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The Farming World

For Farmers and Stockmen

VOL XVIII

FEBRUARY 12th, 1901.

No 25

Encouraging Horsebreeding



T the meetings of horse-breeders' associations, reports of which are given elsewhere in this issue, several matters came up for consideration that are of vital importance to the horse-

breeding interests of this country. Legislation was asked for to protect stallion owners by enabling them to put a lien on the mare so as to insure payment of the service fee for the stallion. In many cases after a mare is served she is sold, and the stallion owner has no claim on her, and without he can collect from the first owner loses the price of the service fee. This is a great hardship for the stallion owner, who has, perhaps, invested a large amount of money in a good animal, and it is nothing but fair and just that his interests should be protected. It will be in the interest of the trade generally that some protection of this kind should be afforded.

The increasing of the service fee was strongly advocated. It is difficult, perhaps, to get united action along this line. A few years ago, when the horse industry of this country was at its lowest ebb, stallion owners were compelled to reduce fees to a very low basis, in order to secure business. It is claimed that now that a reaction has taken place, and business is on the move upwards, fees should be raised sufficiently to enable stallion owners to make a little profit on their investments. Some owners have already raised prices a trifle, but they are still far below what they formerly were before the bad times came. It is, however, more difficult to raise a fee than to lower it. It does seem to be a reasonable request that the breeders are making, and as far as we are able to test the feeling, they are willing to meet the farmers or those requiring the service of stallions on a fair basis. It was strongly advised that owners should return to the old plan and charge a small fee, foal or no foal. The reason given for this is, that in most cases where no foal is forthcoming it is just as much the fault of the mare as the stallion. If this be the case, the imposing of a fee for service only seems a reasonable thing, and one that there should be no serious objection to.

One of the things to be considered in all this is that there are good and bad stallions travelling through the country. A poor scrub of a

stallion is dear at any price, while the stallion that will get the kind of stock the market requires, and for which there is an increasing demand, is cheap indeed at a \$10 or \$12 fee. To regulate matters so that the farmer who pays the larger fee may feel that he is getting the service of the right type of animal is a difficulty. Some will say that he should select only the best and be willing to pay a reasonable fee for the service. This is all right in so far as the man who knows the right kind of stallion to use is concerned. But there are many farmers who are desirous of engaging in horsebreeding more extensively than they have been doing, who do not know which is the right kind of stallion to choose. How are these to be protected? The licensing of stallions would do it, and granting certificates only to those worthy of being patronized by the farmer. But there would perhaps be a difficulty in enforcing any regulation of this kind, though an arrangement by which the owner of a good animal could obtain a certificate from a recognized authority, commending the stallion, might be worked. In Scotland a premium plan is in operation which works admirably, and, as Dr. Smith pointed out, if our agricultural societies or farmers' institutes would take the matter up and arrange to bring animals into their localities of the right stamp, much improvement might be made in the kind of horse produced in this country. At the Canadian Horse-Breeders' Association on Friday, a resolution was adopted making an appropriation for premium purposes. This is a wise move, and we look for splendid results from its operation.

Parliament and Legislature

The House of Commons at Ottawa and the Provincial Legislature at Toronto opened for business on Wednesday last. The legislation foreshadowed at Ottawa in the speech from the throne of interest to farmers, is that providing for the better supervision of the export trade in food products. This is of the utmost importance to the country. No doubt other measures of interest will come up as the session advances. A railway commission, or some means of regulating the freight rates on railways, etc., should receive some attention.

At Toronto several important measures of interest to the farmer were foreshadowed. One,

as noted elsewhere, is assistance to the beet root sugar industry. Measures will be introduced relating to the improvement of the public highways; the encouragement of the dressed meat trade for the European market; and the abolition of tolls on public highways and bridges. Legislation arising out of the report of the assessment commission will also be of interest to the farmer. All these matters, if dealt with in the right way, can be made to render great service to the agriculturists of this country, and our legislators cannot do better than foster in every way possible agriculture, which, to use a common expression, "is the backbone of the country.

Millions in Poultry

The annual sale of eggs, poultry and fancy breeds for breeding purposes in the United States and Canada exceeds one billion dollars. We can hardly realize what an enormous business this amount of money means. Is there any other industry on this continent that exceeds it? Dividing this amount, according to the population of the two countries, we have the annual sales of eggs and poultry in Canada represented by nearly seventy-two million dollars, which we think is not above the mark. But go a little further and divide this again by the estimated population of Canada at the present time (6,000,000) and the poultry industry of this country represents twelve dollars for every man, woman and child in the Dominion.

If such an industry can be worked up under the conditions which prevail on the average Canadian farm in regard to poultry-keeping, what should we expect if all our farmers vere giving the attention to poultry it deserves? It is safe to state that a very little effort in the way of improved breeding and feeding methods would raise this amount to one hundred mil-

lion dollars.

Poultry-keeping, then, affords the farmer an excellent opportunity for very greatly increasing the income from his farm. To make the most out of it, however, he must start right, and be in a position to make the very most out of these opportunities. Last week we published a list of questions bearing upon this important subject, which we would like everyone who keeps hens to answer. We republish the questions this week in order that they may not escape the notice of any of our readers. We hope, from the replies received, to obtain a fund of information that will be of very great service in the further development of this industry, and most helpful in enabling every farmer to carry on the business in the best way. Send in your replies early, and not later than Feb. 20th, as we wish to compile the returns for our special poultry number on March 12th. Remember that one of our Standard barometers and thermometers goes to each of the first twenty-five persons sending in the most complete answers.

The questions are as follows:

- 1. What is the number of acres in your farm?
- 2. How many hens do you keep?
- 3. What breed or breeds of hens do you keep?
- 4. What do you feed them in winter? What in summer?
- 5. Have you a special poultry house? If so, describe it by plan or otherwise.
- 6. What do you get per pair for chickens, alive or dressed?
- 7. What do you get per dozen for fresh eggs: In the winter? In the summer?

- 8. Give an estimate of the number of eggs and chickens consumed by your household.
- 9. Do you sell your eggs to a collector, or on the market, or dispose of them for groceries, etc.?
 - 10. How often do you market your eggs?
 - II. About what does it cost you to keep a hen for a year?
- 12. About what would be the average return per hen from eggs and chickens in the year?
- 13. In your opinion, is the raising of poultry for eggs and table use given the attention it deserves in your locality? Any suggestions will be appreciated.
- 14. What, in your opinion, is the reason farmers do not give the poultry industry more attention?

English Breeders Condemn the

The cattle breeders of Great Britain are beginning to take decided action against the compulsory testing with tuberculin of all stock exported to foreign countries. At the annual meeting of the Grimsby branch of the Lincolnshire Chamber of Agriculture held a couple of weeks ago, the following resolution moved by Mr. Dudding, of the well-known Riby Grove stock farm was carried unanimously.

Resolved, that, in the opinion of the cattle breeders of England here assembled, the regulations relating to the exportation of pure-bred animals, which require the injection of tuberculin as a sure indication of the presence of tuberculosis, are unsatisfactory, and likely to bring serious injury to the cattle-breeding industry of England; that, while the test may be used as an aid in the detection of the disease, it is not sufficiently exact to be relied upon; that the disease may exist in such parts of the animal which make it impossible to be transmitted by contagion or otherwise; and that no real service to the country is being rendered by its use in that connection.

The English breeders are evidently of the same opinion as breeders in Canada and the United States as regards the reliability of the tuberculin test. That no real service either to the old land or the countries to which animals are exported is being rendered by the use of the test is no doubt true. Its application is strongly objected to by the English breeder who has cattle to sell, and also by the purchaser when bringing the animals purchased to his own country. If the test were reliable and accurate in all cases no one would have the right to complain, but when so much doubt is cast upon its reliability there is nothing to be gained and much to be lost in continuing its use

The North British Acriculturist in commenting on the above resolution, says:

Breeders and exporters of pedigreed stock all over the country will cordially indorse this resolution, but Governments-particularly foreign Governments-are stiff to move.

Mr. Dudding, who presided at the meeting, stated that at his last autumn ram sale, at which the champion shearling was sold at the record price of 1,000 guineas, for exportation to the Argentine, no fewer than five veterinary surgeons attended in the interest of foreign buyers, and each of these five veterinaries tested the animal with tuberculin, each using a separate and distinct lymph. One can imagine what effect this abnormally frequent injection of tuberculin would have on the animal. It is little wonder that the British stockman is objecting to the application of the test. If he would carry his objections so far as to refuse to

allow his animals to be tested for export it would perhaps bring foreign governments to time, and lead them to look upon this whole question from a more common sense point of view.

Remember the Auction Sales

The public auction sales to be held at Guelph and Ottawa on February 27 and March 6 are of vital importance to the live stock interests of this country. There success or failure will effect every live stock breeder in the country. If they prove successful, as we think they will, from all we can gather as to the outlook, so much the better for every breeder in the country. It is hard to understand why any breeder

should oppose the establishment of these auction sales. So long as they are properly conducted thev do cannot the business of breeder in this country any harm, while on the other hand, they are capable of doing it an immense amount of good. It will be in the interest of every breeder, then, to give the move-ment his hearty support. Farmers desiring to secure good stock should attend these sales.

We understand that it is the intention to offer at Guelph chiefly beef cattle and swine, while at Ottawa dairy cattle, in addition to these, will be sold. As reported in last week's Gazette department, a large number of the prominent

the prominent Who addressed the Horsebreed breeders of the country are entering animals for the sale, thus assuring intending buyers of a splendid selection to choose from. We believe it is the intention to hold a poultry show at Ottawa in connection with the auction sale. A few leading breeders and farmers in the Eastern section have also expressed themselves in favor of developing a fat stock and dairy show similar to the winter fair at Guelph in connection with the Eastern sale. This might be worked out in time. Such a movement would, however, need to come from the Eastern men, and if they could show that such an exhibition could be successfully carried on, assistance might well be granted them by the Government. The winter fair at Guelph is now recognized as one of the very best educational institutions we have, and if it could be duplicated in the eastern part of the province, so much

the better for those in that section of the country. As far as we know, nothing definite has been done in regard to this matter. Should the movement take definite shape we know of no better place for holding such a show than Ottawa. Its citizens are enterprising and would give a winter fair every assistance in their power.

The Export Sheep Trade

There has been a remarkable decrease in the sheep trade from Montreal during 1900. This, the Montreal "Gazette" states, in its annual report of this trade for the year, was due to some extent to the scarcity of ocean freight space for this class of stock, but principally by

the fact that the low rates freight offered from American ports were a larger inducement to Canadian shippers. The total shipments for the season were 34,-838 head, showing a decrease of 23,-439 as compared with 1899. This decrease represents a value of \$117,195. The average price paid for export in 1900 was \$5 per head, making the total value \$174,190. With ocean freight at \$1.25 per head, \$43,547, and insurance 25c per head, \$8,709, making a total expenditure of \$226,446, showing a decrease of \$138,785 as compared with the year previous. The season, however, has been a profitable one for shippers, as good prices have ruled



HON. G. W. Ross, Premier of Ontario
Who addressed the Horsebreeders' Parameter of Thursday evening

from 11c to 12 1-20 per lb. for the balance of the season.

To Bonus Sugar Beet Industry

The establishment of the sugar beet industry in this country is likely to receive considerable attention during the year. Already factories are talked of in several sections of the country where experiments have been carried on in growing the beets. The City Council of London last week appropriated \$200 to investigate the possibility of securing a factory there, and other places are taking action. Reports from these experiments, as published in these columns a few weeks ago, show that sugar beets can be grown in this country very satisfactorily, and the only thing to prevent the industry from booming is the lack of sufficient inducement to enable factories to be built. This difficulty is likely to be got over by assistance from the Governments as shown below.

A year or two ago an organization of those interested in this matter was formed, known as the Ontario Beet Sugar Association. This assoviation met on Wednesday last at the Walker House, Toronto, Mr. John Parry, Dunnville, Ont., President, being in the chair. There was a large attendance, representatives being present from all parts of the province. Though it was stated that the association would not point out to the Government what form of assistance should be granted. The consensus of opinion seemed to be that the Government should grant a bounty, say, half a cent a pound, this to be paid for a term of from three to five years. It was pointed out that while some fifteen million dollars' worth of sugar is consumed yearly in Canada not a dollar's worth is produced here, and the claim was made by the association that with proper encouragement a considerable portion of the foreign article could be supplanted by the native produce. If assistance were granted there were many capitalists standing ready to put their money into beet sugar factories. It takes about half a million dollars to put up a proper plant, but at Aylmer they were proposing the erection of a factory to cost about one million dollars. The reason promoters asked for something in the nature of a bounty was to cover the cost of the educ. tional campaign that must be carried on before the farming community could be brought to produce the beets required for the factories. When this difficulty was got over the industry could stand upon its own bottom.

day morning, to ask for a bonus to the industry, and a similar deputation went to Ottawa that evening on the same mission.

Premier Ross, in reply, gave the deputation great encouragement. The Government has been considering the matter during the past year, has had scientific experiments conducted, and is convinced that beet sugar produced in Ontario could be richer than that of Germany, and as good as that of Michigan. The Government thought it well worth its while to encourage the industry for a few years, to establish the standard of quality and create a market for the farmers, and had decided to grant some bounty on the product manufactured and grown here. A bill dealing with the matter will be brought down this session.

We understand that it is the intention to appropriate \$100,000 for this purpose. Whatever is done should be done with the view of encouraging the farmer as much as possible to grow the beets. In our opinion the chief thing in the way of putting the business on a good footing is that the farmers are not taking hold of the matter as they should. It will take a lot of beets to supply even one factory, and we do not think the farmers in any section of the country realize what a quantity is required.

Clover Seed

The market for clover seed is looking up and farmers desiring to secure some may have to pay good prices for it. No crop ground on the farm will pay better than clover, and so long as the seed is pure a little higher price will not matter. Bulletin No. 123 by the Department of Agriculture at Washington supplies purchasers with some information they ought to have on the subject. One of the points to which attention is called is that the situation induces the marketing of much seed of poor quality, as well as a great deal of adulterated seed. A large amount of yellow trefoil seed, which is cheap and comparatively useless, has been imported from abroad, and as there is no demand for it in this country as such, the inference is that it is to be used as an adultarant of clover seed which it closely resembles and with which it is often mixed to an extent as high as 30 per cent., without danger of detection upon mere casual examination. It is greenish yellow in color and may be distinguished under a glass by the fact that it has a minute projection, or teat, in the neighborhood of the scar that marks the point of attachment of the seed in the flower. Hungarian grass seed is also used as an adulterant, the small seeds which in size closely approximate the clover being employed.

All those who propose to plant clover should secure samples of the seed they think of using and test it for germination, by placing a given number of seeds between folds of damped cloth laid on a plate over which a second plate is inverted. During the test the temperature should not fall much below fifty at night or sixty and seventy during the day. The seed should begin sprouting vigorously the second or third day, and in four or five days nearly all the good seed will have germinated. A few come later, and testing establishments usually allow ten days as the limit for testing red clover. Very low-priced seeds are hardly ever the cheapest, nor are those grades the cheapest which are sold at exorbitant price. By this last statement is meant that while the high-priced samples are

good, the prices are higher than the conditions of the market justify. The planter should secure seed that is free from weed seed, and especially from dangerous weed seed, such as dodder, plantain, buckhorn, etc., and from the adulterations mentioned, and then be guided in making his selection by a germinating test, choosing that grade which furnishes the largest number of vigorous seed for the least money.

The Apple Trade

The Canadian apple trade is growing more and more in importance every year. While the exports for the season just about closed show no large increase, the interest in this important trade is growing. The latest reports show that the total exports of apples from Canada and the United States to Europe this season to



DR. ANDREW SMITH
President of the Canadian Horsebreeders Association

January 26th, were 1,090,192 bbls., against 1,062,261 bbls. for the corresponding period last season. The season so far for shippers has been fairly satisfactory, though it is claimed that profits have not yet counter-balanced the heavy losses of the season of 1899-1900. Last fall a large portion of the crop was contracted for at 40c to 75c per bbl. on the tree, though prices later went higher. Some recent account sales from Liverpool show net returns of \$2 to \$2.25 per bbl. at Ontario points, thus making a profit for the shipper, whereas a year ago these same nets would have shown a loss.

But it has not all been smooth sailing, so the Nova Scotia growers think. At the annual meeting of the Fruit Growers' Association for that province, held a few days ago at Wolfville, the president, Mr. J. W. Bigelow, in his address made the following statement:

"The past year has been one of the most disappointing and unprofitable for fruit culture in Nova Scotia ever recorded by this Association. Starting in June with abundant blossoms, our apple crop developed unfavorably, with a yield

of less than 300,000 barrels of inferior fruit—one-half of which should never have been marketed, and one-third of which was lost in drops and culls; and having to compete with a good crop of superior fruit from the United States and Ontario, as well as Europe, in foreign markets, the price has ranged from 0 to \$2 per bbl., and in many cases money has been remitted to pay expenses."

However, notwithstanding this statement, the Nova Scotia trade does not appear to be in very bad condition as a whole, if we are to judge from Old Country reports. The London Evening News, of January 11, describes the arrival and methods of auctioneering two shiploads of Nova Scotia apples, some 23,300 bbls. in all. The consignees stated that the quality was not quite up to the average usually received from Canada. The apples were somewhat "spotty," a trifle crushed, and some were touched by the frost, owing to one of the steamers having been longer on the voyage than was expected. The methods of selling and the prices received for the consignment are given as follows:

"Still the auctioneers have been kept busy selling off the consignent and, as a result, the Floral Hall at Covent Garden to-day has simply been a babel, by reason of the bellowing of prices and bids, punctuated occasionally by staccato solos performed with auctioneers' hammers.

"Prices have ruled somewhat low, for rough varieties 3s per barrel of some 200 lb. weight being offered and taken; on the other hand, as much as a guinea has been obtained for the same quantity of finer varieties. Baldwins have sold from 8s. 6d. to 14s. 6d. per barrel, while russets went at anything from 12s. 6d. to a sovereign.

The low prices obtained is accounted for by the fact that the Nova Scotian growers have not sent sufficient supplies of late to keep the market going. Hence the dearth of apples, and a general consumption of oranges and other fruits by the public. Now the fashion has been set it is difficult to wean fruit lovers back to apples again."

Holstein-Friesian Breeders

The annual meeting of the Canadian Holstein-Friesian Association, was held at the Palmer House on Tuesday of last week. There was a good attendance of members and others interested in the welfare of this noted dairy breed of cattle. The president, Mr. T. W. Charlton, St. George, Ont., occupied the chair, and in his annual address touched upon several points of interest to cattle breeding, besides reviewing the work of the association for the year. The most important work of the year was perhaps the incorporation of the association under the new Dominion Act. It is hoped that by all the various live stock associations taking advantage of this Act to obtain better recognition for Canadian herd records in the United States. In this connection the president strongly recommended that the Canadian association discontinue to recognize the American Herd Book after January 1st, 1902, provided the American Holstein-Friesian Association fails to recognize Canadian registration before that time. He very strongly commended the public auction sales to be held at the end of this month to the members of the association, and urged everyone to do his best to make them a success.

The financial statement showed the association to be in a most flourishing condition. The total receipts for the year, including a balance of \$848 from 1899, were \$1,963.31, and the total expenditure \$1,147.17, leaving a balance on hand of \$816.14. There were 677 registrations during the year as against 587 in 1899, and the number of transfers was 279 as compared with 137 in 1899.

Some important business was transacted. The constitution was changed, making it compulsory that all animals should be registered in the name of the first owner. A new departure was made in the establishment of an advanced registry to be known as the "Record of Merit." There was considerable discussion over this, but the report of the special committee, appointed to draft rules and regulations, was finally adopted with some amendments in detail, These rules provide for issuing a special certificate of merit to all cows which produce eight pounds or over of butter fat in seven days, at two years of age. At three years ten pounds per week is the standard, at four years eleven and one-half pounds per week, and from an aged cow thirteen pounds per week is demanded by the schedule. A board of control, of which the secretary of the association will be the chief executive officer, will have charge of this work. These tests will be conducted by parties approved of by any recognized agricultural college or experiment station. Some of the members claimed that the inspectors for the Dairymens' Association of the province might be utilized for this purpose. To this there would be no objection, so long as such inspectors are recognized and approved of by some disinterested institution, such as the Ontario Agricultural College. Grants of \$100 each were made to the Toronto Industrial and Provincial Winter Fair, to assist in bringing out a larger exhibit of Holsteins. The sum of \$25 each was made to the fairs at Halifax, St. John, Brandon and New Westminster for the same pur-

Resolutions were adopted endorsing the appointment of a Railway Commission, and commending the Dominion and Ontario Governments for their efforts in advancing agriculture by assisting cold storage, etc. The president and secretary were appointed to represent the association on the Dominion Cattle Breeders' Association, and a resolution was adopted urging that at least one member of the executive of that organization be a dairyman.

The officers for 1901 are as follows: President, G. A. Gilroy, Glen Buel; First Vice-Predent, G. A. Gilroy, Glen Buell; First Vice-Pre-President, S. R. Beck, South Cayuga; Fourth Vice-President, R. S. Stevenson, Ancaster; Directors, M. Richardson, Caledonia; Wm. Armstrong, Locust Hill; T. B. Carlow, Warkworth; A. G. Hallman, New Dundee; Secretary-Treasurer, G. W. Clemons, St. George. Messrs. Shunk and Ellis were appointed representatives to Toronto Exhibition; Clemons and Bollert to London; Gilroy and Fletcher to Ottawa; James Slennie to Brandon and Winnipeg; Wm. Honey to Kingston; T. W. Charlton to Brantford and Stanley J. Logan to St. John and Halifax. Judges for the different fairs were recommended as follows: Toronto, R. S. Stevenson, Ancaster, H. Bollert, Cassel; London, A. C. Hall-man, New Dundee, T. W. Charlton, St. George;

Ottawa, H. Bollert, Cassel; Wm. Shunk, Sherwood; Brantford, T. W. Charlton.
Mr. F. W. Hodson, Dominion Live Stock

Mr. F. W. Hodson, Dominion Live Stock Commissioner, was elected an honorary member of the association.

The Farm and Garden

By Isaac F. Tillinghurst

To keep rabbits from injuring young fruit trees, mix pine tar and grease, equal parts, warm and apply it with a cheap paint brush to the lower two feet of the trunks. This coating will also go far toward keeping out borers if applied in spring.

Your farm is your bank. The proper way to increase your capital is to add to the fertility of your soil so as to increase its productive powers. The better the soil the greater interest it will pay. And don't expect to keep cheeking out without making equivalent, or greater, deposits, or Nature will protest.

The chief supply of drink to growing plants is moisture brought up from below by capillary action, and therein consists the necessity of pulverizing the soil thoroughly before planting, and continuous surface cultivation afterward. Weeds are sometimes counted as a blessing, because their presence compels the farmer to continue really necessary cultivation which he might otherwise feel justified in omitting to the detriment of the crop.

The profit in growing any crop is the net sum remaining after all the expenses of producing it have been paid. It costs about so much per acre for plowing, harrowing, cultivating and harvesting, whatever the yield, so the man who succeeds in producing 100 bushels of corn per acre surely produces it at a less cost per bushel than he who only gets 50 bushels. And just think what an amount of cultivation and fertilization that second 50 bushels w.il pay for. The top bushel is always the most profitable.

I think many farmers, and particularly those who have no silo, lose a great opportunity in failing to plant a field or plot of mangel wurtzel, or cow beets. On good land it is easy to grow 12 to 15 tons per acre. These roots will keep without trouble in any cellar or frost-proof basement, and prove a great addition to the winter's food for cattle and hogs. In no other way have we ever been enabled to winter brood sows at so little cost. We are now feeding a bushel per day to our six calves and they appear to thrive with little or no grain.

Many farmers fail to realize how much easier and cheaper it would be to do more of the required cultivation before the crop is planted. Begin your preparations early enough so that when you have your land all ready to plant you can just leave it alone for a week or more and then harrow and cultivate the surface all over again. One crop of weeds will thus be destroyed at a light expense, and the surface will be brought into finer tilth and better prepared to receive the seed. On lands liable to suffer from drought this process may be profitably extended for weed 5 or months before planting the crop.

Many farmers seem to look upon seeding down a piece of land as an expense which should be undergone only as often as is absolutely necessary in order to cut good hay, and plow the land only when it has ceased to produce a paying crop. In fact, however, the oftener a good sod can be turned under to decay and supply humus, the better will the fertility be kept up. I think money expended in grass seed with a view to maintaining fertility is a far better investment than in purchasing fertilizers. And the more clover seed you can get in the better will this object be accomplished.

Adjoining our place is a farm of 170 acres which has been rented out for the past fifty years, at least, on the cash rental system. For the greater part of this time it has been let annually on a single year lease. The reason for this is that it belongs to an unsettled estate, and the trustee is always in readiness to sell. So the tenant, expecting each year to be his last on the place, has sown little or no grass seed for many years past. As a result the place, which was once profitable and productive, now barely affords a living for the tenant. Meadows which once cut two tons of good hay per acre were this season left untouched, as they contained nothing worth the labor of gathering. And the grain fields, having been cropped year after year, with no addition of humus from rotted sod, are but little better. Thus it has become absolutely unprofitable to both owner and tenant who can no longer undertake to pay one dollar per acre annual rental.

Cattle Breeding

(Continued fr m last issue)

CATTLE FOR MILK PRODUCTION.

The man who is going to live by dairying, without any special regard to meat production, will find that the Jersey, the Guernsey, the Holstein or the Avrshire will answer his purpose, either in the pure or the high grade form. The Holstein, being the largest breed, has higher adaptation for righ and level, rather than for less rich and more broken lands. The Holstein has been railed against because of the low quality of the milk which she produces, but she has never been given due credit for the abundance and excellence of the skim milk which she has given to the farmer. If the cattle have to roam much over pastures in gathering food, the Ayrshire will probably best fill the bill. Usually the results will be found satisfactory where the dairyman begins with good milking cows of any kind of breeding, and then uses pure bred sires of one of the breeds named.

Should the dairyman try to grow his steers into beef? Emphatically no, if they are from dairy sires, He may grow them into veal or baby beef by feeding them on skim milk and certain adjuncts, selling them between the ages of 6 and 9 months, or a little later in the case of Holsteins, but he should not try to mature and finished, unless he is anxious to get rid of his money. But, if the dairyman has grade cows of mixed breeding, and does not care to rear any calves for the dairy, and is, moreover, desirous of growing meat, he can do so by using high class, pure-bred sires of some beef breed. The progeny will then be so pronouncedly beef in form that they can be grown profitably for meat, even to the age of two or three years.

CATTLE FOR MEAT AND MILK PRODUCTION.

Cattle kept for meat and milk production, or for milk and meat production, as the case may be, in the judgment of the writer, always will be the class of cattle that will predominate on the average farm. Especially will this be true of farms rich in production, and more particularly will it be true of those large enough to maintain from 10 cows upward, or even a less number, so that a cream separator can be kept upon the farm. There are several reasons why it should be so, the chief of which are the following:

Good milk production and good beef production are not incompatible in the one animal.

2. Growing animals for milk and meat will ensure the more profitable consumption of all the varied lood products grown upon the farm.

3. Maintaining such cows and milking them by hand wall be more profitable relatively than growing beef cattle only, where the calves suckle the dams, and

4. Such a system of cow keeping is a necessity to keep in equilibrium the production and market values of dairy products.

Each of these propositions may easily be demonstrated, but to do this here would unduly prolong this paper.

These cows, that is to say, dual purpose cows, never stood higher in favor with the average farmer than they do to-day. The cry for more of them has gone up from Lake Superior to the Gulf, and from one side of the Mississippi basin to the other. It is ever bringing renovation to the cow-keeping methods of the farmers beside the Atlantic and the Pacific. A tidal wave is sweeping all down the Mississippi basin in favor of the dual purpose cow, and it is carrying on its bosom toward the Gulf like driftwood, the teaching of those men who taught that the dual purpose cow was a delusion, a myth and a snare. In the face of this tidal wave, let the men who taught those things come out of their hiding places and try, if they can, to arrest the overflow.

But what is this dual purpose cow? She is a large animal, or fairly large, according to the conditions under which she is to be kept. She has a large, deep and capacious barrel, with ribs not too closely spaced, nor too downward in their spring. She has a refined head and neck, inclining to length, and limbs inclining to fine. Her crops are moderately wide above, and she has good width through the heart. Her hind quarter is long and wide and deep, straight on the sides and rear, wide at the pin bones and fairly open in the twist. Her udder is large, well quartered, has medium suspension and conveniently large teats, and her milk veins are long and tortuous, all the better if branched, and enter the body through large orifices. In other words, she is a good, thrifty, wellorganized animal, whose milking powers are not destroyed by obesity, and whose constitution has not been weakened by skeleton clothed development.

Which breeds furnish those dual purpose cows? The shorthorns do in largest numbers, pure and in the grade form, for one reason, among others, that shorthorns are by far the most numerous in the land, and the place for the dual purpose shorthorn is on the arable farm, rich in productive power. And the Polled Durhams can be classed with shorthorns, since they are essentially the same in their leading

characteristics. Second in order come the Red Polls, not placed second because they are in any way inferior to the shorthorns as dual purpose cattle, but because they are less numerous. They are a little less in size than the shorthorn, and, in the judgment of the writer, should be kept so; hence their best place will be found on farms undulating and with fairly good production. The Brown Swiss are also good dual purpose cattle, with a leaning to milk. They have ample growth for beef production, but their strong bone development is somewhat against them for producing the highest class of beef. They are large cattle, and are therefore adapted to conditions in which the production is abundant. The little Devons are good dual purpose cattle, with a leaning to beef. Their place is on hilly farms, with a proportion of bottom land for growing winter food. These animals, with their meat limbs and smooth, pony-like frames, dress well on the block and make an excellent quality of beef. Dual purpose cows may also be obtained by taking large dairy cows of mixed breeding and crossing upon them Shorthorn, Polled Durham or Red Poll bulls from good milking families. In two or three generations of careful breeding the dual quality will assert itself.

HOW TO PRODUCE DUAL PURPOSE CATTLE.

Taking conditions as we find them, how is the dual purpose cow to be bred? Some say, take a good straight dairy cow and cross her with an extreme beef bull, that is one extreme in form and high in breeding. If the breeding is high on both sides, neither man nor spirit can tell what the result will be, for the reason, first, that the relative strength of the breeding cannot be accurately known, and second, because of this the relative strength of the pre-potency in either parent cannot be known. The progeny may incline strongly to beef or to milk or it may be a compromise? Mate such a bull with a dairy cow of excellent performance, but whose breeding is much mixed, and just as sure as the sun travels westward in the sky, the progeny will incline to beef. It cannot be otherwise. The prepotency of the bull will be far greater than that of the cow, because his breeding is pure and hers is mixed. In other words, because his power to effect change is far greater than her power to resist change. If men follow such teaching in breeding dual purpose cows, these can be only one termination to their effort, that is to say, the ditch. Anybody who is thoroughly conversant with the principals that govern up-grading does not require to be told this.

How, then, shall the dual purpose cow be bred? Select large, roomy bodied cows; secure bulls inclining to be pronounced meat form to maintain stamina for crossing upon the cows. These bulls should be from dams in the near ancestry of which were good milkers. Feed the heifers in such a way that their milking powers will not be injured. Eliminate all milk producers below the desired standard as soon as the fact is known. Persistence in such breeding will give the country such dual purpose cows

as have not been seen in the land.

Happily for the farmers of this country, the teaching of the experiment stations is righting itself on this subject. The band wagon of dualism on the cow question has been driven rapidly through all the stations in recent years, and

in nearly all of them teachers of animal husbandry are jumping on. These men are recognizing what many shut their eyes to before, viz.:

1. That dairy form is only a general, not an absolutely infallible guide in determining dairy capacity.

2. That inheritance in milk giving is a powerful factor in milk elaboration, notwithstanding the absence of the highest dairy form, and 3. That food also exercises a powerful influence in determining what the milk production of a cow will be, despite her lack of high dairy form. Men have bowed down and worshipped at the shrine of dairy form, when they should have bowed before the trinity of dairy form, dairy inheritance and dairy food products.

Feeding Crops

For hundreds of years the common practice in farming has been to feed the soil rather than the crops grown on the soil. So ancient is this practice that it has become a fixed law, and many intelligent farmers even to this day continue to enrich the soil without any considerable reference to the crops to be grown thereon. This is one of the most stubborn habits the scientific agriculturist has to contend with; still, it must be understood that the science of farming is so young than many of us will remember the rather startling propositions of Liebig and Lawes, and with what incredulity they were first received by the vast majority of even the more intelligent classes of farmers.

All this brings us back to the main point—the feeding of crops. Stated briefly, crops should be fed (fertilized) with reference to the special needs of that crop. A soil in good general condition is not sufficient of itself, just as good farmers now know there is no good general purpose in anything on the modern farm. A soil black with humus, and in excellent tilth, may answer very well for certain crops, but these are the very crops so common on such soils, and which usually are but slightly profitable. The successful modern farmer is one who quickly learns what crops are to him most profitable, and learns also how to make his soil produce those very crops, whether they are common to his neighborhood or not.

The first thing to do in most cases is to unlearn all the old ideas as to manures, soil heart, etc., and to confine the idea of plantfeeding to the bare fact, now unquestionably fixed by thousands of scientific experiments. that plant food is nor merely manure, or fertilizer, or fertilizer chemicals even, but the nitrogen, potash and phosphoric acid contained in these substances. That is the first thing to fix thoroughly in the mind, and a great deal has been gained when so much is accomplished. Next should be considered the feeding habits of plants, and these are shown largely by the chemical analysis of the whole plant substance of any crop, grain or forage, including in every case the roots, stubble and straw, all such parts as are commonly considered useless as having no sale value. It is well to look into these refuse portions of crops still more closely. While straw roots and stubble have little crop value in the market, they take up their proportionate amount of the plant food needed for the crop; but, without these comparatively useless portions, the valuable grain or forage, as the case may be, cannot be realized. Hence, the plant food required for a certain crop must

FOR FARMERS AND STOCKMEN

always include an allowance for the elements contained in the comparatively useless stubble, roots and straw.

The feeding habits of the chief grain crops are shown roughly by the following table, giving the actual plant food required for crops as

Bu.	per acre.	Nitogen.	Potash.	Phospi oric Acid.
Wheat	35	60 lbs.	35 lbs.	25 lbs.
Rye		52 lbs.	47 lbs.	27 lbs.
Barley	40	47 lbs.	39 lbs	22 lbs.
Oats	60	56 lbs.	65 lbs	22 1hs

It is imperative, in order to realize the yields as above, that the crops should have in available form the quantities of nitrogen, potash and phosphoric acid given in the table. It is also well known that crops cannot sweep a soil clean of food, and that all plant food elements must be present in excess of the actual requirement of the crop. Knowing this, the farmer can easily balance his plant food to fit the

Unfortunately there is a tendency among farmers to use incomplete fertilizers (fertilizers not containing all three of the essential ele-ments of plant food), and to these we must say that the laws of plant growth are inflexible; no one element of plant food can replace another. If any two are present in ample quantities, or even in excess, and one element deficient, the crop is limited by the deficient element-the excess of the other two elements goes largely to waste. In this connection, farmers will do well to scan the composition of the fertilizers offered by dealers, to see if they are not practically incomplete in the sense that one or more elements are present only in very small percentages.

Where incomplete fertilizers are used to grow a legume (plants of the clover type), the procedure is rational, as the object is to favor a heavy growth of the legume, which type of plant not only takes up atmospheric nitrogen for its own uses, but also stores up large quantities in roots and stubble which may be used as plant food for succeeding crops. In this case, potash and phosphates must be used liberally, as the nitrogen cannot be assimilated unless certain qualntities of potash and phosphates are present to accompany same in the vegetable substance of the crop. It must be kept in mind, however, that fertilizers for this purpose may be deficient in nitrogen only.

S. P. Cox.

Caring For Brood Mares and Foals

Gratton Stock Farm, of Illinois, gives its methods as follows in the Christmas number of "The Horseman": "We are prepared to agree with you that the care of brood mares and foals is of the utmost importance to those in the breeding business, whether they are in the business for pleasure or profit, and the writer never saw a futurity won but what he speculated as to the treatment the winner received from the time he was foaled until he won his important race. As to our method of treating mares and colts, will say we are great believers in plenty of exercise in the open air, with plenty of good wholesome food, and, above all, plenty of pure water. We have something more than 800 feet of deep, roomy sheds on the Grattan farm, so that our mares are comfortable in the open air, it matters not how badly it storms. In the yard, which these sheds surround, we have racks, which we keep filled with timothy hay and shredded corn fodder, thus allowing them to choose the food they like best, and we notice part of the day they will eat corn fodder and part of the day, hay. Aside from this, during the cold winter months, we feed corn on the cob. In the warmer days during the winter, we add to this feed carrots, and toward spring we feed the mares twice a week equal parts of bran and oats, which we thoroughly cook in a steam cooker. Our r., res always keep fat during the winter, and re have never had a mare become sick from a 7 disease whatever where allowed the freedom of the yard or sheds. Since wintering our mares in this way, our greatest difficulty has been to keep they from taking on too much flesh.

"As to our method of treating colts: We teach them to eat oats as soon after they are foaled as possible, and we keep oats before the youngesters always. This is a simple matter and can be accomplished by building a pen in the pasture near the watering place. Mares will usually spend considerable time where they go for water, and by building an oat pen at that point the youngsters always have plenty of time to eat oats. As a rule, we feed the mares no grain in summer. In case one does not do well on grass, then we separate her from the herd and feed her twelve quarts a day of oats

"The youngsters receive no special attention until they are four months old. Then we wean them, as we think it is too great a tax on the dam to take care of two colts for more than four months of the year. When we separate them from their mothers we halter-break them thoroughly. As soon as they become tractable and forget their mothers, we turn them out in an open meadow and give them all the oats they will eat until November. Then we put them on cooked feed twice a week and begin educating them to eat carrots. This is their diet until spring. The only change made is to change the cooked feed to four times a week during the winter. Of course they always have timothy hay before them after they are taken off the grass. We prefer a good sprinkling of red clover in the hay that we feed young colts.

"Our housing for them is a good, big, roomy shed, open to the south. For instance, this winter we will keep thirty-odd colts in a shed twenty-two feet in width by seventy-five feet in length, closed on all but the south end. Surrounding this shed there is about an acre and a quarter of ground, so they can

exercise at will.

"Believing in pure water, we have running water in all the yards the year round. We are fortunate in having a flowing well. Our water never freezes, consequently the animals have water befor them constantly. In other words, we believe in letting brood mares and colts eat when they are hungry, drink when they are thirsty, and take their exercise when they please, and we never have the least trouble in keeping the youngsters fat, healthy and growing. As they live in the open air, we are never troubled with lice, distemper, or any of those ailments that seem to be so prevalent among stock that is kept confined in close quarters in hot barns during the winter.'

CORRESPONDENCE

"The Garden of Canada"

Editor THE FARMING WORLD :

It might not be amiss at this time of the opening of this new century, to let your readers know that we in South Western Ontario are still doing business at the old stand, ready to accept what the new century has in store for us with the best possible grace. We in this portion of the moral vineyard are in the habit of congratulating ourselves on living in the "garden of Canada." That the inhabitants of several other sections of the province think that their abode happens to be in that happy spot does not lessen our pride in our own heritage. For a man to believe that his own home is the fairest spot on earth is not by any means a bad sign. Any part of Ontario is good enough to be a source of pride to those who live within its borders. Any section may have its little drawbacks and these may be needed to keep us humble. As David Harum said, "Some fleas are good for a dog; they keep him from worrying all the time about being a dog," on the same principle if we had no drawbacks we would get so all-fired proud we Ontarians would think no other people had a right to exist on this green earth.

Well, Essex, Kent, and Elgin are the home of the bean crop in the province, and for the past two seasons the bean market has been good, and has meant several hundred thousand dollars in the pockets of the farmers of the three counties. Beans at a dollar and upwards per bushel means a fair profit to the grower. Beans first obtained a foothold as a field crop near the Rond Eau. Some settlers from the Genesee valley in York State, brought some beans along when moving to Canada, and very likely they had no idea at the time how great a blessing they were conferring on future generations, or what a source of wealth beans would become. Fortunately for the farmers of this district, something was found to take the place of wheat, which, owing to low prices, the ravages of the Hessian fly, injury from drouth, and a few other like causes, can only be grown at a

When all is said and done, corn is king in these counties, where the corn plant has made itself quite at home, and the acreage is increasing year by year. And now that harvesting machinery is beginning to work satisfactorily, and corn husking machinery is being generally introduced, it will be as easy to grow a crop of corn as any other crop. Corn will continue to grow in public favor year by year. Farmers are going more extensively into stock-raising as the years go by, and more and better feed for all kinds of stock can be grown on an acre of corn than on an acre of any other grain. Silos are not very numerous in this section so far. but they seem to be gaining in favor, perhaps owing to corn not being properly handled a prejudice had grown against the silo. To many it seemed like waste to put in a silo corn that would yield a hundred bushels per acre or better.

A strong effort is now being made to establish a sugar beet factory in Chatham. This effort, if successful, will be a source of profit to the surrounding farmers for miles around. In the States, where these factories are at work, sugar beets are shipped to the factories by the

car load, and a profit is made by the grower at four dollars per ton. The effort to manufacture sugar in Ontario will be watched with interest, and we hope for success for the new business.

Arch. McColl, Sec. W. Elgin, Far. Ins.

Aldboro, Ont., Feb. 1, 1901.

Note.—We enjoy reading a cheery, hopeful letter like the above, and would like to publish more of them if our friends would send them along. We would be glad to hear from other sections as to how the farmers' calling is progressing, and what are the special lines of agriculture carried on. Let us hear from you.

Editor.

Lime

Editor THE FARMING WORLD:

Referring to Mr. Scott's letter on this subject in your issue of 4th Dec., 1900, the importance of lime in soils should not be allowed to drop out of sight, and Mr. Scott does a public service by drawing attention to it, and by the publication of his letter you earn half the credit. There is now no doubt that many diseases result to the crops from lands deficient in lime. In most cases the deficiency may have been brought about by continuous cropping without replenishment, and by leaching to lower stratas owing to the constant working of the top soils. Also there are lands which are rich clays, made rich by ages of humus formation and available food storage, and for the want of lime production is limited, simply because there is a deficiency in the balance of plant foods. Also, the phosphoric acid liberated from the constant destruction of humus, may find such intractable bases as iron and alumina, and the application of lime corrects this difficulty, for the time at least, by providing a less miserly base. I generally advocate the application of lime occasionally to lands on which superphosphates are used. A Thomas phosphate supplies its own lime in a peculiarly fine form, and does not call for further lime application. Poor old Dalmeny was undoubtedly suffering for lime, as is clearly evidenced by the development of "finger and toe" to the turnips, and I imagine the Blackwater farm was too, though the causes may have been very different in these cases. But farmers must consider carefully that lime alone will not enrich, but if depended upon wholly will impoverish lands, as far as crop production is concerned. It will hasten the destruction, or burning out, of the humus, which is like killing the goose that laid the golden egg. If we apply lime, then, we must keep up the humus supply to provide new food storage in the soil. Now the barley crop, to which Mr. Scott refers, only used about 50 pounds of lime per acre for the total crop of straw and grain, and 35 pounds of that was in the straw, which, if it returns to the soil as manure, is in a better condition for future cultivations than before. We should strive in manuring to provide, first, abundant humus; second, abundant plant food for the humus; third, plenty of phosphoric acid to balance and give force to the nitrogen and potash satisfies to set up healthy action in the soil. These latter, of course, at long intervals, say 200 to 400 pounds of lime and a bushel or two of salt every 4 or 5 years.

"Humus."

Horse Breeders in Session

CANADIAN HORSE BREEDERS.

The annual meeting of the Canadian Horse Breeders' Association was held at the Albion Hotel on Friday after-

There was a good attendance and much interest in the proceedings. The president, Dr. Andrew Smith, Toronto, occupied the chair. The annual report of the secretary-treasurer, Mr. Henry Wade, was very carefully and well prepared, covering the work of the association for the year very fully. The year just closed had been one of the most prosperous in the history of horse-breeding in this country. Prices were higher and the demand good. Prizes for stallions at the leading shows should be increased in number

horse-breeders guarantee a sufficient sum for their services during the year. The details to be worked out by the directors and the gross amount offered not to exceed \$500.

The object of this resolution, which was carried, is to foster the breeding of a better class of horses throughout the country. The premium system has been working most satisfactory in Scotland for a number of years, where as much as from £200 to £500 are frequently given in premiums to a single stallion if he be of the right sort. There was some little opposition to adopting the resolution, as it might lead to a considerable draft upon the association's funds in the future. But the majority were determined to give the matter a trial, and we believe the far

son, W. E. Wellington, H. N. Cross ley, Dr. Andrew Smith, S. B. Fuller Woodstock; E. W. Cox, J. M. Gardhouse, Alex. Innes, Clinton; James Henderson, Belton; Geo. Pepper, and W. Harland Smith.

At a meeting of the board of directors, held later, Dr. Smith was re-elected president, and H. N. Crossley, vice-president.

CLYDESDALE BREEDERS.

The Clydesdale breeders had a most enthusiastic meeting on Thursday. There was a very large attendance of members, some being present from the Territories. The president, Mr. Peter Christie, Manchester, presided, and in his annual address referred in appropriate terms to the



A Good Harness Horse.

and value so as to encourage the bringing of good animals into the country. Reference was made to the Pan-American and the importance of Canadian horses being well represented there. Reduced rates on the railway had been obtained for breeding horses on the same basis as those now in force for the transportation of other stock. The total receipts for the year were \$3,417.71 and the expenditures \$512.00, leaving a balance on hand of \$2,905.71.

The principal business before the meeting arose out of a resolution introduced by Rob Miller, Stouffville, and seconded by Col. McCrae, Guelph, which read as follows: That this association, desiring to advance the best interests of horse-breeding throughout the country, hereby authorize the directors to offer premiums to encourage the placing of the very best stallions in districts in Ontario where

mers of this province will back the association up in inaugurating a new departure of this kind. Further, it might be possible if the agricultural societies or Farmers' Institutes evinced a strong desire to take advantage of these premiums by selecting the best stallions for service in their districts that an additional grant for this purpose might be obtained from the Government. It is to be hoped that this offer will be taken advantage of by our farmers.

The directors were instructed to appoint a committee to confer with the Dominion Government with a view to obtaining some financial aid for the association.

The board of directors for 1901 comprise the following, made up of representatives from the various breeders' associations, as noted elsewhere: John McDonald, Toronto; Robert Beith, Wm. Hendry, jr., D. B. Simp

death of the Queen. The demand for heavy horses had greatly increased, and the outlook for the future was never brighter. It was thought several years ago that when electricity suddenly came into use on street railways, etc., that it would lessen very materially the demand for heavy horses. But such had not been the case. The draft horse was in better demand to day than ever before.

The annual report of the secretary-treasurer, Mr. Henry Wade, was most encouraging. Clydesdales had made a splendid showing at the leading fairs. He referred specially to the great honor that had come to Canada, and more particularly to the Clydesdale breeders, through the exhibit of Mr. George Moore, of Waterloo, Ont., at the Cnicago International Show last December. (For particulars see our reports of the show). The registrations of Clydesdales during the year

were 336, or 54 more than in 1899, and 84 more than in 1898. Volume 10 of the stud book was now ready for distribution, containing 896 pedigrees. The total receipts of the year were \$1,109.29, and the expenditures such as to leave a balance in the treasury of \$239.99.

After the regular business had been transacted a valuable discussion took place, principally in reference to increasing the fees for stallions and protecting the stallion owner. Col. Mc-Crea thought that the Clydesdale breeders should take the lead in the matter and increase the fee. Prosperity had come to the horse breeding industry, and it was nothing but fair that the hard-pan prices of the past few years should be increased. advised imposing a service fee foal or

premium plan, he believed that if the agricultural societies would give a premium of a couple of hundred dollars and select a good horse for their purpose, guaranteeing the owner a certain number of mares, it would do a great deal towards bringing about a better class of horses in the country, Others who took part in the discussion were: Mr. Choate, Port Hope; Geo. Moore, Major McGillivray, Jno. E. Turner, Millarville, Alta., who stated that a lien law, enabling stallion owners to take a lien on the mare or produce for the amount of the service fee was in force in Manitoba and the Territories; W. E. Wellington, Wm. Hendry, jr., Mr. Wilkie and others.

It was the general feeling that something should be done to protect the stallion owners, and a resolution was McCrae, Guelph; and Geo. Moore,

Representatives to the Industrial Fair.—Henry Wade and Jno. Davidson; Western Fair, Alex. Innes, Clinton, and James Henderson; Ottawa, David Christie and Col. McCrae; Quebec and Sherbrooke, Robt. Ness and Geo. Stewart, Howick, Que.

Representatives to the Canadian Horse Breeders' Association.—Wm. Hendry and D. B. Simpson, Bowman-

Secretary-Treasurer.-H. Wade, To-

The following were recommended as judges: Alex. Galbraith, Wisconsin; John Davidson, Robert Miller, A. B. McLaren, Aurora, Ill.; James Henderson and Geo. Moore.



A Good Horse for a Dog Cart.

no foal, with additional fee if there is

Mr. Wm. Smith, Columbus, thought that there might be some difficulty in getting all stallion owners to come together on this matter, and believed liberty of action would have to continue, though he believed in a service fee or note taken from the owner of the mare at the time of service. Mr. Robt. Miller, Stouffville, said that there would be no difficulty in enforcing this if stallion owners would agree to put only good, reliable horses on the road. If a stallion is proven to be a non-breeder the service fee should be returned. Licensing stallions was, in his opinion, not practicable. It would be better to give premiums. This system had given the best of satisfaction in Scotland.

Dr. Andrew Smith, president of the Industrial Fair, thought that the most profitable horse for the farmer to breed was the heavy horse. Referring to the

passed instructing the Board of Directors to memorialize the Provincial Government to pass a law enabling stallion owners to put a lien on the mare or her produce in order to guarantee the payment of the service fee. This was carried unanimously. Mr. Clemons, the Live Stock Commissioner's secretary, announced that it was the Hon. Mr. Fisher's intention at present session of the Dominion Parliament to bring in legislation covering this matter.

The officers for 1901 are: President, Peter Christie, Manchester; vice-president, Jno. Davidson, Ashburn; vice-president for Ontario, D. Sorby, Guelph; Quebec, Robt. Ness, Howick; Manitoba, J. E. Smith, Brandon; N.W.T., Jno. E. Turner and J. M. McFarlane.

Directors.-T. Graham, Claremont; Wm. Hendry, jr., Hamilton; James Henderson, Belton; Jno. Vipond, Brooklin; D. Sorby, Guelph; Col.

SHIRE BREEDERS.

The Shire Horse Breeders' Association met on Thursday morning, when more than the usual interest was shown. Mr. W. E. Wellington occupied the chair. The secretary-treas-urer's report was satisfactory, though there had not been any great change in the affairs of the association. Some work had been done in getting things ready for a new herd book, and tenders for printing had been asked for. The total receipts of the year were \$132.73, and the expenditure \$11.65, leaving a balance on hand of \$121.08.

An informal discussion took place as to the number of judges giving the best service in awarding prizes. Some were in favor of only one judge, while others advocated two. The following judges were recommended: Wm. Wilkie, Toronto; Jno. Davidson, Ashburn; Geo. Moore, Waterloo; Arthur Johnston, Greenwood; and R. P. Sterriker, Attica, N.Y.

It was decided to issue 200 copies of the first volume of the stud book, and instructions were given the secretary to have the matter prepared.

The officers for 1901 are: President, W. E. Wellington, Toronto; 1st vice-president, James M. Gardhouse. Highfield; 2nd vice president, J. B. Hogate. Directors—Jno. Gardhouse, Wm. Hendry, jr., Wm. Wilkie, H. N. Crossley, Toronto; Jas. Dalgety, London; Thos. Skinner, Mitchell. Delegates to the fairs are: Toronto, H. N. Crossley and Jno. Gardhouse; London, H. Wade and Jas. Dalgety; Ottawa, H. Wade; and to the Canadian Horse Breeders' Association, H. N. Crossley and W. E. Wellington. It was recommended that an effort be made to increase the prize list at the Industrial.

SADDLE AND CARRIAGE HORSES.

The members of the Saddle and Carriage Horse Breeders' Association met on Wednesday, the president, S. B. Fuller, Woodstock, in the chair. There was a large attendance. The reports of the secretary treasurer showed a balance on hand.

Grants of \$50 and \$60 each were made for championship prizes at the Industrial and Horse Show respectively, to be open only to first prize winners. Mr. W. Harland Smith was elected delegate to the Industrial Fair. A motion was carried asking the Hon. John Dryden to introduce legislation at the present session of the Legislature for the purpose of providing for the licensing and inspection of stal-Attention was called by the president to the fact that the British military authorities were now buying a number of horses in the United States, and expressed the hope that the Dominion Government would impress upon the Imperial authorities the fact that Canada could supply a great many of the horses wanted.

The following officers were elected: President, S. B. Fuller; first vice-president, W. H. Smith; second vice-president, Ald. O. B. Sheppard; directors, W. C. Brown, Meadowvale; T. H. McCarthy, Thamesford; Thomas Crowe, F. S. Gallanough, Thornhill; T. D. Lomes, Brampton; Dr. A. Smith, W. Hendrie, jr., E. W. Cox, W. Graham, Claremont, and George Pepper.

THE HACKNEYS.

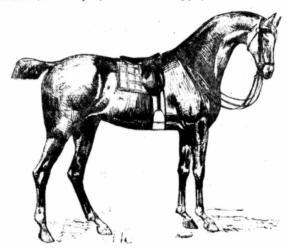
The ninth annual meeting of the Hackney Horse Society was held at the Albion Hotel on Wednesday evening. President Robert Miller, Stouff-ville, in his address, said there was no question that the Hackney was the best breed of light horse for this country or any other. The report of the secretary-treasurer, Mr. Henry Wade, stated that 32 pedigrees had been recorded during the year, and that there were now 290 on hand, enough to print a small first volume.

There was a warm discussion over the proposition to amalgamate with the American society. The objections to this were that even joint registration would mean the extinction of the society. For national reasons it was considered inadvisable to give the Americans everything, they asked for However, there was a strong feeling in favor af amalgamation, and a committee was finally appointed to confer with the American society on the matter and report to the directors. Fifty dollars each were granted to the Industrial and the Horse Show.

The officers for 1901 are: President, R. Miller; vice-president, Thomas Graham, Claremont; 2nd vice president, John Holderness; vice-presidents for the Province—Ontario, Robt. Davies; Quebec, J. A. Cochrane, Hillburst; Alberta, A. M. Rawlinson, Calgary; Manitoba, M. McMillan, Brandon; New Brunswick, J. R. Frink, St. John; directors, H. N. Crossley, Rosseau; R. Beith, Bowmanville; E. C. H. Tisdale, Beaverton; W. Graham, Claremont; Dr. A. Smith, R. Bond, George Pepper, John Macdonald, D. B. Simpson, Bowman-

at the hands of his Government. He had personally interested himself in the matter of securing a remount depot for Ontario by interviewing the Governor-General, who had promised to do everything in his power to induce the home Government to establish such a station in Canada. In addition the Legislature would be called upon to take some action in the matter at the present session. The establishment of such a station would prove a great incentive to our farmers to breed horses suitable for army purposes, which are so much in demand at the present time.

The Hon.Mr.Dryden, who followed, also spoke encouragingly of the horse breeding industry. Organization was most important. A few weeks ago he had, in conjunction with a committee of horse breeders, waited on the railway authorities and been successful in obtaining the same rates for horses for breeding purposes as are now in force



The Saddle Horse.

ville; delegates Industrial Exhibition, R. Beith, G. Pepper, (provisional); London Fair, Adam Beck, London, and E. E. Attrill, Goderich; Ottawa Fair, R. Beith; Quebec, James Cochrane; Woodbridge, R. Bond, John Holderness, John Macdonald; Horse Breeders' Association, John Macdonald, R. Beith; auditor, C. F. Complin; secretary-treasurer, Henry Wade.

The second annual dinner of the Canadian Horse Breeders' Association was held at the Temple Cafe on Thursday. It was a brilliant affair, and President Smith and Secretary Wade are to be congratulated on its success. There were representative horse breeders present from all parts of the province, as well as many of the leading citizens of Toronto. The leading address of the evening was made by Premier Ross. He referred in a very hopeful strain to the outlook for horses, and gave every assurance to the horse breeders that their interests would receive every consideration

for the transportation of other live The Spring Horse Show was stock. The Spring Horse Show was not a Toronto fair, but a provincial one, and should receive Government assistance for that reason. Canadian horses had rendered good service in South Africa. He had been informed that the Guelph battery, when it left for South Africa, had 138 horses, and after one year's service at the front, had 78 horses for sale. This was a splendid record, and showed that our Canadian horses were able to stand the heavy strain at the front as well, if not better, than any others on the field. He did not favor legislation compelling farmers to breed the right kind of horses, but believed in educating them as to the requirements of the market and how they could be supplied.

Others who addressed the gathering were Major McGillivray, Wm. Smith, Thos. Crawford, Andrew Pattullo, Col. Lessard, Col. McCrae, Robt. Miller, D. B. Simpson, Alex. Innes, W. Lee, H. J. Hill and W. H. Smith.

The Agricultural Gazette

The Official Bulletin of the Dominion Catrle, 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 Breed re' St; Sheep Breeders', St; Swine Breeders', \$2

BENEFITS OF MEMBERSHIP.

Back member receives a free copy of each publication issued by the Association to which be belongs, of the Swine Record.

In the case of the Swine Breeders' Association this includes a convenience of the Swine Breeders' Association this includes a convenience.

string 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 sember of the Swine Breeders' Association is allowed to register pigs at 500, per head; non-members a sember are charged \$1.00 per head.

A sember of the Swine Breeders' Association is allowed to register sheep at 500, per head, while non-members are the sember are charged \$1.00 per head.

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The name and address of each member, and the stock he has for sale, are published once a month. Over the sember are the sember of this directory are mailed morthly. Copies are sent to each Agricultural College and each inpersional Station in Canada and elsewhite States, also to prominent breeders and probable bevers resident A member of an Association will only be allowed to advertise stock corresponding to the Association that he belongs; that is, to advertise cattle he must be a member of the Dominion Cattle Breeders' Association, and to advertise as member of the Dominion Swine Breeders' Association.

Whe list of cattle, sheep, and swine for sale will be published that the same and the same

A Spleadid Lot of Stock Entered for the Provincial Auction Sales.

In last week's issue we gave a partial list of breeders who had entered stock for the provincial auction sales to be held at Guelph on Wednesday, February 27, and at Ottawa on Wednesday, March 6, but, owing to the fact that copy had to be sent to the printers before the entries closed, the list did not contain the names of many of our best breeders, who have since entered. Now that the lists are closed we are enabled to state that there will be a splendid lot of stock put up at auction, comprising Shorthorns, which breed is naturally in the majority; a prime lot of Ayrshires; some choice Hol-steins, Jerseys, Polled Angus, Galloways, Herefords and Guernseys; while, among the swine, the breeds represented are Yorkshires, Berkshires and Tamworths, all from noted herds.

Hon. John Dryden, Minister of Agriculture for Ontario, has put into the sales a couple of very fine Shorthorn bulls. Robt. Miller, Stouffville, has entered no less than six, which are a very nice lot, in prime condition. J. M. Gardhouse, Highfield, is another Shorthorn breeder who has come forward with a pair of bulls of the highest breeding, the dam of one of which is a fine milker, being a Crimson Flower of prize-winning stock. A. W. Smith's two entries stock. A. W. Smith's two entries are also not only well-bred, but from particularly good milking dams; both buils being by the well-known sire, Abbotsford = 19446=, owned by H. Smith, Hay. A Johnston, Greenwood, and these fire females. A money sends three fine females. Among other Shorthorn breeders (and the list is a long one) who will be on hand with well-bred stock in

good condition, are J. T. Gibson, Denfield; V. Flcht, Oriel; H. K. Fairbairn, Thedford; H. J. Davis, Woodstock; McDonald Bros., Colwill Bros., New-Woodstock : castle; D. Talbot & Son, Everton; Castie; D. Failott & Son, Everton; H. Arkell, Arkell; W. Grainger & Sons, Londesboro'; Thos. Coyte & Sons, Port Hope: Webb Bros., Ospringe and Elora; Jno. Bright, Myrtle; D. DeCourcy, Bornholm; R. Corley, Belgrave; J. McCorkin-

dale, Guelph, and some 52 others. The Ayrshire breed will be well represented by contingents from the fine herds of W. W. Ogilvie, Lachine Rapids; Robert Hunter, Maxville; R. R. Ness, Howick; Arch. Campbell, Howick; W. W. Ballantyne, Stratford; McNiven Bros., Ancaster; R. S. Brooks, Brantford; John H. Douglas, Douglas, M.P.P., Warkworth; W. E. H. Massey, Coleman; John D. McInnes, Glen Payne; O.A.C., Guelph; D. Drummond, Myrtle; John Clow, Harrowsmith; John R. Campbell, Vernon; R. R. Sangster, Lancas-ter; W. Nichol, Plattsville; Hon. W. Owens, Montreal; R. Reid & Co., Hintonburg; J. G. Clark, Nepean; I. Yuill & Sons, Carleton Place, and others. All have guaranteed to send some of their best

Jerseys are not so numerous as Ayrshires, but what are there will be good.W. E. H. Massey, Coleman, has entered two grand bulls, one of which has been a prize-winner since a calf, and which captured the sweepstakes for best Jersey male at the last Toronto Industrial. His dam has a record of 43 lbs. of milk per day, testing 5.6 per cent. His sire was also the sire of the firstprize aged bull at Toronto in 1900. The other bull is also of prizewinning stock, his sire being Distinction's Golden, who has won wherever shown. B. H. Bull & Son, Brampton, have entered a

handsome cow, which is a first class milker. Among others the herd of W. Willis, Newmarket, will be represented. G. W. Clemons, St. George; John A. Richardson, South Merch, and C. R. Gles, Heideburg, have some fine Holsteins entered.

James Bowman, Guelph, has selected four of his best Polled Angus young stock to show. He will be supported by J. W. Burt, Coningsby, and others. D. Mc-Crae, Guelph, will furnish a couple of fine Galloways.

There will be several Herefords put up, among them being a couple of grand things from the herd of H. D. Smith, Compton. R. & J. Stutt, Forest; O'Nelli Bros., Southgate; and P. C. McParland, Darcyville, have several head entered

There will be a very select lot of Brethour & Saunders, Burford, have entered some of their best stock for both Guelph and Ottawa. G. B. Hood, Guelph; J. G. Clark, Nepean; L. Rogers, Weston; Scanlan Bros., Ennotville, and other Yorkshire breeders will contribute. In Berkshires, R. Reid & Co., Hintonburg; J. Yuill & Sons, Carleton Place; D. McCrae, Guelph; E. E. Martin, Canning; Compton Model Farm, Compton, Que.; and W. C. Henderson, Keady, are the principal contributors. Tamworths are entered by Colwill Bross, Newcastle; John A. Richardson, South March; H. D. Smith, Compton; and R. Reid & Co., Hintonburg; and the stock can be depended on to be first-class in every particular.

Report of the Block Tests at the Provincial Winter Fair.

Prepared for Publication in the Live Stock Report by Prof. J. B. Reynolds, O.A.C.

One of the lessons to be learned from the block test in swine is that it is very important for the feeder to know when the animal is ready for market. It is much easier to leave the animal unfinished or to feed a week or two too long than it is to know just when the right condition is reached. A number of the carcases slaughtered at the show were unfinished; and, at the packing house, an unfinished carcase commands a lower price per pound, because the quality of the meat is poorer than it is in better finished animals. But there was more error on the side of feeding too long. After a certain stage is reached, according to the demands of the English market, the feed

given is practically wasted since it is turned to fat by the animal, and the superfluous fat serves only to lower the grading quality of the hog. There were two conspicuous illustrations of feeding too long. In reply to letters sent inquiring about the condition of the animals slaughtered, Mr. A. C. Hallman reports that his Tamworths, according to his opinion, had been kept a week too long, and were

over-ripe. These animals were graded at the packing house as medium fleshy (too fat for best selection). If they had been slaughtered a week earlier they would in all probability have graded No. I.



FIGURE 1.—Wrong type for bacon hogs. Note, 1. The short side. A long side is desirable because this part between the shoulder and the ham furnishes the choicest cuts and brings the best prices. 2. The short thick ham. The left side of the figure shows what this form of ham means—a tendency to too much fat. 3. The arched crown—a sure sign of being predisposed to fat. 4. The excessive thickness of fat over the back and round the ham.

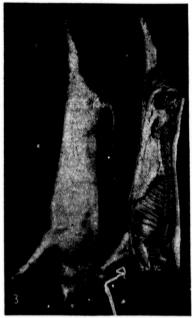


FIGURE 3.—A lean old stag. Quite unfinished, and quite undesirable, rated by the packers at 4 cents a pound. Note, 1. The lean ham and coarse scrawny head. 2. The side, long enough, but altogether too light and thin.



FIGURE 2.—Correct form, but fed too long. Note, as to form, I. The long, tapering ham and head, and light jowl. 2. The long side, and even depth throughout from shoulder to ham. If this animal had been killed some weeks earlier it would have been worth more to the packer, and, under a proper system of graded prices, would have brought more to the producer. Note the excessive amount of fat carried.



FIGURE 4.—A prize carcase. Won sweepstakes for all breeds. Note, I. The long, tapering ham, quite fat enough, as is shown by the left half of the figure. 2. The long side, and comparatively light crown. 3. The evenness and proper thickness of fat over the back. 4. All that need be said of the head is, that it is typical of the breed.

Mr. Blain reports that a pair of his grades were too fat and had been held back. One of this pair ranks fat and the other medium fleshy.

Generally speaking, the block test has been the means of causing a decided advance in the quality of the bacon as compared with that shown in 1899, more especially in those breeds that are capable of improvement in the direction of the bacon type. The

Yorkshires, for a large class, were exceptionally good, and showed a marked improvement over those exhibited last year. The largest class, the Tamworths, have not equally improved, and there appeared to have been less care in bringing them just to the correct condition.

The grades are pushing themselves rapidly to the fore, both in number and quality. Last year four grades were shown, and two of these were 20 and 40 pounds respectively over weight. This year eight were shown, of which six graded No. 1. A pair of grade carcases also won the sweepstakes.

The American classes—Poland-China, Duroc-Jersey and Chester Whites were not exhibited in as large numbers as last year. The judges awarded no prizes to any of these classes.

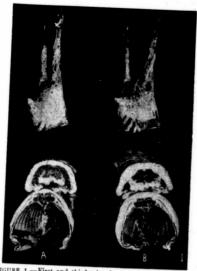


FIGURE I.—First and third prize sheep, respectively, in the same class. Note, I.:The difference in the amount of fat. As between these two, B loses chiefly on account of excess of fat. This animal had been prepared as a prize animal the year before, and had been kept over. Fed altogether too long to be profitable, either commercially or for prize purposes. The broad heavy rump indicates fat throughout. 2. In the live class, B won second, and A won no prize. Here is a point for the judges in the live classes to consider.

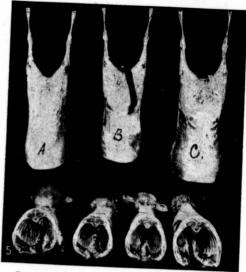


FIGURE 3.—A choice lot of lambs. Any one of them apparently worthy of a prize. The decision was given in favor of B on account of the better mixture of fat and lean over the ribs. A is a little too thin.



FIGURE 2.—Of these two sheep, B is too thin to compare favorably with A. A is not too fat, and the fat and lean are fairly well mixed.



FIGURE 4.—A prize sheep carcase. Won the sweepstakes over all breeds. The live animal and the dressed carcase won at Chicago and at Guelph in December \$127 in prize money.

There is also a great improvement in the quality of mutton shown. Last year, the general complaint of the judges was that the mutton was too fat. While there is a mutch larger exhibit this year, only two mutton carcases were decidedly too fat. Any errors, however, are still on the same side as last year,—a tendency to make yearlings too fleshy and to leave the lambs too thin. This tendency was quite evident in looking at the carcases, and is plainly brought out by the judges' awards. In nearly every case, the prizes went to the lightest carcases in the yearlings and to the heaviest classes in the lambs. As in the swine classes, the first prize sweepstakes went to a grade.

RELATION BETWEEN SHRINKAGE
AND QUALITY.

This year we were able to secure some uniformity in the fattening of the animals to be slaughtered; and, as a consequence, the results are more uniform and satisfactory. The accompanying tables relating to the per cent. of dressed weight show that this percentage does not vary uniformly with the quality of the carcases. The fatter animals almost invariably dress a higher percentage than the leaner ones.

In the sheep, there is practically no difference, as the table shows, on the average between the first prize carcases and the average carcases, but the following table showing the relation between the percentage of shrinkage and the prizes won indicates that in the yearling classes the percentage decreases with the quality of the mutton; but in the lamb classes, on the contrary, the percentage increases with the quality of the meat, as indicated by the prizes. All these results go to show that high percentage indicates a greater amount of fat; and, since excessive fat is undesirable in the markets, it appears that to dress a high percentage is no longer an unalloyed virtue in either sheep or swine.

PERCENTAGE OF DRESSED WEIGHT, SHEEP CARCASES.

		er and ler 2.	Under	ı year.			
	Average for class.	First prize carcase.	Average for class.	First prize			
Cotswold Dorset Grade Lincoln Leicester Oxford Shropshire Southdown Suffolk Average	55 62 63 60 62 64.5 62.5	55 64 62.5 61.5 60 65 63	55 57.5 56 57.5 57.5 56 57.5	57 58 53-5 50 57 59-5			
Average	62	61.5	. 57	57			

SHOWING RELATION BETWEEN PER CENT. OF SHRINKAGE AND PRIZES WON.

 Vearlings.
 Lambs.

 1st.
 2nd.
 3rd.
 1st.
 2nd.
 3rd.

 Shropahire.
 60
 62
 64
 59.5
 55
 56

 Southdown
 65
 64
 62
 59.5
 57
 56

 Grade...
 62.5
 63
 65
 58
 57
 55

 Average...
 62.5
 63
 63.7
 59
 56.3
 34.7

COMPARISON OF DECISIONS ON THE SAME ANIMALS ALIVE AND DRESSED.

There is a pretty fair agreement between the decisions of the judges in the live classes and those of the judges in the block test.

Among the swine the pairs in the Yorkshire, Berkshire and Essex classes, are given the same standing relatively in the live and dressed classes. In Tamworths, however, there is a reversal of the decision, the first-prize pair in the block test winning no prize on foot; the second-prize pair winning third; and the third-prize pair second, in these two classes respectively. In the grade classes, the first-prize pair in the block test was given fourth place in the ring. It might be mentioned that this same pair won the sweepstakes in the block test over all breeds.

Sheep Classes.-Here again, the decisions harmonize fairly well. It is impossible in a number of cases to make any comparison on account of the fact that the animals were sometimes entered for the block test unnamed; and it was therefore impossible in these cases to identify them. Where comparisons were possible, there are in the yearling classes only two reversals. In the Shropshire, the first-prize animal in the block test received no place on foot; and the second received third and the third second. In the Southdowns, the first and second have their places reversed in the two classes. The same is true of the Lincoln lamb class.

The accompanying tables set forth the comparisons of these decisions, so far as comparisons are possible. Those who wish to study out the matter in detail may do so by referring to these tables:

There has come to hand a report from the Davies Co. on the individual mutton carcases. This report in detail is perhaps of less interest to the general public than to the exhibitors. If any exhibitor wishes to obtain a report on his own exhibit, he may do so by applying to the writer.

The following is a letter relating to the shipment of bacon from the Provincial Winter Fair to the Davies Packing Company:

Covering the 62 dressed hogs shipped to us from the Guelph Winter Fair, we find a marked improvement in the general character of type of these hogs as compared with any previous shipment received by us from your winter exhibit. There was plainly an effort on the part of the breeders produce a well-developed lengthy hog, having the particular characteristics required for the production of Wiltshire sides of bacon. We think that the irritation of breeders of the type of hog used in the United States-Poland China, Chester White, and Duroc Jerseys-because they were refused prizes by the judges in the Wiltshire bacon classes arises from a misapprehension which should be corrected. There were several of these hogs in the parcel shipped to us which were reasonably good of the kind, but they represent a type of hogs which are not suitable for the manufacture of best Wiltshire sides. In saying this we are not reflecting upon the excellency of these breeds for the purpose for which they are adapted. Their prime qualities are developed in the production of a stout, wellfinished, fat hog, where lard is an important part of the product, and the development of a fat side a necessity. Therefore, it is entirely necessity. Therefore, it is entirely erroneous for breeders of these hogs to feel that they are being discriminated against in any improper way.

If Canada, at some later date, chooses to raise in competition with the Western States hogs abounding in fat and heavier in weight, these breeds will be pre-eminently satisfactory, and will win in any compe-

Breed	Te	mw	orth		1	lo	rks	hii	re	1	Bei	ksl	hire	1	Es	sex	x	6	Gı	rad	le
Prize in Block Test	1	2	3	3	1	2	3	4	5	-	1	2		1	1	2	Ī	-	1	2	1
Prize in Ring	0	3	. 2	•	1	2	0	4	3	1	2	4			1	2		1.	4	1	
Breed	Cotswold		Dorset			Leicester			Lincoln	-	7-6-0	CAIGIG		Shropshire	F 15 5 50		Southdown			Grade	
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Prize in Ring under I year		1	П		1	2		2	1	1	1	I	1		3	0	2	0			

tition against the Wiltshire type of hog, which is now so much in We venture to make these remarks, because we feel assured that if the facts of the case are understood, the irritation will be found to be entirely misplaced.

We believe Canada will continue to breed and feed hogs suitable for Wiltshire sides. The type of hog required for this purpose has been so often desrcibed that we have no right to trespass upon your space to repeat what is needed. It is right, however, for us to say that in the parcel received by us, above referred to, the "Yorkshires,"
"Tamworths," and "Grades"
were altogether superior to the others, and if we are to steadily improve the character of the Wiltshire sides shipped from Can-ada, we must steadily increase the percentage of the hogs marketed of these desirable types. It is not to be understood that none of the less favorable types will make Wiltshire sides, but it is to be understood that the whole tendency of these breeds is to produce an article, if the hog is moderately well-finished, unsuitable for Wiltshire trade, and, inasmuch as the character of our Wiltshire sides on the English market is determined by the average character of the whole shipments, it is plain that every hog put into a Wiltshire side which does not produce the best article, injuriously affects the aver-

J. W. FLAVELLE.

The Block Test is undoubtedly a potent factor in harmonizing the judgments on classes before and after slaughtering. There is, this year, less discrepancy in this respect than last year. The appointment of the same judges for live and dressed classes, and requiring these judges to justify their decisions before the public in the lecture-room will certainly lead to a more careful and discriminating study of those indications in the live animal that point to the most desirable quality of meat in the carcase. There is a decided demand for this harmony of judgment; and, at the meetings held at the recent show, scant consideration was given to "breeders' ideals" that interfered with the demands of the consumer.

age of the whole.

Report on Dehorning.

Any one wishing to get a copy of the "Report on Dehorning," drawn up by the commissioners appointed by the Ontario Government in 1892, can do so by applying to the Department of Agriculture, Parliament Buildings, These reports are nicely bound in cloth and make a useful book for library or reference.

FARM HELP EXCHANG

FARM HELP EXCHANG

The Farm Help Exchange has been started with the object of bringing together employers of farm and domestic labor and the object of bringing together employers of arm and domestic labor and the object of dairy, or any person wishing to employ belp for or dairy, or any person wishing to employ belp for or dairy, or any person wishing to employ belp the following should be given: particular sate of the following should be given: particular of work to be done, probable length of snagagement, of work to be done, probable length of snagagement of work to be done, probable length of snagagement of work to be done, probable length of snagagement of work to be done, probable length of snagagement of work to be done, probable length of snagagement of work to be done, probable length of snagagement of work to be done, probable length of snagagement of start work in which a start with a start of the snagagement of start work in which shall be supplied to the snagagement of the "Agricultural Gasatte" and will aftertake the snagagement of the "Agricultural Gasatte" and will aftertake the snagagement of the "Agricultural Gasatte" and will aftertake the snagagement of the snagagement of

Help Wanted.

Boy wanted on a farm. World engage for a year, if satisfactory. No. 669.

Wanted, at once, a good, steady, reliable single man to do general farm work. Will hire by the year. Liberal wages to a good man, with board and washing. No. 670.

Wanted, boy of good habits, who can milk and do general farm work. Will engage by the year. No. 671.

Good, strong, steady, temperate man, up to general farm work, milking, tending cattle, etc., wanted. Wages, \$150 a year, or more, or \$16 to \$19 a month for the summer season. No. 672.

Would give \$130 a year to good, strong, willing boy, about 18 years old. No. 673.

Wanted, man by the year, able and willing to do all kinds of farm work, good with teams and good plowman. Will hire at once. Wages, \$170 a year with board and washing. Must not smoke or have any bad habits. No. 674.

Wanted, on a dairy farm, man to work team most of the time, but, if necessary, to put his hand to anything, and take charge when owner is away. Good wages to right man. No. 675.

Man wanted to manage a farm of 250 acres in New Brunswick, who thoroughly understands his work. Farm is three-fourths of a mile from a large town. Wages, thirty-three dollars a month and house. No. 676.

Man, experienced with live stock and all kinds of farm work, of temperate habits, and a good and careful worker, wanted at once on a farm in Illinois. Wages, \$240 a year and board and washing. Man must milk, if necessary. No. 677.

Herdsman wanted on a dairy farm. Work will be caring for cattle and pigs all the year round and helping in the harvest work in summer. Man must board himself and be sober, industrious, a good milker and quiet with cattle. Wages, \$225 a year, with free house and garden. No. 678.

Single young man wanted on a farm. Wages, \$120 to \$145 a year, according to capabilities, with board, washing and lodging. 10. 679.

Good, single, young man, not afraid of work, wanted on a farm. No. 680.

Wanted, good, Wanted, good, general farm hand, who is a good plowman and willing and able to do all kinds of farm work. Young or middle aged single man preferred. Wages, \$14 per month. Duties to commence April 1. No. 681.

Wanted, general farm hand by the year, unmarried. Must be a good milker, and capable of feed-ing and looking after stock. A good, strong boy of 18 to 20 would do. Would give employment to such an one for a number of years. Wages, including board and washing, from \$130 to \$150 a year. Apply to Jas. L. Williamson, Whitfield, Ont.

Single man required on a farm. No 682.

Good, trusty boy wanted on a farm near Niagara Falls, on a yearly engagement. No. 683.

Wanted, for seven or eight months, commencing April 1, a single man. Steady employment, if satisfactory. No. 684.

Wanted, a man for general farm work for a term of eight months, commencing about March 1. Must be a Protestant. State wages and give references. No. 685.

Wanted, on a farm in Bagot county, Quebec, a good man for farm work. Farm consists of 150 acres. House and garden fur-nished, also milk for family if engagement is for a year, or would give one third profits. No. 686. a

Man of about 23 years of age, who can do general farm work, is kind with horses and a good plowman, and handy with machinery, wanted on a farm in Bruce county. Must be a Protestant. No. 687. a

Married man wanted to assist in general farm work on a 200-acre farm with two sets of buildings, man to live in one house. Give wages. No. 688.

Wanted, a good, steady man. Must be a good milker and kind to stock. State wages wanted and give references Address E. Gillett, Petrolea, Ont.

Boy, about 18 years of age, wanted on a farm. Will hire by the month. State wages asked. Mostly grain grown on the farm. No. 689.

Trustworthy, reliable boy wanted on a 100-acre farm, 5 miles from Sarnia. A good home for a good boy. Would hire by the month or year as desired. State wages expected. No. 690.

Boy wanted on a farm near Carleton Place. No. 691.

Good man wanted on a farm on a yearly engagement. No. 692. a

Good man wanted on a farm where live stock are kept. No. 693.

Boy, or man, wanted by the year to work on a farm of 150 acres, tend cattle in the winter and help milk. State wages wanted. No.

Single man wanted by the year. Must be temperate and used to all kinds of farm work. Good wages to the right man. No. 695.

Good single man wanted by the year, on a 100 acre farm, for general farm work. Wages, \$150 a year with board. No. 696.

Wanted, a man to do general farm work in Manitoba. Must be gentle with stock and not use tobacco or intoxicants. No. 697. a

Boy wanted on a farm. Must be sober and steady. Will engage for a year. No. 698.

Man wanted by the year. Must be strictly honest and kind with stock. Would have to milk. No.

Wanted, thoroughly temperate and industrious men of good habits on a large farm in Western Michigan. Work begins about April I and lasts to about November I. Wages for teamsters \$20 a month and board; for other work \$1.10 per day without board. Board furnished at \$2.50 a week. Also wanted, a married man of experience as manager of a large cattle ranch in Western Michigan. State age, nationality, whether married and, if so, size of family, and whether family will accompany; also give experience with stock and farm machinery. Some further consideration besides wages given to suitable and permanent applicants. No. 663.

Man wanted by the year, to start April 1, who is capable with horses and cattle, able to milk and plough well, and is generally useful. Wages \$150 to \$175 per year. No.

Wanted, a man used to all kinds of farm work. Must be a good ploughman. Will hire for 7 months from April 1 at \$18 per month, or by the year at \$175 and board. No. 665.

Single man wanted to work in a market garden near Regina and deliver in town. One who has had experience in both preferred. Wages \$25 a month for 7 months. Work to start April 1. No. 666. b

Trustworthy man wanted as farm manager in New Brunswick.

One who knows his work and will do it. Good wages to a good man. Engagement to start May 1. No.

Two single men of steady habits wanted on a stock farm, one to act as foreman. Must understand live stock, especially sheep, and be able to run machinery. Wages to the to run machinery. Wages to the foreman \$200 and to the second man \$175 and board. No. 668. b

Situations Wanted

Man, with good references, and who has been on a farm all his life, wants a place. No. 487.

Man wants a situation on a farm where either dairy or stock of any kind are kept. No. 488.

Man wants a position as working foreman on a farm in Manitoba. No. 489.

Place as working foreman wanted. No. 490.

Young man, 28 years old, of good character, wants a place. Has always worked on a farm. Good references. Wages, \$200 a year, board and washing. Can start March 1 or April 1. No.

N.B.—Where no name is men-tioned in the advertisement, apply to A. P. Westervelt, Parliament Buildings, Toronte, giving number of advertise-ment.

Farmers' Institutes.

Farmers' Institutes.

Under this head the Superintendent of Farmers' Institutes will each week publish matter relating to Institute work. This will include instruction to Socretaries and other officers, general information about Institutes and Institute work, suggestions to delegates, etc. He will also from time to time review delegates, etc. He will also from time to time review states of the superintendent of the ed, by app.
in direct communication.
in direct communication.
G. C. CREELMAN,
G. C. CREELMAN,
intendent Farmers' Institutes.

The Farmers' Institutes.

Some idea of the excellent work that is being done by the Farmers' Institutes for the improvement of agricultural conditions by promoting the interchange of ideas among its members and placing at their disposal the results of the latest scientific research and practical experiments in connection with the leading branches of farm industry, may be gained from the report of the Superintendent of Farmers' Institutes for 1899 and 1900. This volume, in addition to giving many details as to the growth and progress of the organization, contains selections from 3,328 addresses given at the meetings held during the season, covering a great variety of subjects in connection with agriculture, live stock, dairying,

horticulture, poultry, etc. These papers embody the experience of the leading practical farmers and others engaged in kindred pursuits, and the results of tests and experiments made by professional instructors and scientists on the more advanced lines. The list is such an extensive one that it would be impossible to mention any considerable proportion of the contributors whose addresses have been embodied in the volume, among the most valuable and interesting are papers by such well known authorities on general agricultural matters as John McMillan, Barlow Cumberland, Henry Clendenning, Duncan Anderson and John I. Hobson. In the Live Stock department are papers by Prof. John A. Craig, J. S. Wood-ward, James Tolton, A. P. Ketchen and Simpson Rennie. Dairy matters are discussed by Prof. H. Dean, A. C. Hallman, and W. C. Shearer. The orchard and garden by Prof. Hutt, J. E. Orr, G. C. Gaston and A. W. Peart. W. R. Graham and Prof. Gilbert take up Poultry for Home and Foreign Markets. In the Women's Department Miss L. Rose, Miss B. Maddock, Miss A. Hollingworth, Mrs. F. M. Carpenter and others have written some very particular and interesting articles.

The appreciation of the Farmers Institute as a means of material and social improvement is shown by the continued increase of membership which has grown until now there are registered in the Province nearly 19,000 members. were 715 meetings held during the year, which were attended by 139,-982 persons. A noteworthy feature is the organization of Women's Institutes on practically similar ilnes to the Farmers' Institute the pioneer movement in that direction having been inaugurated in Saltfleet Township, Wentworth County, where the first Women's Institute has done excellent work. This was closely followed by the ladies of South Ontario and later by an organization in North Grey, East and West Durham, Halton, Peel, East and West York, Amherst Island, West Bruce, and East Victoria where flourishing Institutes are now in operation. Some of the admirable papers contributed at these meetings on Domestic Science and household economy are reproduced.

The report is one of the most elaborate and comprehensive documents of the kind yet issued, and its character affords a pleasing evidence of the advanced stage of the farming industry in the Province and the disposition of the farmers to keep abreast of the times and avail themselves of the resources of culture and information now at their disposal.-Exchange.

The Farm Home

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The Snowflake.

It was a little snowflake
With tiny winglets furled:
Its warm cloud mother held it fast
Above the sleeping world.
All night the wild winds blustered
And blew o'er land and sea;
But the little snowflake cuddled close,
As safe as safe could be.

Then came the cold, gray morning, And the great cloud mother said, "Now every little anowflake Must proudly lift its bead, And through the air go sailing Till it finds a place to light; For I must weave a coverlet To clothe the earth in white."

The little snowfiake fluttered
And gave a wee, wee sigh,
But fifty million other flakes
Came sofily floating by.
And the wise cloud mothers sent them
To keep the world's breast warm
Through many a winter sunset
And many a night of storm.
—Margaret E. Sangster.

The Cellar.

By Laura Rose, O.A.C., Guelph.

Apart from the usefulness of a cel lar it adds greatly to the healthfulness of the dwelling house, but this is only so when properly constructed and ventilated. A house without a cellar is almost surely to have damp, cold floors.

The walls of the cellar should be water-proof and air-tight, and the floors should be of concrete.

Before starting to build it is a good plan to lay down tile to insure perfect drainage, and thus avoid dampness.

It is well to expend more thought and money on the hidden structure, and less in the ornamentation of that which is seen.

When the cellar contains the furnace and fuel as well as the vegetables, milk, etc., it should be divided into apartments where different temperatures may be maintained.

One of the first essentials is that the cellar should be furnished with sufficient light to admit of no dark corners. Darkness, then dirt, then disease, then Death.

We sometimes see painful manifestations of the last stage, but do not go back step by step to the cause.

Let us not be so sparing of God's health-giving, germ-destroying sunshine, but let it penetrate into the farthest and most obscure parts of the home.

I know cellars where both in summer and in winter it is necessary to take a lamp to see what you want to get. This is very frequently the case in winter where the windows are banked up to prevent frost. What a heavy, musty smell these holes in the ground have, and every article of food that goes into them comes out tainted.

One cellar of this description I remember in particular. I was visiting

at the place in the early spring. The cellar window had not been open since fall. In my imagination I could fancy bacteria of every tribe and nation vieing with one another for supremacy.

It is a mistaken idea that cold air is pure air. Ventilation is just as necessary in winter as in summer; in fact more so, because of the doors and windows being closed to keep the place warm.

The windows in the cellar should be so constructed as to be conveniently and easily opened. To this end it is better to have them hung on hinges than to slide up and down.

Every day when the weather at all permits, fresh air should be admitted, even if only for a short time. Not only does this help to keep the house air pure, for remember the atmosphere of the cellar soon finds its way to the top part of the house, but it prolongs the keeping qualities of what you have stored in the cellar. And just here I might say a word with regard to the storing of food in the cellar.

Vegetables and fruits should be kept by themselves in a real cold but frost-proof department. By keeping the roots in piles, and if possible covered and the fruit well spread out, and by removing any that is beginning to decay, little loss will be sustained.

From the fact that milk and butter is so easily contaminated by odors, a separate room should be provided for them, and this room, above all others, kept sweet and clean.

Every cellar should have a swing shelf and a suspended wire safe to secure food from rats, mice, flies, etc. The safe is easily made by a ailing four pieces of scantling to the studding of the ceiling and having them reach to within four feet of the floor. Within the scantling put two shelves and a top. Cover the sides with fine wire netting, making one side a door.

At least once a year the cellar should be well white-washed. One lady told me she frequently washed off the walls of her cellar with a weak solution of copras, using a broom with which to do it.

She claimed this kept her cellar thoroughly disinfected.

There should be a law prohibiting the trap door from opening in the kitchen to the cellar. To say nothing of the inconvenience, think of the danger and frightful accidents which

In closing, let me urge the necessity of keeping the cellar free from all decaying matter, and do not be sparing of light and fresh air.

Tried Recipes.

Maple Ice Cream.—This is simply ice cream sweetened with maple sugar. Scald a pint of cream; add to it eight ounces of scraped maple sugar, stir

until the sugar is dissolved. Take from the fire, add a tablespoonful of caramel, a teaspoonful of vanilla, and when very cold add another pint of uncooked cream. Turn into the freezer, and when thoroughly cold freeze as ordinary ice-cream.

Delicious Apple Salad.—Take halfa-dozen rather tart apples, peeled and
sliced, and add a Spanish pepper,
chopped fine. Place in your salad
bowl the tender leaves of a large head
of lettuce and upon that the apple
slices sprinkled with chopped pepper.
Over all pour a dressing composed of
six tablespoonsful of olive oil, two
tablespoonsful of lemon juice and a
little salt. Serve with cold meats.

Cream Dressings for Salads — Mix with the yolks of four eggs three-quarters of a teaspoonful of mustard, one level teaspoonful of salt and a half saltspoonful of mace; add to them one cupful of cream and beat thoroughly. Cook in a double boiler until the mixture thickens. When cool add the juice of a small lemon, or one-and a half tablespoonsful of tarragon vinegar.

Molasses Sponge Cake.—Pour half-apint of boiling water on half a cupful of butter. Heat half a pint of molasses, and add to it a level teaspoonful of baking soda dissolved in two tablespoonsful of warm water. Add a tablespoonful of ginger and sufficient flour to make a batter the thickness of sponge cake; about two and-a-half cupsful of pastry flour should be sufficient.

Cocoanut Pudding.—To half a teacupful of grated or prepared cocoanut add the same quantity of grated bread or cake crumbs. Mix these with halfa-pint of milk, two eggs, an ounce of butter and two tablespoonsful of sugar. Beat this all well together and bake for an hour in a deep pie dish which has been well buttered. The oven should not be too hot. Serve hot or cold with a custard sauce.

Rarebit.—For rarebit it is necessary to have a cream cheese, as a skim-milk cheese will not melt properly, remaining a tough mass when heated. A real rarebit is made with ale, but another dish is made by substituting milk for the non-temperance ingredi-ent. Grate one pound of rich crumbly cheese, and sprinkle over it one level teaspoonful each of salt and mustard, a pinch of bicarbonate of potash and a dash of cayenne. Pour one scant half-cupful of ale or beer into a cha-fing dish, double boiler or saucepan stood in boiling water, and when it is hot add the cheese, stirring constantly until a smooth, creamy mass is obtained, when it is ready to be poured over hot, buttered toast fingers or rounds, and served. Crisp crackers are preferred by some to the buttered

Ten Uses of Lemons.

Lemon juice removes stains from the hands.

A dash of lemon in plain water is an excellent tooth wash. It not only removes tartar, but sweetens the breath.

Two or three slices of lemon in a cup of strong tea will cure a nervous headache.

Lemon juice (outward application) will allay the irritation caused by the bites of gnats and flies.

No family should be without lemons. Their uses are almost too many for enumeration.

A teaspoonful of the juice in a small cup of black coffee will certainly relieve a billious headache.

Lemon peel (and also orange) should be all saved and dried. They are a capital substitute for kindling wood. A handful will revive a dying fire.

The juice of a lemon, taken in hot water on wakening in the morning, is an excellent liver corrective, and for stout women is better than any anti-fat medicine ever invented.

Glycerine and lemon juice, half and half, on a bit of absorbent cotton, is the best thing in the world wherewith to moisten the lips and tongue of a fever-parched patient.

The finest of manicure acids is made by putting a teaspoonful of lemon juice in a cupful of warm water. This removes most stains from the fingers and nails, and loosens the cuticle more satisfactorily than can be done by the use of a share instrument.

by the use of a sharp instrument.

Lemon juice and salt will remove rust stains from linen without injury to the fabric. Wet the stains with the mixture, and put the article in the sun. Two or three applications may be necessary if the stain is of long standing, but the remedy never fails.

Hints by May Manton.

Woman's House Gown, No. 3730.

The house gown that partakes of the nature of the tea gown, yet is not too elaborate for morning wear, fills a practical need and always finds a place. The model illustrated has the merit of being exceedingly effective and giving a decidedly smart effect while, in reality, it is simplicity itself. A deft arrangement of trimmings and the applied revers give a bolero effect, and the Watteau back means charm and grace; but the gown is cut quite simply and involves really very little labor. The model is made from wool crepe de Chine in robin's egg blue with a bias frill at the lower edge; yoke and trimming of cream lace and bands of bias black velvet, but cashmere, Henrietta cloth, veiling, albatross and French flannel are all suitable wool materials, and foulards, Indias and all the less costly silks are admirable.

The gown is made with a fitted front lining, over which the front proper is arranged, side-backs and Watteau back, with under-arm darts that render it smooth and well-fitting without being tight. The lace yoke is

faced into the lining, the revers are attached to the lower edge and rolled over the seam, so giving the jacket effect, and the lace is applied as indicated. The sleeves are in bishop style, but terminate in soft, lace-edged frills over the hands. At the front where the revers meet is a generous bow of soft Liberty satin ribbon, and at the throat is a stock of lace banded with narrow strips of velvet.

To cut this gown for a woman of medium size 11½ yards of material 21 inches wide, 10½ yards 27 inches wide, 10 yards 32 inches wide, or 6 yards 44 inches wide, will be required, with ½ yard of piece lace 18 inches wide for yoke, stock collar and revers.



3730 House Gown, 32 to 40 in. bust.

The pattern No. 3730 is cut in sizes for a 32, 34, 36, 38 and 40 inch bust measure.

The price of above pattern post-paid is only 10 cents. Send orders to "The Farming World," Confederation Life Building, Toronto, giving size wanted.

A Bread Standard.

NONE GENERALLY ACCEPTED—POSSI-BILITIES IN LOW GRADE FLOUR.

The lack of a generally accepted standard for a perfect bread is one of the greatest obstacles in the way of good home made bread becoming universal. By many Vienna bread is regarded as a type of fine bread, but one soon tires of Vienna bread, and it should be taken as a type of good bread from the breadmaker's standpoint rather than from that of the bread eater. Since it is so widely known, however, it may be accepted by the unprofessional breadmaker as a

THE LIFE AND REIGN OF QUEEN VICTORIA

has a crumb which when lightly rubbed between the hands on the second or third day will fall into fine, light crumbs without lumping and without showing white, floury particles; its crust, brown and thin, is tender, yet crisp, and breaks between the teeth like a cracker, but the loaf lacks that quality of highest importance, flavor.

No matter how light or well made a loaf may be, if it lacks flavor it will not be acceptable for steady use. Therefore, having taken the Vienna bread as a guide as to appearance, we must seek to improve on its flavor before we have a perfect standard for homemade bread.

Few breadmakers in private families seem to have any standard, or much of any notion of what really good homemade bread is. In fact, people in the country, and they are the chief consumers of homemade bread, seem to use it not because it is better than baker's bread, but because it is more convenient or cheaper to do so. Often the writer has heard housewives say: "I consider my bread excellent for home made bread," it apparently never having occurred to them that a homemade bread could be anything more than tolerable.

Bread of a proper standard may be described as being light yet close, with small, even pores; as having a thin, crisp crust; a crumb that will break up between the thumb and fingers without massing, and as being sweet to taste and smell. By sweet is meant not only not sour, but sweet with a distinctly wheaten flavor. This flavor is more pronounced in the second and low-grade flours, however, than in the first or high-grade flours. Experiments have been made in the use of low-grade flour for bread-making which have resulted in excellent, sweet bread possessing a flavor which many people have declared it impossible to obtain from modern high grade flour, and it is sincerely hoped that the success of these experiments may lead to the more general use of such flour for bread-making purposes. - American Kitchen Magazine.

Doctor—"Well, I consider the medical profession are badly treated. See how few monuments there are to famous doctors or surgeons!"

The Patient—"Oh, doctor, look at our cemeteries!"—Gaiety.

"Mother, what are twins?" asked little Bobbie.

"I know," chimed in Dolly.
"Twins is two babies just the same age; three babies is triplets; four is quadrapeds; and five is centipedes."

—Answers.

May—"Algy and Pamela had a falling out last night."
Clarence—"What was the cause?"

May — "A hammock." — Harlem Life.

A PAPER FOR FARMERS AND STOCKMEN.

Publisher, D. T. McAINSH. Editor, J. W. WHEATON, B.A.

The Parming Werld is a paper for farmers and stockmen, published weekly, with illustrations. The subscription price is one dollar a year, pay-able in advance.

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> THE FARMING WORLD, CONFEDERATION LIFE BUILDING TORONTO

POUESTIONS & AND ANSWERS

CALF WITH SWOLLEN JOINTS.

G. T. writes: "A calf, aged six months, about two months back, began to swell on its near fore leg and its off hind leg on the joints, causing it to be very lame and still going worse, and falling away in condition. Its food is cut turnips, cut hay, with a little meal and bran."

Judging from the particulars given, it would seem as if the calf is suffering from some rheumatic complaint, or inflammation of the joints of a rheumatic character; or the complaint may be of a tubercular nature neither of which is at all encouraging. The calf should have a good dry bed and should not be allowed to stand in a wet or damp place. Sawdust with straw on top makes a good dry bedding. A good food would be crushed oats, linseed cake and bran, equal parts mixed, and from half to three quarters of a pound of the mixture given night and morning. Give the calf one table-spoonful of the best cod liver oil night and morning in a little milk, and the joints can be rubbed daily with a little stimulating liniment. Hand-rubbing alone twice a day might be beneficial.

Poultry at the Pan-American.

The rules and regulations are out for the poultry exhibits at the Pan-American. Classes have been arranged for every variety (standard or non-standard) and full placing will be given in every case where there are four individuals to compete for each

premium. The time for the show will be October 21 to 31, and stables covering ten acres will all be devoted to the Poultry and Pet Stock Show. Entries will close on Sept. 16, 1901. An entry fee of \$5 will be charged each exhibitor, which will entitle him or his representative to a single admis sion ticket, good for the ten days within which such exhibit is made. A display, unless otherwise stated, shall consist of at least nine birds made up of one pen, one cock, one hen, one cockerel, and one pullet in the open classes. For particulars address F. A. Converse, 735 Ellicott square, Buffalo,

American Cattle Growers.

The first annual convention of the American Cattle Growers' Association will be held at Denver, Colorado, on March 5 next, for the purpose of effecting permanent organization, adopting a constitution, etc. This new association is intended to represent the business of growing and feeding cattle. aside from all other interests.

Early Lamb Raising.

The following summary is from a bulletin on early lamb raising issued by Cornell University:

"It is of the utmost importance that the lambs be fat.

"The market early in the season does not require so large lambs as the late market. The best early market commences as soon as the holiday poultry is out of the way, usually about the middle of January.

"Other things being equal ewes that give the most milk breed earliest in the season

"The Dorset Horn sheep have bred earlier and fatted better lambs than the Shropshires.

"There is practically no difference between beets and ensilage as a succulent food for ewes rearing early lambs.

"Dressed lambs should reach the New York market as early in the week as possible; as Saturday is retailers' day the lambs ought to be sold before Friday noon.

"As a coarse fodder for the ewes and also for the lambs, there is nothing better than good clover hay. In fact, this is one of the essentials to success in early lamb raising.

"As a rule ewes respond more liberally to forced feed for milk production the second year than they do the first.

"The manner in which the lambs are dressed determines to quite an extent their selling price. Neatly-dress-ed lambs are always preferred to those of like quality poorly dressed.

"Ewes should not be forced for milk production until the lambs are a few days old.

"Be sure that the animal heat is all out of the carcase before wrapping up for shipment; particularly is this of the utmost importance in warm weather.

"An opening should be made to re-move the blood from the chest before shipment."

Silage at a Dollar a Ton.

A Pennsylvania correspondent of Hoard's Dairyman gives the following account of how he put up 80 tons of silage for \$83.55:

"I am asked frequently, What does it cost to fill a silo? and in answer to this I present this statement. The patch (it was scarcely more) was in corn the year before, and was manured highly, about 12 loads per acre, and was plowed about 6 inches, turning the manure under. It was then rolled,

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ELASTIC CARBON PAINT E-pecially adapted for farm not crack run, idiater or scale; will stop leaks, and last a lifetime; great protector for everything from a belief front to a plow, bridge, roof and fence. Our immense buildings are covered with Metallic Roofing and of valuable resultancials from Canadian and American customers. We have received thousands of valuable resultancials from Canadian and American customers.

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harrowed twice and dragged. 15th it was planted, one grain in a a place, 3 feet 6 inches by 8 inches, using almost one bushel B. & W. Red Cob silage corn. It was gone over once with weeder and three times with two-horse cultivator. September 18th commenced to fill, and finished Sep tember 20th; two days' time of 14 inch cutter, set to cut 1 1/4 inches. My silo is built on Professor King's plan, 13 feet in diameter and 33 feet high. Silage was thoroughly tramped while filling. The second day after filling there were 31 feet in silo. This would make, in round numbers, 4,000 cubic feet.

"Professor King estimates the weight of silage 30 feet deep at 39.6 pounds, and so 31 feet would probably

WIN THS WATCH



FIRST—It is made by one of the best manufac-turers in the world. Every one is guaranteed. SECOND—It is a good timekeeper—in fact so good that many railway conductors rely on it. THIRD—It is strong, and will stand the rough and tumble, the dust and damp of every-day wear.

FOURTH—The case is nickel-finished, and looks just as well as solid silver. With ordinary wear it will keep its color for two or three years—much longer with care. The works will last ten on fifteen years.

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scribers to THE FARMING WORLD will receive one of these fine Watches, carefully packed in wooden box, postpaid, Free. Or we will send the Watch for three new subscribers and one dollar in cash. Or any subscriber whose subscription is paid up may have one for \$2.00. Your money back if you are not satisfied.

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weigh 40 pounds; 40 times 4,000 equals 160,000 pounds or 80 tons. The cost would be as follows on the four acres: Rent of land, \$4 per acre.....\$16 00

14 of 48 loads manure, 50c	6	00
2 days' plowing, \$2.00	4	00
½ day's rolling	1	00
I day's harrowing	2	00
½ day's dragging	1	00
² / ₃ day's planting	1	00
I bushel seed		75
2 hours' weeding, 15c		30
2 days' cultivating	4	00
Cost of raising	36	05
2 days' cutter and power,		
\$10.00\$20 00		
22 days' work, \$1.25 27 50		
Cost of filling	47	50
Total cost of 80 tons silage	883	55

Sheep Dips in South Africa.

The South American Journal of November 24 last contains the following reference to the use of lime and sulphur sheep dips in South Africa:
"The last South African mail brings

news of a startling development in the Government policy with regard to

sheep dips.

"An Act of Parliament provides a certain sum to be set aside for the provision of free sheep dips to the farmers. Last year a great proportion of this money was spent in lime and sulphur, with the help of which Mr. Davidson, the Chief Inspector of Scab, had announced that he was going to exterminate the disease.

"The result of the lime and sulphur dippings is now stated by the Government to have been so unsatisfactory that only one-sixth of the amount voted for free dips will be spent during the coming season on lime and sulphur, the other five sixths having been already spent upon other dipping preparations. The Government are compelled by Act of Parliament to provide lime and sulphur at every depot, else it is fair to assume they would have abandoned the dip altogether.

"These plain facts have been offici-ally stated by Sir Peter Faure, the Minister of Agriculture, and in a debate in the House of Assembly on the 4th October last, a full report of which appears in the Cape Times of October

5, he confirmed them.

"Australia has abandoned lime and sulphur. South Africa is giving it up in despair, the United States wool houses won't have it at any price, neither will Bradford nor the European Continent. I will never believe that with all these warnings the Argentine estancieros are going to take it up."

Father-Well, Philander, have you made up your mind as to what you are going to turn your time and talents?

Son-Yes. I'm going to study music.

Father—Music? Why, if you had a hand organ that played "Old Hundred" you would never get more than seventy-five out of it!

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NCLUDING "More Leaves from the Journal of the Life in the Highlands," written by Her Maistersterleft. Book 75, 20, 12, nearly 700 pages, about 100 engavings, several from her Majesty's own book, with autographs attached. Three authors, namely, her Majesty Queen Victoria, John Coulter, the celebrated historian from London, England, and John A. Cooper, editor of the Canadian Magazine, Torosto, Price only 8 13.75. Prospectus free to canvassers. Credit given. Apply,

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The Nafest, Best BLISTER over used. Takes the place of all liniments for mild or severe action. Genoves all summents for mild or severe action. Genoves all summents for mild or severe action. FIRLYON, IMPOSED SON ALL. CAUTERY OF STRIKYON, IMPOSED SON ALL. CAUTERY OF STRIKYON, IMPOSED SON ALL. CAUTERY OF SEMENTS. SON OF SEMENTS, SON

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If you have a real or suspected case of Lump
Jaw among your cattle cure it at once with
Fleming's Lump Jaw Cure. Don't take chances
on a disease that always proves fatal if neglected.
Don't waste money on experiments; use the
remedy that invariably cures.
One bottle cures one severe or two or three
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on cattle or horses.

Argyle, Ont., April 3rd, 1900.
Sirs,—Enclosed please find \$2; send me a bottle of your Lump Jaw Cure. I got a bottle from you last fall and it gave good satisfaction.
ARCHIE MCFARLANE.

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Price \$2, or three botte for \$5. At druggists or sent by mail prepaid. Money promptly refunded if it ever fails.

FREE—Our Illustrated Pamphlet to readers of this paper.

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Choking Cows.

A writer in one of our American exchanges gives the following experience and advice in regard to choking cows:

"We never lost a cow by choking, and think there is no need of it if the trouble is discovered while she can breathe. Few cows ever actually choke to death, but an obstruction lodged in the gullet and the effort to swallow it so fills the stomach with wind as to cause bloating, which may be as dangerous as if the cause were the generation of gas by eating green clover, rape, or other food such as cause hoven or bloat. In all the cases we have seen the obstruction could be removed by having some one hold the animal's head up and back so as to bring mouth and throat on a straight line, place a block between the jaws well back, or put a horseshoe in the mouth, and then let some one with a small hand and arm draw the tongue to one side with one hand and reach down the gullet with the other, and either remove it or push it down into the stomach. Or the latter may be done with a whip-handle or other flexible rod, but it must be done carefully not to break or injure the walls of the passage. But we think there is a better way. When the head is in the position described above turn down the throat a half teacupful of linseed oil, whale oil, lard oil or melted lard, almost any greasy substance, but not kerosene, and then put a round stick about as large as a broom-handle into her mouth like the bit of a bridle and fasten it there by tying over her head. The oil will cause a little nausea and at the same time lubricate the throat, and as soon as her head is let down she will be likely to cough up whatever may be in the throat, and if she does, be ready to grasp the gullet to keep it from going back before it can be removed from the mouth. Leave the bit in for a time, as her efforts to remove it will cause the wind or gas in the stomach to escape. We do not blame you for desiring to know what to do in such a case, and we think the above as sure and safe and more simple than using the knife to take it out. But "prevention is better than cure." Never feed apples or potatoes without slicing them. If one has not a root cutter, a bushel can be cut in a box with a spade in a few minutes.

Sunday - School Superintendent (pointing a moral)—"Yes, scholars, the great thing is to know one's duty and then do it. Admiral Dewey knew his duty when he entered Manila Bay and saw the Spanish ships, and the world has seen how nobly he performed it. Now, children, what is our duty in this bright holiday season? How may we emulate the great Admiral? What should we do when we see about us the poor, the sick, and the suffering?"

Small-boy Class (in concert)—" Lick em!"—Harper's Bazar.



Our books, telling about composition of fertilizers cest adapted for all crops, are free to all farmers. GERMAN KALI WORKS, 93 Nassau St., New York.



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Wide-Tire Wheels
Made to fit any axle.

They are lighter, stronger and much cheaper than wooden wheels.

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For MAPLE SYRUP and SUGAR. Has a congragated pan over firebox, doubling boiling capacity and awing fuel; small interchange able syrup pans (connected by siphons), easily handled for cleaning and storing; which accommand to require the storing of the storing of

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Patent Foot and Lever		LIS.	Т
Drive.	No.	Holds	CHURNS
•	0	6 gal.	à to 8 gal.
Patented Steel Roller	1	10 4	1 to 5 "
Bearings.	3	15 "	2 to 7 "
•	4	26 "	8 to 9 "
Improved Steel Frame	5	30 "	6 to 14 "
mproved Oteer Frame	6	40 "	8 to 20 "

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SKUNK I pay highest prices for all kinds of Raw Furs and Ginseng. Write for p.ice list. J. I GLEED, East

Cheese and Butter

Makers of these articles, in many instances, do not pay the necessary attention to the quality of the sait they use. Some people think that "sait is sait," and it does not matter where it comes from or who makes it. This is a great mistake, for it is essential that to produce the best Butter or Cheese nothing but the present and the produce the best Butter or Cheese nothing but the present and the produce the best Butter or Cheese nothing but the present and the produce the best Butter or Cheese nothing but the present and the present a

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at the various exhibitions is conclusive proof that these brands of sait stand unrivalled. For prices, etc., address

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Farmers wishing to buy first-class stock, absolutely **First Hand and without paying commission to agents** should write to us at once for a catalogue and price list. Don't wait until the last minute, as you will be disappointed. Place orders early and secure the varieties you want. Correspondence Solicited.

WINONA NURSERY CO., Winona, Ontario

Horse Breeding.

Messrs. Telfer & Climie, of Montreal, have received an interesting letter from the Hon. Mr. Fisher relating to the question of horse breeding, which reads as follows:

"I am glad to receive the information from you that you are importing a number of English thoroughbred stallions for use in this country, and especially am I pleased that you have secured the services of Major Dent to choose these horses for you in England.

"I have thought for some time that one of the chief needs of our country in horse breeding is a larger infusion of the English thoroughbred blood.

"I know there is a certain prejudice in the minds of many against this breed for ordinary purposes, but this I think is due to an attempt to use comparatively highbred animals for rougher and heavier work than they are suited for. I am satisfied that a slight infusion of this blood is needed in the mares which are to be used for breeding purposes, and this I believe to be true of any grade mares, even though the rest of their breeding may be of a very different strain.

"The most evident lack on the part of our breeding mares is quality, and this can be best attained from the English thoroughbred. Until we have a considerable number of thorough bred sires in the country we cannot secure this strain of blood in our mares, even though it may not be considered necessary to have more than a very slight infusion of it.

"Too often the class of thoroughbred used in Canada has been of the weedy, second-class racehorse type. This does not serve the purpose above indicated at all.

"I have had so much personal discussion with Major Dent upon these subjects that I am sure the animals he will choose for you will be of an entirely different type, strong-boned, muscular, with good constitution and impressive power.

"Your enterprise in bringing these animals out is very praiseworthy, and I trust that the venture will be most successful financially, as it deserves to be. I am also pleased to think that it is the direct result of the presence of an Imperial officer purchasing army horses in Canada last fall, which action on the part of the Imperial Government was brought about by representations from the Canadian Government, and the active personal work of Lord Strathcona, our High Commis-

"I shall be glad to see these horses as soon as they arrive, and am confident that they will prove to be exactly what is wanted."

Swell Hunting.

It was with the utmost caution that the fox crossed the highway.

"You see," he explained, "there is a hunting club of the swellest sort in this vicinity, and I smell so extremely like an anise bag that I have to be very careful, indeed."—Punch.







" A Stock Holder"

For holding stock the "Page" is the only reliable kind. It is used on the Largest Stock Farms in Canada; equally suitable for small or large stock. We now make our own wire. Could not get good enough before. It is twice as strong as that in other fences and better galvanized. Ow Fencing is slipped from our farm of the property of th

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

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Important Auction Sale of Thoroughbreds

TUESDAY, MARCH 12TH, at 11 O'CLOCK

By instructions from Mr. N. Dyment, Barrie, Ont., and Mr. Jos. Duggan, Toronto, we will sell without reserve on the above date a splendid collection of

STALLIONS AND MARES

Also the following valuable Thoroughbred Stallions:

Imported **SENTINEL**, seal brown, small star, 9 years, 15-3 hands. By Hawkeye, (by Uncas, out of Jennie Howlett, dam of Chittabob); dam Fair Bent, by Wisdom, sire of Sir Hugo, winner of the Derby.

Hugo, winner of the Derby.

A grand young horse of fine quality, plenty of bone, compact, short coupled, lots of substance, beautiful conformation and excellent action. Purchased specially for Canada from Dr. Haslewood, Buxton, England, by Major Dent. of Malton, England, whose judgment is famous at the leading Agricultural Shows in England, and who was appointed by the War Office to purchase remounts in Canada for the South African war. In purchasing Sentinel for service in Canada, Major Dent says: "I have not endeavored to buy a horse that is only fit for the show ring himself, but one whose produce has been winning prizes regularly in the best agricultural districts in England in strong competition. I consider this type of horse the best to breed to, from a commercial standpoint, as his get from the ordinary mares I have seen in Canada will be easily sold for remounts and in any case are the most saleable class for riding, driving and general use. Sentinel has proved himself to be a wonderfully successful sir; all his foals are extra large, strong, compact, with the remarkable beauty of their sire in every case. No fault can be found with the conformation or substance of any of the get of this grand young sire whose three-year olds have all outgrown him."

HOMECREST. No. 12498, chestnut, foaled 1897. American Stud Book, vol. 7.

of any of the get of this grand young sire whose three-year olds have all outgrown him."

HOMECREST, No. 12498, chestnut, foaled 1897. American Stud Book, vol. 7, page 160; 16-1 hands; bred by Frank M. Ware, New York.

Consigned by Mr. Frank M. Ware, New York, as a specially desirable sire on account of his size, substance, splendid breeding and graceful action. When put into training he was valued at \$10,000.00, but on account of growing so fast it was found he would not develop speed enough to insure profit for this year and the owner was persuaded to sell him as a sire. He shows any amount of substance, short strong back, powerful quarters, and bred on the best producing lines in the world. Sired by Cheviot, by Traducer, out of Idalia. Dam, Carmen, by Fiddlesticks, out of Camille. Extended tabulated pedigree will be found in catalogue, which may be had on application. Before being put into training Homecrest was fired in front as a precaution to save his tendons, but is perfectly sound.

Catalogues of all the above may be had on application.

50 HORSES of all classes will also be sold on the same day, including first-class, well

50 HORSES of all classes will also be sold on the same day, including first-class, well broken drivers, saddle horses, carriage pairs, general purpose horses, etc. And on the following day

WEDNESDAY, MARCH 13th,

at 11 o'clock, 100 New and Second-hand Buggies and Carriages of every description will positively be sold regardless of cost to make room for new consignments.

WALTER HARLAND SMITH,

Auctioneer and Proprietor.



PURE-BRED STOCK NOTES AND NEWS FROM THE BREEDERS

These columns are set apart exclusively for the use of oreeders of pure-bred stock and poultry. Any information as to importations made, the sale and purchase of stock and the condition of herds and flocks that is not in the nature of an advertisement, will be welcomed. Our desire is to make this the medium for conveying information as to the transfer of pure-bred animals and the condition of live stock throughout the country. The co-operation of all breeders is earnestly the right to eliminate any matter that he may consider better suited to our advertising columns.

The thoroughbreds owned by the late Lord William Beresford brought good prices last week. The American bred colt, Cayman, by Locohatchee, dam Happy Day, topped the list at 2,500 guineas.

Captain Heygate, of the British army, who was sent to Kansas City, Mo., by his government more than a year ago to purchase horses and mules for the British army in South Africa, and later was ordered home, has again returned to Kansas City with an order for 50,000 more horses and mules. As fast as the animals are inspected and bought they will be sent to New Orleans, and shipped to Cape Town, Durban, and New London on British transports. One shipload of the ani-Captain Heygate, of the British army, who Cape 10WB, Durban, and New London on British transports. One shipload of the animals were taken to South Africa by Lieutenant David Moberly, leaving New Orleans early last month. Lieutenant Moberly said: "By the time the horses and mules are landed in South Africa they cost the British Courts." the time the horses and mules are landed in South Africa they cost the British Government \$360 a head. That is a large price for an animal which will be fit for service only six weeks. Many of the animals die because of the change in climate. They must cross the Equator in going to South Africa, and the torrid heat of the tropics kills them rapidly. The average death-rate on shipboard is \$12\$ to the \$1,000. Forty days after a horse is pur-The average death-rate on shipboard is 32 to the 1,000. Forty days after a horse is purchased in Kansas City it is landed in South Africa. So great is the demand for horses at the front that it is impossible to give them the needed rest after landing before putting them into service. Consequently they go to the front in a weakened condition, and not cetting a sufficient amount of food they soon getting a sufficient amount of food they soon die. Since the beginning of the Boer war, England has purchased over 100,000 head of England has purchased over 100,000 head of horses and mules in the United States. It required 65 ships to carry them from New Orleans to South Africa. Government transports will be kept very busy from now on carrying the horses which England will need in South Africa, and which have been ordered purchased in the United States. Baden-Powell now has 25,000 mounted police, and purchased in the United States. Baden-Powell now has 25,000 mounted police, and it is proposed to mount 50,000 of the imperial infantry. England has discovered that her infanty. England has discovered that he soldiers must be mounted to be able to cope with the Boer, who gets over the country with alarming rapidity."—The Rider and

Cattle

At the recent Hereford sale at Kansas City, At the recent Hereford sale at Kansas City, during the first three days of sold for \$24,015, an average of \$353.16 each, and 68 females brought \$19.095, an average of \$280.81. Total, for 136 head \$43,110, an average of \$316.98. The yearling Hereford bull Columbus 17th sold for \$5,050, a price that has hear hit twice averaged at a second to the sold of \$10.000. that has been but twice exceeded at a Hereford sale in this country, by the bull Thickset as selling for \$5,100, and the bull Champion Dale sold last at same sale at Chicago for \$2,000. Chicago for \$7,500. A two-year-old heifer sold for \$9,055. While our breeders use such stock as this to breed from they are not likely. likely to greatly fear competition from Ar-

The Superintendent of advanced registry of the American Holstein Friesian Association of the American Holstein Friesian Association reports twenty official records during the month, two of which may be regarded as phenominal,—that of Aalije Porch. 4th, a cow nearly eleven years old, producing 19.091 lbs, butter fat, equivalent to 23 lbs. 13,8 oz. butter 80 per cent. fat or 22 lbs. 4.4 oz. 85.7 per cent. fat, and that of Alta Posch, a heirer 1 year, 11 months old at 12.970 lbs. butter 80 per cent. fat, or 15 lbs. 2.1 oz., 85.7 per cent. fat, equivalent to 16 lbs. 3.4 oz. butter 80 per cent. fat, or 15 lbs. 2.1 oz., 85.7 per cent. fat, cent. fat, or 15 lbs. 2.1 oz., 85.7 per cent. fat.

Summarized :- Four full age cows average 8 years, 8 months, 29 days, 27 days after calving: Milk 399.5 lbs., butter fat, 14,962

lbs., equivalent butter 80 per cent. fat 18 lbs. lbs., equivalent outrer so per cent, fat 10 lbs.
11.2 oz., equivalent 85.7 per cent, fat 17 lbs.
7.3 oz. Four four-year olds average 4 years. 7.3 oz. Four four year olds average 4 years, 5 months, 4 days, 17 days after calving; Milk 300 7 lbs., butter 1at 14.248 lbs., equivalent butter 80 per cent, fat 17 lbs. 13 oz, equivalent 815 7 per cent, fat 16 lbs. 10 oz. Seven three-year-olds average age 3 years, 6 months, 4 days, 43 days after calving: Milk 324 4 three-year-olds average age 3 years, 0 mon.ins, 4 days, 43 days after calving: Milk 334 dbs. the calving: Milk 334 dbs., butter fat, 10,459 lbs., equivalent butter 80 per cent., fat 13 lbs. 1.2 oz., equivalent 85, 7 per cent., fat 12 lbs. 3.2 oz. Five classed as two-year-olds average age 2 years, 2 months. or dave. 38 davs after-calvinn: Milk 230.8 two-year-ones average age 2 years, 2 thorns, 10 days, 28 days after calving: Milk 320.8 lbs., butter fat 11.084 lbs., equivalent butter 80 per cent. fat, 13 lbs., 13.7 oz , equivalent 85.7 per cent. fat, 12 lbs. 14 9 oz.

Messrs. Alfred Mansell & Co. have recently sitesses. Attred Mansell & Co. nave recently shipped to New York, per the White Star Line, a choice selection of Shropshire sheep from the prize-winning flocks of Mrs. Barrs, Mr. R. P. Cooper, Messrs, Evans, Mr. Alfred Tanner and Mr. T. S. Minton.

Messrs. Alfred Mansell & Co., the well-known live stock exporters, of Shrewsbury. Messrs. Alfred Mansell & Co., the well-known live stock exporters, of Shrewsbury. have recently despatched from the port of London per SS. "Karamea,"two choice shearling ewes, on account of Mr. Read, of Tasmania. One ewe of exceptional merit was selected from Messrs. Evans' flock, being a twin to No. 7 ram in the Sherlowe sale, sold in August last to Mr. Joseph Pulley, at 70 guineas. She was sired by Star of the Morning, 10145, dam by Medallist, the 50-guinea ram lamb at Mr. Geo. Graham's sale. She was served by Star of Fortune, purchased by Messrs. Evans at the Harrington sale for 85 guineas, being a son of Fortification, from a Dream Star ewe. Mr. A. E. Mansell supplied the other ewe, an animal of outstanding merit. She owned as her sire, Dream Star, a son of the 175-guinea Montford Dreamer, her dam being by Strong Head, 7143, and through a long line by good blood to Mansell's No. 16, 1876. This ewe was served by Fortification, the sire of this year's Royal winner, recently shipped of Andrelia by Messre. Mansell. at 220

of this year's Royal winner, recently shipped to Australia by Messrs, Mansell, at 240

The American Association of Dorset Horn Sheep Breeders in their annual convention met at the Monongahela House, Pittsburgh, met at the Mononganeta House, l'ittsburgh, Pa., January 14, with about 50 members present. The object of this association is to preserve and register the breed of Dorset sheep. The association had its beginning about ten years ago with 69 members, and to-day numbers 1,980.

day numbers 1,980.

The first Dorset was imported by E. A. Stanford, of England, in the fall of 1885, who took 50 ewes and 6 rams to Markham, Ont. In 1887 several importations were made by Canadians. The first importation to the United States was in June, 1817. The tota number of certificates issued by the association is 0.263. covering herds in 22 States. tion is 9,263, covering herds in 27 States, Canada and Nova Scotia.

SHORTHORNS FOR SALE

These Registered Bulls were sired by Brave Baron; he by the noted imported Indian Chief.

- 2 Bulls, 16 Months old, Roan color.
- I Bull, 13 2 Bulls, II Fancy "

YOUNG BROS.. Whitby Main, Ont.

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OUR stock includes all that is best in Garden and Field Roots, Flower Seeds and Flowering Plants, Grasses, Clovers and Seed

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Thomas - Phosphate

FOR SALE CHEAP

We have a quantity of the far-famed Thomas Phosphate Powder for sale at

\$15.00 PER TON.

An opportunity for farmers to try this famous fertilizer at small cost.

Guaranteed 18 per cent. Phosphoric Acid. THE KING MILLING CO.

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Extension Ladder

Light, Strong, Convenient and Cheap.

And Cheap.

Port Colborne, April 10, 1900,
Dear Sir — Have you an agent
down here for your goods? The ladder I got from you seems to take
with the public, and I wish you
would send agents prices so if I can
do anything I will take it up or let
them know who your agent is.
L. TURRBULL.

(See our ad. in last and next week's issues.)

For stacking, or for picking apples, and for general use about the farm the WAGGONER LADBER is un-equalled. Made in all lengths.

Ask your local Hardware Rerchant for our goods. Or write for catalogue (free) to

The Waggoner Ladder Co., Limited, LONDON, ONT.

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Windsor Salt

because they know it produces a better article, which brings the highest price.

THE WINDSOR SALT CO. Limited WINDSOR, : : : : ONT.

Market Review

Office of THE FARMING WORLD. Confederation Life Building, Toronto, Feb. 11, 1901.

There is a quiet feeling in wholesale circles and a slight reduction in the volume of trans action reported. Remittances are said to be somewhat slacker than usual at this season of the year. This, however, is believed to be The outlook of ouly temporary character. The outlook for the spring and summer trade is still good. Money keeps steady at 5½ per cent. on call, though some claim to be able to get all they want at 5 per cent. Discounts on commercial paper are steady at 6 to 7 per cent.

Wheat.

Little improvement is noticeable in the wheat situation. There is still talk of a big corner in wheat, and in some quarters specutators are getting excited, but there does not appear to be anything in the present situation to get excited about. The visible supply of wheat in Canada and the United States decreased one million bushels during the week, creased one million bushels during the weeks but is still 5,406,000 bushels more than it was last year at this time. The total world's supply in sight is 88,767,000 bushels, as against 75,961,000 bushels at this time last year, an increase of 12,806,000 bushels. Then the reported big shortage in the Argentine has turned out to be a myth, as present indications seem to show as large a surplus from that quarter as a year ago.

Regular market conditions on this side are quiet, with little demand. The growing crop in the west is reported to be in better condition than at this time last year. Towards the end a little firmer feeling was noticeable at Chicago. On the local markets things are quiet. Quotations at Montreal are nominal, with little business doing. Cables report a lower market abroad. Shippers' quotations at country points are 65 to 66½c. middle freights, 66c. for goose east, and 67 to 68c. for spring east. On Toronto farmers' market abroad with the busine 68 to 66c. spring fig. 60. red and white bring 68 to 69c., spring fife 69 to 69½c., and goose wheat 64 to 65c. per bushel

Oats and Barley

The oat markets are generally quieter, owing to lower values abroad. 271/2 to 28c. owing to lower values are said at 17/2 to 2/7/2 bring 33c. per bushe

The barley market shows little change. On Toronto farmers' market barley brings 45

to 48c. per bushel. Peas and Corn

The pea market keeps steady at from 621/2 to 63½c. at Ontario points. A better demand is noticeable here. On the farmers' market peas bring 64c. per bushel.

Canadian yellow corn in car lots is quoted at 45½ to 46c, on track at Montreal, and American mixed at 47 to 48c. Canadian yellow is quoted here at 37 to 37½c. west, and No. 3 American yellow at 441/2c. in car lots, Toronto.

Bran and Shorts.

Ontario bran seems to be scarce and dear, Montreal quotations being \$17 to \$17.25 in car lots laid down there, and Manitoba bran car lots laid down there, and stainting the state of the west at \$13 and shorts at \$14 to \$14.50 per ton.

Eggs and Poultry

The egg market shows little change, the cold weather lessening supplies of strictly fresh eggs somewhat. These have sold at Montreal at 22 to 24c. in case lots. There is Montreal at 22 to 24c, in case 10ts.

a steady demand here for new laid eggs at 20

Other quality is dull. to 21c. in case lots. Other quality is dull. On Toronto farmers' market new laid bring 23 to 28c., and fresh eggs 18 to 23c. per dozen.

dozen, "Choice fresh-killed turkeys are quoted at Montreal at 9 to 9½c, chickens at 7½ to 8c., and geese at 6 to 7c. per lb. in large lots. The demand here is moderate, though supplies are light. Good turkeys bring 10 to 11c., and geese, 7 to 8c. per lb. and chickens 40 to 7oc. per pair in a whole:

sale way. On the farmers' market chicken, bring 50 to 75c., and ducks 75 to \$1 per pair, and turkeys 9 to 12c., and geese 7 to 9c. per

Car lots on track at Montreal are quoted at 45 to 47½c. per bag. There is little inquiry here. Trade is inactive and prices are 28 to 30c. per bag in car lots. On the farmers' narket here potatoes bring 30 to 35c. per bag.

Hay and Straw.

The local and export demand for hay keeps good. Quite a few large shipments have gone forward during the week to the British markets, while American buying has been more active. At country points east \$9 to \$9.50 have been the ruling figures for car lots of No. 1 baled hay, and \$8.50 for No. 2 quality. Prices show no change here, though supplies rrices snow no change here, though supplies have increased. Quota ions for baled hay are \$10 to \$10 50 for No. 1, and \$9 to \$9.50 for No. 2 quality for car lots on track, Toronto. On the farmers' market hay brings \$13 to \$14. sheaf straw \$8.00 to \$9.00, and loose straw \$6 to \$7 per ton.

Seeds

There is more activity in seeds. There is a firmer feeling in clover seeds in sympathy with the American market, which has advanced 30c. per cwt., equal to 20c. per bushel. Wholesale quotations at Montreal are \$7 to \$9 for clover, \$7 to \$9 for alsike, \$2.50 to \$3 59 for clover, 57 to 59 for alsake, 25 to 63, 25 for flax seed per bushel. On Toronto farmers' market red clover brings \$6 to \$6.60, alsike \$5.75 to \$6.75 and timothy \$1.40 to \$2 per bushel. Apples.

The Montreal Trade Bulletin has the following report for last week: "There has been an advance of 25c. per barrel for car lots of choice varieties in this market, with sales of a few cars at \$2.50 to \$2.75, a very fancy lot of red bringing \$3. In the West we hear of a red cars at \$2.50 to \$2.75, a very languist or red bringing \$3. In the West we hear of a lot of 500 barrels of choice spies held on Chicago account selling at \$2.50 f.o.b., and a smaller lot at \$2.75." On Toronto farmers' market apples bring \$1.50 to \$2.50 per bbl.

There is a quieter feeling in the cheese market, but stocks are moving freely. The out-look in some centres is not considered encouraging and dealers are strongly advising not making fodder cheese in the spring. Holders do not agree on values and are asking all kinds on not agree on vaues and are asking all kinds of prices, ranging from 10 to 10\cdot/c. at Montreal. Perhaps 10\set/s to 10\cdot/c. are the ruling figures for finest westerns. English holders do not appear to be scared and are seemingly not anxious to dispose of their receiver. stocks.

Cheese.

though our commission louises say the sales, however, have been reported to us to-day of creamery at 22 to 22 c. in jobbing lots, but it is said to be hard work to secure the top figure. is said to be hard work to secure the top ngucy CO course, single packages to the grocery trade bring more money. Lent is near at hand, and it is expected that a decided improvement will take place as soon as the Lenten supplies have to be laid in. Western dairy sold to-day at 19 to 19\frac{1}{2}c, and we quote 18\frac{1}{2}c to 19\frac{1}{2}c, as to quality. Manitoba dairy 18½ to 19½c. as to quality. Manitoba dairy has sold at 16 to 17½c. The New York market declined ic. at the beginning of the week to 21c. for finest creamery, but has since recovered the decline and is now up to

The market here is quiet, especially for tubs. Creamery prints bring 23 to 24c. and solids 20 to 21½c. per lb. The demand for dairy is to 21½c. per lb. The demand for dairy is fair. In a jobbing way pound rolls bring 18 to 19c. and large rolls 17 to 18c. per lb. On Toronto farmers' market pound rolls bring 20 to 23c. each.

Cattle.

The American cattle markets were rather the American cattle markets were rather weaker at the end of the week, though cables were higher on Friday. At Toronto market on Friday the receipts were only moderate, composed of 713 cattle, \$87 hogs, 287 sheep and 20 calves. Trade in butchers' cattle was firm and earlier, though not any bigher than firm and active, though not any higher than earlier in the week, and all good animals were quickly picked up. One reason for this was the light run and another that there were several buyers from outside points. Exporters were not so active with very few choice animals offering. First-class cows are wanted.



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Good grain-fed lambs are wanted and sell quotations. Sheep were easier at \$3 to \$3.25 for ewes and \$2.50 to \$2.75 per cwt. for bucks. Grain-fed lambs sold at \$4.50 to \$4.75 per cwt. and ordinary barnyard lambs at \$3.75 to \$4 per cwt.

Hogs.

The hog market showed little change during the week. Receipts were light. There are some indications of higher values this week. On Friday select bacon hogs 160 to 200 lbs. each unfed and unwatered off cars 200 los. each united and unwatered off cars sold at \$6.25 per cwt. Unculled car lots sold at \$6.0 s.0 in per cwt. Unculled car lots sold at \$6.0 s.0 in per cwt. The Wm. Davies Co., Toronto, will pay \$6.50 this week for select bacon hogs and \$6 for thick and light fats.

\$6 for thick and light lats.

At Montreal the ruling price has been \$6.25 with some choice lots reported sold at \$6.40 to \$6.50 per cwt. The *Prade Bulletin* London cable of Feb. 7, re Canadian bacon reads thus: "Another unsettled week has been extracted in the bacon trade and owing to thus: "Another unsettled week has been ex-perienced in the bacon trade, and owing to more liberal supplies of the home cured ar-ticle prices of Canadian have again been marked down about 2s, per cwt. No. 1 lean sides are quoted at 54s, to 56s, and No. 2 50s, to 53s. Sales have been cabled to parties on this cide at feet for No. 1 and 50s for this side at 54s. for No. 1, and 50s. for Dressed hogs on Toronto farmers' market bring \$8 to \$8.25 per cwt.

Trade was rather quiet last week. fresh carloads were sold at Grand's at prices not as good as was expected. Good, strong

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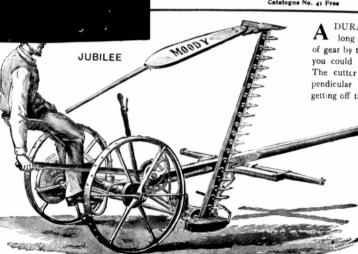
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AN EVERYDAY STORY RETOLD

SOPERTON, JAN. 14TH, 1901,

GENTLEMEN.—

On January 1st, I allowed your agent at Delta, Wm. Johnson, to place a No. 2 Alpha Cream Separator in my house on trial. He took 163 lbs. of skim milk that we had ready for pigs, milk that had been set in creamers for 28 nours, and skimmed as close as we could skim it. We did not think the Alpha could get any more cream out of it, but to our surprise took out of the 163 lbs. enough to make I lb., 15 oz. of butter, for whi h we received. 00 cents from agent, who wanted to the control of the country for 25 hours; from this we got 7 lbs. butter. We then separated same amount with the Alpha and gct 9 lbs. Gentlemen, I am fully convinced that the Alpha is a labor-saving and money-saving machine, runs easy and comes up to the recommendation you gave it. I intend using one while I am in the butter business. Wishing your Company and agent success.

JOHN FRYE

Write

Soperton, Ont.

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1st Prize, \$3 00 cash. 2nd Prize, \$2.00 cash. 3rd prize, a handsome one-dollar book.

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" The Breeding and Feeding of Chickens for Table Use."

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Conditions:

- Each essay should not exceed 600 words. 1.
- Plans of poultry house are permissable.
- Prize essays will be published in our special Poultry Number in March.
- Articles must reach this office by February 20.
- Write on one side of paper only.

ADDRESS

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Confederation Life Building, TORONTO.

Ideal Milk Ticket

HE old-fashioned pass-book has been discarded by every up-to-date factory. The Monthly Statement Card below shows exact size front and back. It is made of stout Manilla, and can be either delivered by the milk-hauler, or sent to the patron in an ordinary envelope.

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Price, 25c. for 100; or a package of 1,000 for \$2.00, Post-Paid.

A factory with 100 patrons will require from 800 to 1,000 tickets during the season.

Monthly Statement

PUBLISHED BY THE FARMING WORLD, TORONTO									
1900	1st WEEK	2ND WEEK	SRD WEEK	4TH WEEK	5TH WEEK				
	LBS.	LBS.	LBS.	LBS.	LBS.				
Monday									
Tuesday	****								
Wednesday									
Thursday									
Friday									
Saturday									
Weekly Totals									
Per cent. of butter fat in milk									

The butter-fat test covers the milk supplied for the we or weeks intervening between the last test and the one in cated by the per cent, of fat in above table.

Mistakes or complaints if reported to the maker or the cretary, in writing, will be promptly attended to. Read carefully and observe the rules, governing the care of milk, on the back of this card.

(FRONT)

THE CARE OF MILK

The quality and value of cheese or butter is determined very largely by the flavor. Nearly all the injurious flavors found in the finished product are traceable to the milk before it reaches the factory. Hence the importance of the patron giving the milk he supplies his very best care and attention.

The following rules, if carefully observed and followed, will greatly aid in obtaining a pure-flavored milk :

1.—Cows should have at all times an abundance of good, wholesome, succulent foods. No food that will produce bad flavors in the milk, such as turnips, turnip tops, etc., should be fed to cows supplying milk to cheese or butter factories?

2.—Food pure water should be supplied and cows should have access to sait at all times.

3.—The miking should be done in the most cleanly man-ner. Brush the miler of the cow carefully before commenc-ing to mik. Milk with dry hands.

4.—When finished milking, remove the milk to a place where the atmosphere is pure and strain immediately through

a wire strainer.
5.—Thoroughly aerate the milk before cooling it. This can be done by stirring or bailing with a long-handled dipper or by pouring the milk several times through some suitable aerator. The morning's milk should be aerated as well as the night's milk.

6.—Keep milk over night in a place where the surround-ing air is pure. Milk in pails hung a few feet from the ground will keep in good condition over night. If it is not possible to do this do not keep the milk in too large quantities in the

milk cans.
7.—It is not necessary, unless the weather is extremely warm or it is required to keep milk from Saturday till Monday, to set it in cold or lee water.
8.—Give special attention to keeping the cans, palls, etc., clean; no wooden vessels should be used. Wash cans and palls first with luke warm water, then scald them thoroughly with bolling water and place to dry where the direct rays of the sun will reach them.

9.—If whey is returned in the milk cans, have it emptied as soon as the milk hauler returns from the factory and the cans thoroughly washed and aired as above.

By carefully observing these brief rules no milk need be returned from the factory sour or with a bad taint, and the patron will find his profits from the factory increased by the enhanced value of the product that can be made from good, pure milk supplied his cheesemaker.

(BACK)

Address: The Farming World

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