

first-class clover and alfalfa hay may be used to excellent advantage, and the oat feed need not be increased to any great proportions. While the horse is idle it may be possible that a little of the heavier grains could be worked into the rations to good advantage, and we would not hesitate in advising the use of a little oil cake to put the horse's coat in first-class condition and to aid in keeping up his general health.

Colt Futurities.

Commenting on the Clydesdale Futurity classes at the Winnipeg Industrial this year, "The Farmer's Advocate and Home Journal," of Winnipeg, Man., says:

"The Clydesdale Futurities, inaugurated last year by the Canadian Industrial Exhibition Association, proved an attraction of extraordinary interest to those who know the merits of this famous breed, and the showing at the exhibition in July was looked forward to with keen anticipation throughout the West as promising to be a star feature of the big Western fair. These expectations were fully met. As a new enterprise, the Clydesdale Futurity was a pronounced success. Twenty-six foals were entered in the two events, eight stallions and 18 fillies, and flattering in the extreme were the encomiums passed on this collection of magnificent young blood, not only by the judges but by the assembled horsemen and the stock experts of the various publications represented on the fair ground. The winning colts were among the best representatives of the breed, type and quality both considered, ever shown in Canada.

"The exhibition management put on the Clydesdale Futurities with a view to stimulating the breeding of a superior class of heavy-draft horses throughout Western Canada, and to make it an object for breeders to take better care of their young stock, especially during the winter season. The result has amply justified the experiment, and the board of directors announces that it has decided to continue this feature for another year. The prize money amounts to some \$500."

We sometimes wonder if some of our Eastern show managements could not make good use of Futurity classes in their prize lists. The plan is gaining great favor in the United States. It is worth a trial.

The Belgian's Horse.

In times of peace the heroic Belgians have been noted as breeders of draft horses. This fame is not only of modern duration, for writers of the first century commented upon the Belgians as being good judges and breeders of horses, and it is assumed that the greater part of the Roman cavalry was comprised of Belgian horses. So much in favor were they, the supply was not equal to the demand upon them by other nations. For sixteen centuries the industry progressed, and trade with other nations continued until the use of gun powder became more general, and the horse was relegated to agricultural pursuits.

The official draft-horse society of Belgium was organized in 1886, and the breed has since been promoted by the Government. In 1904 eleven volumes of their stud book contained records of 12,630 stallions and 21,767 mares. In no other breed is the excess of registered mares over stallions so pronounced, the reverse usually being the condition, especially in America. The Government has given considerable attention to the development and extension of the industry, and in no country of its size is the inspection so complete or imbursements so liberal. Shows are fostered, and the largest horse show in Europe, of one breed, is held annually at Brussels. On one occasion nearly 800 entries, representing 264 stables, were forward. Many of the good ones come from the Provinces of Liege and Namur, now famous names, but all Belgium sends forth her exhibits to this show.

The Belgian draft-horse is of the most compact form, having the maximum weight for his dimensions. The legs are free from long hair, but are sometimes a little slight to support the weight of the horse. Many good individuals come forward at exhibitions on this continent, especially at Chicago where good line-ups appear. They were first introduced to America in 1866, but males are chiefly brought over.

It was reported that last year 28,000 horses were exported from Belgium, but since the devastation of that country it is hard to foretell what the future of that horse will be. The breed will, no doubt, remain intact, but exportations from Belgium will be very much curtailed for years to come.

The real value of school fairs and even township and county fall exhibitions is in the interest which they arouse among the boys and girls. A love for high-class farm products from flowers and garden vegetables to horses and cattle once established sticks.

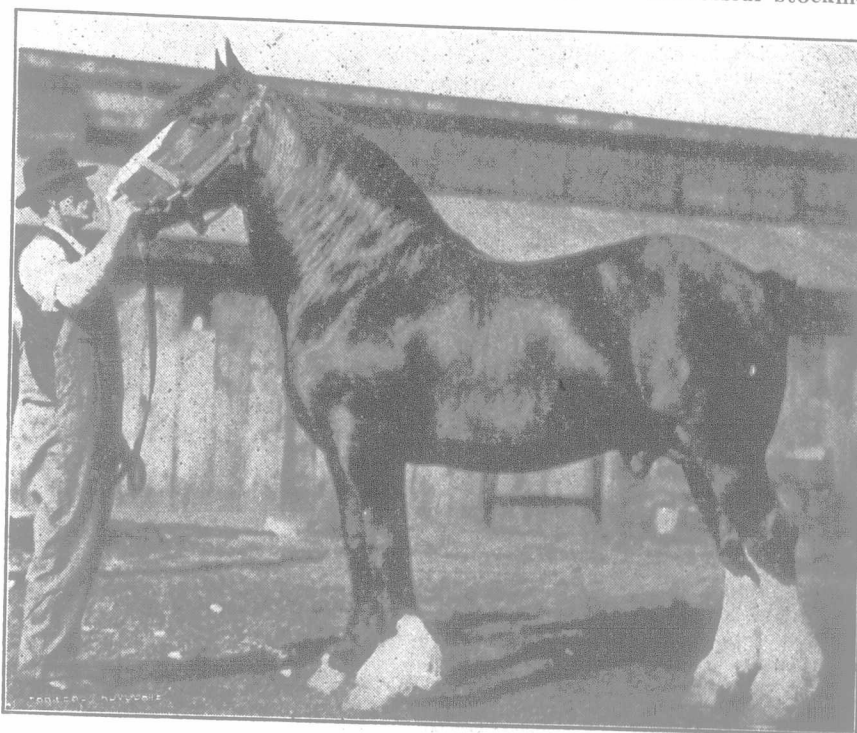
Salt Saves Doctor Bills.

Most stockmen realize the value of plenty of salt for their stock at all times, but very often this is neglected, and horses, cattle and sheep are salted only once or twice a week, the owner believing that this is enough. In talking with a horseman a few days ago we happened to bring up this point of salting, whereupon he related to us the story of one of his best brood mares which had been taken suddenly ill with indigestion. The veterinarian was able to save her life through prompt action, but one thing he insisted upon, if the mare was to be kept in good health, that she should have salt before her all the time. The owner remarked that he made a practice of salting her twice a week, but he was told that

and again that if these little-yielding cows are properly fed they give a different accounting of the food they consume.

On a good many farms the home-grown feeds do not fill the bill. Because one or more materials is lacking, the efficiency of the food ration is at a low level. From the standpoint of the dairy farmer, for instance, the grass hays are not the ideal roughage materials for dairy cows. The same is true of corn stover. But both are satisfactory as a part of the ration. A good flow of milk is dependent upon a reasonably large amount of protein in the food. The grass hays and corn, and all such feeds, are insufficiently supplied with this protein constituent.

Successful stockmen and dairymen know that bigger production and better financial returns follow when in addition to these home-grown materials there is given also other feeds largely of a by-product nature to supplement these farm-reared feeds. When this is done a liberal allowance of protein may be had. The practice of disposing of a part of the carbohydrate feeds for by-product feeds that are heavy carriers of protein, is both wise and profitable. Roughage material is necessary and this material should be home-grown, but the legumes should form the basic supply. As soon as a farm is properly organized and put into condition for the production of legumes, these hays will more and more be depended upon as a basic food for all farm animals. With these will go also corn silage, and pasture crops. If the farm supplies all



King Junior.

Champion Shire stallion at London, for Johnston Bros., Croton, Ont.

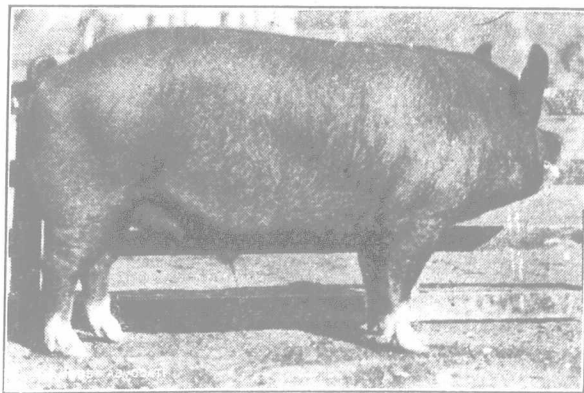
this was not enough, and, that especially for brood mares suckling foals, it is absolutely necessary that they have salt where it is accessible whenever they wish to take it. It is a wise precaution, now the horses are being brought in from the green feed to the stable, to keep salt on a ledge or in a receptacle for the purpose in front of them. It is an aid to digestion and should be there at all times, and more particularly when feed is being changed. A little salt may keep the veterinarian's fees down to a minimum.

LIVE STOCK.

Utilizing Feeding Stuffs for Best Results.

Editor "The Farmer's Advocate":

In the feed lot, two mistakes stand out conspicuously. One is the use of home-grown feeds only, and the other is the use of purchased foods of a grain nature without a proper regard for the material they contain. In this matter just



Champion Berkshire Fear.

W. W. Brownridge's unbeaten young hog.

a few principles will help to define the situation. Farm animals require for food five groups of materials. These are: Protein, the flesh and muscle makers; carbohydrates and fat, the heat, fat and energy producers; mineral matter, the bone maker; and water. One of the reasons why the best returns are not always had from farm stock is because of the food given has been improperly provided. If milk and butter, for instance, are figured on the basis of cost of production, the average cow doesn't much more than pay the cost of her keep. Yet it has been proven time

of the alfalfa or clover and corn silage, and soiling and pasture crops. If the farm supplies all of the alfalfa or clover and corn silage, there will not be needed very much purchased grain. The man who depends upon such feeds as corn and grass hay is the one who will be forced to buy the largest quantity of mill feed. If he would have a balanced ration he must buy his protein.

When protein leaves the farm in being disposed of in the richer grains and in seeds like wheat, unless brought back, it is lost to those farms, and if lost, the land loses in fertility and the stock are denied an important food constituent. It is the business of the feeder to remedy this loss. Unless abundantly supplied with alfalfa and clover he ordinarily will need the protein, especially if he feeds young stock or dairy cattle. But in making his selection he must purchase (if he is going to make his purchase scientifically) the concentrated feeds that give him the largest quantity of protein at the least cost per pound.

The guaranteed analysis of a food is an important guide not to be ignored. Successful dairymen have learned that between corn and cottonseed meal they get more milk from the cottonseed meal than from the corn, although in a ton of both there are 2,000 pounds. They know, however, that in the ton of corn there are but 150 pounds of digestible protein, while in the cottonseed meal there are 750 pounds of protein, or five times as much as in the corn. The corn may be the cheaper per ton, but the question is, what is the relative cost of the protein? The buyer of grain feeds should consider his purchase in this light. There is considerable variation in the cost of grain feeds. Between some of them there is a difference of but \$3 or \$4 a ton, while in others there is a difference of \$10 to \$15 per ton, and sometimes the feed selling at a lower price contains more protein than another feed at a higher cost. If the buyer will make a list of the foods that are available to him, and will get the cost per ton of each and then from the analysis ascertain the number of pounds of protein that each contains, he will be able to determine pretty accurately what each pound of protein in each feeding stuff costs. Of course this method of reckoning ignores the carbohydrates and fats contained in the feeding stuffs. The purchaser of feeds who has a shortage of the fats and carbohydrates will take into consideration the quantity of these materials contained in the feeding stuffs purchased.

In the purchase of feeding stuffs there are individual questions to be taken into consideration. One may not have a silo, and, therefore, may want a succulent food, and if he does he can secure this in roots or molasses. If for some reason he needs mineral matter or food of a meaty nature, he can resort to brans, or meat