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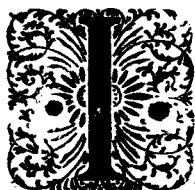
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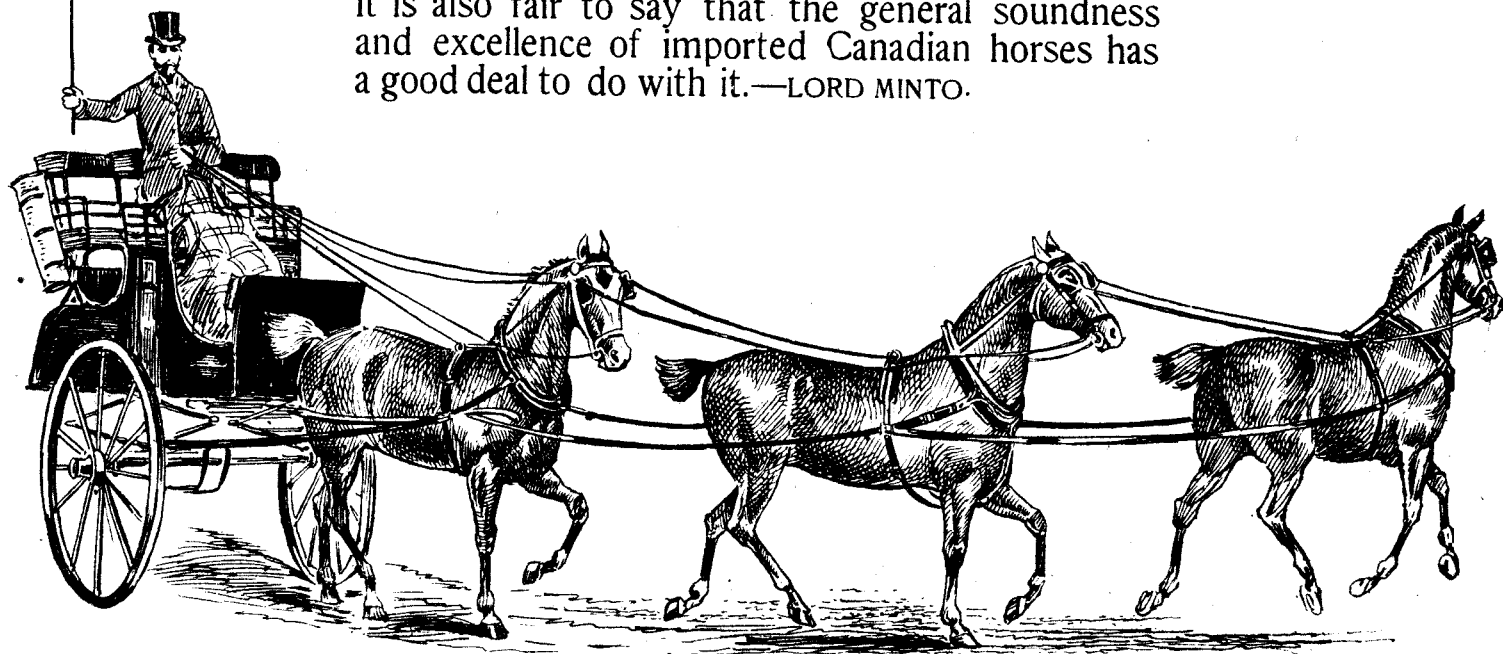
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Farming

A Paper for
Farmers and Stockmen



I have had several opportunities of sitting behind Canadian horses, and have always found them good horses, showing excellent quality and speed. There is an inclination on the part of the gentlemen in England to buy Canadian horses for smart carriage work. I know of several friends of mine who have done so. They are no doubt influenced a good deal by the tremendously high prices the London dealers ask for carriage horses. Still, it is also fair to say that the general soundness and excellence of imported Canadian horses has a good deal to do with it.—LORD MINTO.



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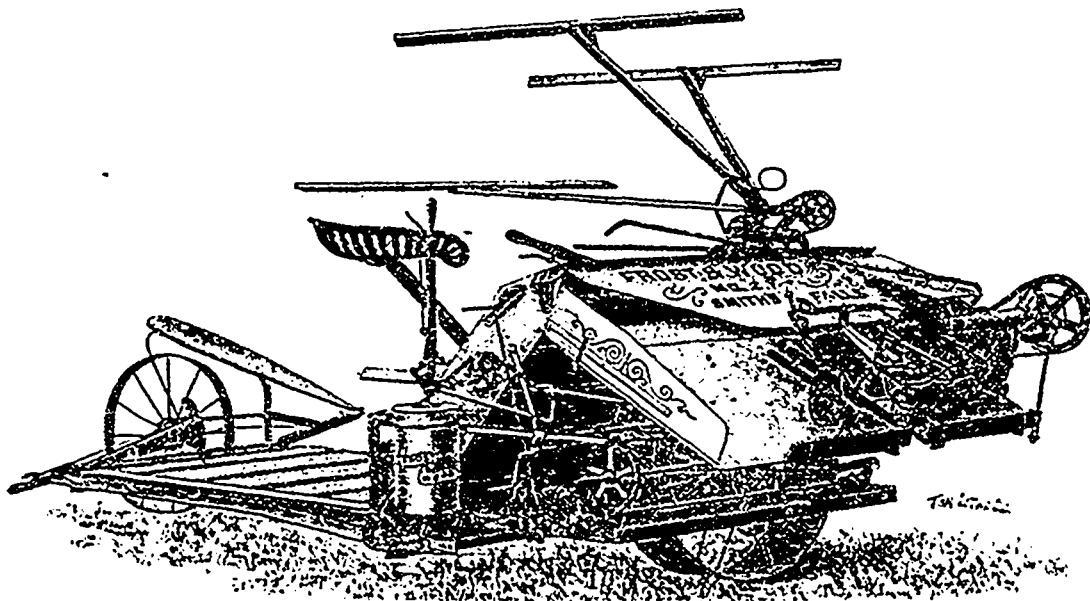
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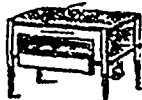
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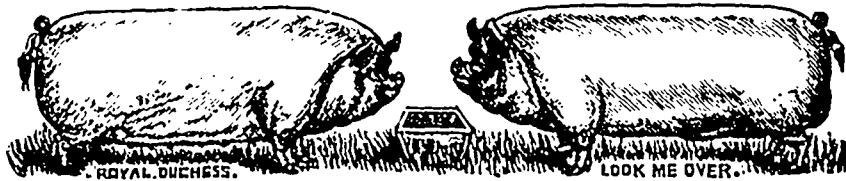
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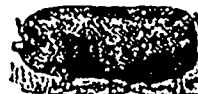
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FARMING

VOL. XVI.

APRIL 18th, 1899.

NO. 33

A Paper for Farmers and Stockmen

This week's issue is especially devoted to the feeding, breeding, and rearing of horses on the farm. We have also given some attention to the general outlook for horses with the view of showing the kinds of horses the market demands and the prospects for the farmer obtaining remunerative prices if he gives special attention to breeding and rearing only the right types. A careful perusal of this number by every farmer will, we think, lead him to the conclusion that the breeding and rearing of good horses in Canada has entered upon a new era of progress and development.

Beginning with next week's issue we purpose adding a new department to FARMING which will have special reference to the farm home. This new feature which has been in contemplation for some time will be devoted wholly to woman's sphere on the farm. Special attention will be given to domestic science and its relation and bearing upon the moral, intellectual, and economical side of the farmer's household. In this work we hope to have the hearty co-operation of everyone interested in the welfare of the girls and boys on the farm and in making them useful, strong and loyal citizens of this great Dominion.

The Outlook for Horses

That the outlook for horses of the right stamp and breeding is a very encouraging one we are not alone in our belief. The following extracts from some of our leading American, British and Australian exchanges indicate how the feeling is regarding the outlook for horses in these countries.

The *Breeders' Gazette* of March 29th last says: "The demand for handsome carriage and coach horses remains far in excess of the available supply. The shippers find that many agents of private buyers are scouring the breeding districts for choice horses, and offering in many cases much larger prices than a shipper can pay. This means that the supply is really shorter than it seems, as private buyers will often take a four-year-old that a shipper cannot afford to handle. The shippers are complaining that they cannot compete with private buyers, and that the latter are going wild in their competition for horses."

Western Agriculturist and Live Stock Journal: "Horse breeding is reviving throughout the West; the draft horse importers and breeders have inquiries and visitors like old times; of course many have not yet got their courage up to paying importation prices, but those that have stallions know that when these are sold they cannot be replaced except by importation and we all know that horses are higher in all Europe than ever before. However there are so few stallions to be had and so many wanting the best that it is just a question of who buys them first."

The St. Louis National Live Stock Reporter: "The apparent scarcity of native horses, the recent advance in their values and the large demand and small receipts of western range horses have caused the latter class to also advance in value about \$5 to \$10 per head."

Mr. F. J. Berry, president of the National Horse Breeders' Association of the United States, in a recent address, says: "Great changes have been continually going on; business has revived, prosperity has returned, the year 1898

being the most prosperous and successful year in the agricultural and stock line that this country ever knew. It brought with it a great demand for all agricultural products. Stocks of all kinds have advanced very much; cattle, hogs and sheep are high, and the best kind of road, carriage and coach horses are as high as they ever were, also the best grades of heavy draft sell for as much money as they did in high-priced times, with a strong demand and good prices for blocky, smooth horses from 1,100 lbs. up.

Mr. J. H. Sinclair, a prominent Texas horse breeder, says: "Horse breeders should take courage. It is only sorry horses that are cheap. The bicycle and the horseless carriage have their place, but never will they drive out the superb roadster, the spanking team and the swift courser. Men and women love the saddle and the reins and they will pay well for good horseflesh."

The Farmer and Stockbreeder, London, England: "The foreign demand, which has been gradually improving, is confidently expected to make a big leap in the near future, and those in the know, while predicting a stirring trade in the fall of this season, feel certain that next year will see the trade nearly as good as it was in its halcyon days. It is at least safe to assert that there is a scarcity of horses in America, and the same will be found in this country when the long-looked-for "boom" comes. That it will come is the firm belief of all, and this belief is not merely based on imagination, but principally upon advices from old customers abroad.

The Australasian, Melbourne, Australia: "Horse-breeding has languished very much in late years, and, as a consequence, good draughts cannot now be had for love or money. If someone does not start breeding soon, horses will become an extinct race like the moa of New Zealand. In fact, they are now so scarce that one has to give a very high figure for an animal if it is anything of a good stamp."

Electricity vs. the Horse

There is a great deal of talk these days about electricity, auto-trucks and horseless carriages eventually replacing the horse in all the avenues of usefulness, where he is now doing good service. Many who look upon this question in a somewhat pessimistic way claim that in a comparatively short space of time these modern inventions will replace the horse in almost every line of work in which he is now made to do valuable service, and that the horse will become a "drug" upon the market, and a practically unsaleable animal for the farmer to raise. To some extent there is ground for this contention. Electricity has already replaced the horse as a motive power for street railways. But now that the change has been made who would want to go back to the old slow horse car for the sake of providing a market for a certain class of horses? In fact, we believe the farmer who breeds a good horse and is looking for a market for him would rather see things remain as they are than have the very life dragged out of his good horse by pulling a carload of human freight up one of our city streets at 6 p. m. or during fair week.

But the more one looks at this whole question the more is one convinced that until horseless carriages, auto-trucks and such like twentieth century inventions have been proven to be proof against snow-drifts, mud, etc., it will be many a year before they will entirely replace the horse for general utility as a means of locomotion. This fact has

been very clearly demonstrated during the past month or two when the snow-storms, which are common enough all over Canada, penetrated as far south as New York and other American cities where electric vehicles are largely in use. These vehicles were practically useless as a means of locomotion when the streets were covered with a foot or two of snow, and the old-time horse had to be brought into requisition till the refuse in the streets was cleared away. We are therefore safe in stating that on the northern half of this continent at least and in the countries of Europe where snowstorms and snow blockades are more or less frequent there will be need of man's old friend, the horse, for many years to come. Take the city of Toronto as an example, and outside of street railways and pleasure driving, supposing all the grocery and milk delivery wagons, the delivery vans, the cabs, the railway trucks and such like necessities in large cities were operated by electricity, and a snow blockade should come along such as we had in the early part of the present winter, what a predicament would the city be in! The butcher could not supply his customers with meat, nor the groceryman his with sugar, tea, etc. The baker would have his bread in his bake-shops, and, in fact, business would be completely stopped for the time being, and the citizens might have to do without a square meal for a time. Last summer a large retail business house in this city purchased an electric wagon for delivering goods. This vehicle seemed to do excellent service, but we noticed that as soon as the snow made its appearance it was put by till the hard pavement was dry and smooth when spring-time appeared.

All this goes to show that for many years to come, and perhaps for all time, the useful horse will be needed in carrying on the general business of our large towns and cities. But there is a wider field for the horse than this. In the realm of pleasure and of sport the horse has as strong a hold upon its constituency as it ever had, and in some respects a stronger one. A few years ago it was thought the bicycle would drive the riding horse out of existence; but wheeling only proved to be a very transitory kind of sport, and it is fast receding from the place it attained as a means of giving pleasure to the leisure classes. Hunting, horse-racing, riding and driving are just as popular among those who spend their time for pleasure as they ever were, and the demand for horses suitable for these purposes is better than it has been for many years. Then the demand for draft horses, horses for cavalry purposes and heavy teaming of all kinds is stronger than it ever was. In fact, the demand for high-class horses suit-

horses, the demand for the ordinary horse, or the so-called "scrub," is very little better than it ever was and without the prospect of anything better in the future. It is this stamp of horse that electricity, automotors and such like are driving out of the market, and which it will never pay our farmers to breed.

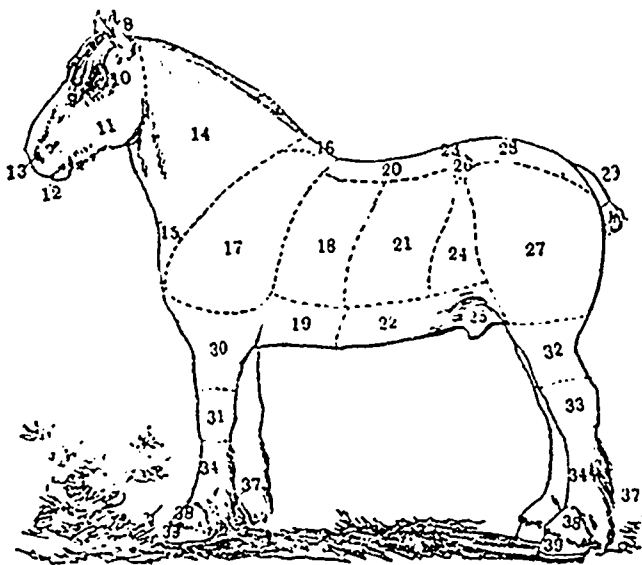
It may be thought by some that we are putting the position of the horse for the future a little too strongly, and that if our farmers go largely into breeding the types of horses we have advocated it will only be a short while before the market is over-supplied, and the country overstocked with good horses. While there is always a possibility of such a thing happening with any line of procedure, it must be admitted that in this country at least it will take many years of training before the bulk of our farmers are in a position to produce the high quality the market demands. Experience, time and a continued line of breeding are necessary to produce the highest kinds of horses the market demands. But what we contend for is this, that if our farmers are going to raise horses—and they certainly are not going to give up raising them no matter what the condition of the market may be—why not raise the very best kind of horses, and a type that will command the very highest price when offered for sale?

The Kind of Horse to Breed

Successful horse-breeding requires care, skill, knowledge of the market and the types required, and a determined effort to follow one line of breeding to a successful conclusion. As we have pointed out elsewhere, success cannot be attained by jumping from one line of breeding to another. For example, to breed the style of horse required for hunting or riding it might take a farmer with the quality of horses found on the average farm several years before he would be in a position to supply the kind the market demands. Consequently, for a farmer to start out on a certain line of breeding and change onto something else in a year or two would be only to leave the work half done. The kinds of horses in demand at the present time and the methods of producing some of them are very well outlined in the prospectus of the Russell Stock Improvement Co., referred to elsewhere, and from which we take the following:

"Dull sales and low prices curtailed the breeding of horses to such an extent that a real scarcity now exists. Those who saw what was coming strongly advised a renewing of the breeding of good horses two or three years ago, but the conditions were so bad at the time that farmers could not be advised to make the venture. But now the scarcity is upon us—everyone can see it, and good horses to fill the demand simply cannot be had. Good saddle and carriage horses are in great request, average better prices than ever before, and they are simply not to be had in sufficient numbers to supply the demand. Heavy draught horses for home use are scarce and almost unobtainable. Then there is the steady British and foreign demand, not only for heavy draught, carriage and saddle horses, but also for cavalry horses. And while there is not now, and probably never will be again, a profitable demand for a medium or poor class of horses such as used to be absorbed by street railway companies, at the same time the opportunities, perhaps, never were so bright for the profitable production of really good draught horses and good carriage and saddle horses as to-day, and the question is, how are these to be produced?"

"There is but one way to do it, viz.: by breeding the right class of mares to the right class of sires and raising and breaking the colts properly. The mares used for dams must be of the right type, and none but purebred sires of the best quality should be bred to. Colts should receive special care, more particularly for the first two years. They should get a little grain just as soon after foaling as they will take it, to be increased as the colt develops, and at weaning time, say at about five months old, no check is felt by the removal of the mother's milk. They



Model of a Heavy-draft Stallion (Clydesdale).

able for the purposes we have named cannot now be supplied, and in the regular course of things it will take at least three or four years before the colts of this year's breeding will be able to supply the want. But, while this bright outlook exists in regard to the highest types of

should be kept in comfortable quarters, and fed liberally on good hay, grain and roots, and also bran if obtainable, and with plenty of regular daily out door exercise the colt will develop rapidly and be farther advanced at one year old than the average colts of the country are at two years old. Then, with good grass through the following summer and reasonably good feed and care during the following winter, the stamp and quality of the horse is pretty well assured, and with ordinary good care and attention and properly broken, the average horse so raised will sell for from fifty to a hundred per cent. more than the average horse of the country. It is much more profitable to raise and feed one horse and sell him for \$150.00 or \$200.00 at five years old than to raise and feed two horses and sell them for the same money.

"Many are the varieties of horses that might be raised, but for the present, at least, this company will endeavor, with the concurrence and support of the farmers of the district, to maintain the use of Clydesdale, thoroughbred and hackney sires. So far as they are aware, no horse has yet produced better stock for the home demand and for export drafters than the good, purebred Clydesdale sire, when bred to good roomy mares and their offspring properly raised. This, it would appear, is the horse for the Canadian farmer to breed to for draught purposes.

"As to the English thoroughbred, he is the foundation stock from which are evolved all the various styles and types of the carriage, saddle and road horses of the world; so that for foundation stock for the production of carriage, saddle or driving horses there is none so prepotent and useful as the thoroughbred, and it should be a great boon to the farmers of Russell to have this opportunity of laying a foundation by the use of these sires, which, if intelligently taken advantage of, will fix the type for carriage and saddle horses among them for generations to come. Farmers having mares of good fair size with good breeding in them, such as that of the trotting stock or partly bred French-Canadian mares of fairly good conformity, bred to these horses will lay the right foundation for the production of the kind of horses that the market demands. The steady aim, however, should be to get size and quality. Then by following on this product with the hackney you get the quality, size and action which give the high-priced street and park horse that is so much in demand. Those who prefer it might continue breeding to the thoroughbred and produce the large sized hunter, which is equal in demand and at equally good prices. This line of breeding is somewhat on the line of the more expert horseman."

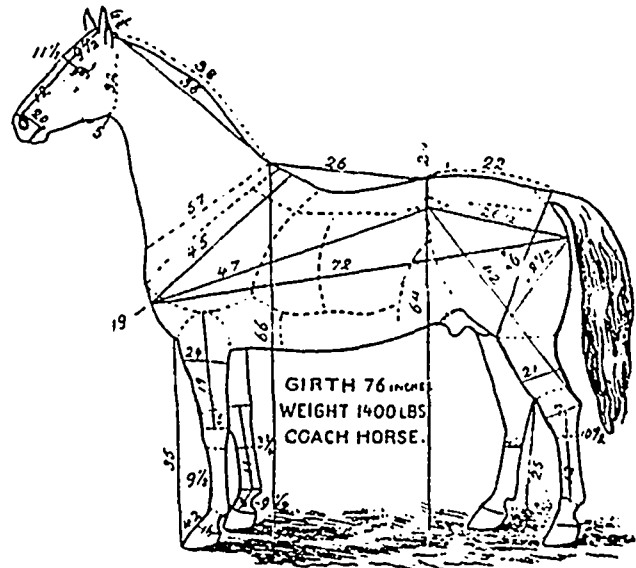
Continuity in Horse Breeding

One of the great difficulties in raising horses is to get farmers to stick to a certain type of horse till they reach the top and which is bound to bring a paying price if faltered long enough. This can only be accomplished by careful breeding. The law of continuity holds good in horse-breeding as well as in any other line of breeding. For the farmer to get into a good line of cattle of either the beef or dairy types he must select some breed or type for which he has a liking or a preference, and stick right to that breed till he makes a success of the business. To jump around from one line of breeding to another without any definite plan or system in view is only to court failure and become disgusted with the whole business in a very short while. One of the things that the farmer of this country is lacking in regard to breeding, more particularly of horses and cattle, is not having some definite plan before him and following that plan to its ultimate conclusions.

While this line of reasoning is applicable to many lines of breeding in this country, it applies to none more forcibly than to horse breeding. About the only definite line many of our farmers have followed during the past few years with anything like continuity has been the breeding of "scrub" horses. To such an extent has this been carried on that in some sections it is very difficult to find anything else

than this inferior animal, and for which there is practically no market to-day, and not likely to be a profitable one.

In following a definite line in breeding, of course it is essential to start right. The first consideration is to select one of the types of horses for which there is now a good



Model for American Coach Horse, as published in Iowa State Agricultural Report, 1896. The figures represent inches.

demand on the market. The kinds of horses for which there is a good demand to-day are the draft, coach and hunter horses, and the horse suitable for cavalry purposes in the European armies. The farmer will have to use his own judgment as to the type of horse he will breed. As far as our judgment goes we think the average farmer, who has no special liking for or has not had much experience in breeding light horses, will do better to confine his efforts to breeding draft horses. These latter do not require as much training in preparing them for market as the hunter and coach horses. What is important, however, is for the farmer to choose the line of breeding which he will follow by a wise selection of the best types of animals of this class, both mares and stallions, and stick right to this special line, when success will be sure to follow. A good motto for all lines of breeding is to start right, and not deviate from the path marked out till success is assured.

A Horse Improvement Scheme

A greatly increased interest has been aroused in horse-breeding in this country during the past year. For several years back horse breeding has been a kind of "drug," and there has been very little activity shown regarding it on the part of the average Ontario farmer. But a change seems to be coming over the country in this particular and more attention is now being given to the raising of horses. But what is most gratifying about this renewed interest is the evident desire to start out on right lines and breed only the best quality of horses and the kinds for which there is a good demand both in this country and elsewhere.

Realizing the importance of the Canadian farmer raising only first-class live stock of all kinds and the greatly improved demand there is at the present time for first-class draft, coach and hunting horses, several gentlemen in Eastern Ontario interested in the welfare of the farmers of that section, prominent among whom is Mr. W. C. Edwards, M. P., Rockland, Ont., who, we understand, is the chief promoter of the scheme, have formed what is known as the Russell and District Stock Improvement Co., with but one object in view, that of improving the live stock of the Russell County district.

The scheme is outlined in a neat prospectus just issued by the company as follows:

"The five gentlemen composing the company take the risk of advancing the money to buy the horses and com-

pleting the organization in every way, including the expense of maintaining the horses, paying manager, grooms, etc. If the scheme fails they have to pocket the loss. If it succeeds the farmers of Russell reap the entire benefit, for, after paying the cost of the horses and maintenance as first explained, all earnings are applied in the way named for their advantage. If the farmers of Russell realize what is being done for them, and give their co operation, it will be only a few years when Russell will be the leading live stock county of America, and perhaps of the world, for the aim of the promoters will be to keep on improving and improving the sires just as the financial support accorded enables them to do so.

"The company is being organized under Provincial Charter, in which power is being asked to associate, with the chartered directors, a director from each of the six townships of the county, who will aid in the direction of the affairs of the company and meet with them at the regular annual meetings to receive and scrutinize the manager's report, and pass upon everything pertaining to the company.

"A commodious stable for the care of the horses has been erected in the village of Rockland, to the inspection of which the farmers of Russell and district are invited.

If supported as it should be by the farmers of Russell for the first two or three years of its inception, this institution should, and no doubt will, become a permanency for the benefit of the farmers themselves. They, and they alone, are the only parties who may gain out of it."

From this it will be seen that the plan is of a co operative character. A reasonable charge will be made for the services of the stallions, the proceeds from which will go to maintain the stud and the surplus towards purchasing more stock. It is the intention, also, to take up other lines such as cattle, sheep and swine breeding, the whole concern eventually becoming the property of the farmers of the Russell district. At present the company have in the stud four thoroughbreds, two hackneys, and three Clydesdales, all of which are animals of the highest breeding.

Such a plan for improving the live stock of any community cannot help but meet with high commendation from everyone interested in the development of the live stock interests of this country and affords a splendid opportunity to the farmers of Russell county for improving their stock and breeding the types of horses the market demands. We wish the promoters of this company every success, and trust that their efforts to improve the position of the farmer in Eastern Ontario will meet with the support and patronage they deserve.

Watering Horses

No animal on the farm is deserving of more care and attention than the faithful horse, and one of the special points in this respect is supplying a drink when necessary. An English veterinarian in the *Mark Lane Express* gives some excellent advice on this matter which our farmers would do well to heed, and from which we take the following:

"Where the water is brought to the horse in a bucket the vessel should be a large one, so that the horse is certain to get enough, and if there is any doubt it should be refilled. Horses that are allowed a free supply or that are watered at frequent intervals drink relatively less than those receiving water at long intervals or that get an irregular supply. When the chance is afforded they make up for the deprivation, often with disastrous results that tend to get water a bad name with unthinking men as a cause of disease.

"Unless quite used to a free supply, the quantity of water should be limited or withheld for a time when horses are excessively heated, also when first stabled after doing a hard day's work in particularly cold weather. It must, however, be understood that there is a vast difference as regards danger between a drink of water that has been exposed for some time and raised to the temperature of the

atmosphere and one of water freely drawn from underground pipes or a deep well.

"With regard to the time of watering, the necessity of giving it before the grain, except in the instances mentioned, should be obvious when the small size of the horse's stomach is borne in mind, and the process of digestion considered. Water given on a comparatively empty stomach does not long remain in that organ, but is almost immediately conveyed to the large intestines. If it is withheld until after feeding it is almost physically impossible for both food and water to be retained in the stomach together, and a portion, at least, of the food is carried by the water into the intestines undigested, where, besides being a loss of nutriment to the animal, it is a source of irritation.

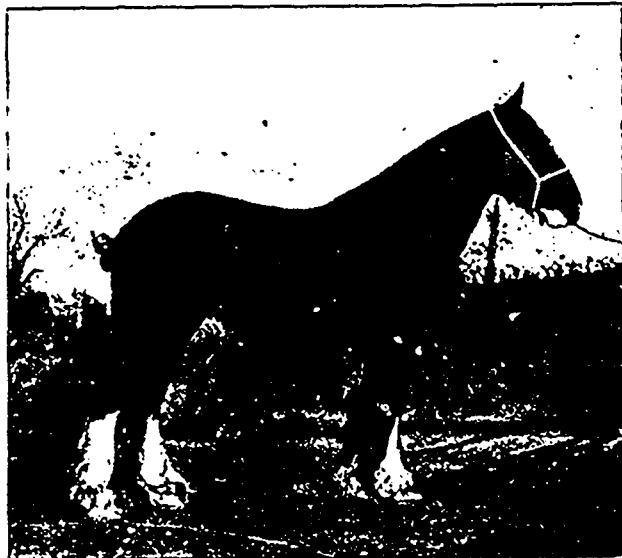
"Of all the common faults, and they are many, in the alimentation of horses, that of giving water just after a full feed of grain is among the worst. This, unlike hay, has to undergo gastric digestion in the stomach, where its nitrogenous elements have to be dealt with, not in the intestines.

"An excess of cold water after food causes vascular congestion and violent muscular contractions, lowers the temperature, and, by interfering with digestion, tends to disorders of a dangerous character, and, as we have seen, even a big drink of water of moderate temperature is full of peril to the coloped.

"Always allay thirst before the grain is given, and if any water is allowed after it should be merely a mouthful until the lapse of an hour or two has given time for gastric digestion."

Treatment of Pregnant Mares

More consideration than is the general rule should be given to the treatment of brood mares. As soon as it is known that a mare is safely in foal care should be exercised that she receive no treatment or annoyance that would endanger the loss of the foal through abortion. Sometimes the teasing or annoyance by a stallion or a gelding will cause such trouble. During the time of pregnancy foods that are of a laxative and distinctly nutritive character should be used. Besides, something more than the ordinary amount of grain should be given so that the mare's strength is not reduced while supporting the unborn foal.



Shire mare "Victor's Queen," winner Junior Mares Cup, British Shire Horse Show, 1899.

Oats should be the chief and staple article used and the pregnant mare should have a fair allowance at least twice a day during the winter months. Along with oats, bran should be freely and regularly used by every farmer who raises horses. Clover hay is preferable to timothy if free from dust. In addition to these, a few roots should be

given once a day and a warm mash once or twice a week consisting of bran, cooked or steamed barley or oats mixed with cut hay with a handful of flax seed jelly give splendid results when fed to brood mares. As a rule if the mare does not appear to be thriving it is better to change the feed than to give medicine.

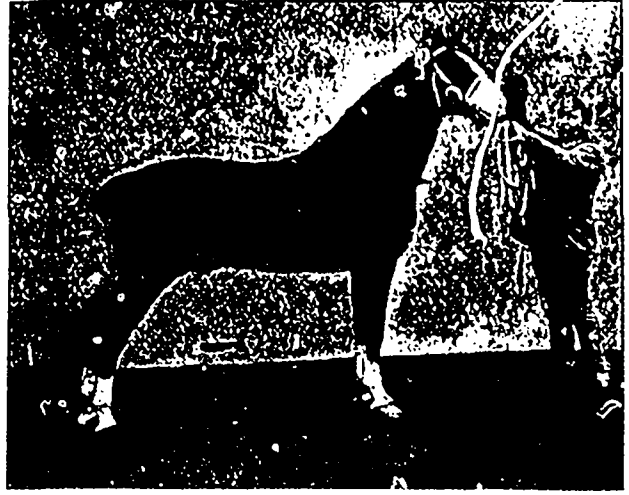
A debated point in connection with the treatment of brood mares is whether they should run idle or be given a certain amount of work or exercise. In regard to this Alex. Galbraith, the well known American authority on horse breeding, says:

"I find some farmers are under the impression that an idle mare will produce a better colt than a mare that is regularly worked. The very reverse holds true. No surer way of losing your colt altogether or of obtaining a smaller and inferior animal can be found than by allowing the mare during pregnancy to stand a large portion of the time in the barn without work or exercise. If moderate work—not excessive hauling of course—can be provided all through the winter the chances are that the colt when it comes will be strong and the mare healthier than any other way. But as all mares cannot be provided with suitable work during our long cold winters the farmer ought always to arrange so that the mares will at any rate have abundant daily exercise. Let them run out part of every day, storm or shine, always remembering, of course, that it is not advisable to have a band of pregnant mares squeeze or jostle each other at the water tank or going into or leaving the barn. Ordinary judgment and prudence will dictate what is the best and most natural treatment at that season, but I cannot impress on the average farmer too strongly the fundamental necessity of giving them plenty of exercise and a good liberal supply of nutritious food. I do not mean of course that the mares should be made fat like market horses but they should be maintained in reasonably good condition, their feet kept trimmed and their legs and body clean but without too frequent use of the currycomb."

Then special care should be exercised as the time of foaling arrives. On this point the same writer says:

"As the time of foaling approaches close attention should be paid to the mare's condition and particularly to see that her bowels are not constipated—in which case more laxative food—but not medicine—should be given. If the season be advanced so that it is thought advisable to have the mares foal on the pasture, good and well, although, as a rule, it is preferable to have one or more good roomy box stalls where the mares may be put each night as the time for parturition arrives. In the latter case it is proper to have a reliable attendant watch the mare every night so that when the event happens he may be on hand to render any necessary assistance. As many mares are of a nervous temperament, and especially at this particular time, it is recommended that the stall be so constructed that the attendant can feed, water and inspect the mare without entering the stall himself, the object to remove any exciting cause which might injuriously affect the mare at this critical time. The principal duty of the attendant in the event of a natural presentation is to see that the navel cord breaks at time of birth a few inches from the body of the colt. It may sometimes be necessary to cut this cord, in which case it is well to tie what remains attached to the body with a soft string to prevent bleeding. Should a false presentation take place, or, in other words, if the foal should be coming 'wrong end to,' or in any unusual or unnatural manner, it is well to secure the services of a veterinary surgeon or other skilful person to set matters right. The birth is usually a rapid process, however, and one of the attendant's very first duties is to assist the foal on to his feet and try to induce him to suck his dam. This done the worst is over for the present, but for the first few days the condition of the foal's bowels should be closely observed, because neither diarrhoea nor constipation can be allowed to go on any length of time without serious and often fatal results. An injection of tepid water and soap is a safe appliance, and many successful breeders make a practice of administering a tablespoonful of castor oil to every colt during the first twenty-four hours of its existence. This is the best of all lubricants and always safe."

Blood poisoning is perhaps the greatest cause of mortality amongst foals. This is caused by the absorption of disease or filth germs by means of the raw navel cord at time of birth, and to obviate this trouble it is recommended that the stall be kept scrupulously clean and thoroughly bedded with light clean straw. As a further preventive it



Hackney stallion "Rosador," champion London Hackney Show, 1899.

is a good plan to bathe the navel cord at birth and twice daily for three days afterwards with a solution of carbolic acid—say ten per cent. strength.

Rearing and Feeding the Colt

By J. H. Griadale, Agriculturist, Central Experimental Farm, Ottawa

It is a truism to state that all forms of living matter are during the early part of their lives as independent organisms much more susceptible to exterior influences than at any subsequent period of life. This is very especially true of domestic animals, and of none more emphatically than the colt. Gifted by nature with higher mental powers than the rest of our domestic animals, it is relatively more influenced by its surroundings and bringing up, as it were. Train the colt as you would have the horse, and such he will be.

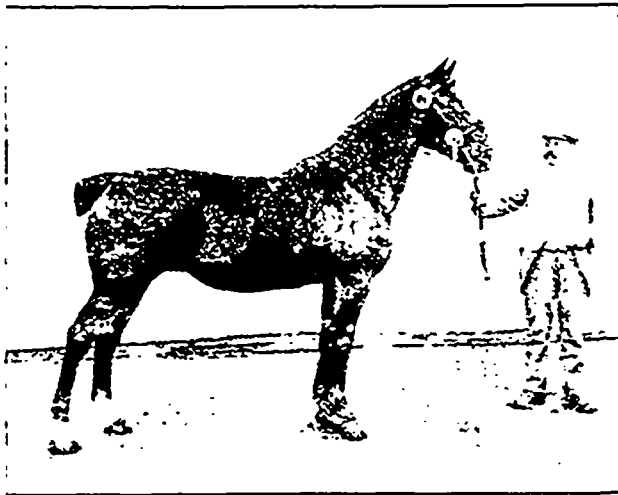
To the skilful breeder the destiny of a given colt is practically under his own control. Too many of our farmers consider that their part is done when they have bred the mare to a sire whose type they admire or whose breeding suits them. The colt comes in due time and is relegated with the dam to some remote pasture, or worse even, it is forced to follow the mare aimlessly from one end of the soft ploughed field to the other in a weary trudge. Then, as the mare is permitted to rest once in a while to cool down, the colt seizes the opportunity to drink and draws from the foaming udder the over-heated milk, turned from a life-sustaining to a death-dealing fluid.

The future usefulness of the colt depends upon nothing so much as the feed during the first year of its life. To be useful in any way a horse must have good bones, and, above all, good joints. Bones are built, like the rest of the body, from the feed consumed by the young animal, and if the food does not contain the elements essential to the growth of bone it is evident that there will be a weakness in this part of the organism. The milk from the dam contains a large proportion of the most necessary mineral substances, such as lime, but the colt seems to require much more in a short time, and may be seen trying to supplement this limited supply by taking occasional mouthfuls of soil. Probably no materials at the farmer's disposal contain more mineral or bone-forming material than bran and oats, and the colt should have plenty of these and good clover hay from the start. It is quite safe, as a rule, to give as much as two quarts of these concentrates mixed per diem as soon as the colt can be taught to eat them,

and this may be gradually increased. The colt's temperament and character should be closely studied, however, and the ration gauged accordingly. These concentrates and clover hay, being rich in protein or flesh-forming material, induce rapid development of muscle, sinew and tendon, as well as bone, and such are the great desiderata in colts. Feed liberally of the right kind of feed and nature will do the rest so far as bodily development is concerned.

Yet, nature must be given every opportunity and all her forces allowed to do their part of the work. Let the colt have lots of good pure air. Give it all the sunshine it requires. Stint it not where good pure water is concerned. Be careful to permit it to lie down frequently and comfortably. Do not over-exercise; yet, err not on the other side and give too little. The well-fed colt requires more exercise than the average or poorly fed one. As the weaning time approaches, the colt should be encouraged still more to eat hay, oats, and bran. By careful feeding he will scarcely know that he has lost a part of his ration, and will unwittingly substitute that which is provided to replace it. Some people forget to provide a sufficiency of a suitable substitute. Better not to forget. The same ration may be used during all its colthood days, but remember ever that larger animals require larger rations.

The training of the colt should begin the day it is born. The first point is to make friends with the shy youngster. The first day it is not, as a rule, hard to persuade the little



Hackney mare "Brunette," champion London Hackney Show, 1898.

fellow to stand and be petted, but the longer this is delayed the more difficult to persuade his coltship that your intentions are anything but malevolent. Give him a little sugar when you get near him, or some other equally palatable dainty. He will remember this and come to meet you the next time. Never make any hasty movements likely to scare him. As soon as on good terms, he should be halter-broken. The sooner he is disciplined the more easily will he be eventually got under perfect control.

The colt, when once halter-broken, should be gradually accustomed to the bit, and in succession to all other parts of the harness. It is folly to put all the harness on a colt for the first time and hitch him to some old rattle trap of an affair. He is certain, if worth anything, to show his fear and dislike of the proceeding in no pleasant way, and no amount of chastisement or "cuss" words will ever make him what he might have been.

Handle the colt with care and early accustom him to bicycles, engines, umbrellas, and the thousand and one minor unexpected or unusual things that seem to startle most young horses.

To do all this takes much time and patience, but the value of the animal is greatly enhanced, and if for the farmer's own use, the pleasure derivable from a properly trained horse much more than compensates for the extra labor involved. Just try it and see.

The Origin of the Shire Horse

One of the most popular draft horses in England is the Shire. While the Scotchman clings to the Clyde as being the very perfection of everything that could be desired in the way of a draft horse there are sections of England where the Shire stands just as high in the affections of the breeder and farmer. They are both good types of horses and if we had more of them in this country it would be better for the horse-breeding interests.

In an excellent work just published Sir Walter Gilbey, Bart., is traced the descent of the Shire horse from the "Great" or war horse so famous in England's early military history. This Great horse was bred for size and strength as well as activity. It was necessary that he should carry a heavy armor as well as a warrior who also wore a heavy armor of steel. The total weight that a war horse would have to carry into battle would be about 425 pounds, and not only would he have to carry this with ease but in such a way as not to interfere with his movements in an active engagement.

This Great horse continued to be the favorite animal until the use of armor in battle was discarded. After that he began to be used more as a beast of burden and for hauling carriages and such like through the almost impassable roads of old England. In the time of Queen Elizabeth the Great horse was used for draft and farm work as well as for military purposes. During the reign of Charles I. horse racing became popular, and its results on the breed of strong horses began to disturb the minds of many thoughtful men. About the time of Queen Anne (1702-1713) the name Shire was used for the first time. This name associates the Great horse, now no longer required as a saddle horse, with agriculture and commerce. It was in demand as a carriage horse because of the bad roads.

The writer states that this breed for which war-horse, Great horse, o'd English horse, or Shire horse are terms used at different periods has been distributed for centuries through the district between the Humber and the Cam, occupying the rich fen lands of Lincolnshire and Cambridgeshire and extending westward through the counties of Huntingdon, Northampton, Leicester, Nottingham, Derby, Norwich and Stafford on the Severn. It has also been extensively bred in the low lying pasture lands of England, in the counties both north and south of those named, everywhere retaining its typical character subject to slight variations produced by differences of climate, soil and food. The illustrations contained in this work show the types of Great horses popular at different periods, all having the one characteristic of large size and strong muscle.



How to Feed and Drive the Horse

By W. R. Swans, Valentia, Ont., in 1898 Farmers' Institute Report

Regularity is essential to economical horse feeding. Be regular in both time and quantity. It will not do when the boys are up late at night to feed the horse two feeds and think that will do for his breakfast. Don't conclude your horse is a machine which you can lay by when you do not need him and then give him a feed of grain and expect him to do a full day's work. Feed regularly and gradually increase the quantity as the work increases, until the full ration is reached. Don't measure his grain with a shovel or an old pail; have a measure that holds the right quantity, as every one's eye does not measure the same on a shovel. See that your horse is in good health before you waste much feed on him, as it is not what he eats but what he digests that benefits him. Do not drug him unless it is a case of necessity, instead, when needed, slightly change your feed from oats to bran mash, boiled barley or a feed of roots. You can tell the condition of your horse from his coat, whether his skin is loose or tight on his ribs or whether his hair lies down smoothly

and is glossy or stands up dry and harsh. Keep brood mares in a good condition by daily exercise and an occasional bran mash and a feed of roots, as the constitution of the colt depends somewhat on the health of the mother. Have a collar for every horse, not one set for all the horses, and work each horse in his own collar, as the collar adjusts itself to fit the shoulder it is worked on.

Make the horse feel by your kindness that you are his friend; do not let him regard you as an enemy. The horse is an intelligent animal, and it is surprising what he can be taught by kindness. Never let your colt do its best until it is thoroughly broken and then bring him up gradually and he never knows defeat. Be gentle and have patience, for they have it all to learn. Show your approval when they make a good offer, for even a horse likes to be encouraged when he is doing his best. When I hear a man bragging of what he made or let his colt draw the first or second time he was hitched, or when I hear him say his horse has not been hitched for two weeks and he just brought him in from the pasture, gave him a feed of oats, and drove him fifteen miles inside of an hour and a half, I know he is ignorant as to the proper management of his horse. You can generally tell such people's horses.

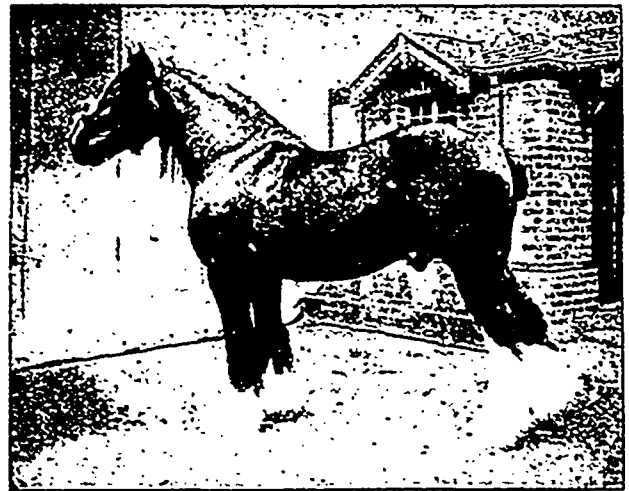
Breeding and Care of Heavy Horses

By Wm. Smith, Columbus, Ont., in 1898 Farmers' Institute Report

A year ago, when engaged with Professor Panton on Farmers' Institute work in the western part of the province, it was almost necessary to apologize to the farmers present when advocating "Breeding and Care of Heavy Horses," even in connection with mixed farming, as the low prices for heavy horses had almost driven the farmers in these western counties out of the business; but now this is changed, and although old-time prices are not realized, still the business is on a fairly good footing, and paying prices are freely given for horses weighing from twelve hundred upwards. Perhaps in no department of farm work have farmers gone from one extreme—of breeding as many horses as possible—to the other—of breeding none at all—forgetting the fact that it takes six years before one has an animal fit to offer upon the market, until to-day buyers of heavy horses are scouring the country everywhere in a vain effort to satisfy their customers, paying according to weight and quality anywhere from \$75 to \$150, and in some cases a good deal more; and now farmers are more than regretting having parted with their best mares.

In breeding heavy mares, a purebred sire should be used, either a Clyde or Shire, although I think the best results are obtained from the use of the Clyde. The ideal aimed at should be a high one, and the following points found in a stallion should constitute an ideal one, full of character and quality, viz.: A good broad jaw, not too fine muzzle, good open nostrils, full and vigorous eye, broad forehead, and the ears fairly long and active. These points will to a great extent determine temper. The head well set on the neck, which should be strong and somewhat rangy, for appearance's sake; shoulders somewhat sloping, giving the long, quick step; a strong, broad forearm, flat broad knee, and below the knee a covering of flowing hair; feet sound and well shaped; a back not too long, round ribbed, chest broad and full; hind quarters should be broad and low set, muscular thighs, fairly broad hocks, and pasterns not too straight, such as are found in the Clyde rather than the Shire. The mare should have a good many of the above points, and should never weigh less than twelve hundred pounds, and as much more as possible. Brown, bay and black are the favorite colors, although it is often said a good horse can never be a bad color. By the union of such a stallion and mare as have been described, if there is any truth in the saying that "like will produce like" there can be little danger of not successfully breeding a heavy horse that will, when five years of age, command a good paying price.

The dam may be advantageously used with light work when carrying her foal, and on no account should be pampered—rather let her have the run of the barnyard. The foaling season is one of considerable anxiety, and an attendant should be on hand if at all possible. In this country, and many others as well, great losses have been caused by a trouble called "colts' disease." Veterinary surgeons now know this trouble to be caused by a germ entering the navel, and causing swollen joints, and sometimes even lockjaw. Prevention is better than cure any time, and by the frequent application of diluted carbolic acid to the navel during healing this serious trouble can be prevented. The colt should be halter-broken as soon as possible, thereby saving a great deal of trouble later on. The dam's nurse should be sufficient, but if an addition is necessary a little bran and ground oats will give good results. The colt should be weaned when about five months old, and should be fed some clover hay, ground oats, bran, pulped carrots or turnips, and cut straw, receive water regularly, and have plenty of exercise. Salt should never be forgotten. Ground flax seed, fed say three times a week, in moderate quantities, will be found a cheap medicine to all horses, with perhaps the exception of mares with foal. This course will answer for winter months, until the colt is nearly three years of age, and the pasture should be sufficient for summer months, but no colt should be exposed to the late fall rains or cold weather. When coming three years old the colt should be bitted and then broken in, and used for light work during the winter months, and as



Shire stallion "Cœur de Lion IV.," an English prize-winner.

the spring draws near more feed should be given, and the colt is ready for its life work. Grooming and plenty of it will now pay, and great attention should be paid to both feet and legs; see that they are kept thoroughly clean. When ready to place him on the market put him in the pink of condition, as flesh on the horse pays as well as flesh on the bullock, and no one can do this as cheaply as the farmer himself.

In breeding and caring for the heavy horse there will be some losses and disappointments, but at present prices, and with a firm belief that the heavy horse will always be required for town and city dray work, I think that mixed farming cannot be as successfully carried on as it should be unless this particular line forms a part.

Inspection and Regulation of Stallions

This question has been given some attention in these columns of late. In FARMING for February 14th, Mr. Wm. Hendrie, Jr., Hamilton, outlines a plan by which the Government might proceed along the lines of regulating the kind of stallions that travel through the country and curtailing the plethora of inferior animals that have been doing duty in this province too long and resulting in an over stock of unsaleable and undesirable horses.

There is no doubt a difference of opinion as to the practicability and workability of such a plan, but there can be no two opinions as to the beneficial results that would follow the carrying out of some effective system of inspection of stallions. But the question is, will the end justify the means, and in a free country like Canada will not a rigid inspection and regulation of animals used for service interfere with personal liberty and impose a hardship upon a certain section of the population? Such a system might perhaps cause persons travelling through the country with inferior or blemished stallions to lose their trade, but aside from this an adequate plan of inspection and regulation of stallions carefully and judiciously carried out would prove effective in introducing a better class of breeding stock and laying the foundation for a better class of horses that would in time be of great benefit to the farmers of this country. The whole question is well worth a full discussion, and we would be glad to have the views of any one interested for publication.

Canada, however, is not the only country where such a system is being discussed. Several of the Western States are considering the matter, and the chief objection raised to the scheme is that it would give too much power to the veterinary surgeons of the country, who would do the inspection. But this is not an objection to the principle of the scheme, and a sufficient number of honest veterinary surgeons could surely be secured to do the inspection. In France and Italy a system of inspection and regulation of stallions has been in force for some years with splendid results. The scheme is not looked upon in these countries as a hardship or as interfering with the liberties of any individual, but in the broader sense of benefiting the whole community in causing a better and more uniform class of horses to be produced throughout the country.

If we follow the history of the horse in Great Britain we will find that as far back as the reign of King John strict regulations were enforced so as to induce the increase of good horses in the country. During the reign of Henry VIII. stringent laws were enacted with the object of improving the quality of the horses in the country. After noting the fact that by breeding many mares to small stallions and nags the breed of good horses in the kingdom was being greatly diminished, and was likely to further decay unless speedy remedy were provided, the law goes on to state that all owners or farmers of land and enclosed ground of the extent of one mile shall keep two brood mares of the height at least of thirteen hands, under penalty of 40s. A penalty of 40s was also imposed on the lords, owners, or farmers of all lands as above who should willingly breed any of these mares to stallions less than fourteen hands high, and no person was allowed to put a stallion of less than fifteen hands high in the fields where mares and fillies were kept in certain countries named. There was another clause in the law which, if in force at the present time, would doubtless cause a rebellion, though it would clear the country of "scrub" horses, and which reads as follows:

"And furthermore be it enacted, that if in any of the said drifts there shall be found any mare, filly, foal or gelding that then shall be thought not to be able nor like to grow to be able to bear foals of reasonable stature, or not able nor like to grow to be able to do profitable labors, by the discretion of the drivers aforesaid or of the more number of them, then the same driver or drivers shall cause the same unprofitable beast and every of them to be killed, and the bodies of them to be buried in the ground or otherwise bestowed, as no annoyance thereby shall come or grow to the people there near inhabiting or thither resorting."

After this period other laws were enacted from time to time chiefly with the object of increasing the size of the horse. Size counted more in those days when roads were bad than it does at the present time. There were frequently enactments to prevent the exportation of large horses if there was a likelihood of their becoming scarce in the country.

Any of our readers wishing to have a copy of this week's issue sent to their friends will kindly notify us by post-card with name and address.

About the Horse

The weight of the heaviest horse ever known was 3,000 pounds, and was of the Clydesdale breed. It was on exhibition in New York in 1889, and was 20½ hands high, and although only five years old measured 32 in. round the arm, 45 in. round the stifle, 95 in. in girth, 34½ in. round the hips and 11 ft. 4 in. in length.

The number of dangerous or vicious stallions does not seem to be as large as in the days of our fathers. The change for the better in this regard is said to be due to definite efforts to breed for desirable characteristics and to generally superior methods of training.

Nothing is more valuable in a good horse of nearly any kind than to be a fast walker. On the farm, on the road, and even for hunting or riding purposes, a good walker is worth a great deal more than a slow, ungainly walker. Though this quality in a horse is to some extent a matter of training when the animal is young and when first driven, it is in a very large degree hereditary, and should not be lost sight of when breeding.

In stopping a runaway horse it is not a good plan to rush straight at the horse's head. The best and safest way is for the man to place himself on the near side of the road, and before the runaway reaches him start to run in the same direction, and if he can keep alongside for a few yards and clutch the rein, he can, by gradually bringing pressure on, succeed in bringing the horse up by increasing the pull on the bit.

Statistics show that there are about 75,000,000 horses in the world, of which Russia has 35 per cent., and the United States 20 per cent. North America has 17,000,000, South America 5,000,000, Europe 38,000,000, and Asia 9,000,000.

Following the example of France, which has levied taxes of from \$20 to \$40 on horses of different ages imported, Germany is likely to so arrange its tariff as to lessen foreign competition. According to the present law, Germany and Austro-Hungary levy a uniform tax of \$5 upon all imported horses, but in Germany, as in France, the imports of American horses have increased very much since 1891, while the exports have fluctuated very little.

In 1893 the British Clydesdale Horse Society were reported as exporting 112 head; in 1894, 21, in 1895, 15; in 1896, 55; in 1897, 57; and in 1898, 132. These figures show progress. The demand last year was general, a goodly number of horses going to Europe, others to the United States, Canada, South Africa and Australia. In many districts of Scotland it is reported there are not more than three Clydesdales bred where eight or nine years ago there were twenty, and it is felt throughout Scotland that the supply will not be equal to the demand.

The Clydesdale

The Clydesdale is perhaps the most popular draft horse in Canada. It is probable that the Shire and the Clydesdale are of the same breed originally. They doubtless started from the same origin and are descendants of the Old English Great horse, as mentioned elsewhere. The people in Scotland, however, evinced an earlier interest in horse-breeding and it is doubtless due to the different climate and soil, the rich lands, the healthy herbage and the nourishing grasses of the North that the Clydesdale of the present day owes its activity and quality characteristics, which have made him superior in the eyes of foreigners.

There is no evidence to show where the Clydesdale received its distinctive name, but it is doubtless from the farmers of the upper valley of the Clyde who took the earliest and greatest interest in the improvement of the old Scottish breed that its name was derived. In the Clydesdale Stud Book the genealogical tree shows that a horse named Glancer, foaled about 1810, was the root from which the breed sprung. This horse was supposed to have been descended on his dam's side from a Flemish horse brought to England between 1715 and 1720. Two noted horses of this breed, Prince of Wales, 673, bred in 1866, and Darnley, 222, are worthy of note as being the two horses from

which nearly all the horses of the present day are descended. Macgregor, a son of the great Darnley, has been called the king of the Clydesdale horses of the present day. He is now twenty-one years old, is still fresh and sound, and was hired not long ago as a stud horse for the season. His progeny are now distributed over the whole world, and both horses and mares of his breeding have won many valuable prizes at American shows.

Hackneys of To-day

The Question of Color

I know some of your readers are ardent lovers of a "good goer," and this is the season when every farmer and horse lover is looking over his stock and wondering if the filly in the field will be fit for next summer's show ring, or if he has made a mistake in his mating of t' owd mare that has done such good work for him to station and market, and often not a little bit of hacking over the farm.

The Shire has many points that appeal to the ordinary farmer, but many prefer the old half-bred or Hackney mare to all the "carters" in the big stables. Why? Because it is his own ride and drive, seldom handled by anyone but himself, and loved accordingly. Now the season for service approaches, and the Agricultural Hall will shortly resound with the yells of excited stable boys and grooms. It is to be hoped the excitement of cheering the winner of the cup will not turn the farmer's brain, even if it does the millionaire stud owner's, so far, at least, as to forget that the sire he requires is not the under-sized, white-faced, white-legged cob, but a sound-colored, big, upstanding horse with action, and bone, and substance, and shoulder good enough to carry a saddle. One cannot err if the blood is right, and the action is bold and high, if the latter standard is accepted. But if the former is chosen, many will regret it, as they have for the past ten years, when too late.

Having bred some fifteen to twenty foals annually from all the best sires for years past, I most unhesitatingly affirm no loss is made when the sire is as I suggested, but the big-priced ones are seldom from amongst the former, and the wasters are unsaleable if bad-colored, small and lacking in bone, even should they beat the big, sound-colored bays and browns in "snappy-action."

Experience teaches wisdom, and I for one should like our coming shows to be some guide as to the best to breed for sale purposes, and so aid the horse owner, and not bewilder and embarrass him in his choice of a sire that in all common sense and fairness should be fit to produce a marketable animal of the highest class.

Every jobmaster in England will agree with me that there is an opening for more 15.2h. to 16h. bays and browns with no white at very good prices, when there is no demand for 14.3h. cobs and "Tits" with plenty of white and not much else to recommend—or, more likely, bar them altogether when a good sale is looked for.—*Farmer and Stockbreeder.*

Some Horse Statistics

According to the year books of the U. S. Department of Agriculture horses reached their highest point in regard to number in 1893, when the United States had 16,206,802 horses at an average value of \$61.22 and total value of \$769,224,799. The highest average value was in 1884, when 11,169,683 horses averaged \$74.64 each. The largest amount of money that was returned in horses was in 1892, when 15,498,140 horses were worth \$1,007,593,636, an average of \$65.01 each.

In 1897 the stock of horses in the United States had decreased to 14,364,667 and their value to \$452,649,396, an average of only \$31.51 each, which is the low point in total and average values. A loss in total value from the highest point in 1892 of \$554,944,240, or about 55 per cent., and from the highest average in 1884 of \$43.13 per head, or 57 per cent.

In 1898 the total number had further decreased to 13,960,911, but the average price had advanced to \$34.26, making a total value of \$473,362,407. Thus in 1898 the total number of horses was 463,756 less than in 1897, but the total value was \$25,613,011 greater.

CORRESPONDENCE

Sheep vs. Dogs

To the Editor of FARMING:

I have of late read a good deal from the pages of your (to me) valuable journal in regard to sheep *versus* dogs, and on each occasion thought I would give to your readers the value of my short experience. I have for the past few years kept quite a number of sheep. I live, I might say, in the village, as a good portion of it is on a part of my lot. Said village, like most others, is overrun with dogs of a variety of shapes, sizes and breeds.

When I first purchased a few sheep I had three worried, then was advised to put bells on my sheep, being assured this would prevent dogs from injuring them. I took the advice and have since that time kept about one bell for each six sheep, and in now nearly eight years have not had one sheep or lamb hurt, and at no time during that period have I had less than twenty and at times as many as two hundred in the fall.

I verily believe that anyone having sheep will, if they secure a good-sized bell, say half the size of a cow bell, suffer no loss from the dog nuisance.

Hoping that my limited experience may be of benefit to some of the readers of FARMING, and thanking you for space,

ISAAC M. CROSS.

Bond Head, Ont., April 5th, 1899.

Alberts' Thomas-Phosphate

A Reply to Mr. Wright's Letter

To the Editor of FARMING:

I am sorry to see a report from so prominent a farmer as Mr. Wright that he had seemingly failed to obtain any benefit from his first application of Alberts' Thomas Phosphate Powder. While it is too bad that he should have so entirely misunderstood the bearing of this excellent phosphate manure on the soil and the crop, it is also very regrettable that he should have published his failure broadcast without considering the conditions more fully, as by so doing he might do more general harm than good. I had heard of Mr. Wright's case, and by way of investigating it, I wrote him to obtain full particulars and have not been favored with a reply. From other sources, however, which are quite reliable, I find that the phosphate was applied much too late to have any perceptible effect on the crop, especially when it is taken into consideration that the season of 1898 was very early and dreadfully dry. At the time of application of the manure the soil was thoroughly drained of all surplus gravity water and was pretty dry, and it has been repeatedly explained that under such circumstances the manure could be of little benefit the first season, unless it had been applied in the fall, winter or spring, before the gravity water had drained from the soil. Thomas Phosphate is not a special fertilizer but stands in the same category with farm yard manure, and when farmers understand this, and grasp the fundamental principles of manuring better, such difficulties as Mr. Wright's will not arise. It may be necessary to explain that the application of water to the land after planting would not have given the best results, as enough water to ensure the best effect of the manure would have been too much for the crops. In explanation of this I would draw special attention to the sixth part of my address on manures. A special fertilizer, such as superphosphates, nitrate or potash salts would only need sufficient moisture for ordinary crop requirements to give their results. I will look for satisfactory results and a further report from Mr. Wright later on after the second crop, for I can assure him his mistake has been in the time of application, and the dry season also prevented the proper development of the plants.

Thanking you for the space,

T. C. WALLACE.

Toronto, April 13th, 1899.

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CANADIAN HORSE SHOW.

A GREAT SUCCESS—A SPLENDID EXHIBIT.

The fifth annual Canadian Horse Show took place at the Toronto Armouries on April 13th, 14th and 15th, and proved to be one of the most successful ever held. Not only were the total entries some fifty in excess of any previous show but the breeding classes showed an especial increase, much larger in proportion than other classes of the show. The quality of the stock was generally good, a decided improvement in many classes over previous years. There were in some sections a few weedy animals but these were but few, and the general tone of the exhibits was decidedly above the average. The educational feature of these shows has been so marked that a visitor from year to year who carefully compares can see the steady though gradual advance made in the different classes. In some classes this advance has been so great and evident as to change the whole appearance of the exhibit. In others no such marked advance has been made, but on the whole the lessons learned from the good judging have neither been neglected nor unprofitable.

And to speak of good judging does not mean that no mistakes have been made; these will occur under the most careful management, and with the most conscientious awarders, but these mistakes often tend to emphasize certain points and to call very special attention to things which might otherwise be easily passed over. Not the least in the educational features of such a show is the comparison and careful criticism of the outsiders over some apparent inconsistency in the judge's decision.

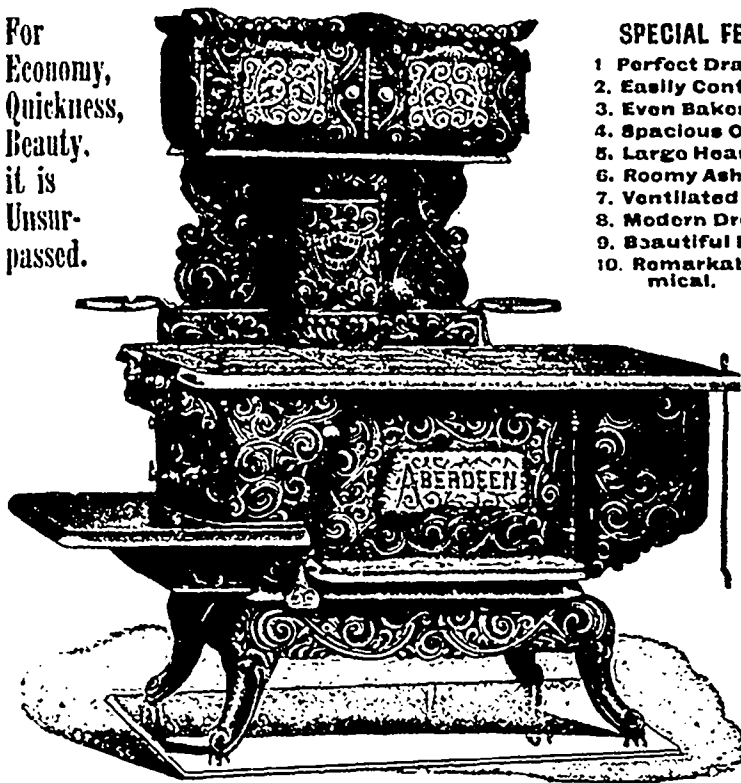
The judging was well and carefully done. Major-General Hutton, general in command of the Canadian militia, made a most excellent judge of saddle horses and it was a happy idea of the directors to secure such an able and distinguished horseman as one of their judges. He was well seconded by Charles McEachran, V. S., of Montreal, and it was the general opinion that these classes were never better or more carefully judged.

The attendance was large and varied. The society people of Toronto turned out well, and, aided by a few lovers of a good horse from the other Canadian cities, contributed largely to the enjoyable features of the show. A pleasant crowd and the people one meets add much to any exhibition, and were specially prominent in Toronto. Many farmers and breeders were present. A particularly late spring, with no farm work pressing, gave a greater opportunity than usual for farmers to visit this show, and more than usual they availed themselves of the opportunity. Our circumstances in Canada are such that when the spring work begins it taxes the energy and demands the closest attention of every farmer. So much is this the case that few can be got to visit a show held at a time when spring seeding is being done, and those who do go can seldom shake off the feeling that they should be at home at work. This year the case was quite different—spring work had not begun, and the show profited by the backwardness of the season.

From the farmer's standpoint there was one feature that calls for a change. To arrange a programme to suit all classes is not easy. In this case it has been modelled after the New York style to arrange the various classes fairly and evenly throughout the whole three days of the show. A breeder or farmer coming to the show to see any one class has to remain the whole three days. What many of the farmers would like is such an arrangement as would permit the various breeds to be shown more together, grouped in such a way as would bring on the Clyde classes in one day, Shires on another and standard bred and Hackneys on another, so that a visitor who came specially to see his favorite breeds and had only one day to spare, could be able to see the bulk of the whole exhibit in that breed. Grouping the breeds this way, while not detracting from the variety of the exhibitors, would meet the wishes of the farmers in this respect. Our Canadian farmers are so situated that few can breed with profit more than one class of animals. His whole energies have to be given to that one favorite breed and he wants in coming a day to the show to see as much of the favorite breed as

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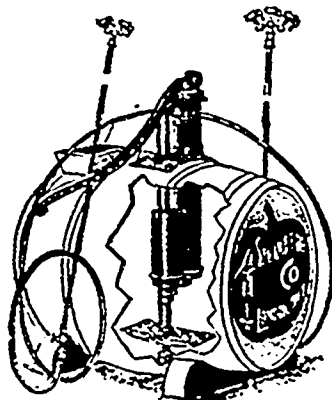
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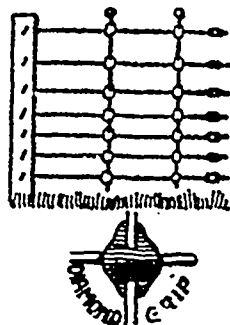
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H. L. HUTT, H. PETTIT, Judges.

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possible. This is a point well worth the careful thought of the directors in future.

As to the show itself, there was not much new in thoroughbreds. The old, well-known horses came again to the front. The same might well be said of the Hackneys, which, while a good class, was not as large as has before been seen on a Canadian show ground. There was a fine show in harness breeding classes for older horses. The younger classes were not well filled. Harness horses, both high steppers and road animals, were good—many extra good. In the heavy draught classes the Shires did better than ever before, and the class for aged Shire stallions was a pleasing advance on former exhibits. Clydes were, as usual, the heavy draught feature of the show. Several new horses were shown, and recent importations, added to the interest in this class. Teams were excellent, and were almost exclusively Clydes. It would be hard to get together on the continent a better exhibit than the two classes which the heavy teams made. Saddle horses were specially good. The gaited saddler has not yet been able to get a hold on Canada, but fields of twenty, thirty-five and forty saddlers, going at the walk trot and canter, and all of fair quality, hardly a wad among them, shows the care that is being given to this class of horses. It is true that the most of them—as was also the case in the harness classes—were shown by professional dealers, but only such can give the attention to the grooming and schooling necessary to win at such a show, and the farmer and breeder gets the benefit by the demand for such a class and the advantages of exhibiting and selling, not to speak in detail of the love of a good horse, enhanced by such an excellent exhibition as the Fifth Canadian Horse Show.

LIGHT HORSES.

The thoroughbred classes had nothing very new or sensational. The old horse "King Bob," vol. v., foaled in 1883, was an easy winner. He was shown by W. I. Thompson, Orkney. Terremont, a younger bay, owned by A. Frank & Sons, The Grange, Ont., was second. The younger classes were not filled, only three entries in two classes. In the class for thoroughbreds to improve the breed of saddlers and hunters "Wiley Buckles," exhibited by Quin Bros, of Brampton, was again first, where he has been so often before. His produce took a first place in several classes. For half-bred filly or gelding the black mare "Witch," by Wyndham, exhibited by T. M. Walton, Innerkip, looked like a descendant of racers, and the second prize animal "Florence Dennison," by Dennison, was more the half-bred saddler with sidgety flighty ways. There were seven entries for aged carriage or coach stallions and but one for the younger class. In this class first went to Graf Bremer, owned by James McCartney, Thamesford; second to General Watson, shown by John Rodney, Emory, and third to Young Duke of Cleveland, shown by J. Mannell, Toronto.

In standard bred trotters Graham Bros. won with Reflection, 10 years old, by Duplex, 18817. This horse has a record of 2:07½ and has good conformation as well as great speed. There were two young things shown, Jas. A. Child's winning first with a son of Altoneer, 17493. In Hackneys three well-known good horses faced the judges. First went to Lord Rosebery (1307), exhibited by Graham Bros., the first Hackney they imported, and probably the best. He is a good type of the breed and was an easy winner. H. N. Crossley was second with his roan six year old, "Rosseau Performer"—34—white D. & O. Sorby got 3rd with "Square Shot"—27—a big chestnut by "Great Shot 2nd." In three-year-olds R. Beith & Co. were first for "Squire Rickell," a son of Cadet (1257), a fine chestnut and a grand goer. "Hillhurst Sensation" was second. He is a son of the well-known breeding horse "Hayton Shales" (4806) and out of "Miss Baker" (4371). Another son of the same dam was winner in the younger class. "Woodlands' Performer," owned by D. & O. Sorby, is a very promising youngster and one that will yet make a mark in Hackney circles. In the sweepstakes he was placed second to the old horse "Lord Rosebery." In young Hackney mares R.

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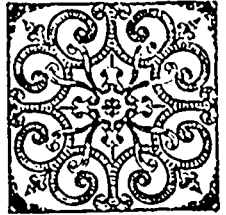
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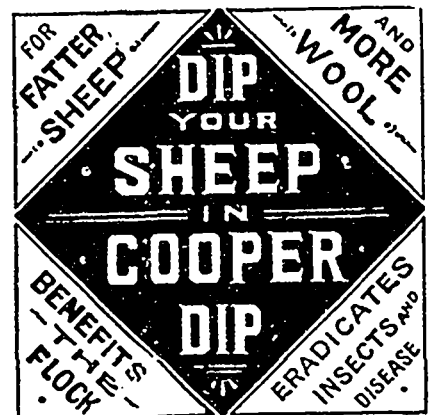


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NIAGARA FALLS, ONT.

Beith & Co. were first with "Cordelia," 85, by Banquo. For high stepper, mare or gelding, R. Beith & Co. were first with "Jessica"—25—a fine dark brown mare with four white stockings, a sweet goer with high knee action and good hock action as well. She was one of the features of the show and a winner of more prizes probably than any other animal in the show. She had the sweepstakes as best Hackney mare, also the English medal for best animal for registered stock in the English stud book. One of a pair that was second for best pair and several other events she figured well to the front.

HEAVY HORSES.

Shires.

The Shire breeders turned out the best ring that has been seen in Canada for many a day, and excelled all previous efforts at the Spring Show. They sent out a dozen very good specimens into the ring. They were a taking lot on first sight, and while they would not bear close inspection, yet they were a very fine lot. They did not seem as massive as the Clydes, nor did they move quite as freely as their rivals. The first place went to a fine upstanding chestnut, "Mawdsley" (16817), owned by the Colborne Shire Horse Association. He is a flashy, big horse, and may prove a good stock-getter. Second prize went to Morris, Stone & Wellington for their imported horse "Bahallion Vulcan" (16502), by Vulcan (4145), a horse with good legs and well-set pasterns, and a good mover. Third place went to Thos. Skinner, Mitchell, for "Bravo II." (12836). The old horse, "Pride of Hatfield" [256], was reserve. He was brought out in wonderful bloom for his age, and was in better form than he has been—a credit to his owners. Wm. Hendrie Co., of Toronto, had first and second for a pair of Shire mares.

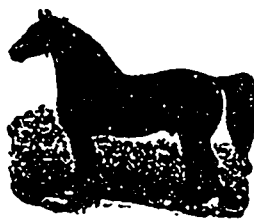
Clydes.

The Clyde class was headed by Graham Bros with "Young Duke of Fife" (10,300), by Orlando (8092), a Prince of Wales. He is a long wide horse, a dappled brown, with white markings—great breadth of chest—so wide that his front legs have to stand far apart—a heavy horse, weighing, probably, a good deal over a ton. They had second for "Macartie" [2,464], by MacClaskie (6,996)—a light chestnut in color, with light mane and tail—a tall horse, well coupled with short rib, and fine crest. He goes well, and is quite a different type to his rival. T. H. Hassard, of Millbrook, had third place for "Gay Prince," by Prince Alexander (8,899), a well bred, good kind of a horse, a dark brown, and a favorite with many good judges. John Bell, Amber had a fine big horse in "Honor Bound" (8,700), by Sir Maurice (4,721), a horse much admired. In the 3-year-olds there were 10 entries, but the exhibitors picked the winners, and sent into the ring only the three selected best. "Lyon Macgregor" [2,308], imported and exhibited by R. Davies, was first. He has grown well, and is a fine thick horse, with good feet and legs. He won the sweepstakes for the best Clyde stallion shown. John Davidson, Ashburn, had the second horse in Prince of Kinellar [2475], a grandson of Prince of Albion, and a horse good at the ground, carrying a good deal of Darnley blood with a Prince of Wales cross. Prince of Blantyre [2239], shown by Alex. Dogherty, was third. This is a promising son of Prince of Quality [2173]. There was a capital class of two-year-old Clydes. Prince of the Glen [2306], exhibited by R. Davies, was not a very popular winner but is a good thick horse—big and a trifle plain. Graham Bros. were second with "Aberdeen" [2447], a light chestnut, a finished horse in good show trim and a good mover. There were several other good ones shown. There were but three Canadian-bred stallions shown. These have to trace to an unregistered Canadian mare. First went to David Carstain, Bomanton, for Sir Julian [2460], second to Arms Agar, Nashville, and third to W. J. Howard Dollar for a son of Red Wattie (2287).

The Clyde mares were a good class and the winner was Geo. Moore, Waterloo, for a thick low-set bay, Rose of Blanchard (2462). The

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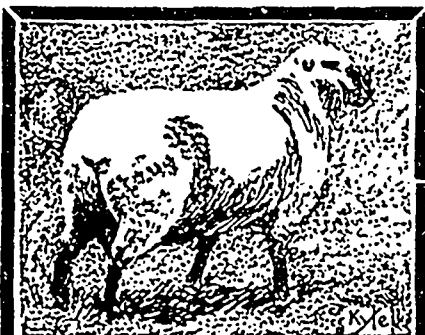
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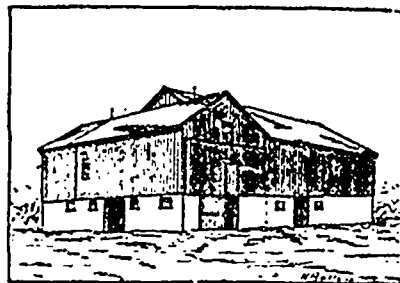
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sweepstakes for best draught pair of mares or geldings, any breed, brought out a fine class of big superb horses. Geo. Moore, Waterloo, won with a pair weighing 3,650 lbs. He was closely pressed by D. & O. Sorby with a pair quite as heavy in line and general get up. For the \$50 prize for a team of Clydes D. & O. Sorby won with Dina McKay (2314), and Louise Lass (2313), as grand a pair as have been shown for some time.

SADDLE HORSES.

There was a splendid show of saddle horses. In the West at St. Louis and in much of the South the saddlers are all gaited, while in the East they are confined to the three common pacers. When the first selection was made the blood-like character of the horses chosen was clearly seen. In the open class L. Meredith, of London, won with a fine mare, a bay, well mannered and of excellent quality. The class under 15½ was a good one, and was won by Crow & Murray with "Bonnie Don," with "The Sculptor" a good second. The latter, owned by A. R. Cutzon, Guelph, who won in the class over that height with "Headlight," a beautiful goer and a fine type of the half-bred saddler. For ladies' saddle horse Miss L. Janes, of Toronto, won first, and Dr. Andrew Smith, of Toronto, second. In the jumping contests there were a lot of entries and they were well brought out, though often green at the jump. Mr. Pepper's "Lady Aberdeen" won in two classes. These contests were very popular, and divided with the musical ride performed by members of the Hunt Club with lady riders. It was one of the popular features of the show and always well done.

NOT THE SAME.

A new firm calling itself Adam, Eve & Co. has recently started business in Paradise, Mo., and is advertising a toilet article called the "Dew of Eden." While the name of this new firm is almost identical with that of the oldest partnership formed on earth, the principals are not the same, as the original figures retired from business many years ago. They are, however, believed to be some kin to the original firm members.—*Exchange.*

BONE MEAL FOR ABORTION.

Mr. F. C. Baker, in a recent issue of *Hoard's Dairyman*, has this to say as to a cure for abortion: "While working in a dairy of over 107 cows for over five months there wasn't a full-time calf born, and over two-thirds of them came fresh during that time. We decided upon watching the actions of the cows, thinking they lacked some substance, and perhaps it was bone, so we gave them bone meal with immediate and perfect results. Not only that time, but have personally seen it tried three times since—the theory being the cows, being fed on high, concentrated food and much stabling, do not get bone substance enough; anyway it did the work."

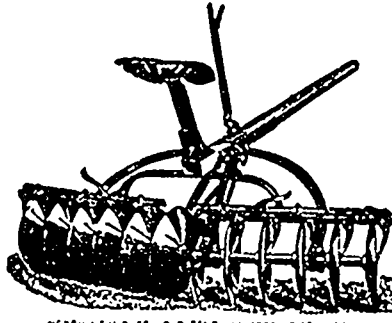
In some places skim-milk can be bought of city contractors for 7 or 8 cents per 8½ quart can. At this price skim-milk is fairly cheap food for poultry, and it will stimulate wonderful growth in young chickens. It does not agree with water fowl.—*Massachusetts Ploughman.*

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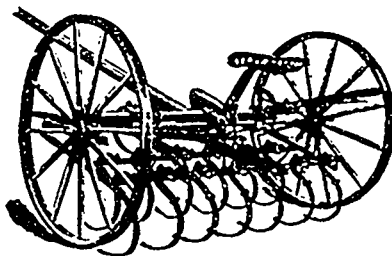
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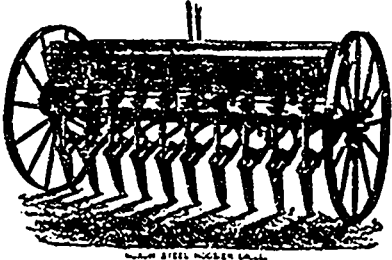
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QUESTIONS AND ANSWERS

LAMBS WITH SORE EYES.

To the Editor of FARMING :

I have a pair of spring lambs, and about four days ago I noticed that one seemed to be blind in one eye. On examination I found the eye to be of a pink color, and now I notice that the other lamb is afflicted in the same way in both eyes, only not so bad. I notice, however, that it is just starting in one eye, and there appears to be a small hole like a pin hole eaten in the eye near the pupil. The lambs are smart and in good condition and have been kept in a dry pen. Will some one please tell me what is the matter with them and what to do?

A SUBSCRIBER.

Canton, Ont., April 10, 1899.

This is evidently a case of ophthalmia or inflammation of the eye. There are various causes for it, and most likely in the case mentioned it may be due to direct injury caused by dirty matter getting into the eye from the chaff or straw. The disease is sometimes constitutional, and in some cases appears to be enzootic, that is, running through the whole flock. The usual treatment is to bathe the eye with warm water. A mild eye water might be used in the proportion of 1/2 drachm of sulphate of zinc, 2 ozs. of laudanum to a pint of water. Should the disease prove to be euzootic, that is, running through the whole flock or district, the diseased animals should be separated from those not affected.

A BAILY KEPT BULL: FEEDING YOUNG PIGS.

To the Editor of FARMING :

(1) Kindly answer the following questions for me: A neighbor has a pure-bred Jersey bull, sired by a bull purchased from Mrs. E. M. Jones, and the dam was a good milker. The animal in question has been given scrub care and "is thin and lousy." Would the stock from such a bull carry the good points of the parent stock? It is the only one around here of the breed. We have a good Holstein bull,



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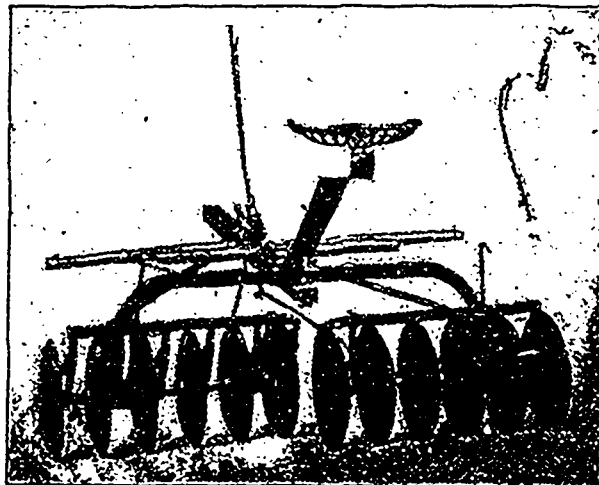
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but Jersey and Holstein has been an unsatisfactory cross with us.

(2) Is wheat bran soaked in water and fed with milk, good for young pigs and is shorts or feeding flour the better to mix with it? The flour, I am afraid, would clog in their stomach if fed alone.

Moncton, April 6, 1899.

M

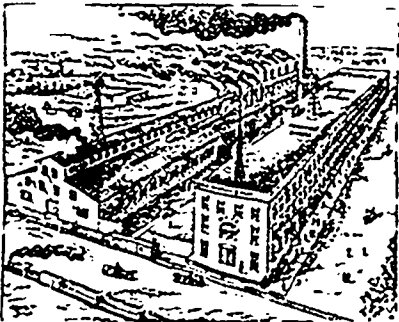
(1) We would not recommend breeding to a sire of any kind unless he was in a strong, vigorous condition and in good health. While the bull referred to might be able to convey to his progeny some of his good points, his weak and poor condition might cause a constitutional weakness in the offspring which would prevent it from becoming a strong, vigorous animal. Good grooming, good feeding, and good care, if applied right, might get the bull in fair condition before it was necessary to breed to him. We would certainly not advise breeding to him if he is in the condition described if good stock is required. In almost every case lice on cattle are due to the too close proximity of the hen-roost to the stable or cattle. To get the animal in good condition get rid of lice, and proceed as we have indicated. The Persian insect powder is good for this purpose and is harmless.

(2) Bran of itself is not a sufficient food for young pigs, but is a good thing to feed with other foods. A mixture of the shorts and bran would do very well, or, perhaps, a mixture of all three would be preferable, but not too much flour. It is a good plan not to feed young stock of any kind on the one kind of food too long. A change of food is always desirable.

For diarrhoea change the food, supply grit, and dust a little powdered chalk and cayenne pepper into boiled milk and feed it with soft food, withholding vegetables and green stuff for a few days. Never feed sour dough.

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Galvanized Steel Wind Mills
Towers and Grinders



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Send for Illustrated Catalogue of Wind Mills, Maple Leaf Grinders, Iron and Wood Pumps, Bee Supplies, etc.

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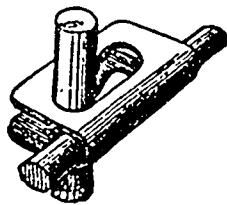
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Is just such a fence.

Its virtue is attested by the fact that there is more of it in use than all other makes combined. Prices lower than ever this year.

THE PAGE WIRE FENCE CO., (Ltd.)
WALKERVILLE,
ONT.

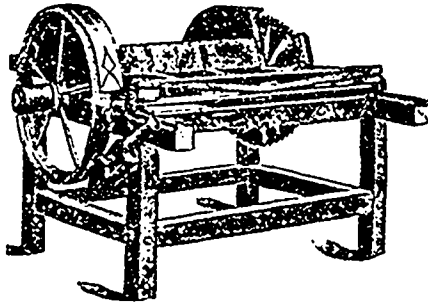


Farmers Want It
and will have it
We Make It
and want you to sell it

—Write for our Illustrated
—Fence Catalogue describing it...

THE FROST WIRE FENCE CO.
WELLAND, ONT.

Experience Teaches



LANCASTER MACHINE WORKS,
Lancaster, Ont.

GENTLEMEN—

I have used one of your Jubilee Circular Sawing Machines for two seasons and am perfectly satisfied with the work done by it. I have used other sawing machines but find yours the fastest cutting and lightest running of them all, doing more work than any other make. With a 26-inch saw I can cut a twelve inch stick without turning it. When cutting small sticks I put about eight inches under the heel of my power and then had to apply the brake frequently. The machine will cut easily 25 cords of hardwood a day.

Yours truly,

PETER K. McLENNAN,
Cashion's Glen, Ont. March 17th, 1899

Winona Nursery Co.

OFFERS FOR
SPRING of 1899

A full line of stock, both fruit and ornamental, at very moderate prices. No agent's commission to pay.

Send for price list and catalogue. Dealers will find it to their interest to correspond at once with

J. W. SMITH, Manager,
Winona, Ont.

DEAL DIRECT

IF YOU CAN USE ANY:

Grape Vines, Currant Bushes, Ornamental Shrubs, Shade Trees, Norway Spruces or other Evergreens, or any Fruit Trees or Plants, write to

E. MORDEN, NIAGARA FALLS,
SOUTH,

for his Price List. Stock reliable and cheap and can be shipped to any point in Ontario in good order and season if order arrives early enough.

HELDERLEIGH FRUIT FARMS and NURSERIES

—400 ACRES—

Sixteen years' experience. Everything wanted that is useful and valuable in the Nursery Stock line—either FRUIT or ORNAMENTALS.

SEND FOR CATALOGUE, which is furnished FREE to applicants.

Do not make the mistake of buying cheap stock—it is dear as a gift.

GOOD RELIABLE SALESMEN WANTED in a number of fine townships to start work at once. Complete Outfit FREE.



Address, **H. D. SMITH**
WINONA, ONT.

TUBERCULOSIS IN EUROPE.

The present condition of bovine tuberculosis in Europe is briefly discussed by Prof. H. W. Conn in Bulletin No. 19 of the Storrs Agricultural Experiment Station just issued, and the following important conclusions are reached:

1. The passage of tuberculosis from man to animal, or from animal to man, must be regarded as not a common method of dissemination. Bovine tuberculosis and human tuberculosis, though produced by the same bacillus, represent two separate problems.

2. Bovine tuberculosis has assumed alarming proportions in regions of Northern Europe, more than half the animals being infected.

3. The only efficient method of combating the disease among cattle is by separation of healthy from infected animals, either by isolation or slaughter.

4. To determine whether any cattle in a herd are infected and ought to be isolated from the others, it is necessary to resort to the tuberculin test. This test should be used to aid the farmer in building up a healthy herd, but not to condemn all reacting animals to slaughter.

5. The history of tuberculosis in European herds will be the history of our own herds unless our farmers wake up to the necessity of battling with the disease at once

THE FARM WELL.

A necessity on every farm is a good well. Not only should a good well contain plenty of water but that water should be pure and the surroundings of the well should be kept as tidy and clean as possible.

The well should always be located at a safe distance from possible sources of pollution; the brick or stone work should be set at least as far down as the ground waterline, in cement impervious to water; the top of the well should be raised about a foot above the surface of the ground and be provided with a tight top to keep out all vermin, and the surroundings should be kept free of all substances that might pollute the water. The well should never be used for a refrigerator, nor should the washing of milk-cans or other utensils be carried on in its immediate neighborhood unless ample provision is made to carry away all wash water. Slops and garbage should be thrown on the compost heap where they belong.

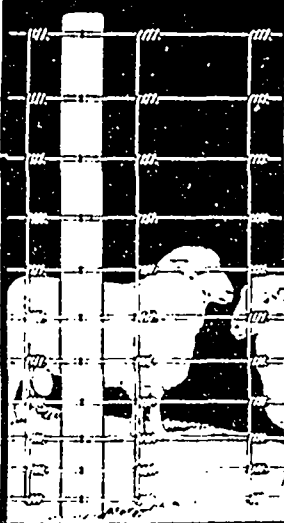
HOW TO KILL THE LEAF HOPPER

HARLEY, KANSAS EXPERIMENT STATION.

Leaf hopper, Thrip and Erythro-neura vitis are all different names for one small insect, which is often very numerous on grape vines during summer.

It is about an eighth of an inch long, of a light color, and marked by three dark red bands. They fly from their position on the under side of the

SHEEP MAY BE DUMB



but it takes a good fence to keep them in bounds. The most successful fence for all sheep pastures as well as for larger and stronger animals is the

AMERICAN FIELD FENCE

either in regular style or special sheep fence.

This fence is most successful because

IT IS THE BEST AS WELL AS THE CHEAPEST.

Most durable, efficient and economical. If you can't find it at your local dealer, write direct to us for catalogue.

AMERICAN STEEL AND WIRE CO.,
CHICAGO AND NEW YORK.

ALEXANDRA AND MÉLOTTE

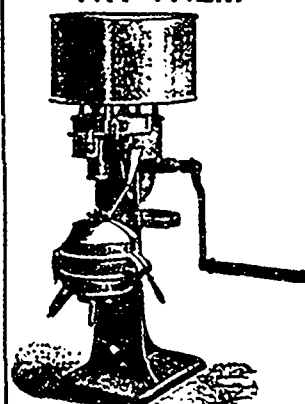
CREAM SEPARATORS

For Particulars apply to

R. A. LISTER & CO., Limited

579-581 St. Paul Street,
MONTREAL

TRY THEM



TRY THEM

To Dairymen of Manitoba and N. W. T. Districts:

We beg to call your attention to our having opened a Branch of our business at Winnipeg, where we will carry a complete line of all articles required in the manufacturing of Butter and Cheese, for either Creamery or Dairy, and at such prices as will enable you to save money.

Heading lists of goods stands the full line of "De Laval," "Alpha" Power and Hand Separators, which are to day conceded by our leading Experiment Stations and Dairy Schools, as well as advanced Creamery and Dairymen to be the best cream separators on the market to day, and other goods of the same standard of merit, which will appeal to all dairymen as worthy of their consideration before purchasing elsewhere.

Our object in opening this branch is to be near the dairymen of Manitoba and the N.W.T., so as to better serve those who have favored us with their patronage in the past, either direct or through local agents, and to acquaint ourselves with new customers. All of which will result to our mutual interest.

The users of any style of "De Laval" separators, who are not fully posted on operating same to best advantage, or those desiring any more information on the Separator question, we shall be pleased to hear from, assuring them that such enquiries will have prompt and satisfactory attention. Any who contemplate the purchase of a cream separator this spring, we should be pleased to hear from, so as to send them reading matter that will prove of much interest and benefit, giving experience of dairy authorities on cream separators, showing first cost is not the only consideration in a separator purchase. If what facts we produce are not convincing enough to any intending buyer that the "De Laval" "Alpha" Separators are the best, we will be pleased to place one of such separators in any dairy on a 15 or 30 days' trial, against any cheap infringing separator, to prove by practical results that the "DE LAVAL" is not only the Best but also the Cheapest. Let us hear from those in any way interested.

For further information or particulars, address

THE CANADIAN DAIRY SUPPLY CO.,
236 King St., Winnipeg, Man.

We want local agents in every Dairy District.

tf

leaves when the vines are shaken and soon light again.

To combat them in the summer when their destructive work is noticeable is difficult. Now is the time. They may be found under the leaves near the vines. If the vineyard is cleaned of all litter and this properly burned many will be destroyed. The insects remaining on the ground can be killed by a spray of coal oil emulsion.

INFLUENCE OF COLD AND STORMS ON BUTTER FAT.

By D. H. ORIN, Kansas Experiment Station.

The Manhattan Creamery received milk on February 3, which, according to the usual calculations, would make 288 pounds of butter; but when the cream was separated and churned it yielded only 227 pounds, or over 21 per cent. short of the usual run. In looking for the cause it was noted that on February 1 the weather turned cold and it snowed for two days. This goes to show that dairy cows especially should be provided with conditions as nearly uniform as possible. Any sudden change in temperature, feed or care may not permanently affect the percentage of butter fat in milk, but it will cause a temporary change both in quantity and quality and may in a large measure account for the fluctuations in the butter fat test experienced at so many of our creameries.

THE SEED FLAT.

By W. H. MOORE, Kansas Experiment Station.

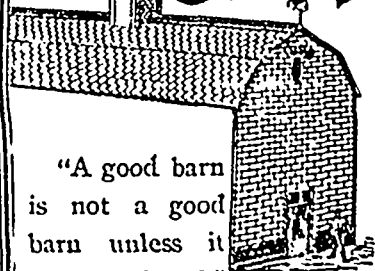
An excellent box, in which the seeds for early flowers can be sown, is about eighteen inches long, fifteen inches wide, and three and one-half inches deep. This box can be placed in the window beside the cutting-box. A good soil for the seed-box is made of three-fourths soddy loam and one-fourth sand; this mixture gives a soil that drains well, and does not run together after it has been watered a few times.

In this box can be sown Pansy, Verbena, Petunia, Snap-Dragon, Sweet Alyssum, Salvia Splendens, or seeds of any other similar plants that will stand transplanting and are desired for early blooming. Enough plants can be grown in a box of this size to supply a good-sized flower garden.

Sheepmen who patronize the well-known Cooper Sheep Dip, advertised in our columns, should write to William Cooper & Nephews, Galveston, Texas, for their pocket calendar and note book, which is mailed free. The Cooper Dip seems to give the greatest satisfaction, and is rapidly increasing in popularity.

Another shipment of pure-bred stock will leave Brantford, Ont., consigned to Quebec and Newfoundland, on Monday, the 1st of May.

ROOFS FOR THE BARN.



"A good barn is not a good barn unless it has a good roof."

Pedlar's Steel Shingles and Siding

Are water, fire, lightning and storm proof, and being constructed by modern machinery from the best stock obtainable, are superior to any similar goods on the market.

Sold by all dealers.

Do not accept any others that are "just as good," but get the genuine, old reliable "The Pedlar Patent."

Made only by
Pedlar Metal Roofing Co.
OSHAWA, CANADA.

CANADIAN PACIFIC RY.

Settlers' One-Way Excursions

To Manitoba and Canadian Northwest will leave Toronto every TUESDAY during March and April.

Passengers travelling WITHOUT LIVE STOCK should take train leaving Toronto at 3.15 p. m.

Passengers travelling WITH LIVE STOCK should take train leaving Toronto at 9.00 p. m. Colonist Sleepers will be attached to each train.

For full particulars and copy of "Settlers' Guide" apply to any Can. Pac. agent, or to

C. E. McPHERSON
Assistant General Passenger Agent,
1 King St. East, Toronto

PLANT LIFE, to be vigorous and healthy, must have

Potash

Phosphoric Acid and Nitrogen. These essential elements are to plants, what bread, meat and water are to man.

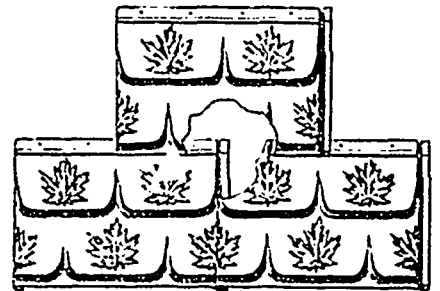
Crops flourish on soils well supplied with Potash.

Our pamphlets tell how to buy and apply fertilizers, and are free to all.

GERMAN KALI WORKS,
on Nassau St., New York.

IF PEOPLE ONLY KNEW

the advantages of using metal roofing, constructed on our patent "SAFE-LOCK" principles, they would not accept a substitute.



OUR "SAFE-LOCK" SHINGLES

interlock each other on all four sides—leaving no openings for snow or rain to get in. They are easily put on by anyone—are practically fire and lightning proof and give a building a neat, finished appearance. We can tell you more. Ask for free catalogue and samples.

The Metal Shingle and Siding Co.
(Limited)
PRESTON, - ONT.

J. E. Richardson's Selected Seeds

Special Choice List of Vegetable, Field and Flower Seeds
These are not cheap seeds, but the best that money can buy

CATALOGUE FREE

WRITE FOR IT

VEGETABLE SEEDS

Tomato—Richardson's Cre-kide Glory, 15c. pkt.
Sweet Corn—Kendal's Early Giant, 5c. pkt.
Potatoes—Carman, No. 3, \$1.25 per bus.
" Great Divide, \$1.25 per bus.

FIELD SEEDS

Sugar Beet—Danish Improved, 50c. lb., 3 lbs. \$2.25
Corn (Field)—Mammoth eight-rowed yellow, \$1.25 per bus.
Barley—Success Beardless, \$1.00 per bus., 5 bus. and over, 90c. per bus.
Oats—The New Black Mesday (all sold).
Clover and Timothy. Write for prices.

FLOWER SEEDS

Pansies—Richardson's Giant Mixture, 10c. pkt.
Sweet Peas—Richardson's Princeton Mixture, 5c.
Verbena—Mammoth Strain, 10c. pkt.
Morning Glory—Japanese Imperial, 10c. pkt.
Carnation—Extra Choice Double, 25c. pkt.
Phlox Drummondii—Mixed large flowering, 5c.
" Splenden's Crimson, pure white eye, 10c. pkt.

LAWN GRASS SEED

Richardson's Special Mixture, 18c. per lb.

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Address all communications to

J. E. RICHARDSON Seed Merchant and Grower **PRINCETON, ONT.**

The Ontario Agricultural Gazette

The Official Bulletin of the Dominion Cattle, Sheep, and Swine Breeders' Associations, and of the Farmers' Institute System of the Province of Ontario.

THE DOMINION CATTLE BREEDERS' ASSOCIATION.

Ayrshires.		
Hallantyne, W. W.	Stratford	3 bull calves, 3 to 8 months old.
Davies, Robert	Toronto	7 bulls, 2 to 18 months old.
Guy, F. T.	Bowmanville	2 bulls, 10 months; cows, heifers, young calves, both sexes.
Smith, W. M. & J. C.	Fairfield Plains	Bull, 18 months; 2 cows; 3 heifers, 1 to 3 years.
Yuill, J. & Sons	Carleton Place	8 bull calves and 22 heifer calves, under 7 months; cows and heifers, all ages.
Shorthorns.		
Birdsall, F. & Son	Birdsall	Bull calves, 2 to 5 months; 1 bull calves.
Bonnycastle, F. & Son	Campbellford	7 bull calves, 1 to 6 months; cows, heifers and heifer calves.
Chapman, J. G.	St. Thomas	2 bull calves, 1 month; heifer, 1 year.
Fairairn, H. K.	Thedford	12 cows, all ages; 5 heifers, 2 years; 3 bull calves, 7 months; 3 heifer calves.
Fried, J.	Roseville	6 bulls, 7 to 13 months.
Hawkshaw, W. S. & Son	Glanworth	Bull, 10 months; bull, 3 years.
Jeffs, E. & Son	Bond Head	2 bulls, bull calves, 2 heifers, 2 years; young cows and heifer calves.
Legge, T. H.	Temperanceville	2 bulls, 12 and 13 months; cows and heifers.
Skiluter, T. A.	Grenfell, Assa	Bull, 6 months; 6 bulls, 1 year; bull, 2 years.
Smith, H.	Hay	4 young bulls; 10 cows and heifers.
Staples, F.	Ida	5 bulls, 13 to 15 months.
Polled Angus.		
Kaufman, A. E.	Washington	2 bulls, 1 year; 4 heifers, 1 and 2 years.
Holsteins.		
Hallman, A. C.	New Dundee	3 bulls, 8 months; bull, 2 months; heifer, 8 months.
Jerseys.		
Birdsall, F. & Sons	Birdsall	Bull calves, 5 months; yearling heifers.
Davies, Robt.	Toronto	2 bulls, 7 months.
Duncan, J. H.	Sault Ste. Marie	2 bulls, 1 and 2 years.
Gibson, K.	Delaware	2 bulls.
Herefords.		
Smith, H. D.	Compton, Que.	Bull calves.

THE DOMINION SHEEP BREEDERS' ASSOCIATION.

Leicesters.		
Armstrong, G. B.	Teeswater	Ram, 2 shears; 2 shearling rams; ram lambs.
Jeffs, E. & Sons	Bond Head	Stock, all ages.
Shropshires.		
Davies, Robt.	Toronto	20 yearling lambs.
Hanner, D. G.	Mt. Vernon	60 shearling rams; 15 shearling ewes; 20 show rams.
Yuill, J. & Sons	Carleton Place	Ewes and ewe lambs, all ages.
Southdowns.		
Jeffs, E. & Son	Bond Head	Ram, 2 shears; 3 shearling rams; shearling ewes.
Smith, W. M. & J. C.	Fairfield Plains	Ram, 2 ewes.
Cotswolds.		
Bonnycastle, F. & Son	Campbellford	Yearling ewes.
THE DOMINION SWINE BREEDERS' ASSOCIATION.		
Berkshires.		
Allen, F. E.	Grafton	Boars and sows, 3 months.
Blain, N. M.	St. George	Sows; pigs, both sexes.
Bonnycastle, F. & Son	Campbellford	30 head, 1 to 3 months.
Campbell, M.	Northwood	2 boars and 3 sows, 8 months.
Decker, C. R.	Cherterfield	30 head, all ages; sows.
Glendinning, H.	Manilla	Boars and sows, 2 to 4 months.
Jeffs, E. & Son	Bond Head	3 young boars; 6 sows.
Julian, G.	Heathcote	13 boars and 5 sows, 2 months to 1 year.
Lahmer, J.	Carville	Stock, both sexes, 2 to 10 months.
Ross, A. W.	Douglas	20 pigs, both sexes, 6 to 8 weeks.
Russell, F.	Cedarville	Stock, 2 months.
Russell, J. A.	Precious Corners	Boar, 5 months; sow, 12 months; boars and sows, 6 weeks.
Smith, H. D.	Compton, Que.	Young pigs.
Teasdale, T.	Concord	Boar and sow, 11 months; sow; 27 pigs, 5 to 8 weeks.
Yuill, J. & Sons	Carleton Place	Sows, all ages, young pigs.
Yorkshires.		
Baldwin, W. G.	Colchester	10 boars, 2 and 7 months; 12 sows, 2 months; 4 sows, 12 months.
Hawkshaw, W. S. & Son	Glanworth	3 boars and 4 sows, 5 weeks.
Howe, W.	North Bruce	30 head, both sexes, 8 months and under.
Hord, J. & Son	Parkhill	2 bars, 5 months; young stock, both sexes.
Owens, W.	Montebello, Que.	Pigs, 6 weeks and upwards.
Rogers, I.	Cooksville	Boar, 7 months; 14 pigs, 4 to 6 weeks.
Ross, A. W.	Douglas	50 pigs, both sexes, 6 to 8 weeks, 14 sows, 6 to 8 months.
Russell, E.	Cedarville	30 pigs, all ages.
Russell, J. A.	Precious Corners	Boars and sows, 2 months.
White, R. J.	Colinville	3 boars, 6 to 12 months; females, different ages.
Tamworths.		
Endsley, T. L.	Charleston, Ill.	3 gilts, 6 months; 5 boars, 6 months; 40 pigs.
Fulton, J. Jr.	Brownville	50 spring pigs; 2 fall sows.
Hallman, A. C.	New Dundee	12 boars, 2 to 7 months; 18 sows, 2 to 12 months.
Hawkshaw, W. S. & Son	Glanworth	Boar, 5 months; 2 sows, 8 months; 6 sows; 2 boars; 45 head, both sexes, 2 and 3 weeks.
Hord, J. & Son	Parkhill	Yearling sow; 2 boars, 6 months; 3 boars, 5 months; boars and sows, 8 weeks.
Owens, W.	Montebello, Que.	Young pigs.
Simonton, J. H.	Chatham	7 boars, 3, 10 and 12 months; 23 sows, 3 to 7 months; 38 head, 6 weeks.
Smith, H. D.	Compton, Que.	Pigs, 5 to 8 weeks.
Smith, J.	Harrietsville	6 sows, 5 months; 7 boars, 3 sows, 3 months; 25 boars and sows, 7 weeks.
Poland Chinas.		
Smith, W. M. & J. C.	Fairfield Plains	Boars and sows, all ages.
Duroc-Jerseys.		
Smith, W. M. & J. C.	Fairfield Plains	Boars and sows, all ages.
Chester Whites.		
Birdsall, F. & Son	Birdsall	Stock, both sexes, 8 weeks.

INSTITUTE MEETINGS.

The following is the average attendance at meetings, reports of which have been received since the last list published:

Algoma, East	37
Hastings, North	52
Ontario, South	49
Port Carling and Bala	6
Russell	200

The following is a list of the names received since the last list published:

Algoma, East	23
Brant, South	2
Bruce, Centre	2
Bruce, South	2
Carlton	97
Cornwall	4
Durham, East	14
Durham, West	4
Elgin, East	3
Essex, South	3
Grey, Centre	5
Grey, South	3
Grenville, South	3
Halton	7
Haldimand	17
Hastings, North	322
Hastings, West	6
Kent, East	6
Lambton, West	18
Leeds	1
Lincoln	1
Manitoulin, East	11
Middlesex, North	4
Middlesex, West	5
Muskoka, Centre	7
Muskoka, North	23
Norfolk, North	6
Norfolk, South	1
Oxford, South	1
Parry Sound, West	4
Perth, North	2
Prescott	2
Prince Edward	13
Peel	64
Simcoe, South	1
Simcoe, West	1
Stormont	2
St. Joseph Island	10
Welland	5
Wellington, Centre	6
Wellington, East	2
Wellington, South	16
Wellington, West	6
Wentworth, North	1
York, North	1

A. J. C. Shaw, Thamesville, secretary East Kent Farmers' Institute, called on the superintendent at his office April 13th and reported his Institute in a prosperous condition. The membership is now larger than it ever was before, and the farmers throughout his district are more interested in the work of the Farmers' Institute and Live Stock Associations. In 1892 Mr. Shaw was appointed secretary. At that time his Institute had but fifty members, and had a good deal of difficulty in obtaining enough to get the Government grant. Since then they have been gradually increasing until at the present time the membership is about 250.

Mr. Shaw is a well-known breeder of Shorthorn cattle, and has always taken a lively interest in the Dominion

Shorthorn Breeders' Association and in the Dominion Cattle-Breeders' Association. He is one of Ontario's progressive and liberal farmers who take an active interest in the well-being of the agricultural class generally. Not only has he proven an excellent secretary of the Farmers' Institute, but a helpful member of the Live Stock Associations. He reports the demand for Shorthorns very good and the prices realized better than in former years. Mr. Shaw recently visited the herd of E. Gaunt & Sons, Lucknow, and bought from them a purebred Shorthorn bull, Lovell's Heir, to head his Shorthorn herd which now numbers 18 head of females.

A QUEBEC FARMER VISITS ONTARIO AND BUYS SHORTHORNS.

Mr. J. W. Mooney, of Inverness, P.Q., recently visited Ontario and purchased three Shorthorn heifers from Messrs. E. Jeffs & Son, Bond Head, Ont. Under date of April 10th Mr. Mooney wrote as follows: "My brother and I have decided to purchase six or eight young cows and a first class bull, also five or six pairs of Leicester ewes and lambs. We will visit Toronto again about the time of the Toronto Exhibition."

Breeders of pure bred stock who have animals for sale are earnestly requested to send a detailed list to F. W. Hodson, Secretary of the Dominion Cattle Breeders' Association, not later than the 9th of each month. A great many parties make enquiries for these lists, and it is to the interest of breeders and the country at large that they be made as complete as possible.

During the past year the sales effected through these lists have been very numerous, the Newfoundland Government alone having bought upwards of \$1100 worth. But for the publication of these lists not one dollar of this money would have reached Ontario but would have been spent in the New England States if spent at all for pure-bred stock.

Ewing's Selected Seeds

Are thoroughly reliable, and better cannot be found. We MAIL FREE our

ILLUSTRATED SEED CATALOGUE FOR 1899

TO ALL WHO WILL SEND US THEIR ADDRESS

PLEASE SEND FOR ONE

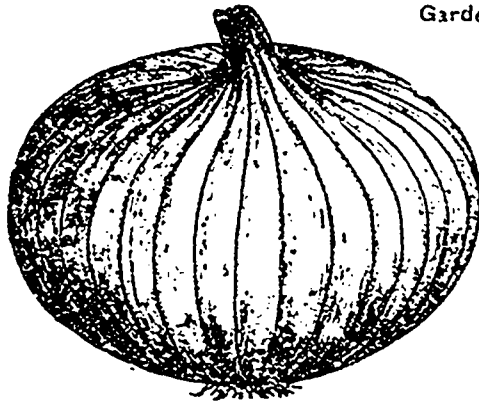
Our Assortment comprises all the best varieties of Garden, Field and Flower Seeds, as well as Clovers, Timothy and other Grasses, Corn and Seed Grain. Spray Pumps, etc. Thomas Phosphate Powder and other artificial manures. Flowering Plants and Bulbs.

WILLIAM EWING & CO.,

142 McGill Street, MONTREAL.

GOOD SEEDS ARE THE CHEAPEST

BEFORE THE PUBLIC NEARLY 50 YEARS.



Garden Collection No. 3—8 Packets for 25c.

Beet—Edmand's Blood Turnip. Carrot—Scarlet Intermediate. Cucumber—White Spine. Lettuce—Simmers' Nonpareil. Musk Melon—Green Nutmeg. Water Melon—The Boss Onion. Large Yellow Strasbourg. Radish—Scarlet. Olive-shaped.

25c.—Simmers' Flower Seed Collection.

10 Packets Choice Fresh Flower Seeds, 25c. post-paid. Contains 10 beautiful varieties of easily-grown annuals in handsome coloured bags, with full directions for their culture. Asters—Choice Mixed. Poppy—Double Mixed. Sweetignonette. Pansy—Good Mixed. Double Imperial Pinks. Snapdragon—All colours mixed. Morning Glory—Mixed. Phlox—Splendid Mixture. Tall Nasturtium—Mixed. Sweet Peas—All colours mixed.

Collection D.

15 Packets of Choice Vegetable and Flower Seeds, only 50c. post-paid.

Full directions for their culture will be found on each packet. Beet—Edmand's early. Carrot—Scarlet Intermediate (stump-rooted). Cucumber—Improved Early White Spine. Lettuce—Simmers' Nonpareil Catalogue. Musk Melon—Montreal Green Nutmeg. Water Melon—Seminole. Onion—Yellow Globe Danvers. Radish—Early Scarlet. Olive-shaped. Asters—Choice Mixed. Poppy—Double Mixed. Sweetignonette. Pansy—Good Mixed. Double Imperial Pinks. Snapdragon—All colours mixed. Morning Glory—Mixed. Phlox—Splendid mixture. Tall Nasturtium—Mixed. Sweet Peas—All colours mixed.

ADDRESS ALL ORDERS

FREE with every order a packet of Japanese Morning Glory. Mention FARMING.

J. A. Simmers, TORONTO, ONT.

Reliable Seeds

THAT'S what we have sold for the last 30 years, and our customers have never been disappointed. The thousands of testimonials on file in our office speak in the highest praise of the reliability of our Seeds, also accuracy, neatness of packing and promptness of our dealings with our patrons.

BELOW ARE SOME OF OUR PRICES—WILL YOU NOT TAKE ADVANTAGE OF THEM!

Pearce's Canadian Giant Mangel

The best selected stock of Long Red Mangel grown, immense cropper 1 lb. 12c. post-paid 15c.

Webb's Giant King Swede

No swede ever grown has produced such crops, good keeper, good quality, good shape 1 lb. 15c. post-paid 19c.

Pearce's Half Long White Carrot

Best White Carrot grown, so say the Guelph and Ottawa Experimental Farms reports. 1 lb. 30c., post-paid 35c.

"Dwarf Essex" Rape

For sheep pasture or plowing under this is the best article grown 1 lb. 10c., 10 to 25 lbs. at 8c. per lb., 50 to 100 lbs. at 6c. per lb.

Danish Improved Sugar Beet

Nearly a ton of sugar in this than any mangel grown. No one in the trade has a monopoly of this beet. Our trial of all samples last year shows we have the best. 1 lb. 30c.; 4 lbs. (enough for an acre), \$1.00, post age 1c. per lb. extra.

White Hull-less Barley (new)

A Barley without beards or hulls. Is not that a boon to the farmer? Heavy as wheat. Peck 75c., bushel (45 lbs.), \$2.50.

Spring Wheat

COLORADO—Best bearded variety. Bushel, \$1.15. WHITE RUSSIAN—Best bald variety. Bushel, \$1.15. Bags 15c. each.

How many of Pearce's Eclipse Peas in a pint?
One guess for every DOLLAR
your order amounts to.

JOHN S. PEARCE & CO., LONDON ONT.

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MARKET REVIEW AND FORECAST.

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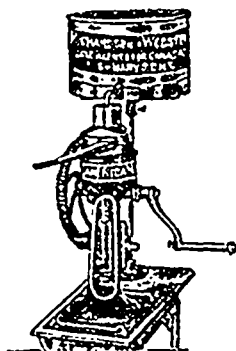
Toronto, April 17th, 1899.

General trade has been materially affected by the late spring. Business in many sections has been almost suspended because of the almost impassable condition of the roads, and there is not likely to be any great activity till navigation opens.

Wheat.

The wheat situation continues to arouse the interest of the speculative element, and the condition of the crop is still the absorbing topic. It is only during the past week or ten days that we have had any weather favorable to winter wheat. A year ago the winter wheat crop of the United States was estimated at 380,000,000 bushels, grown on 25,700,000 acres. Last fall's sowing has been officially estimated at 29,950,000 acres, an increase of 16 per cent. Were the outcome of the crop this season to maintain the same ratio as last year's it would mean an increase of about 16,000,000 bushels in production. On this point the *Commodities Price Current* says: "But it is safe to assume that such results will not be reached, and that instead of the gain in area proving to more than balance the lowering in condition there will in fact be a large shortage in comparison with last year's production of winter wheat, which in our opinion is likely to be not less than 10 per cent."

The Liverpool market advanced some at the end of the week and all round there was a firmer feeling. The market on this side has experienced some sharp advances and reverses, owing to the speculation on the crop outlook. The panic at New York a week ago had considerable effect on the wheat market and it is probable that prices would have been higher had it not occurred. The visible supply of wheat and flour and wheat in transit to Europe from the United States and Canada is equal to 66,111,800 bushels as against 69,880,000 bushels a year ago. There is still an unsettled tone to the market at Montreal with quotations 68 to 69c. f.o.b. at country points west. There seems to be a little better enquiry for wheat here owing to the advances elsewhere. Holders are asking 70c. for red and white west with millers bidding 68c. Goose is quoted at 65 to 66c. north and west, and No. 1 Manitoba hard 60c. and No. 1 northern at 77c. Toronto. On the local market red and white brings 70c.½, spring five 69c. and goose 65 to 65½c. per bushel.



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Oats and Barley

The English oat market is firmer and higher. There has been a decided improvement in the demand for oats at Montreal and as high as 31 to 31½c. middle freights has been paid. At present it would seem as if we were going to have higher prices. The market here is firmer at 30 to 31c. north and west. On the local market oats fetch from 36½ to 37c. per bush.

Barley is quiet at Montreal and prices here are merely nominal at about 42c. west.

Peas and Corn.

The English market has been dull with the demand checked by too high prices. There is a quiet but steady feeling at Montreal and quotations are 72 to 73c. in store and 74½ to 75½c. afloat. Peas are steady here at 62 to 63c. north and west. These are also the ruling prices on the local farmers' market.

Corn at Montreal is quiet at 43 to 44c. for No. 2 American mixed. American brings 41 to 42c. on track here.

Bran and Shorts.

The market for these keeps firm owing to the late spring and the demand from farmers for feed. Ontario bran is quoted at Montreal at \$15.75 to \$16.50 and shorts at \$17 to \$18.50 per ton. City mills here sell bran at \$14.50 and shorts at \$15.50 in car lots f.o.b. Toronto.

Clover and Timothy Seeds.

These has been more doing in these at Montreal, where quotations are: Ontario timothy, \$1.75 to \$2; American, \$1.25 to \$1.50; red clover, \$3.75 to \$4.50 and Alsike, \$3.50 to \$4.50 per bushel. The deliveries of red clover here have not been large and the market has somewhat improved. Local dealers quote \$3 to \$3.25 for red clover, \$2 to \$4 for Alsike and \$1 to \$1.50 per bushel for timothy at outside points.

Eggs and Poultry.

The English markets for eggs are easier owing to large receipts from Ireland. The Montreal market is quiet and lower by 4 to 5c. than a week ago, sales being made at from 12 to 17c. There is reported to be considerable eggs stored here. They seem to be plentiful now and easier at 12 to 12½c. wholesale. On the retail market they fetch about 15c. per dozen.

Fresh killed poultry keeps firm at Montreal. The market here is quiet at 11 to 13c. for turkeys and 6 to 7c. per lb. for geese, and 40 to 70c. for chickens, and 50 to 75c. per pair for ducks.

Potatoes.

The Montreal market is quiet at 68 to 70c. per bag on track. The market here is also quiet at from 75 to 80c. for cars on track and 90c. out of store. They fetch from 75 to 85c. per bag on the local farmers' market.

Fruit.

Apples are quiet but firm at Montreal at \$3 to \$5 per barrel. They bring from \$2.50 to \$4 per bbl. on the local market here.

Hay and Straw.

The late spring and the extra amount of feed required for stock are eating into the big hay crop pretty badly some places. In the

western part of the province hay is selling locally at about \$10 per ton. The Montreal market for baled hay is firmer at \$5.50 to \$6.50 for choice No. 2 ordinary. The market here is about the same at \$7.50 for cars on track and \$4.50 for baled straw. On the local market timothy brings \$9 to \$10; clover \$6 to \$7.50; sheaf straw \$7 and loose straw \$4 to \$5 per ton.

Cheese.

Cheese business of 1898 is about at an end. There is a deficit of 215,902 boxes as compared with a year ago, the largest ever known in the history of the Canadian cheese industry. This coupled with the decrease in the exports from New York make a total deficit of 534,873 boxes. Old cheese has sold during the week at Montreal at 11 to 11½c. and some few lots of fodder goods at about 10c. The English market continues firm under light and gradually reduced supplies. There is a good demand at the advance, and holders are not anxious to sell. It is likely that all the old stock will be sold off before the season closes on April 30th, leaving the field clear for the new goods.

Butter.

The *Trade Bulletin's* special London cable of April 13 reads: "The butter market has declined 2s., but at the drop there is a better demand. Finest Canadian 90 to 93s.; seconds \$3 to \$6s." There has been a sharp decline in prices at Montreal, and sales are reported of choice creamery at 17 to 17½c. and even lower prices are talked of. Supplies seem to be increasing fast, and there is a large prospective; though the high price of cheese may cause the combined factories to make the latter rather than the former, which may lessen butter supplies somewhat. The exports of butter from Canada for the season of 1898-99 show an increase of 100,874 packages as compared with 1897-98. There has been a decrease in the shipments from the United States of about 50,000 packages, making the net increase from both places about 50,000 packages.

The market for creamery butter is easier at about 20c. for prints and 18 to 19c. for tubs. There have been liberal receipts of dairy butter, which brings 13 to 15c. for tubs, 15 to 16c. for lb. prints, and 14 to 15c. for large rolls. On the local market here pound prints bring 16 to 18c. and large rolls 15 to 17c. per lb.

Cattle.

Though Chicago and other Western markets remain firm and steady there has been an easier feeling here. Owing to the lower market reports from outside places, the bad weather, the scarcity of space on boats and the absence of a number of outside buyers, prices for all kinds of fat cattle were lower on Friday on Toronto market, especially for inferior grades, which were too plentiful. The quality of the fat cattle offered was fair. The run of live stock was not what may be considered a heavy one, but in the present easy state of the market it was larger than needed. Reports from Montreal indicate that cable quotations must be losing shippers some money unless they bought very cheaply.

Export Cattle.—Choice loads of heavy ones sold at \$4.50 to \$4.90 and light ones at \$4.50 to \$4.75 per cwt. Heavy export bulls bring \$3.75 to \$4 and light ones \$3.40 to \$3.60 per cwt.

Butchers' Cattle.—Choice picked lots of these, equal in quality to the best exporters, and weighing from 1000 to 1100 lbs. each, bring from \$4.40 to \$4.60, and good ones from \$4.25 to \$4.35, with medium lots selling for \$4 to \$4.15.

Stockers and Feeders.—These are in good demand in the Western States, and on the markets here they are scarce. There was a good supply of Buffalo stockers on this market on Friday, with prices ranging from \$3 for inferior to \$3.90 per cwt. for choice bred steers. Stock heifers fetch \$3 and stock bulls \$2.50 per cwt. Heavy feeders, weighing from 1000 to 1150 lbs., are scarce and worth \$4 to \$4.25 per cwt. Feeding bulls suitable for the buyers are worth from \$3 to \$3.50 per cwt.

Cattle.—These have been in good supply at Buffalo, with a moderate demand. Out of about 60 calves offered on this market on Friday only two or three could be classed as good. Prices range from \$2 to \$10 each, the bulk going at \$4 to \$6 each.

Milk Cows and Springers.—The quality of these offered has not been good. The general run sell for \$25 to \$45 each.

Sheep and Lambs.

Receipts at Buffalo have been too liberal for the demand, and prices were 15c. lower on Friday. The run of sheep and yearling lambs continues light on this market. Lwes bring \$3 to \$3.50, and bucks \$2.75 to \$3 per cwt. Yearling lambs are firm at \$5.25 to \$5.40 for grain fed lambs, and \$3.50 to \$3.75 per cwt. for barnyard lambs. Spring lambs sold for \$4 each on Friday.

Hogs.

The market here for hogs shows but little change excepting in a lessening of supplies. The complaint is made that drovers are taking their hogs elsewhere, where they can get better prices and not have them culled so closely. Packers at Hamilton are said to be paying \$4.45 for choice bacon hogs, while packers here only pay \$4.37½ for choice select bacon hogs weighing from 160 to 200 lbs. Light ones fetch \$4 and thick fats \$3.75 per cwt. The *Trade Bulletin's* cable of April 13th re Canadian bacon, says: "The market for Canadian bacon is steady, notwithstanding the liberal receipts of American, and quotations are unchanged. Canadian pea fed lean sides, 38s. to 40s.; No. 1 and ordinary, 36s. to 38s."

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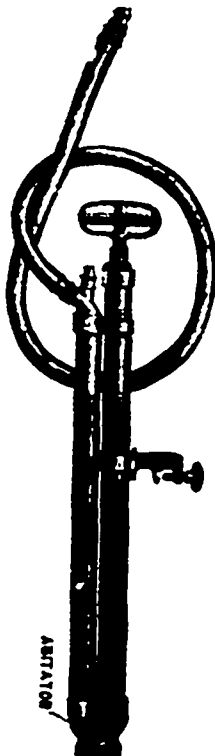
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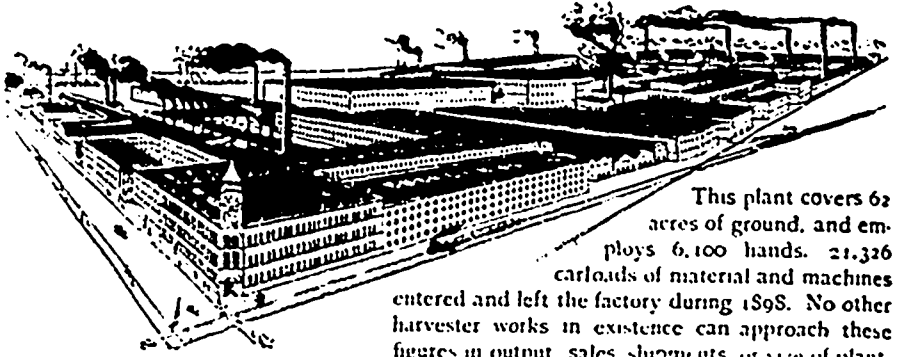
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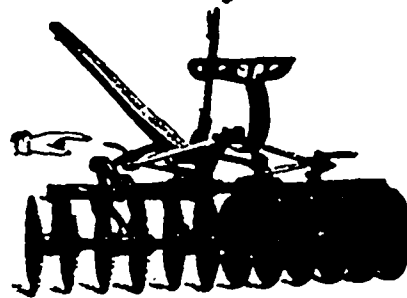
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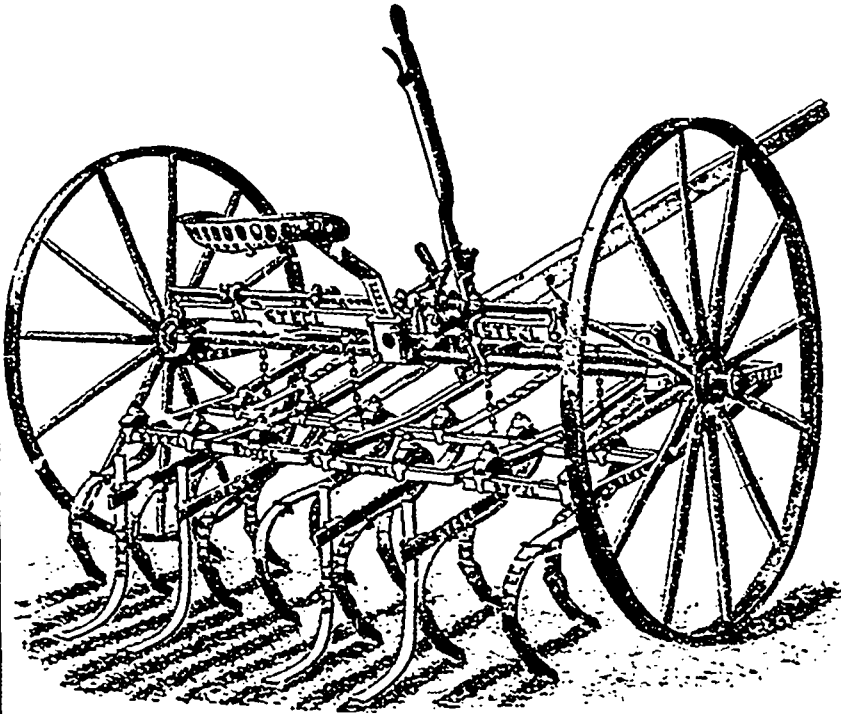
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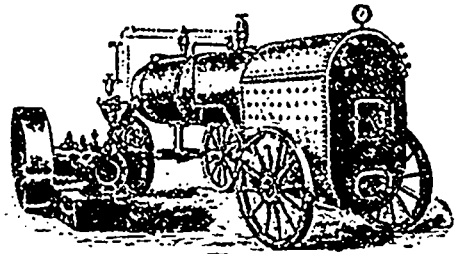
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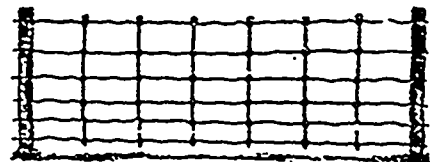
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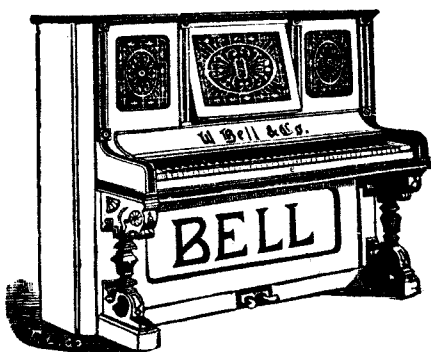


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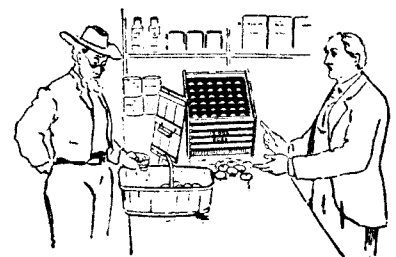
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