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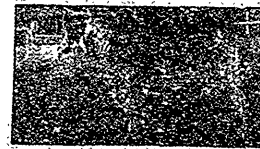
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...LEADING TOPICS FOR THE WEEK...

The San Jose Scale. Breeding Cattle in Demand. Agriculture in the English Universities. Early vs. Late sowing. Scarcity of Fine Wools. The London Horse Show. The Effect Spraying has on Bees. Canadian Oats in England. The Propriety of Sires. The Poultry Industry of Canada. Market Review and Forecast. Fostling Time. Fodder Cheese. Questions and Answers. Correspondence, etc.

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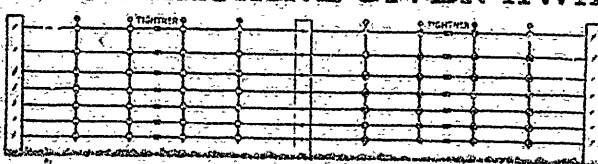


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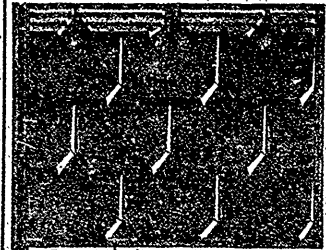
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FARMING

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TOPICS FOR THE WEEK

Read This.

CREEMORE, Feb. 24th, 1898.

Dear Sirs,—Please find enclosed \$2.00 for the past year and also for this year. We did not instruct your agent to send us FARMING, but when it came we liked it very much and receive a great deal of information from it, and after some time found that we could not get along without your paper.

Yours truly,

JAMES NAVLOR.

GREENBANK, Feb. 18th, 1898.

Dear Sirs,—Enclosed please find \$2.00 for FARMING to June, 1898. I am highly pleased with FARMING and especially with the market reports. I could not get on without it, and I would be lost if I did not receive its weekly visit.

Yours truly,

GEORGE LEE.

The opinion expressed by these letters is that of every subscriber for FARMING. They all appreciate its regular weekly visit and its timely and up-to-date articles. The weekly market review and forecast is most highly commended. It is really worth ten times the price of one year's subscription to any farmer who has produce to sell.

We are open for receiving new subscriptions at any time. Look up our special seed premiums in this week's issue. Specially selected varieties given for new subscribers for FARMING. You should not miss this offer of securing new seeds for both the garden and farm. Now is the time to begin.

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Our British Letter.

The Agricultural Depression in England and its Cause.

(By Our Special Correspondent.)

London, Eng., March 9, '98.

Every newspaper one picks up at the present time devotes a portion of its space almost daily, or weekly, as the case may be, to the gold-finding business in the Klondike. So much has this sub-

ject taken hold of men's minds here—as elsewhere—that even at the pedigree stock shows of the past fortnight one found the subject cropping up wherever a bevy of farmers happened to find themselves talking together. I was at the annual show of pedigree hunters to-day (a large and first-class show too, it is), and I had not seated myself in the press stand (to be seated in a stand sounds a bit paradoxical, but let that pass) more than twenty minutes, when a breeder, who had just been awarded a prize called out to me, "Holloa! that's almost as good as going to the Klondike."

There was more than a modicum of truth in the jocular assertion, and I have lead up to this point in order to say a word on the subject to which, stripped of metaphor, it clearly refers. Now, at this hunters' show we see the *crème de la crème* of the pedigreed hunting horses of Great Britain. The breeder in question meant to infer that having won at this, the best show in question, he would for the produce of his animal be able to get tip top prices. The same principle is being recognized, I am glad to say, more and more by farmers in general—whether what they send for competition be horses, cattle, sheep, pigs, or dairy produce. In England, of all countries, it is the best which pays. And if this is so, as applied to what we ourselves grow, it is doubly so as applied to those outside our shores who desire to gain or to retain a foothold in our markets. I am glad, therefore, to observe in an issue of FARMING to hand this week that this lesson is enforced; and if I refer to the matter it is but to enforce a truth which I am afraid is sometimes forgotten.

Farming in England at the present time is better than it has been for some few years past. Not that it is bright even now. Perhaps I ought rather to have said that farmers here are now *losing less* than in recent years; for, whilst many are just now—with the rise in wheat and fair prices for stock—holding their heads fully above water, I am afraid there are very many more who are still losing their capital, though more slowly than two to five years since.

I cannot, of course, here go into a long statement as to why British agriculturists, as a body, are depressed in their calling; but if you ask the farmers themselves why it is, they will commonly answer that it is owing to Free Trade, high rents, and bad seasons.

Free Trade has undoubtedly hit our agriculturists uncommonly hard; but I don't think that is anything like an adequate cause for the depression. Bad seasons, too, have something to do with it, but I cannot remember that the seasons have lately been much worse than formerly. Then as regards high rents, why even a Radical politician writing in one of our chief reviews this month admits that high rents have not been the cause of the depression. I don't know what a Radical is in Canada. I know what he is here: and in a few words, he may be described as "one who is always agin' the landowner." The politician in question is the exception who proves the rule, and, being such, his statement merits recognition.

This same politician, however, quoting *The Rural World*, puts down the farmers' depressed condition very much to the lack of technical education. It is, I think, unfair to account for the depression in this way. It is not due to any one cause, though the lack of technical education is no doubt accountable for a good deal. This is, indeed, the view which the paper in question enforces. It may seem strange to Canadian farmers that I should charge British agriculturists with any lack of technical knowledge, seeing that they produce the finest farm live stock of every

breed. But, after all it is true. The be-all and end-all of farming is not the production of stock, though even here half of our agriculturists are not experts. Where our farmers are lacking in technical knowledge is in their cropping and feeding arrangements. Science to them is a "bugbear," and yet without science, you cannot have such technical instruction as is common in other countries.

The San Jose Scale.

A bill has been introduced at Ottawa and which has already become law, by the Hon. Mr. Fisher, Dominion Minister of Agriculture, which prohibits the importation into Canada of fruit trees from countries where the San Jose scale exists. A great many trees come into Canada every year from the nurseries of the United States where the San Jose scale is known to exist. Mr. Fisher's bill will absolutely put a stop to this trade and compel our fruit men to get their new stocks of trees from Canadian nurseries.

This may seem like a pretty drastic measure, but considering the nature of the disease known as the San Jose scale, and what a scourge it is when it gets a foothold, no legislation can be too strong when it has for its object the protection of our fruit trade from injury from this destructive pest. The disease is so hard to locate and necessitates a microscopic examination in order to detect its presence on trees in its initial stages, that only an absolute prohibition of the importation of trees from countries where the disease exists will prevent its coming into the country. From the very nature of the thing the most rigid inspection would not suffice. As Mr. Fisher pointed out in his address when introducing the bill an inspection of the trees at the port of entry would necessitate the unpacking of every bundle of trees. This, owing to the tender condition of the young trees, would be extremely risky and would entail serious loss to the shipper. The only sure way, then, of combatting the disease is to prevent its coming in with young trees, and if a rigid inspection of the fruit trees already in Canada is enforced our fruit interests may be kept free from this pest.

Though this legislation may perhaps injure our fruit trade with the United States, it will serve to strengthen our position very materially in the European markets. As we have pointed out elsewhere there is already an agitation in Great Britain in regard to the matter, and measures may be adopted there very shortly to prohibit the importation of fruit from countries where the San Jose scale exists. Then, the action of Germany in prohibiting the importation of fruit from the United States may afford an opportunity for Canadians to develop their fruit trade with that country if it is known that the San Jose scale does not exist in Canada, and that such regulations have been adopted as will absolutely prevent its being brought into the country. Self-protection is one of the fundamental principles of all legislation, and when a necessity arises any government is perfectly justified in making laws, however drastic they may be, when this object cannot be attained in any other way. For this reason, this new legislation will meet with general approval from everyone interested in the development of our fruit trade, and we do not think our friends to the south will take it in anything but a kindly spirit.

Early versus Late Sowing.

There is a doubt sometimes as to when is the best time to sow spring grains, and as to whether early or late sowing will be the more advantageous. If the soil be in a suitable condition and

the temperature of the air and of the soil be sufficiently high, there is no doubt but what early sowing will be advantageous to the crop. As a rule a larger yield of grain and a better sample can be obtained by early sowing than by late sowing. Usually in late sowing a larger bulk of straw is obtained, but the straw is very much weaker than from early sowing, the grain inferior, and the yield deficient. The reason for this is that the plant has not sufficient time to mature before the ripening season comes on, whereas with early sowing the plant has every opportunity to develop, and if conditions are favorable returns will be much surer.

However, farmers should guard against sowing too soon or before the soil and air are sufficiently warm to promote rapid growth. No field should be sown until every part of the field is in the same condition as regards the pulverization and nature of the soil and as regards warmth. If one part of the field is warmer than the other the seed sown on that portion will germinate earlier and the result will be an uneven crop when harvest comes. For example, it very often happens that when a field of oats is harvested a large portion of the grain ripens earlier than the rest, and is lost. This is often due to uneven conditions in the soil when the seed was sown. It may also be due to the quality of the seed sown. If the seed sown consists of small and large grains, there is likely to be a difference in the time of ripening, as the larger and more fully developed grain will produce a plant that, under similar conditions, will ripen earlier than a plant grown from a smaller grain. Besides, the results of experiments carried on at the Experimental Station, Guelph, during the past four years show that the yield will be very much greater from large, round, plump seed than from small seed. To ensure a good crop that will ripen evenly the farmer should aim at having an even seed bed, an even degree of warmth in the soil, and a good quality of seed.

Whether the sowing is done early or late it always pays to work the land well before the seed is put in. Our best grain farmers are those who give particular attention to this point, and who aim at having the soil thoroughly pulverized before the seed is sown. Extra cultivation and extra harrowing will always pay providing other conditions are favorable, and though it will pay to sow as early in the spring as possible, yet it will be injurious to do so before the land is in perfect condition for receiving the seed.

Breeding Cattle in Demand.

Reports from nearly all sources and especially from the western cattle ranges show a great demand for breeding cattle. So great is the demand that it is almost impossible to supply it. Auction sales of cattle are largely attended and prices are higher than they have been for some time. The stockmen who foresaw how things would be a year or two ago and stocked up at the low prices that prevailed are now making big money on their investments. In the Western States speculation in steers has been heavy and at constantly advancing prices.

One good feature in the situation is the demand for registered stock. The prices for registered males in the west have trebled in many instances. This also leads up to a universal demand for cows and heifers. It is estimated on the very best authority that it will take at least four years to restock the ranges with cattle to their former capacity, as it will take three years to get steers on the market after the cows begin to breed. The breeders in the west are therefore looking for five or ten years of good business in the cattle trade, and conditions favorable to their interests will be favorable to breeders elsewhere. Canadian breeders may look forward with hopefulness also.

Scarcity of Fine Wools.

"The supply of fine wools in existence to-day is smaller (relatively to the world's needs) than it has been at any time within the longest memory." So says *The Monthly Bulletin* for March of the

National Wool Growers' Association. This statement is based upon facts connected with the world's output for the past two years gathered from reliable sources. The world's wool market, and particularly that of fine wools, is governed by the Australian output. The 1897 clip of wool in Australia was very much short of the usual output, and the quality, owing to the drought, was considerably deteriorated. As the conditions for 1898 are not likely to be an improvement over those of 1897 we may look for a further curtailment in this year's clip. The last clip of wool there showed a falling off of 170,000 bales, and if anything near this occurs this year there will be a most extraordinary depletion of the stocks of fine wool. Therefore, unless the demand for fine woollen goods falls very much below the usual demand fine wools will command high prices during the next few years.

There is this feature to be considered, however, if the price of the best quality of wools goes up to a high figure, consumers are apt to content themselves with an inferior and lower priced article. Should such a condition of things arise the growers of fine wools would not receive the full benefit and a share of the advance in prices would fall to the producer of the coarse variety.

The Poultry Industry of Canada.

By THOMAS A. DUFF, Toronto, Ont.

(Continued from last week.)

FEEDING FOR EGGS.

One of the most important considerations in the management of poultry is the feed. Fowl require a balanced ration in order to produce eggs as much as the dairy cow requires such a ration for the production of milk. It requires a certain quantity of food to be taken into the system to keep up the constitution and to supply heat, the balance or surplus food going to make up that which is produced. Poultry should, therefore, be fed that class of food which contains the ingredients necessary to make up the egg. I am quite satisfied that very little, if any, money can be made out of poultry which are fed wholly upon a grain ration. The food will prove too costly.

Do not feed too much or too little. Fowls require a change. It is absurd to suppose that a continuous supply of wheat, without change of variety, will do. For egg production I would recommend the following:

In my opinion clover hay is one of the very best foods you can give to laying hens, for many reasons. It is bulky. It contains the nitrogenous elements and the carbohydrates in excellent proportions for the nourishment of the fowl. It is rich in mineral constituents. Compounds of lime are abundant, such as are required for shell formation. The poultry relish it at all seasons. It is especially appetizing to them in winter when there is a dearth of green food. Put the shortest cut upon your straw-cutter and cut the clover into lengths from three sixteenths of an inch up, having, if possible, none longer than an inch. Take a quantity sufficient for your purpose (and of this you must be the sole judge, according to the number of fowl kept), and put it into a pail or boiler, then take a kettle of boiling water and pour it over the clover; cover with a cloth, and leave it to steam for from twenty minutes to half an hour according to the temperature of the weather. Into this I would mix equal parts (bulk) of bran, shorts, oat chop and barley meal, and to every twenty-five hens I would add one pint of pea meal. First mix these meals thoroughly together, and add to the steamed clover. Mix as dry as possible, as it is dangerous to feed sloppy food. A great many people run away with the idea that the morning food should be fed as hot as possible; this I believe to be a mistake, because when the fowl are fed hot food they are not in a condition to withstand any sudden change of temperature, and the result is distemper and roup. The morning food should, therefore, never be fed warmer than milk heat. I would recommend these to be fed in a trough about three inches deep, placed against the wall so that the fowl

could not get their feet into it. Do not allow the fowl to gorge themselves, as it makes them lazy. A hen should be active—always busy. Such are the best layers.

I cannot too strongly comment upon the feeding of green bone. In my opinion it is, *par excellence*, the greatest boon the poultry world has had in years. I would give a little of this at noon each day, allowing about one ounce to each bird. Should it be impossible to get green bone, I would advise giving a little skim milk or buttermilk, and failing that, a liver, which should always be parboiled before being fed.

It will be admitted upon all sides that poultry, as a rule, lay better in summer than in winter. The reason for this is that they are able to get the proper kind of food which goes to make up the egg. They get animal matter in the shape of grass-hoppers, worms, grubs, flies, etc., and vegetable matter or green food in the way of clover tops, grass and the like. If, therefore, you feed the same kind of food in the winter as they themselves gather in the summer, and have a warm, comfortable house, it stands to reason that you should get a good supply of eggs in the winter months when the price is high, and winter eggs is where the profit comes in. Be sure, therefore, to feed plenty of vegetable matter. This can be given in the shape of cabbage, turnips or mangels.

At night I would feed whole grain—all that the fowl will eat up clean. Do not mix the grains, but give a variety—one week wheat, another buckwheat, another corn, etc.

Plenty of fresh water should always be given, and it is a good practice, during the winter, to take the chill off it. After they have done drinking throw the water out. Plenty of sharp sand and gravel should always be within reach, also lime for the formation of shell. This can be supplied by placing old plaster where the fowl can get at it. The best article for this purpose, however, is ground oyster shells which can be bought at almost any seed store, and is now kept by druggists and hardware merchants all over the province.

The Prepotency of Sires.

At the recent live stock shows held in England visitors were greatly impressed by the striking examples of the prepotency of sires to be seen in many of the animals exhibited. One remarkable instance was that of the get of old Harold, the noted winner in the Shire horse classes. For the last two or three years winners at the Shire horse shows have to a large degree been of the Harold get, and last week's results show this in a more marked degree. The owner, Mr. Henderson, swept nearly all the prizes in the Shire classes at the London show, and the primary cause of his success is high-skill breeding by illustrious sires so as to get the right material, after which the trainer's art would be requisite to make the highest type of animal.

The wonderful success of the Harold get and the high reputation enjoyed by so many animals of that lineage have naturally raised the value of every animal partaking of it to a high limit. So much so is this the case that the prices asked for mares and fillies of this strain and for the hire of Harold stallions are considered by some to be extravagant. Whether this be so or not there is no doubt that the prices asked are within reason and what many who appreciate really fine animals are willing to pay. Our farmers would be thunderstruck if they were asked to pay the prices for the service of a sire that some of the English farmers are quite willing to pay. For the service of Markeaton Royal Harold, 15 guineas are asked for each mare. This is about the price that many Canadian farmers expect to get for a colt when a year or two old. However, everything considered the price is not an exorbitant one, and a sire with the reputation for getting good stock which one of the Harold strain possesses will give a good return.

The same law of the prepotency of the sire is noticeable in every high class breed of cattle,

sheep or pigs, and the best animals can scarcely be over estimated in respect to their real worth. When twenty three years ago the celebrated Short horn bull calf, Duke of Connaught, was bought for 4,500 guineas, everybody thought the purchaser mad, but time has proven the very opposite. As much as 100 guineas were charged as fees for his service, and instead of being a financial loss as many predicted, his purchase has been remunerative. If a stallion, bull or ram or boar of almost unprecedentedly grand character and high quality happens to have a marvellous prepotency, besides and thereby transmits his superior characteristics to all progeny, the value of such an animal can scarcely be over estimated. There are striking examples of this strong prepotency not only in horses and cattle, but in sheep and swine. An animal of this character is of value because its influence will live after him, and his offspring will transmit the same prepotent qualities to future generations

Agriculture in the English Universities.

A movement is on foot in England to establish an agricultural department in connection with one or two of the leading universities. The only difficulty seems to be to provide sufficient means to finance the scheme. The university senates seem loth to spend any money on the venture but might do so if the venture were to prove successful, and consequently the promoters of the scheme will endeavor to provide the necessary funds from outside the universities for inaugurating the work. The plan is to establish a readership in agriculture at Cambridge, and in connection therewith a special examination in agricultural science for the ordinary B.A. degree, analogous to the special examinations in mechanical science and music. Sir Walter Gilbey, a great friend of agriculture, is ready to offer Cambridge University the sum of two thousand pounds to provide a stipend of £200 a year to a reader in agriculture during the next ten years as soon as the promoters are ready to go on with the scheme.

A training of this kind in agricultural science would meet a long-felt want in the great universities of England. It is here that the landlords of the future are educated and it is of vital importance to the country that they should learn something of the science of agriculture whilst at the university, with the view to the better management of their estates in after life. It is evident from this that agriculture is gradually obtaining its proper place among the advanced sciences in England and is not looked upon as being beneath contempt, as it is in some of the centres of learning in the new world.

Fodder Cheese.

There are several reasons why our dairymen should not make fodder cheese. In the first place it is of inferior quality to the cheese made when the cows are on the grass, and for which Canada has acquired such an enviable reputation in the British markets. By sending forward this early fodder cheese it serves to depress the market for the later goods, and because of its inferior quality gives our cheese a bad name. Then we do not think it the most profitable line of farming to sell all the milk off the farm in the early spring when it is so much needed for the calves and young stock, and especially is this the case this spring when the cheese market is glutted with last season's goods and the price is likely to start lower than for many years. If no fodder cheese is made, and no new cheese is sent forward till about the end of May the cheese market will have an opportunity to recover somewhat and the prospect for next season's trade made brighter. In addition to all this there is the fact that the demand for fine creamery butter is good and that prices are likely to be fairly remunerative for some time. It will, therefore, pay dairymen better to make butter till about the middle of May and have the skim-milk returned to the farm for feeding the calves during their early growing period.

Canadian Oats in England.

There is a growing demand in England for Canadian oats. Since the opening of navigation last year about 7,000,000 bushels of Canadian oats have been sent to England, the largest quantity ever exported in a single season, and valued at about \$2,000,000. There is still a good demand in England for Canadian oats, although prices are somewhat lower.

Russian oats command the highest price of any oats sent into England, and for many years have about controlled the market. There are signs now that Canadian oats are gradually taking the place of the Russian oats in Great Britain. In several cases, recently, Canadian oats have brought prices almost equal, if not equal, to those obtained for Russian oats. About ten days ago a lot of 3,000 quarters of No. 2 white Canadian oats was sold at within 6d. per quarter of the best Russian oats on the market, namely, 17s. ex-quay; and a lot of 2,000 quarters No. 2 mixed Canadian sold at 16s. 6d. landed terms. The London market reports of the same date quoted sales of Russian oats at 16s. 6d. ex-quay, and consequently here is an instance where Canadian No. 2 mixed oats brought as much as the Russian oats on the London market. About March 1st, mixed American oats were selling at about 15s. 6d. ex-ship, so that Canadian oats bring from 1s. to 1s. 6d. more than American in the British markets.

This condition of things will be satisfactory to the Canadian farmer. Though we do not consider the selling of the coarse grains off the farm to be the most profitable kind of farming to adopt, yet there are many Canadian farmers who from the very nature of things have a surplus of coarse grains every year which it is necessary to dispose of in some way other than by feeding. For these the opening up of new markets for oats and other coarse grains will be beneficial. This largely increased demand in England has to some extent stimulated prices here, though they are lower the last week or two than they have been during the winter. Stocks are accumulating very fast, and we may look for easier prices yet. Comparatively speaking, prices have been high so far this season. A year ago oats were several cents a bushel lower than they are at the present time.

Intensive Farming.

It is not always the large farms that pay the best. Many farmers are working too much land. A smaller area thoroughly worked will return a larger income. It would do some of our large farmers good to visit the truck farms in the vicinity of the larger cities, especially in the neighborhood of New York. On Long Island and in New Jersey there are many small areas, kept up to a high state of fertility, that give much greater returns than many of our large farms. Every inch of the soil is thoroughly cultivated. A crop is planted as early as possible and the soil is kept in constant use until the end of the season. The same land must yield at least two or more crops every year.

NOTES AND IDEAS.

The estimated amount of corn on hand at this time is said to be 745,000,000 bushels as compared with 1,083,000,000 one year ago. These figures are giving considerable hope to holders who are looking for a rise in price. In the corn belt of the west live stock feeding has been carried on to a very large extent this season, and it would not be surprising if the supply of corn were pretty short before the present year's crops are harvested.

A striking example of what can be accomplished by intelligent and systematic effort in breeding is seen in the experiments of an English breeder. He applied the natural selection principle to the dairy and without any change of breed, bred from such cows as gave the best average yield of milk. In 1890 the average was 740 gal-

lons per cow, but in the following year it was only 720 gallons per cow. Since 1892, however, progress has been uninterrupted, and without buying any expensive milking strains to improve the herd the yield was 879 gallons in 1896. The steady observance of which cows were doing best, and the trust in a whole year's average in each case, were the clue to this remarkable success.

It is expected that farm help will be scarce during the coming season. Already farmers in several sections are making inquiries of the Department of Agriculture in regard to the matter. The rush to the Klondike and the fresh impetus given recently to emigration to the North-west are the causes of this scarcity, as they are attracting the floating population to the west.

New avenues for Canadian trade seem to be opening up. The Canadian Trade Commissioner to Australia is of the opinion that Canadian cheese might find a market in that country and advises making small cheese, weighing about ten pounds, for this trade. The liners from Victoria are now fitted up with cold storage facilities and consequently cheese could be shipped without any great risk if the market would warrant its being a profitable venture. The Department of Agriculture at Ottawa has been requested to make a trial shipment to test the market.

Owing to the drouth there have been heavy shipments of grain and flour from other countries into Australia, and some shipments of Canadian flour have met with a successful sale there. Other lines in which Canadian trade with Australia may be developed is in furniture and boots and shoes.

The producers in great Britain are asking for amendments of the law relating to the adulteration of foods and drugs. One of the proposals is that the coloring of margarine and its mixture with butter should be totally prohibited. Such a regulation, if it came into force, would be of value to those countries which ship only pure food products into Great Britain. For instance, with the law as it now stands, the Canadian butter-maker has not only to compete with the butter from other countries, but with the large quantities of margarine which appear to find their way onto the British market.

CANADA'S FARMERS.

W. J. Bell, Angus, Ont.

We have pleasure this week in presenting the readers of FARMING with a short sketch of one of our leading poultry men, in the person of Mr. W. J. Bell, Angus, Ont. In our special poultry number of January, '97, we gave a sketch of Mr. Bell's life and work as a poultry fancier, and therefore will not need to enlarge very much along that line just now. Suffice it to say that Mr. Bell is a thorough Canadian, and was born on the farm on which he now resides, near Angus, in the county of Simcoe. With the exception of several years spent in a neighboring township, Mr. Bell has always resided at Angus.

Mr. Bell is one of our most extensive poultry-raisers, and, unlike many farmers who keep poultry, makes it his especial line of farming. Though several varieties of poultry are kept, Mr. Bell has acquired his reputation as a breeder of the highest type of Bronze turkeys. In this special line Mr. Bell counts as his regular customers some of the leading poultrymen of Great Britain and the United States. Considerably over fifty of his birds have crossed the Atlantic, and Bronze turkeys from the Hillsdale farm have won first honors at many of the leading poultry shows in Great Britain. This is, indeed, no small honor, and one of which Mr. Bell may feel justly proud. Another of Mr. Bell's specialties is Rose Comb White Leghorns, his birds having won the highest honors at the Madison Square Gardens, New York, whenever shown.

Mr. Bell is an exhibitor at the leading Canadian fairs, where he is always a winner of a large share of the best prizes. His birds are specially renowned for their large size and conformity to type. In addition to poultry Mr. Bell is a breeder of purebred Berkshire swine, and this venture is also proving successful.

Mr. Bell is as yet a comparatively young man, and we may look for even greater results in his special line of work. His ability has been fully recognized by those who know him best, and many positions of trust in his own locality have been ably filled by him.

OF INTEREST TO IMPORTERS OF THOROUGHbred STOCK.

Editor of FARMING:

It would be very useful to the importers of thoroughbred stock if you will kindly make an announcement in your paper in regard to a change in the customs regulations.

As the regulations have hitherto stood, the customs officers have required the importer to leave on file in the office with them the original certificate, both of the pedigree of the animal and of the tuberculin test, having been made, showing freedom from disease. Instructions have just been issued to the officers of the various ports to accept (in lieu of the originals) copies of these certificates, made either by the importer or the consignor, and, upon presentation, certified correct by the customs officer. These copies will serve the purpose of a record in the office of the official in case any dispute arises, and will obviate the inconvenience which has hitherto existed on account of importers having to part with the original certificates, which they frequently require for practical purposes, and having consequently to incur trouble, expense and delay in procuring copies from the original makers.

Thanking you in advance,

SYDNEY FISHER,
Minister of Agriculture.

FINISH THE HOGS PROPERLY.

Complaint is made at the cattle yards that a large share of the pigs that are offering are too fat. They weigh enough, but they have not been well grown, being over-fat from heavy feeding and lack of sufficient exercise.

The high price of pork last fall and the abundance of feed no doubt led a great many farmers to put up a lot of pigs to feed for the spring market. Many of these pigs have evidently been forced along with strong rich feed with the object of getting them up to the proper weight for marketing while prices were good.

The mistake was made of fattening them rather than growing them, i.e., if the bacon market was the market for which they were being fed. More growing food is wanted, more roots, more exercise and less meal. Of course that means a little longer time, but it means also more profit. Prepare a clover patch for the pigs for the summer, so that they may have sufficient run and also make cheap pork.

A NEW REMEDY FOR CHOKED CATTLE.

Sometimes a cow will get choked with a small potato, a piece of turnip or perhaps something else. It is always well to have something on hand with which to relieve the animal. There is nothing better than a good probang. Every farmer should have one. They are cheap and will often save more than they cost in time and worry. The latest suggestion as a remedy is a peculiar one. Fine cut tobacco is dampened with molasses sufficiently to make it stick together, and a ball the size of a hen's egg is made. Now hold up the cow's head, pull the tongue forward and crowd the ball as far down the throat as possible. In about a quarter of an hour it will

cause sickness and vomiting. This relaxes the muscles of the gullet and the object will likely be thrown out.

SUCCESSFUL DAIRYING.

At a recent meeting of the Farmers and Dairymen's Association in New Brunswick, Mr. R. Robertson, superintendent of the Maritime Experimental Farm urged upon the farmers the importance and necessity of selecting and breeding good stock. He said the farmers should study these two questions that they might be able to choose their stock rightly, to be able to tell when they had good cows and then to know how these cows should be bred to produce the best results. This knowledge means money and prosperity to themselves and to the country. If a dairy cow does not make money for her owner it is all the fault of that owner.

To make the greatest success in dairying, essentially dairy cows are necessary, a general purpose cow will not do. Every farmer should select a breed and stick to it. Don't try one breed this year, another next year, and still another the following year. If you do you will get nothing.

In selecting a good dairy cow, look for a bold, sharp eye, this indicates a nervous temperament, for good breathing capacity as shown by conformation and the nostril, this indicates good lungs, a most important point; as she is intended to consume coarse food she should have a long and healthy body and plenty of paunch room. The right size he thought would be about 1,000 pounds. Color was of no importance. Select a dairy sire. Get him as near the dairy type as possible. Keep weeding out the calves from the poor cows, and any calf that does not do well. Keep only the best. Weed out the cows also and keep only the best and most profitable. The best is none too good.

QUESTIONS AND ANSWERS.

CASTRATING PIGS.

W. J. W.—Kindly give me a few pointers on how and when to castrate young pigs.

Ans.—This operation should be performed when the young pigs are from six to eight weeks old. It is a good plan to feed them lightly for a day before and a few days after the operation. The pigs generally do better if altered before they are taken off the sow. It requires two persons to perform the operation. The assistant holds the young pig between his knees with its back on the ground, or better on a carpenter's bench. Then he grasps a hind leg with each hand and presses the legs down on the belly. The operator presses the testicles out until the skin of the scrotum is tight. Then a quick cut is made with a very sharp knife. Some prefer to make a separate cut lengthwise for each testicle; others prefer to make only one cut crosswise. The opening should be only large enough to let the testicle out. The covering of the testicle should then be cut, gradually worked back, the testicle gradually pulled out and finally cut off as close to the body as possible. Some men prefer to let the cut go without any dressing. Some use salt, but it is better to use a little clean lard.

WEIGHT OF HAY.

L.K.S.—Will you kindly tell me how much hay loses in weight from the time it is put into the barn until spring. What is the rule for measuring hay in a mow. How many feet make a ton? Ans.—The amount lost in weight will vary with the amount of water left in the hay at haying time. If the hay was put in quite green the loss might run up to 15 per cent.; ordinarily cured hay will lose about 10 per cent. in weight. Find the number of cubic feet of hay in the mow. If it is a small mow it will require about 512 cubic feet to make a ton; this is a cube of 8 feet. This is the usual measurement given for clover hay. If, however, the hay is in a large mow, 500 cubic feet may be sufficient, so much depends on the pressure it has been subjected to. About 420 cubic feet of timothy hay will make a ton.

SENDING EGGS TO ENGLAND FOR HATCHING.

L. Macdonald: Can you tell me if eggs for hatching can be sent successfully to England? If so, how should they be packed?

Answered by Thos. A. Duff: The writer has shipped a great many baskets of eggs for hatching to different parts of England, and up to the present time has not heard of one egg being broken. All who received the eggs reported good average hatches, one person reporting, from eggs which left Canada, on the 14th March, 1894, a hatch of fifty-two chicks from fifty-five eggs.

I purchase an ordinary hand basket with a cover; I first line the entire basket with cotton batting; I then put in the bottom of the basket, to the depth of about an inch and a half, oat hulls or bran, the former preferred. I then take each egg and wrap it in tissue paper, after which it is wrapped in the cotton batting and placed in the basket, small end down. I pack these eggs as tightly as possible, in fact squeeze the last of them in. If it is necessary to make another layer (as it usually is with me), I put oat hulls or bran on top of the bottom lot of eggs, then a layer of cotton batting, and proceed as before. On top of the eggs I put more hulls or bran. As a finishing touch I put a newspaper or two on top, and fill up the top of the basket and the lid with the batting, so that to fasten the lid it has to be squeezed down. This prevents the eggs from shaking while in transit. Be sure to wrap the eggs well, and see that they fit tightly. There is no danger in shipping if packed in this way. Be sure, however, that the eggs are not over a week old before being shipped.

EXPERIMENTAL UNION CO-OPERATIVE EXPERIMENTS IN AGRICULTURE FOR 1898.

The Agricultural Committee of the Experimental Union have prepared their list of co-operative experiments for 1898. The grains, grasses and roots offered are varieties that have done well on the experimental plots at Guelph and in co-operative experiments throughout the province.

This system of co-operative experimental work in agriculture was started in 1886 with 60 plots, which were situated on twelve different farms in Ontario. Since that date, however, the work has increased from year to year, and in 1897 there were 11,497 plots, which were situated on 2,835 farms throughout Ontario.

Any farmer, or farmer's son, who wishes to join in this experimental work may choose any one of the subjoined list of experiments. Application should be made to Mr. C. A. Zavitz, O.A.C., Guelph, Ont., who will give all necessary instructions for carrying out the experiments.

LIST OF EXPERIMENTS.

1. Testing nitrate of soda, superphosphate, muriate of potash, mixture, and no manure with corn, 5 plots, 2 rods by 1 rod.
2. Testing nitrate of soda, superphosphate, muriate of potash, mixture, and no manure with mangels, 5 plots, 2 rods by 1 rod.
3. Growing three leguminous crops for green fodder, 3 plots, 2 rods by 1 rod.
4. Growing three mixtures of grain for green fodder, 3 plots, 2 rods by 1 rod.

5. Testing four varieties of millet, 4 plots, 2 rods by 1 rod.
6. Testing four varieties of grasses, 4 plots, 1 rod square.
7. Testing four varieties of clovers, 4 plots, 1 rod square.
8. Testing three varieties of buckwheat, 3 plots, 1 rod square.
9. Testing three varieties of spring wheat and 1 variety of spring rye, 4 plots, 1 rod square.
10. Testing four varieties of barley, 4 plots, 1 rod square.
11. Testing five varieties of oats, 5 plots, 1 rod square.
12. Testing four varieties of peas, 4 plots, 1 rod square.
13. Testing three varieties of beans, 3 plots, 1 rod square.
14. Testing five varieties of carrots, 5 plots, 1 rod square.
15. Testing four varieties of mangels and one variety of sugar beets, 5 plots, 1 rod square.
16. Testing two varieties of Swedish and two varieties of fall turnips, 4 plots, 1 rod square.
17. Testing six varieties of corn, 6 plots, 1 rod square.

These experiments offer a good opportunity to obtain seed of promising new varieties of grains, grasses and roots, and at the same time the opportunity to test these varieties side by side on the same kind of land. Make application early, as they are filled in order until the supply is exhausted. All seed and fertilizer is supplied free of charge.

CO-OPERATIVE EXPERIMENTS IN HORTICULTURE.

The Horticultural Committee of the Experimental Union have decided on the experiments which they will try this year.

A choice of the following six lots of small fruits is offered for testing this year:

1. Four varieties of strawberries—Haverland, Clyde, Woolverton, and Van Deman—12 plants of each.
2. Four varieties of raspberries—Marlboro', Cuthbert, Shaffer's Colossal, and Golden Queen—6 plants of each.
3. Four varieties of black raspberries—Sagehan, Gregg, Palmer, and Hilborn—6 plants of each.
4. Four varieties of blackberries—Kittatinny, Snyder, Taylor, and Gainor—6 plants of each.
5. Four varieties of currants—Fay's Prolific, Victoria, Ruby Castle, and White Grape—3 plants of each.
6. Four varieties of gooseberries—Houghton, Downing, Whitesmith, and Industry—3 plants of each.

Each person who wishes to join in the work may choose any one of the experiments. It is well for each applicant to make a second choice, in case he may be too late for the first. The experiment selected may be indicated by number. The supply of plants being limited, those who apply promptly will be most likely to obtain what is asked for. All applications should be made to H. L. Hutt, Horticulturist, O.A.C., Guelph, Ont., who will give all necessary information and instructions to those carrying on the tests.

THE LONDON HORSE SHOW.

(By our regular correspondent.)

The great annual London Horse Show season commenced this year, as usual, with the Shire Horse Society's show. This is the first of the triumvirate of breeding stock horse shows that annually take place in London every spring, the opening day being February 22nd, and it continued until Friday, the 25th.

The entries for the present year numbered 526, as against 553 in 1897, a slight falling off in respect to numbers. The public interest in the show was fully as great as ever. Indeed, one is almost inclined to say that never during either of the previous nineteen shows has the interest been greater than on the present occasion.

The all round merit was good. Of course in some of the very numerous classes one noted here and there a few moderate animals, but, taken all round, it can fairly be stated that the show was thoroughly good on all points.

The yearling class numbered 41 entries. Mr. E. Green's colt went an easy first, with Lord Langatock's following closely behind. Fifty-five were entered in the class for two-year-olds. This was a grand class, and headed

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, SHEEP, AND SWINE BREEDERS' ASSOCIATIONS.

Annual Membership Fees.—Cattle Breeders', \$1; Sheep Breeders', \$1; Swine Breeders', \$2.

BENEFITS OF MEMBERSHIP.

Each member receives a free copy of each publication issued by the Association to which he belongs, during the year in which he is a member. In the case of the Swine Breeders' Association this includes a copy of the Swine Record.

A member of the Swine Breeders' Association is allowed to register pigs at 50c. per head; non-members are charged \$1.00 per head.

A member of the Sheep Breeders' Association is allowed to register sheep at 50c. per head, while non-members are charged \$1.00.

The name and address of each member, and the stock he has for sale, are published once a month. Over 20,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

A member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs; that is, to advertise cattle he must be a member of the Dominion Cattle Breeders' Association, to advertise sheep he must be a member of the Dominion Sheep Breeders' Association, and to advertise swine he must be a member of the Dominion Swine Breeders' Association.

The list of cattle, sheep, or swine for sale will be published in the third issue of each month. Members having stock for sale, in order that they may be included in the Gazette, are required to notify the undersigned by letter on or before the 15th of each month of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The data will be published in the most condensed form.

F. W. HODSON, Secretary.
Parliament Buildings Toronto, Ont.

LIVE STOCK FOR THE WEST.

A carload of pure bred live stock will leave for Manitoba and the North-west Territories about the First of April. There is room for a few more animals. Space can be procured by corresponding with F. W. Hodson, Parliament Buildings, Toronto, Ont.

Farmers' Institute Department.

Reports concerning the work of the Farmers' Institutes in Ontario will be published weekly in the Gazette; also papers prepared for this department by Institute workers. Secretaries and officers having announcements to make are invited to send full particulars to the Superintendent.

NORTH MUSKOKA FARMERS' INSTITUTE.

I have great pleasure in forwarding the enclosed revised list of members of the above institute containing 122 names; more to follow next month. I see by your report that we lead all the institutes up north here, and are bound to keep the lead if possible. It will not be my fault if we do not, as I can see we have done a lot of good already. I was talking to one of our merchants the other day, and he told me there was great improvement in butter alone since we had the traveling dairy and our institute meetings. I know the farmers are very anxious to learn.

WM. GOLDTHORPE, Secretary.

WEST BRUCE FARMERS' INSTITUTE

Enclosed you will find supplementary lists of members taken by me at our meetings held in the different places, and also the reports of the different meetings held in our district. I have to thank you on behalf of our institute for your wise choice of the speakers you sent us: they are both first-class men and thoroughly up in the subjects they speak on. For our district at the present time Mr. Gould's subjects were exactly what was earnestly desired by the people. Great interest is now taken along the line of dairying, corn-growing and the silo, and how to build a cheap silo. The fruits from the meetings held by us will no doubt be great. Major Shepard's subjects are also very interesting, and will be the means of doing much good. I must say that we have had every encouragement, and the amount of money we have spent will bear good fruit in the near future.

True, the political agitation hurt us in some localities where many meetings were being held, but one thing I can honestly say, no person heard from us outside or inside the hall one word savoring of politics.

JOHN DOUGLASS, Secretary.

THE EFFECT SPRAYING HAS ON BEES.

By R. F. HOLTSMANN, Brantford.

The relationship between the bee-keeping and fruit-growing industry through the work of cross fertilization by the honey bee is at present so well recognized that it is not necessary to more than say that anything which injures the bee prevents her from doing this important work. To spray fruit trees when not in blossom does not interfere with the honey bee. To spray during fruit blossom, when the latter are secreting nectar for the purpose of attracting the insect and distributing pollen when rifling it of its nectar, is very injurious to the honey bee.

The honey bee has a very highly developed nervous system, and for that reason, considering its size, falls an easy prey to quantities of poison which could have no effect upon other insects of a similar size. And the quantity of poison which would be fatal to the honey bee would have to be multiplied many times to have upon larger animals even the effect of a mild tonic, as prescribed by physicians.

The way in which the poison reaches the bee is as follows:—Attracted by the odor of the blossom she goes long distances from the hive; as she nears the flower she locates it, depending more upon her eye as the guide, and enters it, rifling it of its nectar. The nectar through the spraying mixture has a very small percentage of the poison. This mixture is taken up by the bee and enters the honey sac—not the true stomach. I do not know if the effect upon the honey bee varies according to the percentage of poison or depends upon the question as to whether the honey bee allows a portion of the nectar to enter the true stomach for its own support. It appears to me likely that in either case the bee may perish. The result, however, is this: In many cases, bees perish at the tree, in others, on their way to the hive, and

still others, lose their lives after returning to the hive. This is not all. The honey bee undergoes all the stages of a true insect, namely, the egg, the larva, the pupa, and lastly the imago, or perfect insect. During the larva stage it is fed pollen and honey by the mature insect; this food containing only a very minute percentage of the poison is much more fatal to the bee when in the larva or grub stage and in this way many partially developed bees are destroyed.

The loss then is two fold, or to use a well-known term, the candle is burned at both ends. The old bees are destroyed, and so are the embryo bees, which should go to take the place of those who have served their day and generation, and die a natural death, and in addition, to build up the colony for the honey flow. In this way it will be seen that a colony may be totally destroyed through spraying during fruit bloom, or as a result, be in so weak a condition numerically that it can give the bee-keeper no surplus honey when the proper season arrives. By the surplus honey season we mean the time when the bees gather more honey than they require for their own use and when that which is taken to market is reduced; this season does not arrive until later, when clover blossoms open.

An effect of less importance to the bee-keeper, but one of greater importance to the fruit-grower, is that the bees have been decreased in numbers until unable to fully carry on the work of cross fertilizing fruit blossoms by distributing pollen. This, and not the gathering of honey, is the primary object of the existence of the honey-bee.

Ontario Agricultural College.

Announcements concerning the College work will be published weekly under this head.

FOALING TIME.

By J. HUGO REED, V. S., Professor of Veterinary Science.

As the season at which most mares bring forth their young is approaching, a few hints as to the proper attention and the precautions to be observed may not be out of place.

As the period of parturition approaches, the mare should have good care, food, and attention; she should have regular, but not severe or excessive exercise, either in harness or in the paddock. Exercise under the saddle should be avoided, and especially the use of spurs, as the pain caused by their use is liable to cause premature birth by causing violent contraction of the abdominal muscles. She should have a roomy, well ventilated and thoroughly clean box stall while in the stable; mangers or boxes in which she might possibly drop her foal should not be present, and she should be plentifully supplied with good clean straw for bedding. Her food should be plentiful and of the best quality and of such a nature as to keep her bowels open and cause a plentiful production of milk; such as bran, chopped oats, a little linseed meal, a

few carrots, and a reasonable supply of good hay. The water should be of first-class quality. When she shows such signs as are generally observed a few hours before parturition (such as a falling down of the muscles of the hips, the abdomen becoming much more pendulous, often the accumulation of a little wax on the points of the teats, an uneasiness, etc.), she should be carefully watched by a careful man, who understands something about the phenomena of the act. There are various reasons why a mare should be carefully watched. This is one of the most critical periods in the lives of the dam and the offspring which is soon to make its appearance in the outer world, and there are many conditions which may arise which imperil the lives of one or both—conditions, the evil effects of which may be averted by prompt and intelligent interference on the part of man, while injudicious, rash or ignorant interference may complicate matters, and render a comparatively simple case beyond the possibility of successful treatment even by the most skilled obstetrician.

Even the necessity of having a careful man with some knowledge of the act in attendance. The attendant should not be too anxious to interfere or render assistance, but after the labor pains have been present for some time and have acquired considerable force and duration, if progress is not being made towards delivery, he should endeavor to ascertain as carefully as possible, without unduly exciting the mare, the cause of the delay, or in other words the nature of the obstruction. This may be a simple malpresentation of the foetus which he will be able to rectify, but should the ease be beyond successful aid on his part he should without delay secure the services of an obstetrician, which if promptly done will usually result in preserving the life of at least the dam and frequently that of the offspring also, while if the mare has not been watched, but has been left to herself in this state for some hours it is probable complications will have arisen that will, in many cases, have rendered successful delivery impossible.

Then again, it not infrequently happens that the foal is born with the foetal membranes (the after-birth) intact, and will suffocate in a few minutes if these be not ruptured. Instinct teaches the mare to tear these open with her teeth, but in many cases, in fact in most cases, unless birth has been very easy, the mare will lie resting for a few minutes after delivery, and in the meantime the offspring perishes, while if an attendant be present he can rupture the membranes with a knife and expose the offspring to the air and thereby save its life. Many foals are lost in this way. In other cases the membranes are ruptured but the navel string not broken; in this case the attendant should tie it with a soft strong string about an inch from the abdomen and cut it off with a scraping motion of the knife about an inch below the string.

(To be Continued.)

(Continued from page 233.)

Golden Fame, imp. (Feb. '97) W. D. Platt, Hamilton, Ont. 720

Invincible, imp. (Mar. '97) Green Bros., Indiana, Ill. 430

Banker, imp. (Mar. '97) C. C. Norton, Corning, Iowa 575

Prince Odette, imp. (April, '97) Geo. Johnson, Hulsam, Ont. 390

British Prince, imp. (Feb. '97) C. L. Gurlaw, Osborne, Ohio 430

Brass Flag, imp. (Feb. '97) Horndy Bros., Eminence, Ky. 410

Scotland's Fame, imp. (April, '97) Wm. Wilson, Brampton, Ont. 315

Lancer, imp. (Mar. '97) Green Bros., Indiana, Ill. 360

Klondyke, (April, '97) Chas. Rankin, Wyebridge, Ont. 200

Golden Flash, (May, '97) W. J. Biggins, Clinton, Ont. 175

Lavender Archer, (June, '97) E. N. Hyatt, Eminence, Ky. 200

COWS.

Mina 4th, (Sept. '92) J. P. Darling, Coshockton, Ohio. 150

Rose Monrath 5th, (April, '92) W. S. Laster, Middle Church, Man. 300

Selma and, (Sept. '92) Barron, Carberry, Man. 200

Merry Maid, (Jan. '92) P. O'Hara, Glenboro, Minn. 100

Clara's Face, imp. (Feb. '91) John Gardhouse, Hayfield 315

Carce and, (June, '89) imp. John Gardhouse, Hayfield. 120

Coral 2nd, (Mar. '97) Wm. Chambers, Hayfield, 130

Selma 3rd, (Nov. '90) Green Bros., Indiana, Ill. 225

Golden Belle and, (Dec. '96) J. P. Darling, Coshockton, Ohio. 225

Ruby's Pearl 2nd, (Jan. '94) John Shrigley, Allandale, Ont. 100

Mina 5th, (Mar. '92) H. Cargill & Son, Cargill, Ont. 105

Mina 6th, (Mar. '97) H. Cargill & Son, Cargill, Ont. 130

Florence, (April, '97) H. Cargill & Son, Cargill, Ont. 85

Duchess of Gloster 3d, (Sept. '93) J. Miller & Son, Hrougham, Ont. 145

Belle of Plainville, (Mar. '92) Wm. Shire, Sunderland, Ont. 90

Genevieve, (June, '97) J. T. Mulholland, Baltimore, Ont. 105

The total proceeds of the sale amounts to \$8,060, 27¢ an all-round average of nearly \$269. The imported bulls averaged \$473; the home-bred, \$192; all-round, \$381. The females averaged \$170.

Mr. Isaac deserves great credit for the enterprise he has shown in making this importation, and for the excellent lot of good animals he brought out. New blood was needed in our herds and he showed commendable pluck in starting to bring over an importation in face of the difficulties that happily have been since removed.

ENGLISH HACKNEY HORSE SOCIETY.—The 14th annual meeting was held during the week of the Hackney Show. The annual report showed that there had been an increase in the number of members and in the number of registrations during the year. The financial statement was very satisfactory. It was proposed to increase the fee for life membership from £1.10s. to £15.15s. Vol. XV. of the Stud Book has been issued to the members, and the conditions published for Vols. XVI and XVII. The society offers no less than 17 gold medals and 92 silver medals to affiliated societies in other countries. The number of affiliated societies with which the society co-operates is 86, an increase of 36 during the past year.

LAMBING SEASON IN ENGLAND.—Reports from England go to show that the lambing season is well along. So far it has been a most successful one. The losses of both ewes and lambs have been less than for many years. This is no doubt owing to the exception of dry, mild winter. Many breeders report fewer twinsthans is usual, but the single lambs come stronger, and the result will likely be that a much better, stronger lot of lambs will be raised. Mr. J. P. Caswell, Loughborough, Leicestershire, reports that from 260 Lincoln ewes, all strong and robust, several weighing from 17 to 19 lb., the day of birth. The general report is that the lambs are soon on their feet and at a day old are so strong as to have the appearance of being several days old.

A. J. WATSON of Ashton Frontview Farm, Castleberg, Ont., writes: "Shorthorns at Ashton Frontview are now in their finest bloom. The young stock of 1898 are going ahead splendidly. I have 3 bull calves that will make show calves in any company next September. One of the show cows will weigh twenty hundredweight now. I have some good young heifers that will show well next fall. Show sheep are looking as if they might be ready for the exhibition in September or next. I also have some very fine young Berkshires by Byron—see about eight weeks old for sale now."

JAMES A. CASKEY, Madoc, Ont. has recently purchased a herd of purebred Holstein cattle from H. Stevens & Sons, Laconia, N.Y. The herd consists of a bull and eleven females. The bull, Manor De Kol's Prince is richly bred, for he comes of a rich, deep, milking family. Among the females purchased are: Pitterije Hartog De Kol, a two-year old, Belle Hurke Michthilde, another two-year-old, Kornlyke Queen

Do you keep a DOG?



Send for free pamphlet on feeding, treatment, etc., and catalogue of foods, etc.

To SPRATT'S PATENT Ltd
239 E. 68th St., New York.

WHO ESALE AGENTS.—Caverhill, Hughes & Co., Montreal; J. A. Simmers, 147 King Street East, Toronto; The Eby, Blain Company, Limited, Toronto; A. M. Smith & Co., London; C. P. Zander, Halifax; N. S. H. M. E. Co., Ottawa, Ont.; Whitehead & Turner, Quebec; W. H. Gilloard & Co., Hamilton, Ont.

De Kol, De Dikket 3rd's De Kol and Panarista Paule. The balance of the herd is show considerable in blood in their breeding. We wish Mr. Caskey good success with his new herd.

W. W. Ogilvie's Imported Ayrshires.—Mr. Robert Hunter, manager for W. W. Ogilvie, of Lacline Rapids Farm, has arrived at St. John, N.B., with his selection of imported Ayrshires. They number twenty-four females and one bull. Mr. Hunter reports a pleasant passage, and that all the stock arrived in good condition. The bull is Comrade of Garlaff, bred by Messrs. R. & P. Wardrop, of Garlaff, Cumnock, Ayrshire. He is a first prize winner at the Highland and Agricultural Society's show last year and at other places. Many of the cows are also prize-winners, in fact it is a prize-winning herd that Mr. Hunter has brought out. Among the cows are Georgina second, of Wrynholm, a first prize winner at Lanark, and also at Ayr. She was bred by Robert Osborne, Wrynholm, Lockerbie, Dumfriesshire, and White Rose second, of Lower, another first prize winner and sweepstakes at both Thornhill and Sanguhar shows. She was bred by Thos. L. Revlop, of Smauchter, Dumfriesshire. Purchases have also been made from such breeders as Robt. Montgomery, Robert Wallace, Wm. Mair, Mrs. Connor, John Murray, Wm. Winter, James Moffit and J. McKean. The purchase of this herd has attracted a good deal of attention in Scotland, and the editor of the *Scottish Agriculturist* pronounced this selection the finest and one of the largest that ever left Scotland for foreign shores. This will be a valuable addition to the Comrahe herds of Canada, and Mr. Ogilvie is to be commended for his pluck in bringing out such a good herd. It is intention is to use the herd exclusively for breeding purposes, and the increase is to be sold yearly by public auction.

BEES Italian and Hybrid—best quality All Bee Supplies—best quality Wax Wanted
All Veed Patent Process
Foundation.
Gold, Hunsley & Mair Co. Limited, Bradford, Can.

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will weave your fence of a 19 kind of wire.
40 to 50 rods per day
Price saved in one day's work. Hard Coiled Wire of extra quality for sale.
Agents wanted
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MCGREGOR, BANWELL & CO. Windsor, Ont.



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Painted or Galvanized.

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is proving such a boon to FARMERS that we were compelled to erect a NEW FACTORY to meet the demand.

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Note Our New Address.

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have the heaviest gear, and give the most power.

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Credit Auction Sale
On Thursday, March 31st

Of Thoroughbred Holstein-Friesian Bulls, Cows and Heifers. Also Holstein, Jersey, and Durham Grades, comprising my whole herd of nearly 40 head. Also all other stock and implements at

SPRINGWOOD FARM
Lot 71, Con. 4, Nassagaweya, County Halton, 3 mls. south of Rockwood, G.T.R. Sale to commence at 12 o'clock sharp. Rigs to meet trains at Rockwood.

TERMS—8 months' credit on approved joint notes, 6% per annum off for cash. Positively no reserve, at place will be sold or rented.

Ingram & Hoffmann, Ernest L. Norrish, Auctioneers, Proprietor

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APOLLO HARPS
AT A REDUCTION OF 25 Per Cent.

We have **SAMPLE HARPS** which we shall sell at a sacrifice of 40 per cent

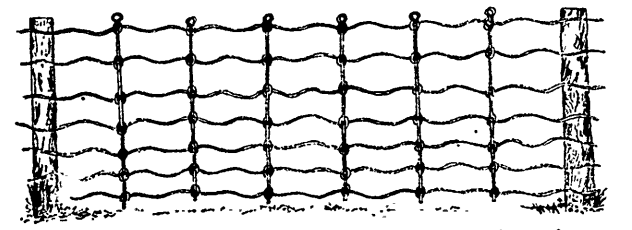
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MARKET REVIEW AND FORECAST.

Office of FARMING.

44 and 46 Richmond Street W., Toronto, March 21-31, 1907.

There is a hopeful feeling in nearly every line of trade at the present time. This hopefulness is not based upon mere sentiment or upon a feeling that times are getting better, but upon actual facts. The volume of business done so far this year is far ahead of what it has been for four or five years past, and though just now business is a little easier, owing to its being a kind of transition period from winter to spring operations, the outlook is very bright indeed. Agricultural products and live stock are no exception to the rule, and though in some cases prices are a little lower than a year ago, there is no reason to regret at the prospect before him.

Wheat

There has not been any very material change in the wheat market since our last week's issue. The high prices for May wheat are being well sustained, and it is probable that these levels up the more it is seen that the high values are entirely due to the speculative element. What the outcome will be is perhaps hard to say, but it is likely a crash will come later in the year, and being unduly high prices of even higher they are now. There has been a great deal of enormous quantities of wheat and is trying to raise prices, while those whom he has outwitted to the great wheat deal are trying to load him up still higher with the hope that he may be crushed finally when the break comes. Meanwhile the world's supply of wheat in sight continues to increase, the total now 71,205,000, as against 63,440,000 a year ago, and showing a gain of 7,800,000 bushels, against a deficit of 33,000,000 last fall. In the face of this prices are not likely to go any higher unless some unforeseen event takes place, such as a war between England and Russia. The sales reports indicate that wheat is likely to come through the winter well.

The local markets here show a easier feeling. The export demand has fallen off a bit, there was little or no buying during the week for this trade. Early in the week the London market was steady at \$5 to \$5 1/2 for red winter north and south. As the week advanced, prices receded to \$4 1/2. Manitoba is reported steady at \$1.10 for No. 1 hard at North Bay, and \$1.00 Owen Sound and Malton. Montreal reports show a decline 1/2 cent for Manitoba wheat.

Barley and Oats

The barley market is quiet. There is very little demand for malting purposes. Feeding barley is bringing about 40c. Malting barley is quoted at from 55 to 57 1/2 at Montreal.

Stocks of oats in the warehouses are accumulating very fast. It is estimated that there are about 1,000,000 in store at present. This rapid accumulation of stocks has had a depressing effect upon prices, which are lower. Early in the week, white were quoted at from 20 1/2 to 30c for 60 lbs. and west, later they were quoted at 20c. Sales have been made at Montreal in car lots at from 33 1/2 to 34c, and at 35 1/2 for export.

Peas and Corn

Peas are reported steady at from 30c to 37c north and west. Montreal market is reported steady at about 67c for May and about 63c in store.

Corn is over a 3/4 cent higher for local yellow, but there is very little offering. Car load lots, American, are quoted at from 39 to 40c in store.

Buckwheat and Rye

Buckwheat is reported steady at 37c east and 36c west. At Montreal it has been selling in carload lots at 41c to 43c.

Rye is reported flat at 55c north and west, which is 1 cent lower than the beginning of the week. At Montreal there has been a drop of 2 cents, prices ranging from 40c to 45c for May 20th.

Beans and Shorts

Prices for most of our beans are steady at \$1.35 for red and \$1.15 for white west. These figures are lower than they were earlier in the week. Montreal prices are from about \$1.50 in car lots, and shorts at from \$1.00 to \$1.50.

Timothy and Clover Seed

The Montreal market is steady under a fair business, red clover being reported at \$3.25 to \$4. Alsike is quoted at \$3.50 to \$4.25, and timothy at \$1.50 to \$2.25, depending on quality and size of lot.

Potatoes

Potatoes are steady. Cars on the track at Toronto are quoted at from 35 to 40c for 100 lbs. net weight. The market is reported to be fair and holding firm, with increasing car lots selling at from 60 to 70c.

Poultry

The receipts are reported small, though it remains only fair. The market is reported to be steady at from 12 to 15c for turkeys, and 55 to 65c for chickens.

Eggs

New laid eggs are bringing plentiful, and receipts are more liberal. Prices have an upward tendency, and have ranged from 12 to 15c. At Montreal prices are also easier, ranging around a 1/4 basis.

Cheese

The cheese market is quiet, with very little business reported. The market is reported to be steady at from 12 to 15c for cheddar, and 10 to 12c for Swiss. The market is reported to be steady at from 12 to 15c for cheddar, and 10 to 12c for Swiss. The market is reported to be steady at from 12 to 15c for cheddar, and 10 to 12c for Swiss.

Butter

The market continues firm for fine, fresh creamery. There appears to be a scarcity of fine fresh butter just now, but as nearly all the milk is now being made into butter there will not likely be a scarcity very long. Prices for fine creamery range from 21c to 22 1/2c at Montreal. At Toronto it brings 22c in prints and 20c in tubs.

There is also a good demand for fresh dairy butter of quality. Eastern dairies are quoted at from 18 to 20c. At Toronto prices are 18 to 19c for dairy and 15c for medium tubs. There is an increase in supply of second grade butter which is from 12c to 14c.

A week or two ago a lot of dairy butter was shipped from England to Montreal, and part of it has been sold at 15c and 16c, showing the owner a small profit after paying two cents to England and back. It was last June make.

Cattle

The cattle market is very steady although receipts are quite large. The demand from the United States for stockers and feeders is good, and will in all probability continue so during the season.

The market in England is dull, but prices in Canada are likely to continue good. Stock in Manitoba and the Northwest will be largely wanted for the Klondike and British Columbia mining camps. In fact, steers have been sold in Manitoba, weighed in their own states, at 40c a pound live weight, for the Klondike trade. Some American buyers have been buying the northwestern portion of the province, buying export cattle, intending to ship them in land through the United States to England. They are offering a higher price for them than Canadian buyers are offered to pay. It has had the effect of making farmers hold their cattle, but such a demand is not likely to continue. It is also reported that during the past three months a stock head of cattle and 25,000 head of hogs will be shipped from the United States to the British market. The ruling prices for good export steers are 40 to 42c, though good ones except in the north brought 45c.

The market for hogs is steady. Early cattle bring about 12c to 14c, and hogs about 25c to 30c. The market is reported to be steady at from 12 to 15c for turkeys, and 55 to 65c for chickens.

The market for sheep is steady. The market is reported to be steady at from 12 to 15c for turkeys, and 55 to 65c for chickens. The market is reported to be steady at from 12 to 15c for turkeys, and 55 to 65c for chickens.

Sheep

Butchers and export sheep continue steady at from 34c to 37c. Lambs are quiet at

\$5 to \$5.40 per cwt. Bucks bring 2 1/2 c. to 3c per pound.

Hogs

As stated in our last report, the hog market last week ruled at \$4.00 for choice selections of sangers, light hogs, \$4.00, thick fat hogs, \$4.50, sows, \$3.75 to \$3.25 per cwt. This is a drop of nearly 1/2c.

The Horticola Horticulturist. We are in receipt of a copy of the Horticulturist for the year 1907. It is a handsome volume, and somewhat larger than those of other years. It is also greatly improved, contains a large number of articles that should be of value to the horticulturist, and is well illustrated. The editor, Mr. L. W. Dyer, is sparing no pains to make the Horticulturist of great help and interest to all fruit and flower growers. The history, description and drawings of new varieties of fruit of all kinds that are given throughout the volume, along with perfect descriptions of old, well recognized varieties, make a most valuable feature of the paper. We can heartily commend it to all fruit growers.

All the Garden and Flower Seeds you need this year may be readily obtained by sending us one or two new yearly subscribers. See our Premium Lists.

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Vegetables

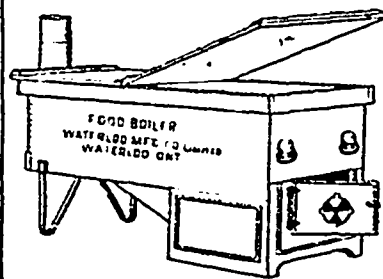
can be raised at a profit, and the yield enlarged, if properly fertilized. Most fertilizers do not contain enough

Potash.

Vegetables need plenty of potash—at least 10%—besides the phosphoric acid and nitrogen.

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You save fifty per cent of the feed, and produce double the growth and fat, when feeding boiled feed than when fed dry and raw. The Waterloo Food Boiler is the simplest, cheapest, most convenient, and most economical boiler in the market. Every farmer should have one.

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Absolutely the Purest and Best for BUTTER AND CHEESE

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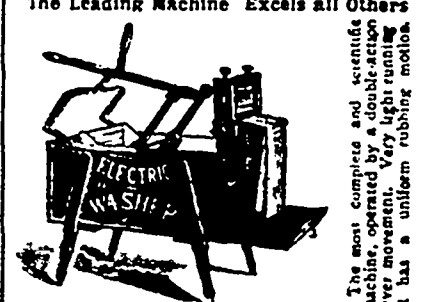
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Buildings covered with our roofing look pretty, are fire and lightning proof, and will last a lifetime.

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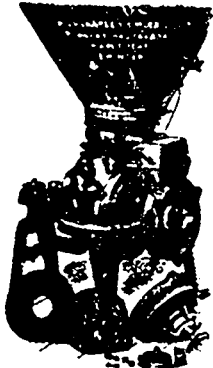
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Galvanized Steel Towers and Wheels
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Made in 2 sizes: No. 1 Senior, with 10-inch reversible burrs, and No. 2 Junior, with 8-inch single burrs.
Fine and coarse burrs. Ball Bearings for Plate Relief Springs.
For any power or any work.
Always guaranteed.

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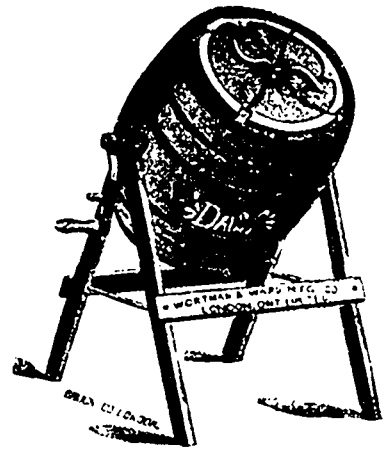
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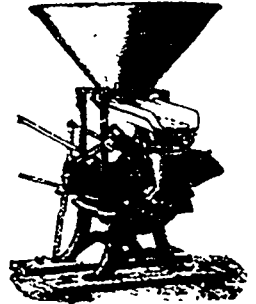
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CAPACITIES, 330 to 850 lbs.
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Parties wishing a first-class Harrow will do well to write us direct, or apply to the local agent.

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Our Motto, "Not how Cheap, but how Good."

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The Farmer supplies the world with food

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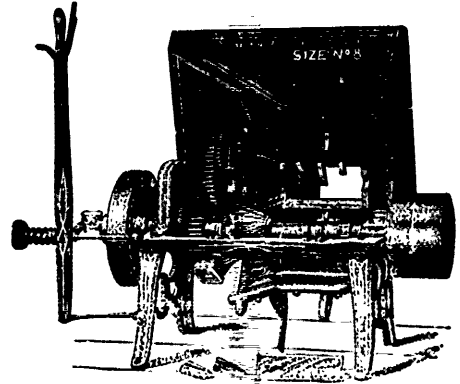


cultivate the ground and reap the crops.

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1884	300 "
1885	2,500 "
1886	12,000 "
1887	65,000 "
1888	130,000 "
1889	240,000 "
1890	400,000 "
1891	440,000 "
1892	530,000 "
1893	680,000 "
1894	760,000 "
1895	920,000 "
1896	1,370,550 "
1897	1,920,000 "

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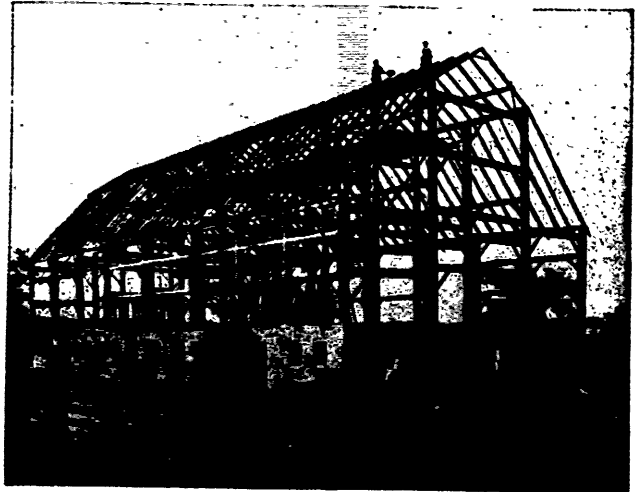
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