Toronto, in September, the champion Clydesdale stallion was Graham Bros.' first-prize aged horse, Mikado [11226], a splendid bay four-year-old son of Marcellus, by Hiawatha. First in the three-year-old class was Graham Bros.' Baron Ivy (imp.) [11225], a son of Baron's Pride. The same firm had the first-prize two-year-old colt in Baron Chapmanton [11228], by the same sire, and first for yearling colt with Royal Ruby, by Ruby's Pride. The champion mare was the first-prize three-year-old filly, Dunmore Radiance (imp.) [22701], by Clan Chattan, exhibited by Hodgkinson & Tisdale, Beaverton.

The large number of Clydesdale stallions imported to and bred in Canada have, we all know, had a splendid influence in improving the heavydraft and general-purpose classes of horses in the country, and one explanation for the comparative scarcity of big horses on our farms and in our cities appears to have been the exportation of so many of our best mares and geldings in response to the high prices offered for that class. Another reason is the predilection of so large a proportion of our people for the light classes of horses. The call, however, for big, heavy horses is becoming more general, because of the tempting prices prevailing for that class, as is indicated by the uncommonly large number being imported and purchased for breeding purposes, and for the sale of their produce. There is a growing demand for larger sires than have been generally imported and bred, which is all right in so far as size can be had, combined with the proper quality of underpinning, but it would clearly be a mistake to sacrifice clean, flat bone of the texture which is free from a tendency to grease or scratches, in order to secure greater size and weight, as the quality of bone above described is vastly stronger and freer from unsoundness or the tendency to other ailments than the round and meaty class of leg. The Clydesdales, as a rule, are exceedingly well furnished with sound limbs and feet, the first desideratum in a horse of any breed or class. Writing on this point recalls an amusing incident which occurred in a meeting of the directorate of the Clydesdale Horse Association in its early history, during a discussion on the question of disqualification from the prizelist on account of unsoundness. A prominent member of the Board had strongly contended that, even a blemish the result of an accident should disqualify a horse, as it was quite possible, and even probable, that such a blemish might be transmitted to his offspring. tleman was receiving little or no support for his contention, which was described by some as little short of an absurdity, when a mild member from the neighborhood of Guelph, whose sympathy is usually with the under dog in a fight, and who is gifted with a sense of humor, brought down the house and closed the debate by citing a case in his reading of a soldier who, on a battlefield, had lost a limb, and who afterwards married and became the sire of a son born with a wooden

### LIVE STOCK.

# Meat Scarcity in Europe.

Our English correspondence.)

The scarcity and high price of meat in continental countries is causing widespread unrest and revolt against tariffs on food products. Austria seems to have suffered most severely, and the Vienna Chamber of Commerce recently appointed a delegation to investigate the free system of supply in Britain. In welcoming the delegates, a speaker for the London Chamber of Commerce stated that "England had made a greater study of the frozen-meat problem than any other importing country in the world. By our special system of importation the great private meat companies have made almost perfect arrangements for the importation of frozen meat. Last year's supply was of the value of £41,000,000. only is the question one of great commercial importance, but a great national asset in providing cheap and wholesome food for the people of this

Liverpool has also fine facilities for handling frozen meat, and the delegates inspected the various storages, etc. In an address to the delegates the chairman of the meat-trade section of the Liverpool Chamber of Commerce strongly supported free importation of food, because of its

vast and enormous advantage to the people.

In returning thanks on behalf of the deputation, a delegate stated that "when it became necessary for Austria, on account of its growing population, to study the question of meat imports, they looked first to England, the country known all over the world as providing the best for its population. The English people were the best fed in the world, and it was possible to provide the people with cheap food without doing harm to anybody."

#### Selecting Breeding Ewes.

The fall of the year is a very favorable season for one to make a beginning with sheep. The surplus lamb crop is making its way to market; breeders are turning off their older ewes, replacing them with younger stock; still other breeders, for one reason or another abandoning the sheep industry entirely, are turning their whole flocks upon the market. Thus, there are many favorable opportunities for a beginner to buy breeding females at, or almost at, his own prices, and, since the acquisition of a sufficient flock of ewes is the chief expense for beginners, there is really little debarring most men from embarking.

The question of breed need cause the beginner in grades little or no trouble; if one has a marked preference for high-grade ewes of a particular breed, he will spend more time and money in obtaining his flock. But, generally a beginner need not be insistent on the point of breeding. However, he should select ewes that are fairly uniform in size, color-marking and conformation, thus laying a foundation upon which he may expect to speedily construct a uniform and excellent flock. For the average farm, the mutton type of sheep is preferable, so that, in selecting breeding ewes, one must, if at all possible, insist on a moderate degree of mutton form in his buying. A short neck; smooth, compact, broad shoulder wide-sprung ribs; wide, strong back and loin, and a full leg of mutton should be sought.

and first of all see that the sheep have good strong feet and legs. If they are young, they should stand well up on their pasterns. If old, some allowance must be made for their age, but they should not be lame, sore or stiff.

The age of ewes which one will buy depends largely on the money one has to invest. Young ewes, one to three years, will cost considerably more than ewes over four years old, yet most ewes are useful breeders up to six or seven years, so that a less expensive start can be made with old ewes. But, in buying them, one must examine the teeth of each one, and reject every one that lacks a good full mouth.

# Substitution of Roots for Concentrates.

The object of certain feeding trials, as given in the New York Cornell Sta. Bulletin 268, was to compare the value of the dry matter in mangels with that in silage and in grain. There were four groups of five cows each. The feeding period lasted six weeks, but the data do not include the first week of each period. The mangels were estimated to be worth \$4.50 per ton, and the silage \$2.25.

In the experiments of 1907-8, ration 1 consisted of hay, silage, Ajax flakes, corn meal, wheat bran and cottonseed meal. In ration 2, two pounds of mangels were substituted for each pound of silage. In ration 3, mangels were substituted for one-half the grain ration. In 1908-9

rations were similar, but the grain ration consisted of Ajax flakes, buckwheat middlings, corn meal, wheat bran and oil meal.

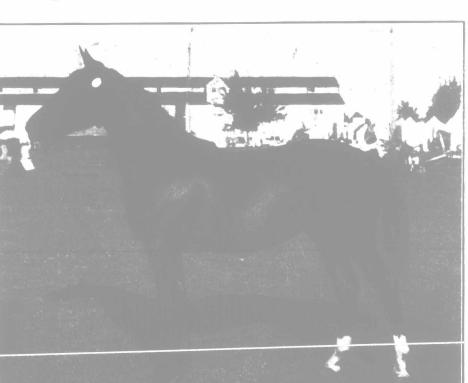
For the two years the total dry matter required for the production of one pound of milk fat on the hav. grain and silage ration was 22.34 lbs.; on the hay, grain and mangel ration, 20.93 lbs.. and on the ration wherein one-half of the grain was substituted for silage and mangels, 22.02 The average cost of one pound of milk fat on these rations was 20.7 cents, 27.4 cents, and 90 7 cents, re spectively.

No conclusions were drawn as to the effect of the different rations on the live weight of the cows. One pound of dry matter in mangels was considered equal to one pound of dry

matter in grain, and a little more than equal to one pound of dry matter in silage, but the cost of ration 2 was considered too high to be eco-

nomical.

Estimating the average price of commercial feeding stuffs at \$30 per ton, it would seem to be a safe assumption that farmers can raise mangels for \$4 per ton, and thus reduce their feed bill very materially by the judicious use of mangels to replace one-half of the grain ordinarily fed in the ration.



Yearling Hackney Filly.

First at Western Fair, London, 1910. Exhibited by W. Hogg & Son, Thamesford, Ontario.

Ewes with a long, scrawny neck, and with sway backs, or high, prominent shoulders, narrow, bare loins, will bring a lot of grief to their buyer if they are used as foundation ewes. If one buys aged ewes, especially, they are certain to be comparatively thin, which gives the purchaser every chance; fat covers a multitude of faults in sheep, as in horses or cattle; but emaciation magnifies any faults, so that if ewes are long-necked or rough-shouldered naturally, these undesirable features strike one at first glance, and usually hit him so hard that he cannot persuade himself to buy such an animal. However, in such animals one must not expect to find the back well covered or the loin thick. Strength in the back, width in the loin and rump, and as much muscle as possible on these parts and in the leg of mutton, must be order of insistence.

Depth of chest, wide-sprung ribs, width on floor of chest, and thickness through at the elbows, are the factors which make for constitutional capacity. With these, one likes to find a deep flank, which is indicative of the good feeder. A dense covering of wool over all the body, and especially on the belly, and a pink, clear, healthy skin, with nostrils free from any discharge, are all desirable features, but if sheep have been shipped any considerable distance, one cannot always expect to find the skin of the healthiest color, or the nose clean. The eyes, too, should be bright and clear, showing no heaviness or deadness.

In addition to size, type, form, constitutional vigor and femininity, as exhibited in a capacious middle, fine head and trim neck, one must always

## Beet-top Poisoning.

Professor Newsome, of the Colorado Agricultural College, says that they are receiving reports of stock dying from eating beet tops. Death seems to be due to two general causes: First, the presence of oxalic acid, which may cause sudden death from paralysis of the heart, or may start digestive troubles from which the animals sometimes recover. The other cause is mold, which is most common when the weather is damp. Moldy tops should not be fed, and even tops in good condition should be fed carefully and in small quantities.

The skill of feeders is sharply contrasted in hog-raising. One man will have stunted shoats, wallowing in dung, consuming grain almost without end, and reaching market at nine to twelve months of age. His neighbor, with a moderate amount of well-proportioned meals, carefully fed with some forage and dairy by-products, has no difficulty marketing 200-lb. six-months singers.