hocks which throw it out of all bearing so far as the contour of a picture is concerned."

The Hackney Horse.

ORIGIN.—This breed originated in the County of Norfolk, England, through the crossing of Thoroughbred stallions on native Norfolk trotters. These trotters were noted more for their ability to travel long distances than for their speed. Through Bellfounder, the American trotter may be traced back to trotters of Norfolk descent. Among the most creditable records that are known for these horses was that of the mare Phenomenon, that trotted in July, 1800, 17 miles in 56 minutes, and in the same month repeated the same performance in 53 minutes. Bellfounder, at five years old, trotted two miles in six minutes, and in the following year trotted nine miles in 29 minutes and 38 seconds. Velocity, the dam of Bellfounder, trotted on the Norwich road in 1806, 16 miles in one hour. In 1808 she trotted 18 miles in 1 hour and 47 minutes. Marshland Shales, in a match race, is reported to have trotted 17 miles in 58 minutes, carrying 168 pounds. Norfolk Phenomenon is known to have trotted two miles in five minutes four seconds. Merrylegs trotted a mile in July, 1834, on the road in 2.42, and his dam trotted a mile in three minutes at different times, and when 22 years old she trotted 2 miles 290 yards in 5 minutes and 48 seconds. The dam of Sportsman, her sire, trotted nine miles in half an hour. Chestnut Horse, brother of Merrylegs, trotted two miles in 6.22, when four years old, and his brother, Bay Horse, trotted 17 miles within an hour in June, 1830, trotting the last mile and a half in four minutes. In August, 1830, in a matched race, he trotted four miles in 11.45, carrying 168 pounds. Another record for the Norfolk trotter was made on April 24th, 1820, when 100 miles was trotted on the Ipswich road in 12 successive hours. The first fifty miles was trotted in five hours and five minutes; the 100 miles in 11 hours and 40 seconds. These records indicate that the Hackney at an early day was bred for endurance, together with speed and substance. The mating of Blaze, a son of Thoroughbred Flying Childers, upon the native mares of Norfolk appears to have originated this type. Flying Childers was the get of Darley Arabian (imp., 1702), that had so much to do in the making of the Thoroughbred. Blaze sired Shales, the sire of Driver, the sire of Fireway, and to the latter nearly all the noted Hackneys of to-day trace, such as Rufus, Confidence, Lord Derby, Trifits, Fireway, Danegelt, Goldfinder, Field Marshal, etc.

CHARACTERISTICS.—The typical Hackney is a horse of extreme smoothness and gracefully curved outlines. The head is light and expressive; neck muscular and curved, but free from heaviness; shoulder smooth, and laid well back; body circular, compact, short; hips smooth, quarters plump with muscle; legs short, and tendons clearly defined. Their action is noted for its gracefulness and stylishness, being very high and round in front, and regular behind. The front legs are thrown very high, and the feet appear to follow the edge of a circle in their course. The action of the hind legs is peculiar, in the degree to which they flex their hocks and carry their feet far forward, thus keeping the stride and the body balanced. The movement of the typical Hackney is elastic, the feet coming to the ground easily, and leaving it with a quick motion. In their hind action there seems to be more movement and less action in the stifle than in the instance of the majority of American trotters. These horses are usually solid colors, bay and brown. They are seldom over 15.3 hands; the general preference being for those of this height rather than over it. An increase in height is very often due to an infusion of

Thoroughbred blood, which will also show itself in straighter outlines and stiffer action.

UTILITY.—The Hackney is best suited for the production of coach horses, and for stylish, high-stepping cob horses for city driving. Their attractive appearance and excessively high action are the qualities that adapt them for city turn-outs. Their action is, to a large extent, the result of cultivation, so that the training and fitting of these horses for the market becomes skillful work, and the mares used should have, in a degree, the Hackney form and action. The use of Hackney stallions from inspected mares is rarely satisfactory, especially if used on mares of mixed breeding, due to the short pedigree of the stallion, his short ancestry being likely to decrease his prepotency.

STOCK.

Infective Animal Diseases.

Through the medium of his special articles contributed to these columns during recent years, and by our reviews of several of his works, readers of the "Farmer's Advocate" have learned to appreciate the services rendered the veterinary profession and horse owners by Capt. M. H. Hayes, F. R. C. V. S., one of the foremost British authorities of the day on these subjects. Among his best-known works are "Veterinary Notes for Horse Owners," "Points of the Horse," "Riding and Hunting," "Stable Management and Exercise," "Illustrated Horse-breaking," etc. We have now received from the publishers, Messrs. Hurst & Blacketts, 13 Great Marlborough St., London W., Eng., a copy of volume 1 of Fried-



Hackney Mare, Fair Nell 65; Sire Robin Adair, out of Steeton (imp).
Owned by Rawlinson Bros., Calgary, Alta.

berger & Frohner's Veterinary Pathology, fourth edition, revised and enlarged, translated from the German into English, and edited by Capt. Hayes. This work, "Lehrbuch der speciellen Pathologie und Therapie der Haustiere," is not only the highest authority on veterinary medicine in Germany, but its French translation has been adopted as a text-book on the subject in the Veterinary Colleges of France. In the authorized translation before us Capt. Hayes has unquestionably done his work well, and in its mechanical execution the book is a credit to the publishers. To the library of the up-to-date veterinarian it will be an invaluable addition, and, in view of the fact that infective diseases, with which it so thoroughly deals, can in many cases be communicated from animals to man, this volume will be appreciated by medical doctors, as well as veterinarians, whom the second volume will more particularly concern. A good many addenda have been made, which will make the work more fully meet English requirements. It contains a valuable chapter on bacteriology. The price of the work is quoted at 10s. 6d. net.

Beats all Other Weeklies Now.

I like the "Farmer's Advocate" very much, and would not like to be without it, especially since it comes weekly. I trust you will have every success in your good work, as your paper ought to be in every farmer's home. The "Farmer's Advocate" beats all other weeklies now, according to my mind.
Middlesex Co., Ont. WM. SMITH.

The Ox Warble.

The observant stockman will have noticed in the winter or early spring, lumps or tumors in the skin of the middle back of his cattle. These, on further examination, will be found to contain, besides the pus and broken-down tissue, a large, fleshy white grub. This is the larvæ of the ox warble.

For many years entomologists were unable to agree as to the correct life history of the insect. It was at one time thought to have gained entrance to the skin by the eggs being laid on the animal's back, and on hatching the larvæ eating their way through the skin. Later and more thorough investigation has revealed the fact that such is not the case; strange as it may seem, the method pursued by the insect is entirely different. The eggs are deposited by the female on the hair of the cow, in places where they can be reached by the animal when it licks itself. When they reach the cow's mouth they hatch, and the minute larvæ bore into the œsophagus, or other parts of the alimentary canal, and work their way through the muscular tissue until they reach the middle back. Here they remain, living on the tissue of the cow until mature, when they emerge by means of the breathing hole they made in the hide, and fall to the ground. On reaching the ground they work their way below the surface a short distance, enter the pupa stage, and emerge in a short time as the adult fly. The adult fly belongs to the family Estridæ, or the botflies, of which the best known is the horse botfly, which at a casual glance might be mistaken for a honeybee, except that the female has the end of the abdomen pointed and turned under. The other common member of this family is the sheep botfly. If one of these ox warble flies be captured and examined, it will be found to have a large head with broad face; the antennæ minute, three jointed, and not readily seen; mouth-parts small and inconspicuous.

The importance of some practicable remedy is at once apparent, when one considers the misery and loss of flesh sustained by the affected animal, and the reduced price usually obtained for hides damaged in this way. At this season of the year, when the larvæ are approaching maturity, slitting the skin, pressing out the grub and killing it, is perhaps the most practicable. The application of mercurial ointment during the earlier stages gives excellent results. This ointment penetrates the wound and kills the larva, which may afterwards be pressed out or allowed to remain and to suppurate out itself. A mixture of lard and sulphur, applied in a similar way, is also beneficial.

As yet there is no practicable method of prevention, although I noticed during last summer that cows which had been sprayed for the stable and horn flies did not seem to be troubled as much as the others. Of cows in same pasture and under same conditions, there were some which for some reason were almost immune from attacks of this insect. The physical condition of the animals did not seem to make any appreciable difference, both the well nurtured and those less fortunate being attacked with equal willingness by the insect.
Peel Co., Ont. H. M.

A Tribute to the Cow.

By Col. F. M. Woods.

Grand and noble brute! Of all the animal friends of man she is the greatest. To her we owe the most. Examine into all the different channels of commerce into which she enters and note the result should she be blotted out.

A Sunday stillness would then pervade the great stock-yard industries of our large cities, and grass would grow in our streets. Fifty per cent. at least of the freights that plow the continent from ocean to ocean would be sidetracked, for there would be nothing for them to do. Fifty per cent. of the laborers would draw no pay on Saturday night. Our tables would be bare of the greatest luxuries with which they are now covered.

Oh! you would abuse a cow. I wish that I as you are about to sit down to the noon-day meal, might slip up and remove from your table what the cow has placed thereon. I'd take the cup of milk waiting at baby's chair. I'd take the