

J.H. Grisdale 2 Feb 20, 1901
Exp Farm, Ottawa

MANITOBA AND WESTERN EDITION

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE.*

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VOL. XXXV. WINNIPEG. NOVEMBER 20, 1900. MANITOBA. No. 514

A Battle of Giants.

MR. A. HUGHES, druggist, Medicine Hat, reports a battle between two stallions on the Shannon ranch near that town. A heavy Clyde stallion got loose in the stable one night, and fiercely attacked a valuable blood stallion. When discovered in the morning, the poor brute was one mass of ugly bites from the withers to the ears, the mane being deeply bitten into the flesh. Every one who saw the horse the next day or two strongly advised shooting him—all but Mr. Hughes, who recommended Dr. Warnock's Uleerure, and persuaded Mr. Shannon to try it. The result was that in a couple of weeks all the wounds were completely healed. Mr. Shannon now believes that Uleerure will heal any kind of a wound, no matter how bad. Sold in large bottles at \$1.

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Vol. XXXV.

WINNIPEG, MAN., AND LONDON, ONT., NOVEMBER 20, 1900.

No. 514

"That Nothing be Lost."

"A penny saved is a penny made." Everything that can be saved out of the products of the soil, especially a year such as the present, is so much made. There are thousands of bushels of weed seeds and small grain in the crop; in some cases we have heard of 50 per cent. of the yield from the threshing machine being taken out by the fanning mill in order to make a salable sample, and 25 per cent. shrinkage is quite common in some districts. Wild buckwheat and lamb's quarter or pigweed seeds boiled seem to possess a considerable amount of nutriment. Some feed a little of this boiled stuff along with oats to horses, and say it has about the same effect as flax seed. Fed to pigs, along with chop wheat screenings or barley, it gives good results. From an analysis made by the Dominion Chemist, Prof. Shutt, of the seed of lamb's-quarters, he concludes that it has a comparatively high feeding value. "Its percentages of fat and protein—the two most important nutriment—place it approximately midway between corn meal and bran." The Professor, in his report, wisely urges the importance of boiling or grinding all small seeds fed to animals on the farm, in order that they might take the good out of such feed, which might otherwise pass undigested through the animal's system and be scattered over the farm. As to the feeding value of damaged and sprouted wheat, J. H. Grisdale, Agriculturist of the Ottawa Experimental Farm, says in a recent letter to this office: "Our experience here points to damaged wheat as a very valuable addition indeed to the hog menu, and we have in some cases found it to do very well fed alone. Sprouted grain also has been tried at several stations, and sprouted wheat has been tried here with very good results. The fact of grain being frozen does not seem to affect its value for feeding, pound for pound, as compared with other grains, since where injured wheat was fed alone, from four to six pounds were required to produce one pound of pork, and the same quantity of barley or peas was necessary to do this. By our experiment here we found that frozen wheat and sprouted wheat were worth from 50c. to 70c. per bushel. Of course, the price of pork has everything to do with the price realized from wheat, but on an average five pounds of this wheat can be counted on to produce one pound of pork. At the present prices this would bring the value of the wheat in Ottawa to about 70c. per bushel."

For Fewer Grades of Wheat.

At the recent meeting of the Grain Standards Board, which was held in Winnipeg on October 26 and 27, in addition to making a "commercial" grade—No. 3 hard—to meet the conditions of this year's crop, the matter of reducing the number of grades, so as more nearly to correspond with Duluth grades, with which our export wheat has to come into competition sooner or later, was discussed at considerable length, and as a result of the Board's deliberations, the following resolutions were passed:

"That it is the opinion of this Board that the methods of handling Manitoba wheat would be best served by making the following changes in the schedule of grades, viz., that the grades of No. 2 hard and 1 northern be consolidated under the name of '1 northern,' and having the present qualifications of 1 northern, with no less than 60 per cent. of hard wheat.

"That the name of 'No. 2 northern' be changed to that of No. 1 Manitoba spring, the grade having not less than 45 per cent. of hard wheat, and weigh not less than 58 pounds per bushel, and that any wheat not good enough to grade No. 1 Manitoba wheat, be graded as No. 2 Manitoba spring, in the discretion of the inspectors."

These changes could not, of course, take effect until the Act itself is changed, and could not go into effect till next year. Such a simplification of the grades, putting them on a similar basis to those

of Duluth, should be of great benefit to the exporter, and what benefits the exporter should certainly benefit the producer in the matter of dried-wheat certificates from terminal elevators. According to the Act, any tough or damp wheat that has been dried, has to be so marked on the grade certificate; and thus branded, its value is depreciated to some extent. It was therefore resolved to ask the Department to allow the inspector to give a clean-grade certificate for dried wheat, if he considered it equal to the standards of such grade, this to take effect at once.

In connection with drying wheat, it is claimed by Mr. King, of the Port Arthur drying and cleaning elevator, that ordinary "tough" wheat shrinks in drying about three pounds per bushel; damp and wet grain will, of course, shrink much more. The cost for drying tough wheat is 1½ cents per bushel, and it is claimed that dried wheat is perfectly safe to store.

Economy in Feeding.

The disposition to defer the day of commencing to draw on the winter store of provender is common to all farmers. While it is well to be careful that nothing is wasted, it is quite possible to be saving on one hand and wasteful on the other, with the result that the balance is against us. If the late fall months are favorable to the growth of grass, and the weather mild, as has been the case in most sections of Canada this year, there is, as a rule, little need of supplementing the pastures by a call on the winter stores, except in the case of milking cows, before the end of November. The coming of cool weather, and the consequent relief from the plague of flies which torture animals in summer, is in favor of the stock, and as long as the fields afford a fair bite of grass they may do well; but it should be remembered that young grass which comes up after autumn rains has not all the nutritive qualities of June grass, and when touched by frost it is still less nutritious, so that if it is desired to hold the flesh and condition that has been gained, there may be, and generally is, true economy in commencing to feed a little fodder before winter in real earnest sets in. Even access to a stack of straw is better than no provision to tide over the critical period between late autumn conditions and winter feeding, and animals, knowing instinctively the need of more substantial food than they can find in the fields, will help themselves to dry fodder if it is at all palatable and within their reach. Milking stock, of course, should be stabled at night when frost and cold weather comes, and fed a half ration at least, while cattle intended for beef should not be allowed to lose weight, which can only be regained by more expensive feeding later on. When hay is scarce, as is the case in many districts this year, the temptation is strong to put off the period of winter feeding longer than would otherwise be done. In this case, if a supply of ensilage or of cured cornstalks has been provided, the contingency is well met; but where such wise provision has not been made, the best use possible should be made of the straw and chaff in the barns as a substitute. To our mind, it is a good plan, where it is feasible, when threshing, to save the chaff separate from the straw, for early winter feeding, as any meal that is fed to cattle in the stables will give much better results if given in combination with chaff, cut straw or cut-corn fodder or ensilage, by reason of its being eaten slowly, masticated thoroughly, well mixed with saliva, and thus better fitted for digestion. One of the advantages of saving the chaff is that it comes handy for early feeding before winter work has set in and while the means for cutting straw may not be convenient or the time of all the hands may be taken up with outdoor work on the farm. Even where ensilage is provided, on which to feed any meal that is given, there is economy and profit in feeding it in combination

with chaff or cut straw or hay, making more nearly a balanced ration and at the same time utilizing a large amount of rough fodder, often having much more nutriment in it than it is commonly credited with, and which may be rendered palatable by mixing it with the ensilage a few hours before feeding time, the straw being softened by the juices of the ensilage, and, becoming slightly heated, the aroma of the silage permeates the whole mixture, which may be improved by the addition of pulped roots. If the farm buildings are only moderately conveniently arranged, this preparation of the feed can be carried out with no great expenditure of time or labor, and will pay well for the doing. By thus utilizing straw, which if early cut and well saved is not to be despised as feed, hay may often be sold to advantage, and, if need be, the proceeds profitably invested in bran, oats or other grain or in corn or oil cake. When, for instance, the market price per ton of hay and bran are about the same, it is well worth considering whether a ton of hay may not be saved by substituting straw to some extent as part of the feeding ration and investing its value in bran and oats or corn, and thus securing a better-balanced and more nutritive ration and one better calculated to give profitable returns from milking cows or by building up the frame and flesh in the case of young stock of any class. The possible objection that cutting straw involves a considerable outlay for machinery and expense for extra labor is met by the reminder that the power needed for this purpose may be utilized for several other uses as well, but where one objects to the outlay for the requisite machinery, the necessary outfit may readily be hired for a day at a time two or three times during the winter to cut all of this sort of feed that is needed and do considerable grinding of grain besides. Thanks to the revelations of scientific investigation, much light has in recent years been thrown upon the subject of the intelligent and economical feeding of live stock, and it is safe to say that a more general and careful study of the subject by farmers in the light of some of the excellent books written by competent authors on this theme will be helpful to all who are willing to learn. The time has quite come when farmers, in order to make the most of the means within their reach, must study the science of their business, which simply means seek to know more about the principles which govern and influence the growth and development of the plants and animals on which their income depends, and we are quite sure that the intelligent application of the knowledge thus gained will satisfy them that it pays to mix the meals of farm stock not only with fodder, but also with or by the use of brains.

The Argentine Opportunity.

"With the ports of this country closed to importations from the United Kingdom, the attention of Australian and North American breeders will be doubtless directed to this as a market for pure-bred stock, and it will be matter for surprise if they let such an opportunity escape them. Australian cattle ought to do well here, and the process of acclimatization should be an easier one than from the colder climates of the north. Californian Merinos too should have the same advantage, while in sheep it is well known that Australasia can produce an animal hard indeed to beat."—*Review of the River Plate.*

Pleased with the Watch.

Mr. F. E. Pollard, Leeds Co., Ont., writes:—"My son received the No. 4 watch from you on Oct. 24th, and wishes to thank you for same. He thinks it better than he expected, and is very much pleased with it, and is anxious to get more subscribers for you."

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN
THE DOMINION.

PUBLISHED SEMI-MONTHLY BY
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Contagious Abortion.

In some of the great breeding districts in Scotland and England outbreaks of abortion occasionally assume quite alarming proportions, and some herds have been known to lose quite half the season's calves through this malady. Of late years much has been done to check its ravages by attention to cleanliness and to the health of the cows, but, like all other diseases which are caused by germs or bacilli, it is very difficult of eradication once it succeeds in getting a foothold on a farm or in a district. It is now well established that the disease is of a contagious character, and is transmissible from one animal to another. When one cow in a herd aborts, every effort should, therefore, be made to prevent the disease spreading, and the best way of accomplishing this is to immediately isolate the animal from her companions and thoroughly disinfect her immediate surroundings. The whole of her afterbirth, as well as the aborted calf, should be buried deeply in quicklime, and the stall in which the animal is kept should be given a thorough course of disinfection. It is now known that the disease can be introduced into a herd (which has hitherto enjoyed immunity from it) through the medium of apparently healthy cattle, and for this reason some of our most experienced breeders always make a point of isolating newly-purchased cows until after they have calved, lest they should be instrumental in introducing the infection. As a preventive of the disease the practice of sponging the region of the tail and the vent daily with some antiseptic is now followed in many herds where trouble has been experienced with the disease in previous years. For this purpose a weak solution of carbolic acid is the dressing usually applied. M. Nocard, the well-known French veterinarian, who made a special study of this disorder some years ago, found that a very good dressing for use as a preventive of the disease consists of 15 ounces of hydrochloric acid and 2½ drams of corrosive sublimate in about 3 gallons of water. Animals which have once aborted are very liable to suffer from the same trouble with future calves, and for this reason, except cows are especially valuable, it is inadvisable to breed from them a second year. *Canada's Gazette.*

Home Grown Grass Seed.

In view of the very general failure of all the cultivated grasses to produce seed this year, inquiries have been instituted by the ADVOCATE to ascertain what are the prospects of obtaining home-grown seed for next year?

In importing timothy seed, there is great danger of introducing thistles and other noxious weed seeds. Brome grass may be imported from Europe fairly clean, but it has not as good germinating power as home-grown seed, and consequently requires thicker sowing. The seed of native rye grass cannot be obtained outside of this Province, as its introduction here is due largely to the efforts of Mr. McIvor, of Virden, who first grew it in quantities from seed he had himself gathered. So far as we can learn, there is little or no grass seed of any of the above varieties saved from this year's growth, but there may be some small quantities carried over from 1890 which will come in useful, as undoubtedly the windy experiences of last June will greatly encourage grass-sowing in order to prevent soil drifting. A good many who sowed grass seed early last year met with failures on account of the continued drought and the high winds, but late seeding has everywhere given good results, and the meadows have made strong fall growth and should be in shape to give extra results next year.

Appended are a few letters from correspondents in reference to the various grasses and the prospects of seeds:

J. H. AGNEW, Prince Albert District: "Brome grass is just the right sort for this country. I cut 4 tons off 1½ acres this year on high upland. Did not save the seed. There is no seed to be obtained here."

A. J. McLEOD, Principal Indian Industrial School, Regina:—"During the past summer our Brome grass did not do well, but the year before from a 10-acre field we had 2,600 pounds for sale, in addition to a quantity we retained for seeding down some additional land. We have a 50-acre field now in good shape, and we entertain the very highest opinion of Brome as a cultivated grass for the West."

C. E. IVENS, Wallace Municipality, Man.:—"I will not have any grass seed to sell this year. I saved a little, but will want it all for my own use. I have a thin catch on what I sowed with wheat this year. I may, perhaps, thicken it for next year's hay crop by drilling in a few oats and a little more grass seed. What I sowed with barley on spring plowing is a total failure. My cultivated grass (timothy and native rye grass mixed) grew a very poor hay crop this year, but has made splendid pasture this fall. However, I had such a good crop of it last year that I have nearly enough of it left to do this winter. Brome grass makes fine pig pasture. I had my young pigs on a little patch in pens. I moved them twice a day, and they were very fond of it."

WILLIAM WENMAN, Glenwood Municipality, Man.:—"I question if there is any grass seed at all saved in this Province the past season. My sons have none left from last season. I am at a loss to know where it will be procured. Probably little, if any, will be sown next season. There was a considerable quantity sown this year, and it is promising well for a good crop next season. I am referring to the native rye grass only. Very little Brome has been sown. One of my sons sowed Brome grass with wheat last spring. Very little grew. I am afraid it is a failure. Native rye grass appears to be the general favorite, owing probably to the difficulty of sowing the Brome seed. The price of Brome seed may also have some influence. At any rate, the native rye is the favorite around here. So far, I have found no grass to equal the above two named, except the Southern Brome, of which I sowed a patch, two or three years since, with other kinds, and was very much impressed with the Southern, but it proved only an annual with me, as it winter-killed. The year before last, Prof. Fletcher sent me some more seed, at my request, but I had no luck with it; the dry season was too much for it. I believe it is an excellent grass, but it will not stand the winter, so that is very much against it. My timothy was a failure, so I plowed it down. I have lost faith in timothy, as our seasons have been so dry of late. I have tried millet and have grown good crops, but feel satisfied it is very exhaustive to the soil, and have always been troubled with mustard in the seed, so that I have given it up entirely. Millet is also an annual, so that fresh seed has to be imported. I have not been able to save my own seed, owing to early frosts. Could we do so, one bad feature would then be obviated. I have great faith in both the native rye and Brome grass."

Poultry Raising in Assiniboia.

To the Editor FARMER'S ADVOCATE:
I have it in my mind to write you some of my experience in raising poultry in the Northwest, thinking it may be of interest and perhaps of some value to other farmers' wives.

Eighteen years ago we arrived in Regina, then a city of tents. At that time there were very few fowls—domestic, I mean—in this lone land. A few months after our arrival, when we were fairly started on our homestead, we invested in five birds. One night a mink left us but one. That poor lone hen had one foot so badly frozen that it came off, but I made her an artificial leg and foot out of bits of leather, whalebone and fine wire, which after a trial was a decided success, and the next summer

she raised me eleven fine chicks. One bright, frosty morning that fall, upon opening our sod henhouse, we found all but five "laid out," the work of a weasel. In the spring I got a Light Brahma rooster, and since then have not been troubled with more than average losses. For several years I kept my hens in a lean-to adjoining our pole stable, and during that time I raised every year quite a lot of early chickens, for which I found a ready market as soon as they were fit for broilers. However, every now and then I heard various comments from the male side of the family about the nuisance the fowls were around the stable, until in course of time the fiat went forth, "They must be banished." We puzzled our brains to contrive a dwelling for them which would be within our means, and which would keep them warm in winter. At this time, which was about seven years ago, I had a great mixture of breeds among my fowls, Brahmas, Leghorns, and several other kinds. They had prospered well, increasing in numbers, and always laying a good supply of eggs. Finally we built a new henhouse. It was partly underground, in nice sandy soil, facing the south, and topped with poles, the walls filled in with sods and manure, and all covered deeply with straw. The window and a porch were at the south side. My fowls existed during several winters, and at nights in several summers, in this building. Each year, with all the care I could give them, many of them had combs and feet more or less frozen, and each spring, as the surface water could not be prevented from making the floor and walls damp, many of the fowls contracted rheumatism. I was almost discouraged, for as a natural consequence they did not begin to lay till very late every spring, and though after they began to lay, I got a fair number of eggs, there was an end to early chickens, and indeed I could hardly raise any chickens at all. They would have something wrong with them, and most of them died when young. To keep up the flock in numbers, I bought for a couple of years chickens to replace those I lost. Then, in desperation, I declared that unless I got a good henhouse I could not keep hens. I then got one. It is built of lumber, the walls filled with chaff and sand, the roof shingled, and inside of that poles, and filled with straw between them and the roof. There are windows at the south, a hall and feed room on the east end, with outside door at the north towards our dwelling house. It is situated near enough so that I can go out myself in any weather and see after my fowls personally. I have two good yards fenced with wire netting, in which I can keep them when I wish. In laying season, I generally keep them inside this fence till after they have done laying, then let them out for a run and a grass feed before going to roost. The house is well banked in winter, and is warm enough so that their drinking water rarely freezes over, and I have not had a comb or foot touched with frost yet. Occasionally I get some eggs in winter, but they have not laid regularly during the severest weather.

During our married life of nearly thirty years, I have always made a practice of keeping strict account of every cent of expenditure, and also of receipts. My books show just what it has cost to live, and what our income has been during all this time. Last year I thought my outfit would warrant an improvement in my stock-in-trade along the poultry line, so I invested in a few pure-bred Barred Plymouth Rocks. On the first of November, 1890, I began to keep my poultry account separate from general accounts. I was led to this partly out of my own curiosity, but mostly because I wished to convince the men folk that keeping fowls properly pays. I knew it myself, but that is quite a different thing from being able to prove it to others, especially when they are not very anxious to be convinced. The result of my year's trial I think will be interesting to some of your readers. On the first of last November I had 35 hens of mixed variety, ten hens and a rooster of good Barred Plymouth Rocks, and fifty chickens, raised last year, most of them being roosters, which I killed later in the season. I also killed ten of my old hens before Christmas. All the chickens I raised this year were from the Barred Rocks. I have had good market for both eggs and fowls; never have a stale or bad egg, and my chickens are well fed. My sales during the year ending Nov. 1st, 1890, amounted to, in round numbers, \$80. This includes both eggs and chickens. My expenses amounted to \$10. These include, besides the food for my fowls, a book on poultry diseases, a setting of pure-bred Buff Rock eggs (out of which I hatched twelve chicks), a breeding pen of Golden Wyandottes, entrance fees to Regina Show, and lumber for a 12x12 addition to the henhouse. One can easily see that I have cleared \$40. Then I raised two hundred Barred Rock chickens. Of course I have killed a lot of young roosters, but have a splendid lot of young birds to keep over winter. Another year I hope to raise from the three kinds of pure-bred fowl, and I will kill off all my mixed hens. They are all two years old now.

I am afraid if I prolong this article it will become tiresome, but if any person desires to enquire into my methods of feeding and caring for chickens, I will be pleased to give the benefit of my experience, such as it is, at some other time. I am trying to learn from others all I can, and would very much like to see more articles in your valuable paper from other farmers' wives, for I think poultry-raising is a work which any woman can do, and find in it change (which is recreation) from her monotonous kitchen and indoor drudgery.

Central Assiniboia. MRS. A. NEVILLE.

Our Scottish Letter.

The past few weeks have been phenomenal ones in the live-stock world. We have got clear rid of all suspicion of foot and mouth disease, and the Board of Agriculture has climbed down from an untenable position with as good a grace as possible. The whole country is declared free of the scourge, and we are breathing freely once more. Here in Glasgow we have also got rid of the bubonic plague scare, and as with foot and mouth further north, there is a general feeling that a deal too much was made of the business. If it does nothing else, the scare has succeeded in drawing attention to the evils of "wakes," and this is a decided gain. There is something heathenish about wakes, and hardly any means better fitted to spread disease could be imagined. Another plague or "scare" in the shape of a general election has also been got over, and the country again breathes freely. Agricultural topics have not bulked largely this time, and if farmers get little from next Parliament they will at least know that they asked for little.

The main features of the past three weeks in the agricultural world have, however, not been these things, but the autumn series of

SHORTHORN SALES.

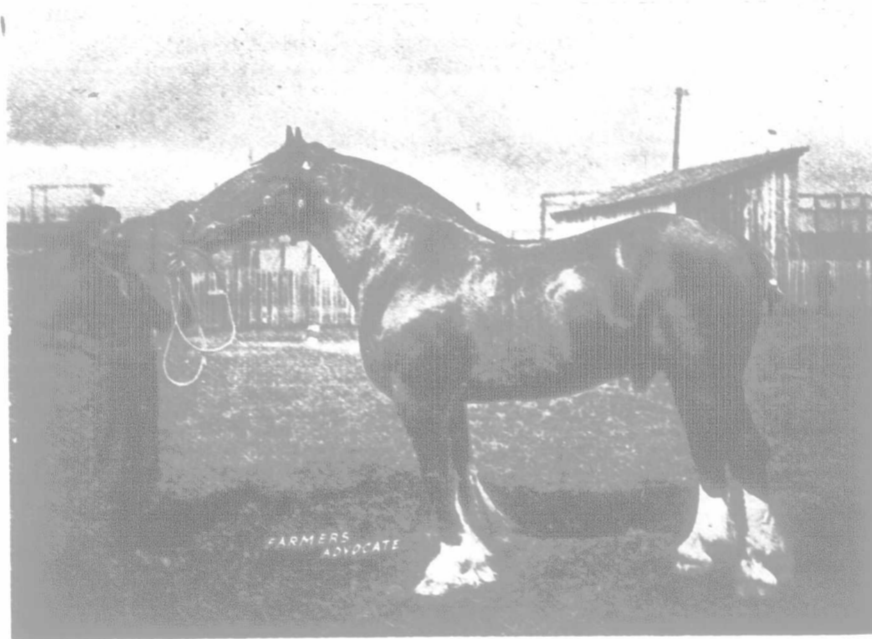
Nothing to equal these have ever before been seen in Scotland, and extraordinary averages for bull calves have been made by Mr. Duthie, Collynie, and Mr. Marr, Uppermill. The attendance at the series of sales conducted by Mr. Fraser, of Macdonald, Fraser & Co. (Ltd.), has been very large, visitors being present from the United States and Canada, as well as from all parts of the United Kingdom. The bull calves were scarcer than usual this year, and possibly this was one reason for the extraordinary prices made by them. I do not know that they have ever been much better, but possibly it is a mistake to say that they were the best lot ever offered from the two great Scottish fountain-heads of Sittyton blood at the present day. In England there is the famous Bapton Manor herd, and as long as it exists the laurels for Sittyton will not all go north. Mr. Duthie had an average of £150 8s. 6d. for 19 bull calves, and Mr. Marr got £126 3s. 2d. for 13, the average overhead for the 32 sold on that one day being £140 6s. 8d. apiece. No such trade was ever before recorded even in the palmiest days of the Shorthorn craze, and yet, although Sittyton deserves most of the credit, it is to be observed that the most successful sire was not a pure Sittyton, but an Inverquhomery bull, named Silver Plate 75633, whose breeding is Sittyton with an outcross of Bates. The foundation of the late Mr. Bruce's famous herd was a pair of large-framed English Shorthorn heifers, and all through its honorable history the late Mr. Bruce endeavored to maintain the traditions connected with this foundation. The result was seen in the greater style and gaiety of the Inverquhomery stock, and many considered that the herd there contained the best lot of cows in Aberdeenshire, Sittyton included. Silver Plate is a white bull, now owned by Mr. Deane Willis, who has the Bapton Manor herd, and the four calves after him, sold at Collynie the other day, made the extraordinary average of £271 13s. 9d. One of them, Silver Mist, a roan, made £315, and I believe goes to Canada. Another, Silver Bell, made £283 10s., and went to Mr. Harrison, Gamford, Darlington. This was regarded as the best calf in the sale, but as he was sold early and before the fever was at its height, he did not make the highest price. This, however, was made by another son of Silver Plate, named Violet Victor, also a roan, for which Mr. P. L. Mills, Ruddington, paid £372 15s. Another capital sire is a young red bull named Lovat Champion 74948. For him Mr. Duthie paid 200 gs. as a calf at Inverness in 1899, and four of his gets made an average of £147 apiece. The greatest number of calves sold by any one sire was seven; these were from Mr. Marr's herd and were got by the good old bull, Wanderer. These made £112 19s. apiece. The second highest price at the sale was £367 10s., paid by Mr. Jolliffe, from Stratford-on-Avon, for Primrose Pride, a fine young bull by the great champion, Pride of Morning, owned by Mr. Duthie. The highest price made by Mr. Marr's calves was £241 10s., paid by Mr. Ward, from Ohio, for Spicy Marquis.

The second days sale was held at Newton, when drafts were disposed of from three noted herds, those of Mr. Gordon, of Newton; Mr. Wilson, Pirriemill, and Mr. Graham Stirling, of Strowan, in Perthshire. Twenty-one head from Mr. Gordon's herd, which has bred several champions in recent years, made £44 8s. apiece, and the average price of two two-year-old heifers in this lot was £108 3s., while three bulls averaged £33 7s. An equal number from Pirriemill made £32 13s., but these were six yearling heifers and fifteen bull calves. The average price of these was £23 7s. 7d., a figure more within the range of ordinary mortals than those current at the Duthie-Marr sale. From Strowan, only

eleven head were sold, and the average price of these was £32 7s. 2d. Three two-year-old heifers in this lot made an average of £51 16s. The sale on the third day was held at Sanquhar Mains, near Forres, when drafts from two of the best herds in the north, owned by Messrs. Law, were sold and made splendid averages. Forty-four head from Mains of Sanquhar went through the ring, and their average price was £53 11s. 8d. Here again the heifers were in favor, 12 two-year-olds making an average of £39 9d., and 9 yearling heifers £73 7s. 8d. apiece. The six heifer calves made £37 16s. From Holl farm, 19 were sold at an average of £38 17s. 6d., four yearling heifers in this case making the fine average of £51 19s. 6d. The last sale of the series was held still farther north, when the herd owned by Mr. George Inglis, of Neumore, was dispersed. The 52 head made an average of £31 10d., 17 cows going as high on the average as £40 2s. 11d. Mr. Inglis was not an absolute devotee of Sittyton, although that blood predominated at Neumore as elsewhere in the north. He, however, liked a little "bit of Bates," and he had his reward in a good trade for useful stylish cows. His 14 heifer calves made an average of £21 11s. 3d., and his yearling heifers went as high as £42 5s. 3d., a very good average indeed.

English sales of Aberdeen-Angus cattle concluded this week, when 40 head from the herd of Mr. Crisp, near London, made the fine average of £31 3s. 2d. The average price of the 11 cows was £42 9s. 6d., one of them making 100 gs., while the stock bull, Governor of Abergeldie, made the same price. Mr. Crisp is giving up the breeding of black cattle, at least on the same scale as heretofore.

Horse sales in the north of England have turned out well, and a grand trade was experienced for Clydesdale foals at the Seaham Harbor draft sale on Tuesday last. Nine filly foals made £39 4s. apiece, and 16 colt foals, £33 10s. 8d. Five yearling fillies made an average of £49 7s., and four yearling colts, £40 13s. 9d. The superb gray horse, Pearl



ALEXANDER'S HEIR (10151) [2557]

Imported six-year-old Clydesdale stallion; sired by Prince Alexander (8889). Winner of second prize at Ottawa and third at Toronto Exhibition, 1900. PROPERTY OF T. H. HASSARD, MILLBROOK, ONT.

Oyster 10831, two years old, made 320 gs.—that is, £320. This is a very fine horse, and in spite of his color he is likely to be very popular in the north of Scotland, where he will henceforth travel. A number of very fine Clydesdale geldings were sold, and the average price of nine matured working horses was £78 9s. 1d. A pair of these—two immense horses—sold for £215 5s. On the day succeeding the Seaham Harbor sale, another took place at South Acomb, on Tyneside, when 10 Clydesdale mares made an average of £50 4s. 1d., and two three-year-old fillies went at £39 6s. 6d. At the ordinary auctioneers' autumn sales there has been good trade in Clydesdales, and generally this has been a remunerative business these times.

The great dairy produce shows are over, and at the Kilmarnock cheese show the championship went to Mr. Andrew Barrowman, Caigton, Castle-Douglas; while at London, in open competition against all England, the first place was taken by Mr. Hugh Hunter, Mossbog, Ayrshire, whose prize cheese sold at 1s. per pound. "SCOTLAND YET."

The pig has the reputation of being able to produce a greater weight of meat and in a shorter time from a certain quantity of food than any of our other farm animals. As illustrative of this, it may be mentioned that while a well-fed, comfortably-quartered pig will increase in weight at the rate of 1 pound for every 5 or 6 pounds of dry food which it consumes, an ox requires to consume from 12 to 15 or 18 pounds of dry food (depending on the materials used) in order to produce the same weight of meat.

Questions in Bacon Hog Raising.

- 1st.—What is the best treatment for sow before and after farrowing, in fall or winter, in order to raise large litters of healthy, thrifty pigs?
- 2nd.—At what age, and what do you think the best plan of weaning fall and winter litters to avoid stunting and to promote the most thrifty growth?
- 3rd.—In winter pig-feeding, to what extent, and how is it profitable to use clover hay, ensilage, mangels, sugar beets, turnips, or boiled potatoes?
- 4th.—What grain foods, such as corn, barley, peas, shorts, do you prefer, and how should the food be prepared and fed?
- 5th.—What pure breed, grade or cross of pigs do you find most satisfactory to yourself and the packer?
- 6th.—In case you buy young pigs or store hogs, at what age do you like to begin fattening, and at what age can you reach the weights that packers call for?
- 7th.—In order to fatten hogs in winter and keep them free from rheumatism or other ailments, what walls, floors, bedding, sleeping room and space for exercise do you advise?
- 8th.—Do you give them charcoal, ashes, sulphur, sods, salt, etc., and how?

EXERCISE IMPORTANT—FEED MIXED GRAINS.

To the Editor FARMER'S ADVOCATE:

SIR,—In regard to the care of brood sows during the cold weather, we consider it very essential to provide a warm shelter for sows to run in, as there is nothing so good for them as plenty of exercise. The sows should be fed anything they will eat in the shape of green food, such as scalded clover, turnips, mangolds, or sugar beets. These I would prefer to be fed with a little grain once a day. Sows kept in this way should be in good flesh at the time of farrowing. The sow should be housed at least two days before farrowing, to get her used to her pen and feel more at home. She should be fed on oat chop (ground fine) and bran, with a little oil cake.

See that the sow is free from vermin at the time of farrowing, and that the pen is dry and clean. Supply her with a little cut straw or chaff for a bed, and, above all, keep her as quiet as possible. Feed the sow at least three times a day on milk-producing foods, such as oatmeal, bran and oil cake, and roots once a day.

When the young pigs are about four weeks old, they will begin to feed at the trough. As the feed the sow gets is not just what they should get, it is better to partition off part of the pen and feed them a little milk or some such food to make them grow.

2nd.—The age of weaning depends on whether the pigs are thriving well on the sow or not. If they are not doing well, it is better to wean them at the age of six, or even five, weeks; but, as a rule, we get better results by weaning at about seven weeks old. Take the sow away and put her in a warm pen where she will not take a chill, and, in about twenty-four hours' time, allow her to remain with her pigs for a short time. Continue to feed the pigs as nearly as possible as the mother has been fed, but feed it to them warm.

3rd.—In winter pig-feeding it is advisable to have as great variety as possible. Feed grain morning and evening, and turnips, sugar beets and mangels (pulped and fed raw) or clover hay (cut and scalded) at noon. Boiled potatoes should be mixed with chopped grain.

4th.—All grain foods should be ground fine and soaked at least twelve hours before being fed. As hogs do not relish all one kind of grain, it is well to mix several grains. A mixture of barley, peas and oats is preferable for fattening hogs; while bran and shorts may be used to greater advantage for brood sows and young pigs.

5th.—We find the Tamworth takes the market as well as any breed which we have ever tried. As a cross, the Tamworth with the Berkshire makes a very commendable pig for packer and feeder.

6th.—As a rule, we shut in our hogs at the age of four months, and feed them lightly for three or four weeks, then gradually increase the feed. Hogs fed with a good ration of grain twice a day and roots once should weigh from two hundred to two hundred and 20 pounds at the age of seven months.

7th.—As a dry wall is certainly preferable in a hog pen, we would recommend frame or cement. The floors should be of good cedar plank, with plenty of clean straw for bedding. The pigs should be turned into the barnyard at least once or twice a week for exercise.

8th.—Charcoal, sulphur, ashes and salt should be mixed together and kept where the hogs can have free access to it.

As it is very necessary to keep a hog pen clean, it is advisable to throw a shovelful of slacked lime about the floor of the pen after removing the manure. As regards crosses, use only the first cross.

Another very important point is "black teeth." At the age of two or five days, these should be extracted. By neglecting them, a whole litter may be stunted or lost.

W. W. M.
Wellington Co.

MUSIC IN PIG-FEEDING.

To the Editor FARMER'S ADVOCATE:

SIR,—A sow will do very well fed on roots, with enough grain to keep her in a thrifty condition, but not fat. With plenty of exercise up to within a few days or a week of farrowing, she should then be put into the pen she is to use, which should be light, comfortably warm and dry. A liberal bedding of straw should be given her, and no more added until a week or so after farrowing. For the first day after farrowing, feed nothing but a little very thin, lukewarm slop, and lightly for a few days, until she is getting all she will eat up clean three times a day.

Wean at from seven to eight weeks old, when they will have learned to eat with the mother. Let her in beside them three or four times after weaning, for her sake as well as theirs. I think shorts is the best feed for young pigs; but one feed per day might be corn, fed in the ear, with a few mangels sliced. But to avoid stunting, and give them good appetites, I would emphasize exercise.

I prefer mangels; feed whole, if to large hogs; sliced, if to small pigs; but regard them more profitable as an appetizer than as a regular feed.

I usually give the noon feed of corn in the ear, and, not having grown either peas or barley, I feed ground oats and shorts mixed equal parts by measure. The feed is soaked in a small concrete tank the size of a salt barrel and two-thirds the depth, from morning till night, and *vice versa*. This tank is in the passage, and, being underground, it is out of the way, and the feed never freezes.

I have lately been crossing Chester White sows with Tamworth boars, with very satisfactory results.

I am satisfied if the hogs weigh from 180 lbs. to 200 lbs. at eight months old.

My pig house is frame, on a concrete foundation, with concrete floors and plank sleeping beds laid directly on the concrete. Good ventilation into loft above is an important point. The pens are only 10x11 feet, accommodating from eight to ten hogs; but they are let outdoors or into a large manure shed for exercise every day. Use wheat straw for bedding, and after exercise the pigs lie quite clean and dry. In this connection, I might add that I think it safer not to feed too heavy; let the pigs be always ready for their feed at meal time, not too noisy, but musical. I have had no trouble with rheumatism or other ailments.

I find a weigh scale very useful in fattening hogs. First, in order to note gains; second, to find out when they are ready to go; and third, to know what they weigh on the morning they are delivered. Middlesex Co., Ont. ADAM BATY.

WEAN AT SEVEN OR EIGHT WEEKS OLD.

To the Editor FARMER'S ADVOCATE:

SIR:—1st.—I think that a sow should have plenty of exercise; and while the pigs are running with her, bran and shorts is the best food; and after the pigs are weaned, I would feed roots and very little grain.

2nd.—I would let the pigs run with the sow until they are six or eight weeks old. I would teach them to eat a little warm milk with some bran and shorts stirred into it; and then when they are weaned they go right ahead and do not miss the mother but very little.

3rd.—I have never fed any ensilage nor clover hay; but I do like the sugar beet for winter feeding, and I always feed them raw.

4th.—I prefer ground peas and bran or shorts for grain feeding. I would have it soaked and soured, and I would feed it warm in the winter.

5th.—We have now a litter that are crossed, the mother being half Chester White and half Berk. and the hog a Poland-China, and they have done the best that we have ever had. We are going to try the Tamworth and Berk. crossed; we think that they are still a better cross of pigs.

6th.—We cannot reach the weights that the packers require under eight months, and most of the fattening is done in the last two months. We keep our hogs growing well and in good flesh until they are about six months old, and then we try to shove them as fast as we can. They usually weigh from 200 to 215 pounds.

7th.—I think that wooden walls are the best; mine are matched lumber, tar paper and lap siding, then lined with inch lumber on the studding. Our exercise space is sixteen by twenty-four feet. I think that it is immaterial as to the kind of straw for bedding so long as they have plenty of it and are kept dry. They do not want to sleep in damp bedding.

8th.—We feed ashes, charcoal, sulphur, and salt. We feed the sulphur in the swill, and the ashes, charcoal and salt dry. WM. I. BUTTERY, Middlesex Co., Ont.

TWO HUNDRED POUNDS AT SIX MONTHS OLD.

To the Editor FARMER'S ADVOCATE:

SIR:—1st.—The best treatment for sows after farrowing in fall and winter is to keep in a moderately warm pen, not too much straw; feed on oat and barley chop or a little mill feed.

2nd.—The best age to wean fall and winter litters to avoid stunting is as soon as they can eat and drink, say about four weeks.

3rd.—The most profitable way to feed pigs in winter is not to keep more than there is good accommodation for, and feed the best kind of feed it is possible to get.

4th.—The grain preferred to feed profitably is chopped barley until about four or five months old; finish on dry peas.

5th.—The kind of pigs preferred for the packing-house, and for profit, is the York. or Berk. sow crossed with the Tam. boar.

6th.—In case I should buy pigs, I prefer starting to fatten as soon as taken off the sow; make them weigh 200 at six months old.

7th.—In order to fatten pigs in winter, shut up in small pens, not more than four in a pen, better have only two, better still if there was only one; plank floor and wooden walls preferred; lots of pea straw to lie on.

8th.—Charcoal, ashes, sulphur and salt are all very good. SCOTT COWAN, Wellington Co., Ont.

[NOTE.—What do readers think of this? See our article in this issue.—ED. F. A.]

IMPOSSIBLE TO FEED PIGS PROFITABLY ON GRAIN ALONE.

To the Editor FARMER'S ADVOCATE:

SIR,—I may say I deal largely in hogs. I sold last year \$1,125 worth, and have sold already this year \$665. This amount of hogs can easily be raised if you keep a lot of cows; but I have only seven; and there is nothing takes the place of milk. This one thing I will say, that it is impossible to raise hogs at a profit on grain alone, but it can be done successfully by feeding grain with grass in summer and roots in winter.

1st.—A sow should have abundant exercise, should not be penned up. If on pasture, she should have a little grain so as to be kept in healthy condition. If in winter, she should have roots, and after farrowing do not give any grain without scalding. Boiled roots of any kind mixed with shorts or oatmeal is best say for first two or three weeks; after that you may give stronger feed—barley or pea meal. To avoid any stunt, the feed should be scalded, and, please understand, the shorts or meal should be mixed with the boiled roots.

2nd.—Wean at six to seven weeks. Shorts is the best feed for weaning young pigs to avoid stunting. Mix with skim milk, if you have it, but if not, it should be mixed with boiled roots, a few peas or a little corn once a day, say one quart to six or seven for a start. Be careful not to overfeed, and feed often.

3rd.—I never used clover or ensilage; this is, I understand, for store hogs. I prefer sugar beets or turnips, and they will winter well with very little grain.

4th.—As to what kind of grain, I do not know how to answer. Looking at it in an all-round way, of course peas are best; but when you take into consideration that, as a rule, we can only grow in this section from 10 to 15 bushels per acre, while we can grow 45 to 60 bushels of barley or 100 or more of corn in the cob, we must leave peas out of the question. I think it all depends on how you feed the grains, or grain. Get it ground into meal, and then mix it with boiled roots; I prefer turnips. If you want the hog to grow, use less meal and more turnips; if the hog has its growth and you want to fatten, feed less turnips and more meal.

5th.—A Yorkshire sow crossed with Berkshire boar.

6th.—Begin to fatten at six or seven months, so as to be ready when eight or nine months old.

7th.—Walls should be double boarded, with tar paper between, on concrete foundation. I prefer concrete floor with boards or planks in one corner for sleeping laid on the cement. Keep 10 hogs in 12 feet square, as the space in a good hog pen is valuable. Then, I have a yard outside to let them run out once in a while when I think they need it.

8th.—I throw the charcoal in the pen, all they want, and put the sulphur and salt in their feed. I never use sods.

The most money in hogs, to my mind, is in wintering them and turning them out to grass in the spring at say about 60 to 75 lbs., and with a little corn or peas they will reach 200 lbs. by August. It's a mistake to feed corn in the cob; it should first be shelled and then strewn around on the grass, so that they do not eat it too fast. ELGIN CO., ONT. JAMES WATKINS.

WOODEN WALLS AND PLANK FLOORS PREFERRED.

To the Editor FARMER'S ADVOCATE:

SIR:—1st.—My experience in raising young hogs in winter has not proved very successful. My mode is to have the pigs come in April and again in October, two litters per year. In treating the farrow, I note that first lots of room for exercise is required, with pulped turnips and a little oat chop for food.

2nd.—I wean my young pigs at five weeks. I feed shorts or middlings, not too strong.

3rd.—I have had no experience in feeding clover hay, ensilage or sugar beets. I have, however, fed turnips, mangels, and potatoes. I find most profit and less labor in feeding the two former pulped, mixed, of course, with a small quantity of grain.

4th.—In the feeding of grain, I use a mixture of oats, peas and barley chopped, regulated in accordance with the age and constitution of the hogs. Feed dry, giving plenty of water to drink.

5th.—The breed I prefer is a cross with Tamworth hog and Chester White or Yorkshire dam. These I prepare for the packer at the age of seven months.

6th.—I begin to fatten at five months, ready for packer at seven months.

7th.—I prefer wooden walls, with plank floor, wheat-straw bedding. Again I say lots of room for exercise.

8th.—I give frequently charcoal, sulphur, and salt. Throw the coal in feed and the others by themselves to be used at their pleasure. I note that frequent sprinkling of wood ashes on the backs of the hogs will keep the skin clean and clear of vermin. C. W. Wellington Co., Ont.

STONE PIGPENS CONDEMNED.

Before trying to answer the questions, I will state that our pigpen is a stone building, and very cold. I would never build another stone pen. I think a pen double boarded, with tar paper between, much warmer and drier. I allow my sow to take all the exercise she wants until two weeks before farrowing, when I shut her in to get acquainted. She has to be housed in the cattle stables for farrowing in winter. I feed roots until she is shut up, then barley chop, not too heavy at first. My plan is to wean the pigs when six weeks old. I think if you can keep them warm and dry, that is half the battle, with plenty of exercise. Six months is long enough to feed pigs so as to weigh from 180 to 200 pounds. I feed barley chop and slop until five months old; the last month, peas. I have found the Berkshire sow, crossed with the Tamworth boar, both thoroughbred, most satisfactory. I had a lot of trouble with pigs crippling. The floor is cedar blocks. I boarded the pen up to keep the pigs away from the stone wall, and raised half the floor for them to sleep on, and have had no more trouble. A pen 12 feet square gives room enough for 8 or 10 pigs. People differ about how much space they should have. Some pigs won't take exercise if they have a field to run in. The cross I am working with now don't need a very big place; they gallop around the pen like blood colts. There is generally a good lot of earth and broken bits of roots in the root house in winter. This I gather occasionally and give to the pigs. That is all in the way of grit that they get, except when they are let out for exercise when the ground is bare of snow. GEO. HENDERSON, Wellington Co., Ont.

Word from England on Raising Fall Litters.

When fall pigs have been weaned, the critical season has come. The chief difficulty with autumn litters is found in tiding them over the growing period between weaning and fattening. If they go wrong during this period, the work cannot be made profitable, however good the price may be that is received for them when they are marketed. The chief item of difficulty arises in the want of opportunity for exercise. Of course, they should have the freedom of a yard, but oftentimes the weather is so cold that they do not care to take exercise much of the time. Because of this difficulty it will often happen that pigs will go off their feed in winter on a diet that would have answered admirably for them in the summer while they were running in the pastures.

The Floor of the Pig House.—It is important that the floor of the pig house be properly made. If the pigs sleep on the floor underneath which the air and wind has free access, and, moreover, if the bedding on this becomes damp, the pigs become rheumatic, no matter what the food given or the nature of the care. Concrete floors are too cold. Plank floors well fastened will prove satisfactory. And it is very important that the pigs take exercise on the sunny side of the building.

The young pigs should be taught to take food freely, by themselves at first, and then later with the dam. Skim milk will be necessary to accomplish this in good form at so early an age. And here it may be mentioned that without the aid of skim milk it will be difficult to succeed with autumn litters, owing to the early season at which they have to be weaned. Because of this, and because of the great suitability of skim milk for producing growth in swine, the rearing of autumn litters may be carried with much advantage along with winter dairying.

The food during the season of growth will be the same substantially as for spring litters. In lieu of the pasture which the spring litters have access to, autumn litters should be fed field roots. Growth is wanted, and the food must be adapted accordingly. Therefore, oats, shorts and bran, with roots, will furnish the principal portion of the diet before the fattening period. But as the latter period approaches, more of the carbonaceous foods, as rye, barley and corn, may be given, to lead up gradually to the final finishing period.

One of the Greatest Difficulties.—The greatest difficulty with autumn litters is found in keeping them on their feet during the growing period. To prevent them from breaking down thus early, give not only foods that are largely nitrogenous, but also some foods that will keep the bowels in tone, such as a free supply of field roots, mangels or turnips, or sugar beets, and also a small quantity of oil cake. The great danger arises from constipation, and when skim milk is very freely fed, the danger from constipation is all the greater. The droppings should, therefore, receive a careful

and constant scrutiny. When the animal becomes constipated, the secretions become inactive, then some organ will speedily get out of tune. With pigs at such a time the kidneys commonly first fail to do their work, and this produces more or less paralysis of the limbs. Some linseed oil given in small doses at such a time will prove helpful, but it will be found greatly preferable in every way not to have such difficulty arise. And here it may be mentioned, that the difficulty will be greatly aggravated by lack of proper ventilation.

The food during the finishing period should consist of such grains as corn, barley, rye, wheat and peas, or a combination or an alternation of these and one-third of the whole by weight should be nitrogenous, and composed of such foods as bran, shorts or oats, alone or in combination. One half pound of oil meal should also be given per day to each animal.—*Lectus, in Stock-breeder and Farmer.*

The Bacon Curer's Pig.

Having been watching for some time past the marked improvement which the efforts of the South of Ireland Bacon Curer's Pig Improvement Association have effected in Irish swine generally, I think I am in a position to know exactly what is the next step advisable.

Swine have been much improved, and to a great extent we have got rid of the greyhound type so noticeable in the past; but we must not go too far in any one direction, and I think it is time to draw attention to the fact that in one point among the cardinal points of the best class of swine we have gone quite far enough. I refer to the depth of the sides.

Originally, deep sides to the pig were suggested as necessary on account of the accompanying vigor of constitution, etc. The Irish pig was too light in carcass and had not room for healthy organs of respiration and digestion. Well, that shortcoming has been remedied now, and we must not run into the other extreme and thereby suffer in the production of the highest possible percentage of the finest portion of the meat.

Irish pigs are now being bred rather of too great depth of side, unnecessary from the point of view of constitution, etc., and wasteful as regards fine bacon production. The bacon trade, which, after all, is the best customer the Irish pig-producer has, now wants less depth of side, as possessing a greater proportion of the choicest cuts of bacon therein, and showing less waste in the cutting out.

Let us now begin to tuck up what we have been so far able to keep—the cream of the bacon trade of the United Kingdom, which is at present in our hands. Shortly, do not aim to have your pig quite so deep from the top of the shoulder to the breast, and all will turn out satisfactorily.—*A. W. Shaw, in Farmer's Gazette.*

Skim Milk as a Pig Food.

Immediately after young pigs are weaned there is no better food for them than skim milk enriched with such grain foods as barley meal, oatmeal or maize meal, or, better still, a mixture of all three. As a food for pigs in general, milk possesses more nutritive value than it is usually credited with, but it acquires special value when given to young pigs at this stage of their existence. The animals are then in need of some food to make up for the loss of the natural supply of milk which they have received from their dams prior to the separation, and skim milk is a better substitute for this than any other class of food. As illustrative of the value of skim milk as a food for pigs, it may be mentioned that in an experiment recently carried out in the States it was found that while it required on an average about 3½ lbs. of a mixture consisting of peas, wheat and rye to produce 1 lb. of pork, a little over 2 lbs. of the same mixture was found to produce the same quantity of pork when fed along with less than a gallon of skim milk. In this experiment it was found that it required about 4½ lbs. of barley when fed alone to produce 1 lb. of pork, while only 3½ lbs. of the same food were required to produce 1 lb. of pork when fed with a quart of skim milk. These experiments, like others carried out elsewhere, afford conclusive proof of the great value of skim milk as a food for pigs.

Feeding Pigs on Sweet and Sour Milk

The Agricultural Department of the Nottingham (England) University College has been carrying out some tests with sweet and sour separated milk for pigs. Ten pigs of the Yorkshire breed, all of them of the one litter and nineteen weeks old, were divided into two lots of five each. Both lots were so evenly matched that the difference in their total live weight amounted to only four pounds. The experiment extended over a period of just twelve weeks, and all through the animals received the same quantities of separated milk and meal (principally corn meal), but the separated milk given to lot 1 was allowed to become sour before being fed, while lot 2 received sweet separated milk. At the commencement of the experiment in August the pigs in lot 1 weighed 700 pounds, while those in lot 2 scaled 704 pounds. The experiment came to a close on November 21st, on which date the weight of the pigs in the two lots had increased to 1,107 pounds and 1,122 pounds, respectively. Both lots were killed on the conclusion of the experiment, and sold for 8s. 9d. per 20 pounds. The dressed

weight of lot 1 was 1,020 pounds, which, at 8s. 9d., produced £22 6s. 3d., while lot 2 weighed exactly 20 pounds more, so that the cash difference in their favor worked out to 8s. 9d. From this difference must be deducted 15s. 0d., the estimated value of the 4 pounds extra weight of lot 2 at the commencement of the trial. A balance of 7s. is thus left in favor of the use of sweet separated milk. The butcher's report was that both lots were of equally good quality. It would seem, therefore, from this experiment, that the feeding value of separated milk is not increased by souring, but that, if anything, its feeding properties are slightly impaired.

The Balance of Nature.

A curious illustration of the way that nature keeps one class of plants or animals from encroaching on another may be seen in the history of the mongoose in the island of Jamaica. The sugar plantations of that country became so badly infested with snakes and rats that heroic measures had to be employed in getting rid of the pests, and it was decided that the mongoose, a kind of ferret, should be introduced into that country. It was not long until there was scarcely a snake in the island nor a rat in the cane fields. The rats, however, took refuge in the cocoanut trees, and ate the nuts so badly that it is scarcely possible to grow cocoanuts ever since. When the snakes were all eaten up and the rats had taken to tall timber, the mongoose took after the ground-laying birds, destroying both birds and eggs. These birds had been invaluable because they kept down the ticks which gave so much annoyance to men and cattle.

When the birds disappeared, the ticks increased enormously, so that life in Jamaica was a burden, and there was not a yellow-legged chicken left for the preacher. Now we learn that the tick is getting after the mongoose and killing them off, the birds are coming back, and the Jamaicans can now keep cattle. In other words, they have gone around once, and are getting back to where they were when they started.

It is well that Secretary Wilson, of the Department of Agriculture, has absolutely prohibited the



HERMIA.

Two-year-old Hackney filly, by Royal Standard; dam Cherry Ripe. Winner of first prize in every competition entered, including sweepstakes at Toronto Industrial, 1900.

OWNED BY ROBT. BETH, BOWMANVILLE, ONT.

importation of mongoose. If he had not, some fool who had rats in his corn crib would have imported it, and then we should have no end of trouble, such as we have with the English sparrow and are likely to have with the Belgian hare when the fad has played itself out and these pesky diggers and bark peelers take to the woods. Ninety-eight out of a hundred will die, but those, like the original rabbit, may survive and plague our children and grandchildren to the last syllable of recorded time. *Wallace Farmer.*

Bees, and the Season in Manitoba.

At the close of a season so desperately bad as to baffle the imagination of the oldest of old inhabitants to match, perhaps some of your readers will care to hear how the "little busy bee" has fared.

One can scarcely think of anything that the season seemed to favor less than bees. The long spell of excessively dry and windy weather in the early part, during which there was almost no bloom at all, was greatly against brood rearing, and threw swarming back several weeks; then the clover was completely winter-killed as new experience for this part of the country, and one we owe, doubtless, to the lack of snow, and not till the ever-reliable thistle began to bloom was there any honey to speak of. Even this was late, and when it came the rainy spell was already on; but as if not to be deterred from doing all the good possible, the thistle stuck to it through rain and shine for fully two months, and the Minister of Agriculture kindly kept himself quiet. Every shower seemed to bring out new blossoms, and so whenever a favorable day occurred, there was no lack of flowers to work on. Indeed, a marked feature of the season was the abundance of bloom in the latter part. At present, October 25th, mustard and French weed flowers are plentiful. If the weather had only been more

favorable to the gathering of it, the yield of honey would undoubtedly have been above the average. As it was, the yield comes to 104 pounds (extracted) to the hive, spring count. Besides this, the number of colonies has rather more than doubled. This is surely a remarkably good showing, considering the season, and one well worth calling attention to, in view of the fact that the clover having been entirely killed out, the record was made on natural pasture alone. *J. J. GUNN.*

Gonor, Manitoba.

Stacking Prairie Hay.

We have had very bad weather here this fall, but it is now fine and we are all getting in our green oats feed after all. We thought at one time that we should not get it saved. We are pulling the loads out of the rack with a rope, and find that it works all right. We use the Northwest hay rack, with one side out of it, and if the stuff is good and dry we drive across the end of stack, and can build about as high as it is possible to pitch with a fork, and as wide as the length of the rack. But if the feed is green or wet, we build narrow stacks, just as wide as our racks, 10 ft., two loads high with the rope, and then put a top on, as the whole load comes off in every case at one pull, and no trouble with a stacker. This plan works equally well whether you use a hay loader or put it on by hand. *H. A. MUNTZ.*

Central Alberta.

Fall Wheat in Northern Alberta.

To the Editor FARMER'S ADVOCATE:

During the spring of '99 I received from Nebraska ten bushels of fall wheat, part of which I sowed on the 11th of the following September, on timothy sod, which was broken up and prepared as soon as the hay crop was removed. It came on very quickly, but was very short when the ground froze up. That winter (there being little snow the greater part of the winter) was a very hard one on my fall wheat, it being an unsheltered place and subject to the bleak winter winds. It came on, however, in the spring and made a rapid growth, and matured a splendid crop, notwithstanding the fact that it was haled down pretty badly just as it began to come in head. It is a fine sample of what our soil and climate will do. The berry is very large, but not as large as it should be. It is, however, very far ahead of the Nebraska seed. I will report yield when it is threshed.

I have sown the balance of the seed on "light scrub" land broken up this spring, prepared and drilled in with a press drill on the 14th of August. It is looking fine at this writing.

I am very desirous of procuring a number of different varieties to test next year. I propose sowing on spring breaking, Brome sod and summer-fallow. Also intend to conduct some experiments on early, medium and late sowing, as well as deep and shallow, thick and thin sowing. I have carried on several experiments of this sort in the past, with other grains, grasses and vegetables, from which I have obtained much valuable information. *Northern Alberta. H. L. BRIGGS.*

Great Dairy Cows.

The unregistered Shorthorn cow, Cherry, which created such a sensation at the milking trials at Tring in August, where she yielded 67 lbs. 10 ozs. of milk in the day and produced over 4 lbs. of butter, was entered for competition in the milking trials held in conjunction with the London Dairy Show at Islington in October. At the latter fixture, 104 days after calving, her yield of milk for the 24 hours was 55 lbs. 2 ozs., but her butter yield worked out to only 2 lbs. 5½ ozs.; so that it took a little over 2½ gallons of her milk to produce 1 lb. of butter. At the Tring trials the milk produced by this cow was so rich in butter-fat that every 1½ gallons of it produced 1 lb. of butter. How is this difference in richness and butter product accounted for?

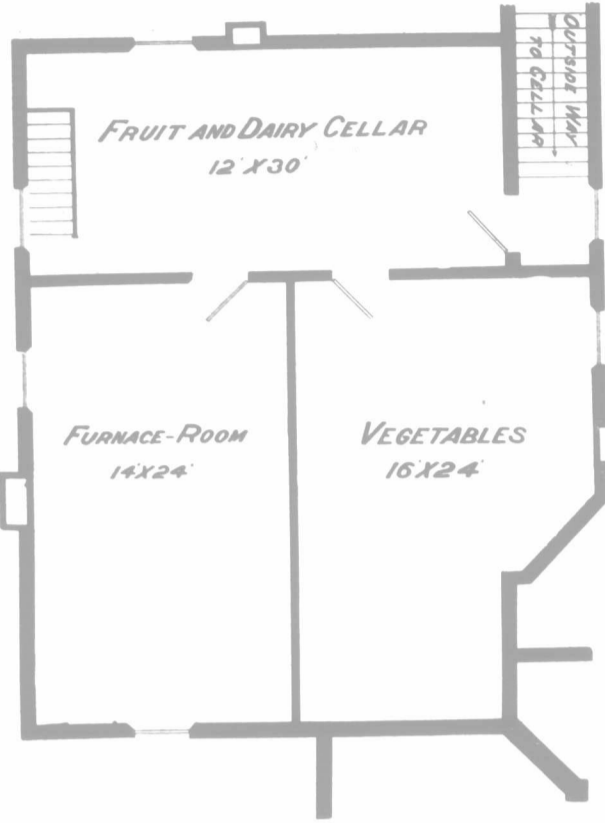
At the London trial another unregistered Shorthorn cow, 31 days in milk, gave 72 lbs. 7 ozs. of milk, which yielded 2.10½ ozs. butter, which shows her milk lower in quality than the other, which may possibly be accounted for by the difference in the time she had been giving milk since producing her last calf.

Clean Udders.

One important feature in securing cleanliness in milk is the cleansing of the udders of the cows before milking. A clean, wet towel, though not so wet as to drip, is probably the best and most convenient means of cleansing the udder. When this is not done, germ-laden dust falls into the milk pails continually during milking-time, and in any weather, but in summer weather especially, the germs multiply by the million, and seriously injure the milk as a fit raw material for the manufacturing of prime butter. This plan of cleansing the udders before milking now prevails in all really well-regulated milking herds, where care with milk is regarded as a religious duty. When first proposed, there were some theorists who objected to it, on the ground that it was likely to stimulate the secretion of milk before the milker was prepared to take it, but repeated experiments where dairy problems are given greatest attention have shown that there is nothing whatever in the theory. There is only one objection to it, and that is to be found in the words, "I'm too lazy."

Agriculture in Illinois Schools.

In response to the demands made by various Farmers' Institutes, agricultural societies and individual farmers, Prof. Ralph Holmes, superin-



BASEMENT PLAN OF FARMHOUSE.
PREPARED BY W. J. ANDERSON, BEETON, ONT.

tendent of schools of Vermilion county, Illinois, has introduced into the common schools of that county the study of agriculture in addition to the other branches taught. The matter was taken up at the beginning of the present school year, and the idea has proven to be quite popular in the more progressive rural communities. The superintendent has sent a supplemental outline of the course of study to the teachers of the county, outside of the three cities of Danville, Hoopston and Rossville, embodying the plan and containing instructions for its practical application. The text-books adopted for use in pursuing the new branch of study are: "Practical Agriculture," by C. C. James, of the Ontario Department of Agriculture, and "The Principles of Agriculture," by L. H. Bailey, Professor of Horticulture in Cornell University.

It is the purpose to make the study as practical as possible, and arrangements will be made for much work along the line of experimentation, and the intelligence of the pupil will be appealed to rather than the memory. The everyday fact of farm work, the growth of plants, the fertility of soils and their constituent elements, the value and application of fertilizers to secure the largest returns from different crops, and all the varied and interesting phases of agricultural operations will be investigated, and simple experiments tending to develop the primary principles underlying the sciences pertaining to agriculture will be features of the new departure.

This experiment will be watched with a great deal of interest, not only by educationists, but by practical farmers who wish to see their pursuit elevated and the young people of the country imbued with an appreciation of the dignity of the farmer's calling.

First Prize Farmhouse at Toronto Industrial Exhibition.

The plans accompanying this description are for a two-story building (30x36 ft.), and were designed with special care for as much comfort and convenience of work as was consistent with what was wanted, namely: "A set of original plans for farmhouse suitable for farm of 100 acres, building to cost \$2,000."

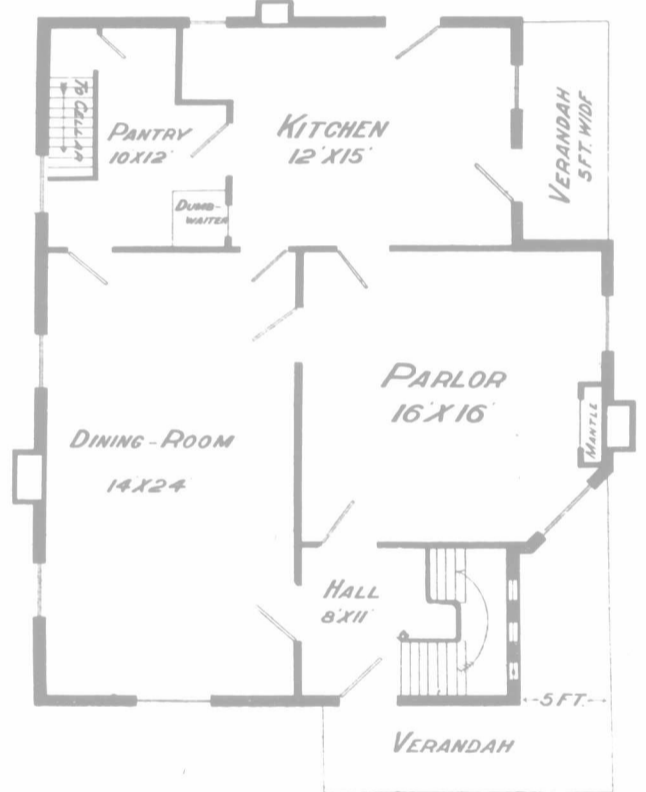
The heights of ceilings can be changed if thought wise to do so (the same may apply to all other measurements), but I would suggest that the cellar ceiling be made 7 ft. high, the first floor 10 ft., and the second floor 8 ft. 6 in. The cellar walls can be built of whatever material desired, but common field stone will make a good wall and will give a good appearance for a farmhouse if properly finished. The wall should be at least 20 in. thick, and the floor cemented. There should be a good drain put in at once to take away any seepage that may appear. The section walls can be of brick, and should be about 9 in. thick, or the width of two bricks laid flat, making a solid foundation for the weight of the joists and partitions directly above. The chimneys should be built from the foundation, having their beginning with the stonework, and brought up on the outside of brick wall. They are better to be double flued, especially the one with fireplace, which should have one flue for fireplace

and another for stovepipe. The walls and ceiling of cellar should be plastered, and can be done on the stone wall. Cellar windows should all be double and so arranged as to open up for ventilation in winter, and a screen should be put on outside for summer use.

There can be a wood shed and summer kitchen conveniently built at the back, the one chimney doing for both kitchens. This building can be run out past kitchen veranda as far as might be needed for the room required. The close proximity of the kitchen, pantry and dining-room saves the good housekeeper many a step during the day—in fact they are as conveniently arranged as if all three were the one room. The dumb-waiter in pantry is quite handy to both kitchen and dining-room; though not opening directly into the dining-room, is still easy of access from it. There is some fault to be found from the want of a set of back stairs on first-floor plan. This can easily be remedied by putting in a stairway directly over the cellar stairs in pantry, where little room will be taken up by them and a good landing is afforded on the second floor. Hard and soft water pumps might be placed quite handy in summer kitchen. However, a tank, as marked in bath-room, should be used if possible, and if there is a system of waterworks at the barn, of hard water, have it arranged to go to the tank in the house first, and then let the overflow go to the barn or to a trough somewhere near for the stock. In this arrangement you will always have a good supply of cool, fresh water in the house.

There is a small space taken off the pantry on the side next the kitchen and let into the kitchen, which is suitable and intended for a wash-room. The same pipe will supply water here to sink in pantry. By using a hot-water heater in connection with the kitchen range, hot water can be had wherever wanted at a minimum cost by plumbing along with cold-water pipes.

The dining-room (14x24 ft.) might be considered by some as being rather larger than necessary.



GROUND-FLOOR PLAN OF FARMHOUSE.
PREPARED BY W. J. ANDERSON, BEETON, ONT.

If so, an arch could be put in and make it into two rooms of reasonably good size. The turning stairs in front hallway, from first to second floor, take up much less room for floor space than if run up straight. At the first landing there should be some sort of ornamental windows put in either in the form of a circle or, say three narrow ones, one rising slightly above the other. These will improve the appearance as well as brighten the stairway.

The roof should be put up something after the style of a cottage roof, only having gothics enough to relieve the sameness of a plain four-sided cottage pattern. The back might go straight out over the kitchen part in peak-roof form, having a gable in back end. There should be a gothic (a large one) over the wing on right side, the ridge of this to meet the ridge of main roof. Another gothic should be put on, covering the two windows in the front or second floor. This one should run just about three-fourths of the main roof in height. These gothics and gables may be finished with scroll work and cornice to suit. In this style and good appearance of roof finish can be shown to good advantage and made very attractive. A slate roof, I suppose, is preferably the best, but a man building should figure on about \$100 extra for slate in place of shingles.

These plans are most suitable for a location having the front towards the south or west. However, to have the front to the north or east, it is only necessary to change the rooms a little by putting the parlor on the opposite side and also change the kitchen and pantry to opposite side the same. The drive past the house to the barn will invariably go past the side of house the projecting wing and veranda are on, this side having

a more attractive appearance and serves as a good front, therefore should be the sheltered side of the house.

The cost of the material and work might be figured somewhat roughly in the following calculation. Of course, this is a farmhouse, and the hauling of material and cleaning up, along with the boarding of the workers, goes without consideration.

These figures are approximate; the values of different articles are not the same in all sections. Then, again, the prices of some materials are very fluctuating, and cannot be reckoned with very much certainty, such as glass, pipe, lumber, nails, heating appliances, etc.

ESTIMATES.

Brick, pressed, 38,000 at \$9 per M.....	\$ 342
Masonry and plastering.....	175
Carpenter.....	140
Material for roof, including cornice and scroll work, about	190
Door and window frames, oak sills in doors and dressed	
stone in windows, all sash, doors and surbase (price	
only as mentioned).....	320
Painting and glazing, glass and paint.....	143
Lumber (hemlock), about 13,000 ft. at \$12 per M.....	155
Lath, about 150 bunches at 20c.....	30
Sand, 30 to 35 loads, worth 25c. per load in pit, or about 60c.	
delivered.....	21
Cement, about 10 barrels at \$1.30 per barrel.....	13
Plaster of paris, about 3 barrels at \$3 per barrel.....	9
Hardware, including eavestroughing, material for gutters,	
nails, etc.....	100
Furnace.....	90
Plumbing, pipe, taps (nickel), bath-tub, basin and sink.....	100
Total.....	\$1,828

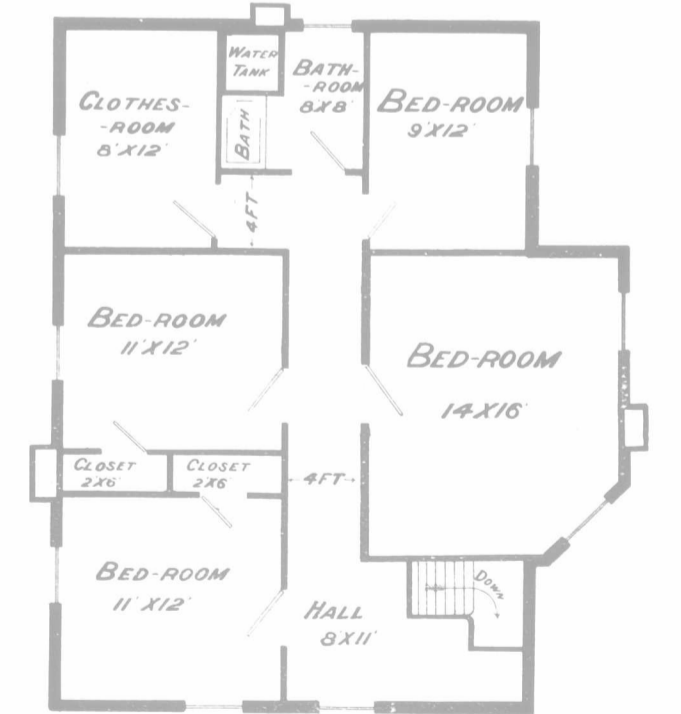
There are other extras necessary, such as tile for cellar drain, sash weights, and locks, etc., which, while adding to the comforts and convenience, will also add considerably to the cost. In building a house, it is, as a rule, only done once in a long time, and therefore should be done well. The best material should be used, and always the best workmen employed, regardless of the price asked.

Simcoe Co., Ont. W. J. ANDERSON.

[NOTE.—The set of farmhouse plans prepared and described in the above article by Mr. W. J. Anderson received first award, donated by the Massey-Harris Co., at Toronto Industrial Exhibition, 1900, for best set of plans for house suitable for 100-acre farm, building to cost \$2,000. While the plan is undoubtedly a good one from many standpoints, it has features that can readily be improved on without interfering with the size of the structure or general outlay.

As is admitted in Mr. Anderson's description, Fig. II. (ground floor) shows no back stairs to upper story, which in a farmhouse with stairway rising from front, as this one does, is simply indispensable. This he suggests could occupy the space in the corner of the pantry over the cellar stair. We would suggest that this be changed by turning the cellar stairway across the end of the pantry and placing the upper stairway over it, opening from the kitchen. The objection to having the way to the upstairs through the pantry is obvious.

A change would probably also be found desirable in the position of the front stairs. Instead of going up from just inside the front door, would it not be better to reverse the positions of the upstairs and downstairs landing, so as to turn the angle to the right instead of the left in going up? Again, we see no advantage, but considerable disadvantage, in having a door directly between the kitchen

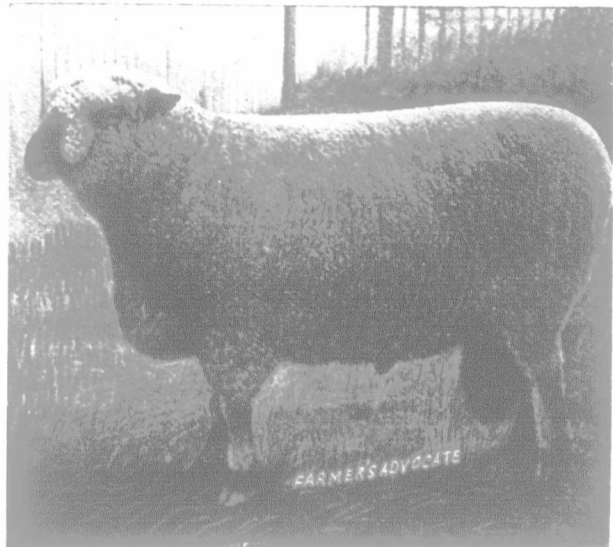


UPSTAIRS PLAN OF FARMHOUSE.
PREPARED BY W. J. ANDERSON, BEETON, ONT.

and parlor. Probably other changes could be made to improve the plan, but these we have referred to appear to us of real importance. —Ed. F. A.]

Judging Dairy Bulls.

We have more than once taken occasion in these columns to point out what has appeared to us a mistake not infrequently made by judges of dairy cattle, in the attempt to judge bulls by the same standard as that by which they judge females of the dairy breeds, a course which, to our mind, tends directly to the encouragement of bulls lacking in the indications of constitutional vigor and masculine character, and consequently in the power and quality of prepotency, which is of the first importance in a sire. We have seen the same mistake



SHROPSHIRE RAM OVER TWO YEARS.

Second prize at Toronto Industrial, 1900; first prize at Western Fair, London, same competition, and head of first-prize flock.

OWNED BY D. G. & J. G. HANMER, MT. VERNON, ONT.

made in judging some other classes of stock, notably rams in the department of sheep, and boars in the classes of hogs where the bacon-type theory has been carried to extremes. Holding strong convictions on these lines, we note with satisfaction an able plea for masculine bulls, by Mr. F. S. Peer, in the *Country Gentleman*, in which, among other good things, he says:

"A recognized type or conformation of dairy cows is generally agreed on, while in the bulls of the dairy breeds there seems to be no fixed standard. Broad hips, deep flank, sharp, clean withers, thin, cordy neck, a fine, bony head and mild, placid countenance are the prominent characteristics in the build or form of a high-class dairy cow.

"There is, however, a tendency nowadays among many showing judges and breeders (the latter, no doubt, having absorbed the idea from the former) to require, as far as possible, that bulls should be of similar mold as that found in the cow. That is to say, preference is given to a bull that has what is called a 'dairy head.' 'Cowy head' expresses it better. Sharp, thin withers and broad hips are also demanded, and are looked upon as evidence of dairy qualities.

"This demand that a bull should be prominent in the features that characterize the cow is evidently based on a mistaken notion of the laws of transmission. It doubtless comes about from attempting to put into practice those oft-repeated and much-abused maxims: 'Like produces like,' 'What is food for the goose is food for the gander,' etc. A little reflection, however, will show that the cultivation of these 'cowy' tendencies in bulls must of necessity lead to effeminacy, which is certainly something to be avoided.

"Whatever else a bull may possess, I believe he should be thoroughly and throughout masculine. There are comparatively few who will venture to disagree on this point, but when we come to compare the conformation of a thoroughly masculine bull with the build of a thoroughly effeminate cow (which is only another name for the highest type of a dairy cow), we find that instead of being similar, the prominent characteristics of the bull are quite the reverse of what is looked for in the cow. The head of a masculine bull is broad, heavy, rather meaty; the head of an effeminate cow fine, clean-cut and bony. The face of the former indicates resolution, courage; while the latter indicates docility, timidity, etc. The neck of a masculine bull is broad, heavy, thick, full and arched; the effeminate cow's the very reverse—thin, cordy, light, tapering and usually drooping forward of the shoulders, where the sire is most prominent. The shoulders and whole fore quarters of a masculine bull are as broad and deep as the cow's are sharp and light. In this the extremes are very marked. While the hips of the masculine bull are narrow in comparison to his size, and quite hidden, the hips of an effeminate cow are one of her most prominent features.

"We see, therefore, that so far as general conformation is concerned, the lines of a masculine bull are quite the reverse of what they are in an effeminate cow. In a general way, you may say the heavy end of the desirable wedge-shaped cow is in the hind quarters, while the bulk and weight of the masculine bull is on the forward quarters. Because we like the big end of a cow back of the heart, it is no sign whatever that a bull to get cows

with that desirable conformation should be built like her. The very reverse would seem to be nearer the truth; i. e., that to produce the most perfect type or form in the female (which must of necessity be the highest type of a dairy cow), we should rather look for it to come from a sire that was thoroughly and throughout masculine.

"Let us, in our eagerness to discover dairy type in the showing and in the selection of sires to head our herds, take thought of what we are doing and whither we are drifting. Let us not condemn a bull (as I have seen done so often of late years in the ring) simply because he has not as 'cowy' a looking head as another, or because he is heavy in the neck and at the shoulders, and because he is not 'cowy' or dairy-looking about the hips; or because in a female we want the heavy end of the wedge behind, condemn a bull because he is built the other way about. If you wish to produce thoroughly feminine cows, select a thoroughly masculine bull, so that their sons at least may be fit to perpetuate the race without deterioration, but with added vigor. Let us study what constitutes the dairy characteristics of a dairy bull, and judge bulls from a bull's and not from a cow's standpoint."

Long Churnings.

A common fault in cream, and one which may arise from a variety of causes, is that of refusing to churn into butter. It is possible to get cream in which the butter fat globules will not separate out, simply because they are so small that they will neither solidify nor coalesce; such a thing, however, is comparatively rare, and cannot be overcome any more than cream or butter can be obtained from milk which has absolutely no butter-fat in its composition at all. This phenomenon sometimes occurs in milk coming from a diseased cow whose system cannot elaborate the fat.

Cream which refuses to give butter, or "goes to sleep," gets "frothy," "puffy," or "hove" in the churn, may, in the first place, have derived this property from the fact that it is being churned at a wrong temperature. If the cream is put into the churn at a much lower temperature than is advisable, it will often be found that it thickens, becomes viscid, and hangs to the inside of the churn, so that unless steps are taken to remedy the defect, churning is prolonged indefinitely. On the other hand, if churning is begun at a higher temperature than it should be, the cream will sometimes get frothy and swell to a tremendous extent; again churning is delayed until the cream has been cooled and thinned down.

There is no set rule as to the temperature at which cream should be churned according to the surrounding conditions; it can only be stated roughly that for every five degrees Fahr. of difference between the air of the dairy and the normal working temperature (57 deg. Fahr.), the cream should be raised or lowered one degree in the opposite direction. Only practice and experience tell one how this rule may be departed from.

In the early stages of churning there is expelled from the cream a quantity of gas which, being generated by the ripening ferments, and dissolving in the cream as it forms, is thrown out of solution by the concussion to which the cream is subjected in the churn. If this gas is not removed by frequent use of the vent, it is forced into the cream, and hence arises the heaving or frothy state.

Cream from the milk of stale cows—i. e., those which are going dry—is a frequent cause of bother in this respect. If such a thing is suspected, it is well to be assured of it by keeping such milk apart from the rest, and churning the cream obtained from it separately. By careful attention to all the details of ripening and churning, raising the temperature so that it stands at 70° Fahr. in the churn, this difficulty may be overcome.

Too much acidity in the cream is also said to result very frequently in a difficulty in bringing the butter. The remedy, if the cream must be left till it has reached such a state of over-ripeness, is to ventilate very frequently indeed, for, say, the first five or six minutes of churning, as such cream throws off an enormous quantity of gas.

Winter feeding is sometimes responsible, as at a time when the cow is denied her natural food and a ration of oil cakes and other feeding stuffs is given her the milk is naturally affected to a considerable extent and rendered liable to develop abnormal properties.

Remedy During Churning. If the cream is found to go to sleep in the churn, the churn should be stopped, opened, and the temperature of the cream tested; if it has fallen or risen it must be

brought back to the correct churning temperature by the addition of a quart or so of strained water. Churning may then be resumed, slowly at first, being careful that at each revolution the cream is heard and felt to "drop." As the cream appears to be regaining its normal condition, full churning speed may again be resorted to, until the butter breaks.

If the fault threatens to become chronic, all the points under discussion must be looked into, everything used in connection with the milk and cream must be kept scrupulously clean; the cream should be stirred almost continuously during the ripening period, and then the last resource is to pasteurize the cream immediately it comes from the separator, cool it, and add a "starter," so as to ensure a healthy and normal ripening of the cream.—L. J. Lord, in *Agricultural Gazette (Eng.)*.

Milking and the Care of Milk.

Comparatively few dairymen appear to realize that milking is a trade. Kindness, neatness and regularity must be observed, and all the milk must be secured. The cow must be kindly treated at all times. She cancels a part of her debts to her owner every twenty-four hours. When she is well treated and furnished a plenty of palatable food and pure water and made comfortable, generally she does her best, but when she is abused in any way, she cannot do her best, and I have sometimes thought she acted as though she would not if she could. She may have less resentment than humanity, but I doubt it. I know that she does poor work when poorly treated.

The dog or the boy on horseback after the cows is, as a rule, a mistake, to say the least. The cows should have no fear of the persons caring for them. When I find my cows are afraid of a man after he has been about them a sufficient time for them to become acquainted with him, I know there is something wrong and that a change of some kind is necessary, and if no other change remedies the trouble, a change of the man does. This point should be insisted on rigidly.

The cow must be kept clean. When it is necessary to wash the udder and teats before milking, do so. Each milker should have a pail for this purpose, and be given to understand that it is to be used when there is need of it. This requires but little time, and is a necessity if we are to have clean milk. The filthiness connected with much of the milking is sickening to a person who sees the work, and many times it is to the person consuming the milk fifty miles away from where it is produced. I was much interested and somewhat surprised a while ago in reading a report of investigations made by Dr. Backhaus, of the milk supply of Berlin, in which he made a statement that the city of Berlin consumed with its daily milk three hundred-weight of cow dung. Is it probable that we are doing any higher grade of work?

Promiscuous milking should not be allowed. Each milker should have his regular cows to milk. The cows will do much better for it. My cows are milked in the cowhouse summer and winter; in fact, this is a general rule in the dairy sections. There is a great difference in milkers; some do not try to do good work, and others cannot when they do try. I have found difference sufficient between the work of milkers to pay a man's wages if he milked fifteen cows.

This is not guesswork, but a matter of calculation on hard facts, and proves that we need to look after the milkers. There should be regularity in



PRIZEWINNING HOLSTEINS.

Cow, Empress Josephine of Brookside, 5 years old, second prize; heifer calf, Myrtle Pearl, first prize under 6 months; yearling bull, Emperor Joseph, first prize, Ottawa Exhibition, 1900.

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time of milking. The cows know the time of day, and are uneasy when not milked at the usual time. Have patience with a kicking cow; she is hurt or frightened or has been abused in ninety-nine cases out of a hundred. I lose confidence in a milker when he has trouble with cows kicking. Almost invariably, a cause can be found for cows kicking when being milked. If a cause cannot be found and removed, it is best to dispose of the cow, as we

cannot afford to have a confirmed kicker in the herd; it has a bad influence.

When milking, make a business of it, and allow no other business to interfere with it; much and loud talking should not be allowed. Always milk with dry hands; milking with wet hands is filthy. It is best to milk at the same hour morning and night, so as to have the time between milkings uniform.

The best results are secured in this way, or at least better results are secured when the time between is twelve hours than when it is eight to sixteen hours.

One of the facts that should be kept in view at milking time is that the quality of milk is, so to speak, dependent more or less upon the conditions that surround the cow. If a cow is moved into new quarters, or if there is anything of a disturbing nature, the Babcock test will show a loss in yield of fat. A certain dairyman who had made a success of the business enforced a rule that there should be absolutely no conversation in the "mistle" at milking time, and while this may have been going too far, still a quiet cowhouse is a necessity for the best performance of the cow. It is supposed that the production of milk is more or less a result of expenditure of nervous force, and if in any way this nervous force is diverted, the milk will show a loss, because the cow has only so much nervous force, and as she had to supply some of it to whatever was disturbing her, she had not her usual amount to bestow on the operation of producing milk.

No man who makes dairying his business can afford to be much away from the cowhouse at milking time unless he has a man on whom he can safely rely for the right treatment of the cows at that time. It is of equal importance, if not greater, to see that the cows are milked properly as they are fed properly, for while poor feeding will hurt the yield, it will not necessarily hurt the cow, as most assuredly poor milking will do.

It is surprising the total unfitness that the majority of men have for handling animals. Go to any large city and watch the drivers of various teams, and probably the majority of them have only one resource for any and all failings on the part of the horse to do as they wish, and that is the whip supplemented in most cases with profanity.

Such a man should not be allowed to even pass by a cowhouse, much less go in it to milk. A milker that is a thoroughly good one is worth his wages if he does nothing else on the farm save milk. They are rare, and it is still rarer to find one out of a job, for when a dairyman gets hold of one he generally obeys the Scriptural injunction to "hold fast to that which is good."

One of the most common failings of milkers is in not getting all the milk. It is important to get the last drop, for two reasons: the last milk is the richest in butter-fat, and if the last drop is not drawn from the cow, at the next milking the cow is apt to supplement the milker's failure in getting the last drop by keeping another last drop on her own account.

The giving of milk by a cow for so long a period as the average cow now does is entirely an abnormal proceeding, and one that needs to be encouraged, and if it is not, the cow will be very apt to go back to the natural way and give milk for a shorter period, as she was accustomed to do in her native state.—*Rusticus, in Bibby's Quarterly.*

Care of Milk for the Creamery in Fall and Winter.

The milk in summer is usually free from very objectionable odors; that is, where fair care is taken of the milk and cows, and where cows get good water to drink and gain access to no rank or strong flavored weeds. The reason for this is that the cows are in the open field the milking is done outside, and the cans when washed are usually left where the sun and fresh air can work their part of cleaning, for where there is a good amount of sunlight, objectionable germ life is very low. But in the fall when the cows are beginning to be housed and when cans, pails and strainers are kept in the kitchen or outhouse, then extra care must be taken of the milk, for it must not be forgotten how very easily milk absorbs odors, and milk off flavor makes poor butter, and poor butter is an unprofitable product.

We assume the fact that the cans have been washed in lukewarm water, with a good brush, and then scalded. They should then be placed where the pure air can blow in and around them continually, and every care should be taken that no breeze from the barnyard, hogpen or other infectious source be allowed to pass over them.

At milking time in the stable, very many should turn over a new leaf. When the animals are in the stable, the udders, whether they appear clean or otherwise, should be wiped with a cloth; the milker should put on a pair of clean overalls or an apron, wash the hands and commence to milk. This may seem a lot of needless trouble, to those not accustomed to it, but habit, along with a desire to improve, will overcome the objection in a remarkably short time.

Never, under any consideration, make the cows inside the cow stable for milking. If possible, go outside the door, and as quickly as possible carry it to the milk house and bring back, just as you do on until the milking is done. As soon as the milk

milking, stir each can quite frequently until the milk is quite cool, and never place a cover tightly on the cans while the milk is cooling, or the animal odor will be retained, and that gives it that stuffy, musty and sickening smell.

If there is not a proper milk house, make a determined effort to have one, for kitchen and cooking taints on milk give no end of trouble to the buttermaker. Most of the farmers know what foods impart flavors to milk, and these in every case should be avoided, and the purest of water should be furnished the cows to drink at all times.

Stripping Cows Clean.

Carefully-conducted experiments, as well as the everyday experiences of stock-owners, go to show that clean milking exercises a very material influence, not only upon the quality of the milk and butter produced by cows. It is well known that in the hands of careless milkers, cows which would otherwise continue giving a good flow of milk for seven or eight months after calving are often run dry within four or five months of having produced their young. The great cause of trouble on this score is incomplete stripping. The necessity for the thorough removal of all milk in the udder is rendered of special importance by the fact that it not alone induces a cow to continue longer in milk than she would otherwise do, but that it also ensures a considerable improvement in the yield of butter obtained from the milk produced. The last milk to leave the udder is, as is well known, many times richer in butter-fat than that which is first drawn. Too much emphasis cannot, therefore, be laid upon the necessity of thoroughly stripping dairy cows at all seasons of the year.

Dr. Saunders at the Paris Exhibition.

Dr. Wm. Saunders, Director of the Dominion Experimental Farms, Ottawa, who has been visiting the Paris Exhibition in connection with his official duties as one of the commissioners for the exhibition, has returned home. The special work assigned him was the bringing together of specimens of the agricultural and fruit products of the Dominion. During his absence he has also spent some time in other parts of France and Great Britain, inquiring into the progress of agriculture and horticulture in these countries, and has visited as many of the agricultural schools and experiment stations in both countries as was practicable. He expresses himself as much pleased with the excellent display made by Canada at the Paris Exposition, particularly in agricultural products and fruit. The exhibits of grain were quite imposing, and had been most artistically arranged by Mr. W. H. Hay, of the Experimental Farm staff, who visited Paris early in the year for that purpose.

The agricultural products of the Dominion are shown in provincial groups, by a series of trophies; also, very effectively, in a general way by a grand central trophy, placed in the middle of the first half of the Canadian court. This central trophy is built up with a large series of glass containers of different sizes, showing excellent samples of clean grain from all the principal grain-growing districts in Canada, including a most excellent display from the Experimental Farms. With these were associated a first-class showing of fine sheaves of grain in the straw, also representing the many grain-producing sections of the Dominion. This important part of the exhibit attracted much attention and was very much admired.

The fruit display, a part of which was in the Canadian Pavilion, and the other and larger part in the Horticultural Hall, has been the subject of most favorable comment. The large collection of about 1,200 glass jars of pears, apples, plums, peaches, cherries, and small fruits, which were put up in antiseptic fluids, has been a great success. The fruit has preserved its form and character, and, to a very large extent, its natural appearance, and has been a source of constant wonder to visitors. That such magnificent specimens of fruit could be grown in Canada, many could scarcely credit. The exhibit, however, speaks for itself, and was a constant advertisement to the genial character of our summer climate and the capabilities of the country to produce fruits of the finest and most luscious quality.

The show of fresh fruit, including a large variety of our best sorts of winter apples, the growth of 1899, was continued all through the summer and up to the close of the exhibition, and awakened much interest. This constant exhibit was made possible by the cold-storage arrangements perfected under the direction of the Hon. Sydney Fisher, Minister of Agriculture, by Prof. J. W. Robertson. This cold-storage plant, which was placed under the Canadian building, worked admirably and rendered most efficient service, not only in preserving the more perishable of the food products brought together by Prof. Robertson, of which there was an admirable exhibit, but also rendered possible the preservation, in perfect condition, of the fine display of fresh fruit brought together by Dr. Saunders. The crispness, juiciness and high flavor of the best sorts shown so long past their normal season, were a very admirable and received the most favorable comment.

The arrangement of the fruits, fresh and preserved, in the Horticultural Hall, which was made by Mr. Robt. Hamilton, of Grenville, assisted by Mr. Hay, was most effective, and to the assiduous attention given to this collection by Mr. Hamilton and by Mr. H. S. Knowlton, of Knowlton, Que., a large measure of our success in obtaining awards may be attributed. The specimens on exhibition were examined from day to day by these gentlemen, and as soon as any of them showed sign of deterioration or shrivelling from exposure in a heated atmosphere, fresh specimens were brought from the cold-storage chamber to replace them. At the time of Dr. Saunders' first arrival in Paris our best winter apples were represented by 18 varieties, all in good condition. When he was leaving, however, on the 6th of October, the number of varieties shown was reduced to 8 or 9 sorts. Prior to this, on October 4th, the large collection of fresh fruits made under instruction of the Minister of Agriculture, in different parts of the Dominion, and forwarded by cold storage, arrived in Paris. Those came in splendid order, and with the help of a second supply, since received, will insure a large and varied exhibit of Canadian fruits to the close of the exhibition.

Mr. A. McD. Allan, of Goderich, Ont., who has lately arrived in Paris to assist especially in promoting the fruit trade, had, before Dr. Saunders left, made several large sales of fruit to wholesale dealers in Great Britain and different parts of Europe, and was negotiating further business in this direction. A careful study of the conditions in which our Canadian fruits have reached the Paris Exposition, under different methods of packing, has been made by Dr. Saunders, and he hopes to be able to put the information gained to practical value in furtherance of the fruit-growing interests of this country.

The more important food products of Canada, of which a large collection was brought together by Prof. Robertson, have been arranged and looked after by Mr. W. A. Mackinnon, of the Commissioner's branch of the Department of Agriculture, who has rendered very efficient service.

The mineral and mining interests of Canada have been ably looked after by the Director of the Geological Survey, Dr. Geo. M. Dawson, as shown in the magnificent collection displayed in the Canadian Pavilion. This exhibit has furnished the most convincing proof of the great extent and varied character of the mineral resources of Canada, which must be highly beneficial to this country.

Our fishery products and the attractions offered to sportsmen by the variety of game in different parts of this country, were ably shown in the fine display arranged at the entrance of the Canadian court, under the superintendence of Colonel Gourdeau. In this connection, Mr. Andrew Halkett, of the Department of Marine and Fisheries, has, under Col. Gourdeau's guidance, rendered very efficient service.

The collection of forest products shown in the large building devoted to this purpose, in which all our more important woods are illustrated by both the raw and manufactured material, has drawn many encomiums. These have been brought together mainly by the persevering efforts of Mr. James M. Macoun, of the Geological Survey, and have been arranged tastefully and with good judgment. This collection has awakened much interest in our timber productions, and from the many inquiries which have been made, it is believed that, as a result of this display, new openings will be made in connection with the trade of Canada in timber.

To the Commissioners who have succeeded in bringing together the excellent display of Canadian manufactured goods, much credit is also due for the energy and good judgment they have brought to bear on this work, and for the tasteful manner in which the exhibits have been arranged.

While in Paris, Dr. Saunders attended the Congress of Pomologists and the Congress of Botanists. He also visited Ussy, in Normandy, a great center for the growing of forest and ornamental trees and shrubs, for the purpose of gaining information on this branch of industry, and also, at the same time, selecting a supply, for the Ottawa Improvement Commission, of young stock for planting on the boulevards which are being laid out in connection with the new drives now under construction in that city. A fine selection has been made, consisting of over 20,000 trees and shrubs suitable for this purpose, including evergreens and deciduous sorts, which will be forwarded in the spring. A visit was also made to Brittany for the purpose of studying the results which have been obtained from tree planting on the drifting sands of the seashore in that part of France, and some useful lessons learned. Some of the caves in the outlying parts of Paris were also visited, where mushrooms are extensively grown.

While in England, Scotland and Wales, many of the stations where experimental work in connection with agriculture is conducted were visited by the Director, and the progress made in this direction noted. The meetings of the British Association, held at Bradford, England, early in September, were also attended, where opportunities were afforded of explaining the nature and progress of experimental agriculture in Canada.

Some new varieties of cereals were secured, both in England and from among the exhibits of foreign countries at the Paris Exposition, for test in Canada. Many new sorts of trees, shrubs and plants have also been obtained for trial at the Experimental Farms.

A Meeting of the Butter and Cheese Makers' Union.

A meeting was held in the City Hall, Winnipeg, on Nov. 8th, under the auspices of the recently organized Butter and Cheese Makers' Union, at which, in addition to Messrs. S. M. Barré, C. C. Macdonald and D. W. Shunk, the principle promoters of the Association, there were in attendance a fair representation of those interested in cheesemaking from the French and Mennonite districts to the east of the Red River, and also from Woodlands and vicinity.

The object of the meeting was for the discussion of the conditions of dairying in the Province, the promulgation of plans for the advancement of the factory interest, and the submission of these plans and suggestions to the Local Government. The annual meeting of the Association is to be held in February.

Mr. Barré occupied the chair, and addressed the meeting at length, reviewing the past and present condition of the dairy industry, and intimating some of the improvements the Union considered were advisable. He referred to the favorable conditions of the season of 1900 for dairying, which had resulted in the production of the largest quantity of butter and cheese in the history of the Province. Prices were also favorable, until the inferior quality of our goods, especially cheese, had permitted Ontario goods to capture the British Columbia market, thus depreciating the value of our products. He then reviewed at length the butter and cheese factory industry, showing that but a small percentage of the factories that had been organized were now in operation, having mostly failed, and from these facts concluded that Manitoba is not adapted to cheesemaking on a large scale. He contended that cheese factories could only succeed in a few thickly settled localities, as where the land is divided into river lots, thus facilitating the gathering of milk. He also pointed out that local creameries had not been a marked success, and inferred that with the favorable transportation facilities now granted by railway companies, cream could be gathered and larger factories operated at central points with better results than were possible by local creameries. The tendency towards establishing small factories and the making of cheese in farm dairies was very detrimental to the dairy interests, and all such tendencies should be discouraged. A number of letters were read from commission men in Montreal and Vancouver to show the inferior quality of Manitoba dairy products. While readily admitting that some good cheese and butter were manufactured in this Province, still, said Mr. Barré, our average was away behind Ontario and Quebec, and the sooner that is realized the better. He proceeded to criticize the Provincial Dairy Association as having failed to accomplish anything for the benefit of the factory owners, pointing out that for several years past few factory owners, directors or makers had been included in the membership of the Association. That the professional dairymen took so little interest in the affairs of the Dairy Association was sufficient, he thought, to prove lack of unity among the dairymen. He also criticized at length the Government Dairy School and the instruction being given under the Provincial Dairy Superintendent. The total expenditure for dairy instruction was, he said, \$7,218, \$4,000 of which was for the Dairy School, and as there was only an attendance of about 21 students, each student cost about \$200 for tuition. As the number of creameries and factories were so few, and are now supplied with makers, he considered that there was no further use for the Dairy School, and, besides, he contended that cheesemaking could not, in this country, be taught in winter time, as the condition of the milk was entirely different in winter from what it is in summer. He therefore advocated the closing up of the Dairy School as at present operated, and suggested that a butter school should be established in connection with some creamery in the western part of the Province, and a cheese school in the eastern districts, and in order to educate the farmers, a fully-equipped travelling dairy school should be sent about the country. By running a cheese school in summer and the butter school in winter, one staff of teachers could do the work and be employed the year around, besides many other advantages that he considered would accrue from such a system. He also advocated the appointment of instructors, whose duty it would be to travel from factory to factory, inspecting the conditions and equipment of factories, instructing the makers, and inspecting the milk and cream supplied by the patrons, with power to reject all milk not up to standard; also to visit the farmers and give instruction as to the care of milk and cream; and that these instructors be given the same power as is given to

health inspectors. He also referred to the want of discrimination in the purchase of dairy goods on the part of the buyers.

A representative of the J. Y. Griffin Produce Company was the next speaker. He criticised in severe language the Government Dairy School, the Dairy Superintendent and his assistant, and said it was an imposition upon factorymen to send out instructors who were not practical cheesemakers. He thought the Superintendent should not occupy his time judging dairy butter at the small country fairs, but should give his whole attention to the creamery and cheese-factory interests, where it was so much needed. He strongly endorsed the suggestions made by the chairman favoring a summer cheese school, travelling instructors, etc.

Mr. McKellar, chief clerk of the Department of Agriculture, reviewed briefly the work that had been undertaken by the Dairy Association, pointing out that while all the organizers and promoters of that Association were not personally identified with cheese and butter making, they were all interested in the success of the industry, and had done noble work in building up and advancing the dairy interests of the Province. This Association had urged upon the Provincial Government the necessity of a superintendent for the Province. There was abundant evidence to show that good work has been done by the Dairy Association and the Dairy School. He pointed out that if Manitoba dairy products were not of as high quality as they should be, and sold at lower prices than Ontario goods on the markets of British Columbia, it was largely the fault of the Winnipeg commission men. The commission houses had given as good a price for very inferior goods, made by careless, incompetent men, as for goods of high quality, made in well-equipped factories, where the services of expensive makers had been employed, thus damaging all progress. Neither the Dairy Association nor the Dairy School should be blamed for the present unsatisfactory conditions of the dairy produce market, which was largely due to the lack of discrimination on the part of the buyers. He was pleased to see so great an interest being taken by so many of the cheesemakers, and believed that a full and free discussion would be helpful.

W. S. Grant, who has long been identified with and interested in the handling of dairy products, said that he had recently returned from a trip through British Columbia, and while there had taken special interest in the dairy produce market. He had seen some Manitoba goods that were simply a disgrace, and said that the quality of Manitoba cheese and butter was not as good to-day as it was ten years ago, and for this reason he blamed the produce dealers who, in their anxiety to do business, had paid as high prices for inferior goods as for the best quality, and had thus encouraged the careless maker and the dirty, shiftless patron; it had also encouraged the making of farm dairy cheese, which were of irregular quality and had done more to demoralize the trade than anything else.

Dairy Superintendent Murray said, in reference to the favorable condition of the season of 1900, that he considered the season had been rather unfavorable in Manitoba, as compared with past years, having been one of the hottest and driest seasons ever known in this Province. The prices had been extremely favorable, caused by the demand in the Old Country, which had maintained prices in the eastern markets. So far as the reputation of the dairy goods that had been shipped to British Columbia the past season, after having visited the main distributing points in British Columbia, he found that Manitoba butter had sold well upon that market, and had arrived there in good condition; that is, the creamery butter. A large percentage of the dairy butter had been fairly good, but some small shipments had been indeed very poor. One carload of cheese shipped to Nelson, B.C., was, he considered, in fairly good shape, but had found some faults owing to neglect on the part of the maker. But the man in charge of the produce house at Nelson had said that it was the style of cheese most adapted to that market, as it sold in competition with American cheese, which was a very fresh, mild cheese, and this was what their market desired.

As far as the local creameries in Manitoba are concerned, a number of them have failed, but those operated at the present time are doing good work and rapidly straightening out their financial difficulties. A few of them that have been idle the past season are preparing to start next season.

In reference to the construction and the machinery used in the factories of Manitoba, he had prepared a complete list, and had also noted the conditions under which they are trying to work, and, in his opinion, there are but four or five factories in Manitoba that are working under conditions which should produce a first-class article. I know several cases where cheese is made in small rooms, from 12 to 15 feet square, and are cured in lofts overhead; not in curing rooms, but rooms that would represent dry kilns, and would be better adapted to seasoning hardwood. In such places the cheese is not cured, but simply smoked and dried.

The worst feature of our trade has been, and is at the present time, the fact that all goods are bought at one price. Creamery butter, no matter how it is made or of what quality it may be, is sold at creamery-butter prices, and all cheese, no matter how cured or in how bad a condition, are sold at one price, or rather bought at one price by the produce dealers, and so long as this continues there

is little desire among the makers for information as to how to better their product.

The Government for some time past has had under consideration a number of changes and improvements looking toward the benefit of the industry of the Province, but up to the present time have not seen their way clear to carry out these changes. He pointed out to the meeting that the Provincial Dairy Superintendent had an office, but absolutely no power. He could ask owners and makers of cheese and butter factories to make certain improvements; he could advise them as to what to do, but had absolutely no power to compel changes in methods or insist on improvements, no matter how badly they were needed.

As far as the Dairy School is concerned, the past season, which had been his first year in charge, had cost the Government a total of about \$2,500. There had been applications from thirty-five students, and considering the fact that there had been but one month in which to advertise the School, he considered that they were doing pretty well. For the present season he expected to have fully fifty or sixty students, which goes to show that the farmers are directly interested in this work and consider the School a great benefit.

With reference to judging butter at small fairs, the Department considered this a first-class means of giving instruction, and as most of this work comes at the time of the year when the actual factory work is nearly over, it interferes but little with the factories. The great benefit of using the score card, which had been done this year for the first time, at every exhibition where any Government official had judged the products had been greatly appreciated.

EVENING SESSION.

The evening session was devoted principally to a discussion in French, and there was a large attendance of Frenchmen from the cheesemaking districts. There was also a few Mennonites present, and also several of the clergy from the various French parishes. The chairman, Mr. Barré, delivered an address similar to that of the afternoon in French. The Rev. Father Lacasse, of St. Boniface, spoke on the "Improvement of Dairy Cattle," referring to what had been accomplished in the Province of Quebec. He pointed out that fifteen years ago the farmers of that Province were flocking to the United States, as it was almost impossible for them to make a living at home. They were at that time depending entirely upon grain-growing. All this had been changed since dairying and the improvement in dairy herds had been inaugurated, and now the farmers of that Province were prosperous. Father Jolly, of St. Pierre, also spoke along similar lines.

D. W. Shunk, St. Ann's, read an excellent paper on Cheesemaking, pointing out that no matter how careful and skilled the maker might be, unless the patrons supplied clean milk of good quality it was impossible to make a good product. Cheese of good quality simply could not be manufactured out of dirty milk. He referred to the importance of the factory owners backing up their makers and assisting them to bring the careless patrons to time by rejecting their milk.

Superintendent Murray addressed the meeting on the subject of testing and paying for milk according to its cheese value.

RESOLUTIONS.

An adjourned meeting was held on the morning of the 9th, when a number of resolutions were adopted, and subsequently presented to the Hon. J. A. Davidson, Minister of Agriculture. The resolutions, some 15 in number, may be summarized as follows:

That on account of the depreciation in the quality of our cheese, Ontario cheese is displacing us on the markets of British Columbia, and even in Winnipeg, where the highest quality of cheese is demanded. That some of the worst cheese is manufactured by ex-students of the Dairy School. That much of our butter will only grade No. 2 in Montreal. That the fault of all this lies partly with the farmers, in supplying milk and cream of poor quality and in poor condition. That little instruction has been given of late to remedy these evils. Therefore, there is urgent need of Farmers' Institute meetings, at which dairy instruction should be given. That speakers able to speak both French and English should be employed in the French-speaking settlements. That cheese and butter instructors be employed to visit the factories, give instruction in making, in the sanitary conditions of factories, with power to inspect and reject milk not up to certain standards. That these instructors be practical cheesemakers, and pass examinations before a board of examiners. In order to inaugurate these improvements, it would be necessary for the Government to grant sufficient funds to the Cheese and Butter Makers' Union to carry on the work, pay instructors, etc. That the Dairy School be abolished, and that a summer cheese school be operated in some factory in the cheese districts, and a butter school in some of the western districts.

The Minister thanked the deputation for the many valuable suggestions they had made, and said that some of these very things had been under consideration by himself and the Dairy Superintendent for some months, but lack of funds had prevented them from undertaking some desired changes. His Government had under consideration the establishment of a School of Agriculture, and it was the intention to amalgamate with it a thoroughly-equipped dairy department.

The Breed Shows and Sales.

The success of the combined show and sales of Shorthorn and Hereford cattle at Kansas City last month, in point of entries and prices, appears to have been all that could reasonably be expected. There were strong inducements, in the form of large prizes and lots of them, to bring out a great display of show animals, and, judging from the reports published, it was the greatest exhibition of cattle of the red, white and roans, and white faces, that has been seen on this side the sea since the Columbian Exposition of 1893. In so far as the judging and placing of many of the animals in the prize list, as compared with their relative standing at other leading shows in the last two months, is concerned, it appears to have been a regular carnival of reverses, and even in the various competitions for sweepstakes and specials at the same show, under different judges, the decisions were such as to make it almost safe to wager at the opening of each new event that the last in former contests would be first in the next. The advantages of such object lessons from an educational point of view, in the way of fixing a standard of excellence, are past finding out, and evidently tend to render confusion worse confounded. The ups-and-downs of the showing in Western stock exhibitions would appear to be a suitable caption for a chapter of accidents at the Kansas City Show, for, as one visitor remarked, you never knew where lightning was going to strike. The work of Canadian judges and juries is sometimes hard enough to reconcile with one's ideas of consistency, but for irregular and incomprehensible verdicts their United States contemporaries certainly take the bun.

The auction sales of cattle, which took place at the close of the show, considering the large number catalogued—150 Shorthorns and 250 Herefords, of which 144 and 185 respectively were sold, taking it for granted that all transactions were genuine—must be recorded as a success, as the prices proclaimed—an average for the Shorthorns of \$316.90, and for the Herefords, of \$330.46, particulars of which are given in our Stock Gossip columns—show. An average of \$318.91 for 329 head in the seven days' sales, three of which were devoted to the sale of the Shorthorns and four to the Herefords, sets a pace which it may not be easy to keep, although the average price is less than half that realized at Mr. W. D. Flatt's individual sale at Chicago in August last.

The fact that so large a number of cattle found buyers at so good an average of prices reveals a great demand and a large field for good stock, and is full of encouragement to breeders who are raising pure-bred animals of the beef breeds, and who need have little apprehension that the present activity of the trade in pedigreed stock is only spasmodic or ephemeral. It seems to be only the beginning of a period of wholesome expansion, which may last for many years, since the market outlets are also increasing and expanding. A special feature of these sales is that they were entirely under the auspices of the Shorthorn and Hereford Breeders' Associations, respectively, and wholly independent of Government subsidies or supervision, and, therefore, free from the possibility of political scandal.

The Bacon Industry.

The growing time, so much spoken and written of during the last few years, applies with no greater aptness to any other branch of Canadian agriculture than to the production of bacon hogs. Within the last decade, enormous strides have been made in export of hog meats. There was exported out of Canada, of bacon, hams and pork, during the years ending June 30th:

1890	- - - - -	\$645,360
1899	- - - - -	\$10,473,211

—an increase of \$9,827,851, or over 1,688 per cent., in nine years. Nor has the growth of trade been spasmodic, but of gradual development, brought about by the creation of its own demand, which could not have been without the co-operation of hog raisers, feeders and packers, in producing what the markets demand. It is true that when the supply is excessive, we hear of the lack of the proper type and weights, but the trouble in this direction is finding its own cure in the packers grading as they do the prices according to quality. The Canadian farmer is a business man, not slow to make changes that will result in greater profits in his business, but he is not the one to produce a more expensive product unless he gets a corresponding higher price for it. While earnest attention is being given to the production of the higher type of hog, we believe more deliberate consideration and experiment are devoted to the questions of cheaper foods, and more appropriate combinations of these. Along with the feeding of the hog is very closely associated his housing and yarding, which at the season of the year just upon us requires more attention than during the months that are past; in fact, the feeding and the care of fall and winter litters is about the most troublesome problem met with on the average hog-breeding farm to-day.

In order to get for our readers the best possible information upon this and other important branches of hog-raising, we secured from leading Canadian packing houses the names of farmers who supply them regularly with considerable quantities of bacon hogs of the correct type, free from objectionable features to the high-class trade. A number of these men have been heard from and their letters appear on another page of this issue, and will bear careful study. We are not surprised to notice the prominence given to the use of succulent and vegetable foods other than grain, also to the necessity for liberal exercise, especially for all breeding animals, and growing stock up to the finishing period and to the deferring of weaning the litters until they are well started in life. It will be noticed that all the breeders do not agree on some of the essential points, as, for instance, one writer, hailing from Wellington Co., recommends weaning at four weeks old and excluding roots and other coarse foods from the rations. It has occurred to us that if this writer sells 200-pound pigs, as he claims, at six months old, either his son or hired man manages their feeding and care, and does not report fully the methods employed.

The real value of succulent food for swine cannot be measured by simple gains in weights of pigs given such food. Undoubtedly, where animals are confined to a pure grain diet, the digestive tract is more torpid and sickness is more likely to occur than when succulent food is given. Then, the digestive organs are more active and natural in movement and the body is better prepared to resist disease than when pure grain food is fed. The influence of this succulent food on sows in pig or suckling pigs cannot be measured by the scales, but the general testimony of practical feeders of experience is that such diet promotes easy parturition, a generous milk flow and vigorous offspring. Pigs that are to be fattened in a short period of feeding do not perhaps need roots in their diet, though no doubt it would be to their advantage, but breeding stock, both male and female, and suckling sows, will certainly be materially benefited by summer pasturage and roots in winter.

In his work on "Feeds and Feeding," Henry quotes at considerable length certain Danish feeding experiments on pigs. In reference to the use of roots: In comparing mangels and grain, all the lots received skim milk or whey in addition to grain and roots, excepting two lots to which an equivalent of additional roots was given. It is shown that ten pounds of mangels more than equal and eight pounds about equal one pound of grain in trials. The quality of the pork produced by the different lots was very satisfactory. Even where one-fourth the daily feed was given in the form of mangels no ill effect was noted.

The preparation of foods is shown by the writers to be of importance, as well as the use of mixed grains, which we are persuaded is of greater importance than is generally supposed, making a better-balanced ration and promoting health and growth of bone and muscle. Fine grinding is favored, a number recommend soaking the chop for some time before feeding, and in one or two cases it is recommended to administer the feed in a warm condition. The methods of feeding roots, and the kinds preferred, also differ according to the practices of these men. Whole mangels are quite in favor, especially for a noon feed, but one writer estimates them as valuable more as an appetizer than a food.

It is remarkable to notice that grades or crosses are generally recommended, rather than pure-breds. This may be accounted for by the fact that pure-bred sows of good type generally cost more money than grades. The Tamworth sire is evidently a general favorite, but the blood of the Yorkshire, Berkshire and Chester White have their admirers, and it is important that only pure-bred sires be used.

The matter of hog-pen floors and walls is of no small moment, especially for winter quarters, as it seems to depend a good deal on these that the animals escape rheumatism and coughs. The wooden walls, with cement floors covered with lumber, are generally preferred, and a liberal use of bedding is recommended. One writer, who has had no trouble from rheumatism or other ailments in his pigs, allows them the run of a manure shed once a day for exercise.

While very little is said regarding the use of such condiments as sulphur, charcoal, salt, etc., we notice most of the writers recommend them in practice, some of them being mixed with the feed and others left where the hogs can help themselves. It is evident these products have a place in pig feeding, but we doubt the advisability of mixing them with the food, except perhaps charcoal (of which an excess can do no harm), as their virtue undoubtedly lies in their corrective influence. This being the case, the pig should be allowed his own discretion in their use, since it is the needs of the system that prompt the craving for them, while an excess is liable to derange the digestive organism.

Not in this issue, but in that for July 5th, 1900, it will be remembered important evidence is given by Mr. E. D. Tillson on the subject of raising winter litters. After building a first-class new brick pigpen, in which no expense was spared in making the place warm, dry, well lighted and ventilated, it was found that even in this seemingly model structure losses would occur in spite of the most careful management as to feeding, etc. This led to the use of small eight-by-eight feet outdoor pens

in yards about fifty feet square. The sow and pigs are put into these when the youngsters are about three weeks old, and allowed free access to pen and yard as desired. In cold weather a canvas covering is hung over the entrance of the pen to allow the pigs to pass in and out and still exclude the cold wind. Here the pigs keep healthy, thrive and grow rapidly, none of them ever dying except something very uncommon happens to them. Now, it is probable that certain readers have discovered other special or unusual methods of preventing winter loss or unthriftiness in winter or late fall litters, and we hope to hear of these and other precautions, not only to avoid loss, but to promote rapid gains and greater profits in producing hog products for the markets of the world.

Practical Essentials in Successful Poultry Raising.

When the Jersey cattle fever first became epidemic in this country the rage was all for "solid color." A cow that would bring fifteen hundred dollars if possessed of a solid color and other required "points," would be worth no more than a hundred or so if she had a little white mixed with the other color of her hair. This condition of affairs prevailed for many years, but is decidedly changed at the present day. Now the fancier of Jersey cattle is more concerned with the amount of butter he can secure from his cows than with any other feature connected with them. He still tries to get a solid colored animal if he can, and one that excels in other desired characteristics, but the yield of butter is the paramount interest in his breeding. He has made it one of the "fancy points" of his work. The millionaire breeder of Jerseys is not anxious to secure an added yield of butter because he will thereby get more money from his herd, but he is after the satisfaction of securing a greater and still greater yield of butter by judicious breeding. To breed a Jersey cow that shall make a yearly test of a thousand pounds of butter in one year is an honor eagerly sought by men to whom the value of a thousand pounds of butter is of no moment whatever. It is the incentive of securing greater production than others can secure that urges on their efforts, and the result is greatly increased value in the race of Jersey cattle.

It seems to me that the same interest could well be applied to poultry breeding. I have always contended that there need be no antagonism between the fancy and the practical in poultry culture, and I am of the same opinion still. I believe that the beautifully formed Plymouth Rock or Wyandotte, from a fancier's standpoint, is the most profitable bird from the market poultryman's standpoint. The Leghorn of the most characteristic, sprightly shape is the bird that will make the egg basket overflow the quickest. The fancier has made our poultry what it is to-day—a steady improvement, both in the fancy and practical side, to the poultry of the past. But this has come about, not so much because the fancier cared particularly whether the practical side were benefited or not, but because, as I have said, there is no real antagonism between the fancy and the practical, so that in aiming for excellence in fancy points, the practical side has been added to.

But when it comes to increased egg production, a distinct effort must be made outside of mating for fancy points. There must be a mating here for larger results, just as there is a mating for larger results in the dairy world, and it can be done while attending carefully to standard points. Now, it seems to me that this striving to reach a large egg yield ought to give an added zest to the fancier's work. He will have all the pleasure that he has ever had in breeding for points, and in addition can have the same keen satisfaction that a Jersey breeder experiences in breeding so skillfully as to secure large production. The Jersey cow that has made fourteen pounds of butter in one week is called a "tested" cow, and she and her descendants thus acquire distinction above their fellows. Why may we not set the "tested" mark for the hen at two hundred eggs per annum?

All credit to the fancier for what he has done for American poultry—he has made it what it is. It now remains for him to put another element of great value into his work by increasing the egg production of the fine specimens he sends out, and in the case of some varieties, by increasing the size of the egg. It seems to me that these points ought to appeal to a thorough fancier spirit. Breeding for them requires skill, judgment and patience, and these give zest to the fancier's work.

[NOTE.—The above article, written by Webb Donnell for *Reliable Poultry Journal*, indicates with considerable clearness the necessity for earnest personal study and effort in poultry-raising in order to conduct a really successful business. It is not enough to get good foundation stock and a good pen, and then determine to follow the best obtainable rules, but in order to go to the top, or even to reap a good profit, one must exercise considerable mental effort in the direction of improvement all the way along. The tendency in all classes of stock is towards deterioration, so that testing, weeding and developing must be constantly aimed at in order to keep up to the present standard. In poultry-raising, as in any other vocation, there is always room and profit at the top. Ed. F. A.]

QUESTIONS AND ANSWERS.

Veterinary.

INJURED COLT - WART.

G. E. L. Newdale:—"1. What can be done for a sucking colt that has a swelling on the stifle, caused by being accidentally prodded by a manure fork? This happened about four months ago. The part swelled, broke and discharged, and then healed up, but the part is now swelled again, and the colt is lame."

"2. I have a two-year-old colt. About four months ago a small pimple, resembling a wart, appeared on left side behind shoulder blade. It is now about the size of an egg cup, and discharges matter."

[1. Clip the hair closely from the part that is swollen, wash the skin well with warm water and soap, rub dry with coarse cloth, and apply, by rubbing well in with the hand, the following blister: pulverized cantharides and biniodide of mercury, of each one dram; vaseline, one and a half ounces; mix. Let the blister remain for forty-eight hours, wash off, and smear the parts with vaseline or lard. Repeat in two or three weeks.

2. The quickest and best remedy for a wart of the kind you have mentioned is to remove it with a knife, and sear the part with an iron at red heat, sufficiently to stop the resulting hemorrhage. No after-treatment will be required.

W. A. DUNBAR, V. S.]

COW FAILING TO BREED.

JERSEY, Lanark Co., Ont.:—"I have a thoroughbred Jersey cow that I can't get with calf. She has been milking now three years, and is perhaps too fat, as she is in good condition. She comes round with great regularity every 18 or 20 days. Sometimes I leave her with the bull all day, and again tie her up after she is served, but it is all the same. I have had her washed out with bicarb. soda and water, before service, too, and now an old farmer and stock-breeder here tells me to tie up the cow after service and open the orifice, and I would find a little wrinkle at the lower corner, and to just give this a slight nick with a sharp knife, so that a few drops of blood would come, and that she would be sure then to be with calf. Now, I don't want to do anything like that without knowing something of the reason for it, and as there is no veterinary near here, I appeal to you for your opinion on this plan or one of your own, if you can recommend one. If I should be able to get her with calf, would her offspring be liable to inherit her condition. She is only 7 years old, and I have but one heifer from her, and it is the best cow on the place, and has apparently none of her mother's trouble at all. Would a bull from her be liable to be unsure?"

[Sterility in cows and other domestic animals is due to various causes, both physical and organic. Some of the causes are removable, while others produce permanent impotence. Animals suffering from tuberculosis or other seriously-diseased state of the system, especially when the sexual organs are involved, are very often sterile. Occasionally the male animal used is at fault, and when that is suspected, it is advisable to make a change. It would be well also to insert the hand into the vagina, and learn if the entrance to the womb is open. Occasionally it becomes closed and calcified, and requires to be opened mechanically. By pressure with the hand, commencing with one finger, an opening can usually be effected. If this is found to be the trouble, apply to the opening, three successive days before service, equal parts of belladonna and Venice turpentine. There is no reason to believe that the cow's offspring, either male or female, will inherit her tendency to barrenness. Nor is there anything in the operation recommended by the old farmer. That is an old notion long ago exploded by veterinary science, and is akin to that of splitting the tail for the cure of "hollow horn." Sometimes bleeding a cow in high condition has value, but five or six quarts of blood should be taken in such a case in order to do any good.]

CRIBBING HORSE.

C. A. A., Illinois, U. S. A.:—"I have taken your valuable paper for a long time, and could hardly afford to do without it. I have a fast pacing horse, 6 years old, that has been cribbing at the manger for about a year. He is not very bad. Can you please tell me how to cure him?"

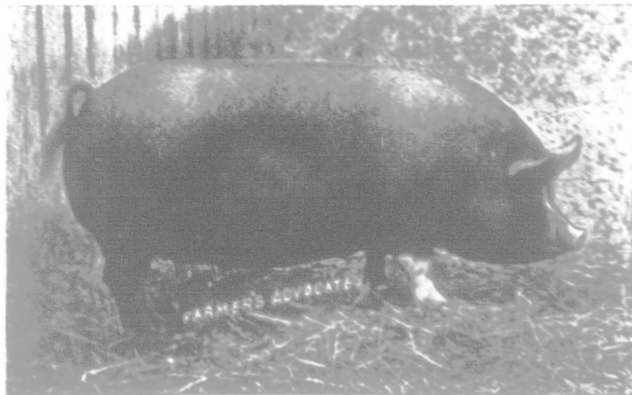
[It is unfortunate that cribbing has been allowed to continue so long without adopting measures to stop it. When first noticed, the horse should have been put in a box stall without manger or any projection for him to press his teeth against. His hay should have been given on the floor, and his grain in a pail, that should have been removed as soon as the animal had finished eating. The chances are he will be difficult to cure, as the habit will have become pretty firmly fixed. In such a case, get a muzzle for him, and leave it off only while he is eating. A strap buckled tightly around the throat is a treatment often given, and renders the horse incapable of filling himself with wind as is done in cribbing.]

HORSE LAME IN HOCK.

C. R., Addington Co., Ont.:—"I had a thoroughbred gelding kicked in front of hock by a horse sharp shod. The cut closed up, but swelled very large, and I lanced it on the inside of leg above spavin, and considerable thin yellowish fluid ran

out. He was on three legs for two months. Have blistered several times with mercury and cantharides; is still lame and a little stiff. How can I relieve the lameness?"

[There is probably ankylosis (the union of two or more bones) of some of the bones of the joint. If so, and they be those involved in the gliding articulations (the lower part of hock), the lameness will disappear as soon as the inflammation has entirely subsided. If the true hock is involved, lameness will be permanent. Ankylosis of this part of joint is not likely to take place, but the articular cartilage may be diseased. Injuries such as described are liable to leave permanent enlargements and sometimes permanent lameness. The treatment you



LADY SHIELDS.

Berkshire sow, first prize in class over 6 and under 12 months, at Toronto and Ottawa.

OWNED BY SNELL & LYONS, SNELGROVE, ONT.

have adopted is the best you can use, unless you get a veterinarian to fire and blister, which I think would be your better plan. J. H. REED, V. S.]

RINGBONE.

A. W. P., Baldur, Man.:—"A 7-year-old horse of mine has had ringbone for about three years. There is an enlargement above the hoof, and I think lameness must come from this enlargement. After working some time, he gets better, but it is painful to see him going out of the stable in the morning. Please inform me what can be done for him?"

[The best remedy for a ringbone of old standing, such as you have described, is firing by the thermo-cautery or by the common pointed budding iron, and in keeping the parts irritated by the frequent application of biniodide of mercury ointment for at least six weeks. The firing should be done by a qualified person.

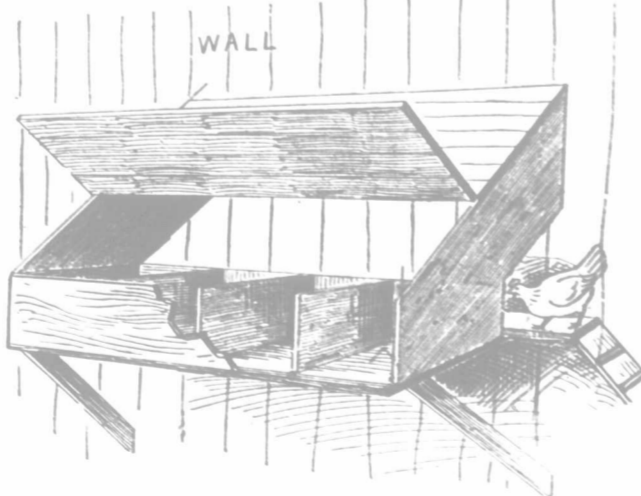
W. A. DUNBAR, V.S., Winnipeg.]

Miscellaneous.

NEST BOX - POULTRY BOOK.

L. K., Grey Co., Ont.:—"Will you please show in your next paper the latest style of a hen's nest to prevent them from eating eggs? Let me know where one of the best poultry books is to be got."

[To prevent hens eating eggs, give plenty of meat, grit and lime, and provide dark nests, constructed similar to the one illustrated beneath. We have presented this cut before, but believe it to be a good one and well worth repeating for the benefit of those who have not seen it. This box,



NEST BOX TO PREVENT EGG-EATING.

which extends along the wall of the house, is shown open at back, that its construction may be understood. The hinged lid is in sections, each covering three or four nests, and can be raised to remove the eggs. When the lid is down the nests are quite dark, and therefore good for preventing egg-eating. In fact, it is a good sort of nest box from any standpoint.

One of the best poultry books we have knowledge of is "The Practical Poultry Keeper," by Lewis

Wright. It is a new edition issued last year, price \$2. It can be had through this office at the regular price, or for obtaining four new yearly subscribers, at \$1 each, to the FARMER'S ADVOCATE.]

BLUESTONING WHEAT IN THE FALL.

H. J., Reaburn:—"Would you recommend me to bluestone my wheat this fall and have it ready for the coming season?"

[For some reason bluestone has a very uncertain effect on the germination of wheat. In some instances I have known wheat to be bluestoned for months previous to sowing without any injury whatever; while in other cases, even a month's bluestoning in advance has injured the germination. Knowing this, I do not feel like recommending you to bluestone your wheat this fall.

S. A. BEDFORD, Supt.]

EARLY RIGA WHEAT.

H. J., Strathclair:—"I notice by one of your recent annual reports that Early Riga is one of the early and apparently productive varieties of wheat. Would you recommend this variety for our section of the country? We have not been very successful with Red Fyfe here."

[So far Early Riga has proved early and promising in every respect, but we have only tested this variety for a short time, and I do not feel like recommending you to sow large areas of it. I shall be pleased to supply you with a small quantity for next spring's sowing.

S. A. BEDFORD.]

CORN AS FODDER.

J. M., Virden:—"We are very short of fodder in this section. Do you recommend the general cultivation of corn for fodder purposes? If so, can you give me any suggestions as to its cultivation? I notice that you have recommended the corn to be put up in tepee-shaped stooks. Does not the corn become badly injured by the weather in this shape? Please state how deep you plow for corn?"

[Indian corn for fodder and ensilage has done exceedingly well on this farm. There are, however, a few points that must be borne in mind in growing corn in this Province: The land should be rich and warm, preferably with a slope to the south. The varieties used should be such as will ripen early. Pearce's Prolific and North Dakota Flint are both good varieties. We plow early in spring for corn, harrow at once and keep the surface well cultivated until the 20th of May, when we sow the corn in drills three feet apart, with the plants from six inches to a foot apart in the row. If the weeder is used frequently until the corn is two or three inches high, very little cultivation will be necessary. The best plan for curing corn is to make tepee-shaped stooks, holding about three hundred pounds. For this purpose we use a large two-legged horse. The corn is piled around the horse, and tied at the top with binding twine, then the horse is removed. Corn is certainly an excellent fodder crop for this Province, if properly grown, but it requires more time than is given to a grain crop. With the exception of the outside of the stooks, the corn remains perfectly green all winter. We usually plow seven inches deep for corn.

S. A. BEDFORD.]

MILKING WITH WET OR DRY HANDS - TACKLE FOR A KICKER.

SUBSCRIBER, Montreal, Que.:—"I would like to know, through the ADVOCATE, which is the proper way to milk a cow, to wet the teats with milk and keep them moist while milking, or to milk with the teats dry?"

"I have a cow that kicked continuously while milking; I tried all ways neighbors suggested, and finally I arrived at an idea which worked well. I inserted a 'humbug' ring in her nose; to this I attached a small rope run up to a pulley above her head and then back through a pulley behind cow, then down through pulley at floor behind her, and then fastened to her right hind foot. The rope is fastened sufficiently tight that when she lifts her foot forward, her nose is drawn up to the pulley above."

[There is considerable difference of opinion, even among experts, as to whether milking should be done with wet or dry hands. If nature is to be the guide, taking the calf as the model, then the wet method must be chosen; but unless the cow's udder is thoroughly cleaned, and the hands washed after milking each cow, milking with wet hands is far from being a clean method. We have frequently seen brown filth dripping into the pail from the hands of a wet milker, even among people who take some pride in being considered cleanly in their habits. In any case, the udder should be thoroughly brushed and wiped before commencing to milk. When this is done, there can be no serious objection to milking with slightly moistened hands, using a dab of the foam to lubricate the teat. Where one can do as well with dry hands, perhaps that method should be chosen, as, ordinarily, it is more cleanly.

2. No doubt the prescribed method for kicking cow would prevent kicking, but it appears just a little heroic for the good of all concerned. We would not expect the cow to give much milk, wearing such a tackle.]

TO PREVENT POTATO SCAB.

H. E. McGregor: "Can you give me a cure for scab in potatoes? I tried formalin, with very poor success."

[In the year 1895 we carried on several experiments in connection with the prevention of scab in potatoes, and we found the best results from treating the tubers, at the time of planting, with a liquid composed of two ounces of corrosive sublimate dissolved in 15 gallons of water. The potatoes were allowed to stand in this liquid for two hours, then cut and planted at once. (The corrosive sublimate is a virulent poison when swallowed by man or beast, and great care should be taken to prevent any accidents.) By this plan, we were able to prevent any injury from scab, while 51 per cent. of the untreated were scabby.

S. A. BEDFORD.]

Agricultural Societies and Institute Meetings.

In addition to the meetings announced in last issue to be addressed by A. G. Gilbert, of the poultry department of the Ottawa Experimental Farm, and Chief Clerk McKellar, other meetings are being held as follows: R. G. O'Malley, Provincial Weed Inspector, and Fred Lutley, of the Dairy School, will address meetings at Stonewall, November 20, at 2 p. m.; Argyle, Woodlands and Winona, November 21, at 2 p. m.; Meadow Lea, November 21, at 7 p. m.; St. Francois Xavier, November 22, at 7 p. m.; Carman, November 26, at 2 p. m.; Holland, November 27, at 2 p. m.; Cypress River, November 28, at 2 p. m.; Swan Lake, November 30, at 7 p. m.; St. Jean, December 1, at 7 p. m.; St. Pierre, December 3, at 2 p. m. By S. A. Bedford, Superintendent Brandon Experimental Farm, and C. A. Murray, Provincial Dairy Superintendent, at Wawanesa, November 20, at 2 p. m.; Glenboro, November 21, at 2 p. m.; Melita, November 22, at 7.30 p. m.; Hartney, November 23, at 2 p. m.

Farmers' Institute Work in Manitoba.

In 1880 there were twenty-six Farmers' Institutes organized under the Farmers' Institute Act. The total membership was 1,088, the largest since the Institutes were inaugurated. In order to reach a greater number of farmers, the Legislature at its last session enacted that part of the grant to agricultural societies would be given only when agricultural societies carried out more fully the objects of such societies. The Agricultural Societies Act provides that one of the objects is "for holding meetings for discussion and securing the delivery of lectures on subjects connected with agriculture, arboriculture or horticulture." This is practically what Farmers' Institutes have been doing.

There are forty-eight agricultural societies in the Province, with a membership of 3,659. According to the amended Act, Farmers' Institutes will cease to exist when there is an agricultural society to take up the work. Twelve Institutes, with a membership of 523, remain, and new Institutes may be organized in districts where there is no agricultural society. Agricultural societies will now be on a more permanent basis, for when Institute work and probably plowing matches are added to the work undertaken in the past, the Government will no doubt see that every possible encouragement is given in the way of liberal grants.

The following are the rules and regulations to guide agricultural societies in the work:

1. Each agricultural society shall hold at least three meetings every year other than the annual meeting, the exhibition and the meetings specially arranged by the Department of Agriculture.
2. At these meetings papers shall be read or addresses delivered on topics relating to agriculture, horticulture, dairying or kindred subjects. Free discussions shall be encouraged.
3. The order of meetings is to be similar to the regular meetings of the society, and under the management of the directors of the society.
4. The Department will endeavor to supply speakers to address two extra meetings each year.
5. The directors of each society will arrange for place of meeting, advertise meetings, and pay all expenses incurred thereby.
6. The secretary of the society will compile all reports regarding Institute work, as required by the Department.

Canadian Eggs.

One shipment of an article of inferior quality will sometimes do more injury to the reputation of producers than can be remedied by several successive shipments of good quality. On more than one occasion, we have referred to the specimens with which some of our country neighbors and others are accustomed to forward eggs to the

markets: the result being that the number which have to be thrown out as unfit for food is simply astounding.

Now the natural sequel to this unbusinesslike method is being told in the receipt of letters from importers in Great Britain complaining of the quality of the eggs received from this country. One firm in England says that the price now being paid for Canadian eggs is ridiculous, but not more so than the quality of the same. Several lots have been sold at prices which will not pay for more than their freight charges. Needless to say, the shipping of eggs from Canada which are not strictly fresh-gathered will injuriously affect the sale of even such as are truly fresh: the reputation of the whole body of producers will suffer for the sin or the carelessness of some amongst them.

No doubt, much of the state of things complained of is due to a combination of unfortunate circumstances. The eggs probably were gathered during the extremely hot spell; or they were put on the market at a time when large quantities were arriving from other places. The fact remains, however, that the chief cause for the low prices which Canadian eggs have been fetching lately in the British market is the poorness of the quality of many of them. It is a known fact that several lots have been shipped by parties who did not know how to handle the business wisely, and who did not take the necessary precautions to see that the eggs had been properly candled.

It is the hardest thing in the world to establish a reputation for our goods in the face of such unbusinesslike methods as these mentioned. As we said before, to a large extent all must suffer for the sins of the few. If the small shippers would think a moment, however, and would realize what large possibilities lie in this business, properly managed, they would also realize how largely their own interests would be served by a rigid adherence to



TAMWORTH BOAR UNDER ONE YEAR.

First prize, Toronto and London, 1900.

PROPERTY OF JOHN C. NICHOL, BUREY, ONT.

honesty and a system of the most careful selection in packing. Only in this way can a great Canadian egg industry be built up. *Monetary Times.*

Chatty Stock Letter from Chicago.

FROM OUR OWN CORRESPONDENT.

Following table shows current and comparative live stock prices:

	Extreme prices now.	Top Prices		
		Two weeks ago.	1899	1898
Beef cattle.				
1500 lbs. up.	\$5.25 to 6.00	\$6.00	\$6.50	\$5.70
1350 to 1500 lbs.	4.85 to 6.00	5.90	6.50	5.60
1200 to 1350 lbs.	4.50 to 5.85	6.00	6.50	5.70
1050 to 1200 lbs.	4.25 to 5.75	5.90	6.25	5.45
900 to 1050 lbs.	4.10 to 5.65	5.87	6.00	5.35
Fed Westerns.	4.90 to 5.75	5.80	6.10	5.55
Stillers.	5.20 to 5.10	4.45		
Stockers and feeders.	2.25 to 4.65	4.95	4.60	4.50
Hogs.				
Mixed.	4.15 to 4.95	4.92	4.30	3.77
Heavy.	4.10 to 4.95	4.90	4.30	3.80
Light.	4.35 to 4.90	4.50	4.25	3.70
Pigs.	4.25 to 4.75	4.15	4.15	3.50
Sheep.				
Natives.	3.90 to 4.25	4.15	4.75	4.75
Western.	3.50 to 4.30	4.25	4.50	4.45
Yearlings.	3.90 to 4.40	5.65	4.85	5.00
Native lambs.	3.65 to 5.75	5.40	5.75	5.75
Western lambs.	3.75 to 5.10	5.85	5.85	5.15
Feeding sheep.	3.50 to 3.90	4.70	3.90	4.00
Feeding lambs.	3.75 to 4.90	4.80	4.75	

The supply of fat cattle of good heavy weights has been larger of late, and the heavy weights not of prime quality have met with but light demand. The choice to extra cattle, of all weights, however, have not been very plentiful, and the prospects are that they will be plentiful. However, prices for the very best cattle are fully 8c. per 100 lbs. lower than a year ago, while the low grades do not show so much difference. This simply means that the proportion of good to choice cattle, which was very small a year ago, has been decidedly larger this fall. Consequently, feeders are not making so much money, and the number of cattle being put on feed is decidedly less than a year ago. The price of young cattle is lower, but not as much in proportion as the price of fat cattle is lower. Then, too, the price of corn is considerably higher.

The following table gives the average weight of hogs at three markets for the months mentioned:

	Oct., 1899.	Sept., 1900.	Oct., 1899.	Oct., 1897.	Oct., 1897.
Chicago.	274	217	216	226	241
Kansas City.	215	214	215	215	210
St. Louis.	243	240	250	271	286

As a rule, the average weight of hogs the first ten months of this year at Chicago was 241 lbs. at Kansas City, and 214 lbs. at St. Louis. At these markets have been getting an unusual

number of 70 to 130 lb. pigs of late, which were crowded in on account of sickness and high-priced corn.

Chicago had 72,467 of the 96,779 increase in hog receipts at the four Western markets during October.

Western range cattle receipts for the year so far about 115,000, against 170,000 a year ago and 195,000 two years ago.

Chicago's receipts of Texas cattle were the largest for October since 1885.

Chicago's total number of cars was 3,034 larger than in October, 1899, being the largest month's total in five years.

Chicago's receipts of cattle increased 33,303, while combined receipts at Kansas City, Omaha and St. Louis decreased 6,100, compared with October, 1899.

Toronto Markets.

The abundance of poor-grade cattle may be assigned as one of the reasons for the low prices. The mild weather of the last few weeks has made butchers indifferent as to loading up with any quantity of poor-quality stock.

Export Cattle.—Trade very dull. Exporters are not anxious to embark any more money in the business this season, which all say is the worst on record. Only a few on offer. Prices quoted at \$1.40 to \$1.60 per cwt. Not wanted. Light export cattle sold at from \$1.00 to \$1.25. Messrs. Brown & Shell bought two loads of export cattle, 1,300 lbs. each, at \$1.60 per cwt. Mr. Joseph Gould bought two loads of export cattle at \$1.00, average 1,300 lbs. each. Mr. Wm. McClelland bought five cattle, average 1,050 lbs. each, at \$4.00 per head.

Butchers' Cattle.—About 400 cattle on offer, but the quality not very good. Choice lots would sell, but not many on offer. Prices, \$3.00 to \$3.80; for the very best, \$4.20 per cwt. Medium cattle sold well at the price—\$3.00 to \$3.50. Common butchers' cows sold down to \$2.50 per cwt. Mr. S. Levack bought 20 butchers' cattle, average 1,050 lbs. each, at \$4.00 per cwt. Mr. R. Pugsley bought seven heifers, 800 lbs. average, at \$2.25 per cwt.

Bulls.—Prices were lower on all bulls offered. Heavy export class at \$3.50 to \$4.00 per cwt. Light bulls were quoted at from \$3.00 to \$3.50 per cwt. Mr. Joseph Gould bought one load of bulls, 1,600 lbs. average, at \$3.50 to \$4.00 per cwt. Mr. Heise, of Creemore, sold a very choice, heavy bull, 2,350 lbs., at \$3.00 per cwt., to Messrs. Crawford & Hunslett.

Feeders were plentiful. As most of the feeders at the byres are stocked, prices weakened. Short-keep feeders met the best sale, at \$3.00 to \$4.00 per cwt. Heavy feeders sold down to \$3.25 per cwt.; light feeders at from \$2.50 to \$3.50. A few short-keep feeders, 1,150 lbs. average, met ready sale. Good steers, weighing 1,168 lbs., in request at \$3.00 per cwt.

Stockers were easier, many loads selling down to \$2.25 per cwt. Top price for the day was \$3.00 per cwt. Black and white, all inferior grades, sold down to \$1.75 per cwt. to \$2.25 per cwt., the lowest price for the year. There was a good demand from Buffalo market for all inferior stock. Mr. G. Maybee shipped six carloads of stockers, Mr. A. W. Maybee shipped two loads of stockers and one carload of lambs. Mr. W. Murby shipped three carloads of mixed stock.

Sheep.—Best butchers' sheep sold at from \$3 per head downwards. Best ewes sold at from \$3.25 to \$3.50 per cwt.; bucks at \$2.50 to \$2.75 per cwt. Mr. W. B. Levack bought thirty sheep at \$3.40 per cwt.

Lambs were in good demand, and sold well at from \$2.50 to \$3.50 per head, and at from \$3.50 to \$4.00 per cwt. Not many on offer, and wanted.

Cattle.—Very few on offer, at various prices from \$2.00 to \$3.00 per head for choice. Poor, half starved, skim-milk dairy wasters are not wanted.

Milk Cows.—All quality in milk cows was easily sold. One good Ayrshire cow fetched \$53.00 without calf. Prices range from \$25 to \$50 per head for choice milkers. Fifteen on offer, and wanted.

Hogs.—As foretold in my last report, hogs went down with a slump, and we fear have not yet reached bottom. One dollar per cwt. is very severe for a single fall, but our readers must remember that we have forewarned them for the last month what to expect as soon as the Old Country demand fell off. While we were asking for supplies at the high figures, very few offered; but now \$3.00 in one week is just a few more than we can conveniently manage, and look for \$4.62 per cwt. next week. Most of these were overweight; that is, above 200 lbs. Many of the hogs offered have been kept from three weeks to one month longer than necessary to fetch top prices. Long, lean bacon hogs—not above 200 lbs. nor below 160 lbs. is the weight wanted off cars. Best choice hogs are to-day quoted at \$4.75 per cwt. All others are culled down to \$4.25 per cwt.; sows at \$3.50 per cwt.; stags at \$2.00 per cwt. The market is too uncertain to foretell what the prices will be until bottom is reached, which is likely to be \$4.50 for choice. After that, a gradual rise may be expected and a steady market.

	Comparative prices to-day.		2 weeks ago.	Same date last year.
	Nov. 9, 1900.	Oct. 26, 1900.		
Export cattle.	\$4.00	\$4.50	\$4.50	\$4.80
Butchers' cattle.	4.40	4.40	4.40	4.40
Bulls.	3.25	4.25	4.25	4.25
Stockers.	3.00	3.00	3.00	2.75
Feeders.	3.90	3.80	3.80	4.00
Sheep.	3.50	3.44	3.44	3.40
Hogs.	4.75	4.75	4.75	4.12
Lambs, each.	3.25	3.30	3.30	3.00
Milk cows, each.	50.00	50.00	50.00	50.00

Grain Market.—Owing to bad roads and continued inclement weather, the street market has been very small.

Wheat.—One hundred bushels of white sold steady at 68c. per bushel; one hundred bushels of red sold at 68c. per bushel; two hundred bushels of goose sold at 60c. per bushel.

Hay. The supply liberal; prices a little easier. Ten loads sold 50c. lower than last week; now quoted at \$13 to \$14.50 per ton in farmers' loads of loose hay.

Baled Hay.—Market quiet and prices easier, at \$9.00 to \$9.50 on track.

Straw. Two loads on offer at \$12.00 per ton.

Baled Straw. In car lots on track, \$3.00 per ton.

Dressed Hogs.—Very few dressed hogs coming forward; good demand; prices firm at \$7.00 to \$7.25 per cwt. for all choice stock. Market steady and a little firmer, in sympathy with live hog prices.

Hides and Wool. Hides, No. 1 green, 7c. per lb.; hides, No. 1 steers, 8c. per lb.; hides, cured, 6c. per lb.; calfskins, 8c. per lb.; lamb skins and pelts, 7c. each. Wool, fleece, unwashed, 9c. per lb.; wool, pulled super, 17c. per lb.; wool, pulled, extra, 2c. per lb.

Butter.—The trade quiet. Extra choice dairy rolls in good demand at from 18c. to 21c. per lb. There is a demand for choice butter in small lots, suitable for hotels and boarding-houses in this city, and why some of our creameries do not seek to cultivate this trade is not quite apparent.

Eggs. Choice new laid eggs range from 19c. to 22c. per doz. Strictly new-laid will fetch a trifle more for domestic consumption.

Poultry. There is no change in the market. The offerings are liberal. The Toronto Produce Co. have removed to larger premises, on Front street, and now offer 7c. per lb. on live birds. Chickens, per pair, 30c. to 35c. for choice birds. Messrs. A. Gunn Bros. will ship dressed turkeys to the Christmas market in the Old Country. They expect to take 20,000 this year, and will pay 7c. per lb. on all choice birds from 9 lbs. upwards in weight. They have made arrangement with the railway companies to have their largest-sized cars, 20,000 lbs., and place four decks in each. They have experienced a difficulty in obtaining poultry-shipping cars, as our railways do not cater for the trade, and refuse to build any. At present it costs \$10 and upwards to fit the cars, which is money wasted, as the lumber used is unfit for any other purpose than kindling. All poultry for shipping is directed to be billed, Messrs. Harris's Abattoir, Western Cattle Market, Toronto, to arrive not later than December 1st.

Oct. 9th, 1900.

THE QUIET HOUR.

The Duty of Praise.

Thou hast done well, perhaps,
To lift the bright disguise
And lay the bitter truth
Before our shrinking eyes.
When evil crawls below
What seems so bright and fair,
Thine eyes are keen and true
To find the serpent there:
And yet—I turn away—
Thy task is not divine,—
The evil angels look
On earth with eyes like thine.

Thou hast done well, perhaps,
To show how closely wound
Dark threads of sin and Self
With our best deeds are found;
How great and noble hearts,
Striving for lofty aims,
Have still some earthly chord
A meaner spirit claims;
And yet—although thy task
Is well and fairly done,
Methinks for such as thou
There is a holier one.

Why is it that a whisper of wrong-doing is passed from mouth to mouth, increasing like a snowball as it rolls along? Why do we eagerly retail the faults of our neighbors, while their virtues are unnoticed and seldom mentioned? A few kind individuals, indeed, run to the other extreme and praise everything and everybody. Such indiscriminate praise is worth very little: it is altogether too cheap and too easily won. If it is not true, if it is undeserved, then it has degenerated into flattery, and flattery is very harmful. Some people take great pleasure in giving others "a piece of their mind," as they say. When the visible supply of faults runs short they hunt eagerly for more material, and we generally find what we seek for.

Most of us belong to neither of these classes. We are not given to praising overmuch, and we are not bold enough to tell a man of his faults face to face. No, our forte lies rather in cheerfully and pleasantly discussing them *behind his back*. Of course, as soon as our backs are turned the rest of the company begin to pull our characters to pieces in the same friendly fashion. To be quick to detect flaws is not a mark of genius, nor a proof that we ourselves are above criticism, it is rather a sign of spiritual pride. Our fault-finding is an admission that we consider ourselves to be better, in these respects at least, than the persons criticised. Praise which is just and well-merited is a grand thing with which to help our comrades along. Many are toiling day after day at wearisome duties, without a word of cheer and encouragement from those who love them best. Do you ever dream of praising a well-cooked dinner, or a nicely-kept house? Do you tell the children you are pleased with them when they are well-behaved and obedient? Do you ever give a few words of encouraging praise to those who are hired to do your work? I don't think it would do us any harm to join the children's "Lookout Regiment," and try to be on the lookout for good qualities in everybody we meet, instead of being on the alert to detect faults. Love is not blind, for God is Love and He knows us through and through, but it is our *virtues* that He specially watches for and encourages. He never quenches the smoking flax, but rather fans it into a brighter flame. How beautifully this is shown in the parable of the prodigal son. The father does not question the motives which brought his son to him again. Fear of starvation was not a very worthy motive, but such a loving reception of one who knew himself to be so unworthy would surely stir up more genuine sorrow for sin than a cold, critical investigation of motives and reasons which would have had the effect of making the son try to justify himself.

An oriental fable describes a crowd of idlers, thronging the market-place of a Syrian city, and looking contemptuously upon a dead dog, with a halter around his neck, by which he had been dragged through the dirt. "It pollutes the air," said one, holding his nose. "Look at his torn hide," said another; "one could not even cut sandal- straps out of it." A fourth spoke of his ears, dragged and bloody; a fifth declared "he had no doubt been hanged for thieving." But there stood among the throng a stranger, who had, as they flung their jeers at the dead dog, drawn near. There was a strange light about his face, and in his manner a strange dignity and grace. Looking down compassionately upon the dead animal, he said: "Pearls are not equal to the whiteness of his teeth." Then the people said among themselves: "Who is this? This must be Jesus of Nazareth, for only He could find something to pity and approve even in a dead dog," and in shame they bowed their heads and went each on his way.

This fable is a vivid representation of a great truth, viz., that God will never overlook the smallest trace of good in any of His creatures. Small things are not to be despised, they may grow. Germs which are invisible to the naked eye are treated with respect nowadays—*physical* germs at least—and *spiritual* germs should not be despised either. As George MacDonald has said: "The Father of Lights is the Father of every weakest little baby of a good thought in us, as well as of the highest devotion of martyrdom."

It is Satan's business to look out for evil—or at least he has made it his business—the very word "devil" means an accuser. We don't want to be

his assistants, do we? Let us rather take up the divine task of pleading for our brethren, and encouraging them to fresh efforts.

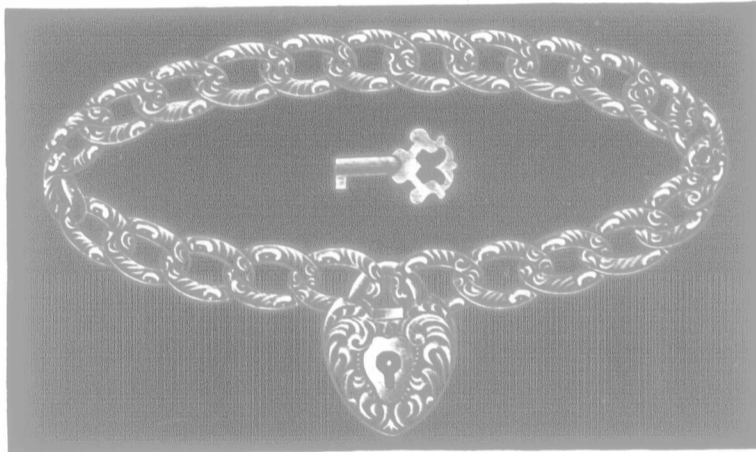
Actors know well the necessity of a little applause to help them in playing their part well. In an American theatre a celebrated actor came to the manager when the play was half over, and said: "I can't go on the stage again if the pit keeps its hands in its pockets. Such an audience would extinguish *Etna*." The manager at once told the audience that Mr. Kean mistook their silent attention for disappointment, and that if they did not applaud him as he was accustomed to be applauded, they could not see him act as he was accustomed to act. The audience took the hint and their hearty applause roused the genius of the actor. It is exactly the same on the stage of life, no one can act his part enthusiastically and heartily if he is treated always with cold and chilling disapproval, or constantly discouraged by scolding and nagging. If it is true, as Sidney Smith has said, that among the minor duties of life nothing is more important than that of not praising where praise is not due, it is surely even more true that one of the duties of life is to praise where praise is due. "The world is full of men and women who are living unhappily and rusting in comparative inactivity, or doing but a tithe of the good they might do, for want of a little judicious praise."

HOPE.

OUR BOYS AND GIRLS' DEPARTMENT.

MY DEAR BOYS AND GIRLS,—

Quite a number of very good essays have been sent in in response to our first contest, and I am much pleased with the sentiments of patriotism and pride that permeate one and all. Those were the very sentiments I desired to evoke when I called for this particular essay. I have often felt that we Canadians do not do enough to foster this spirit, which is so essential to the building up of heroes for the future, the material for which we



find in our youth of to-day. Individually we may not be able to accomplish much, but by each doing his or her best to place our noble country where she should be, the equal of the proudest, what a powerful total we shall make!

What constitutes a state?

Men who their duties know,
But know their rights, and knowing, dare maintain,
Prevent the long-aim'd blow,
And crush the tyrant while they rend the chain;
These constitute a state.

The prize in Class III. of this competition has been awarded to Verne Rowell, Bryanston, Ont., whose contribution appears in this issue. The judging in the higher classes is not yet completed, but final results will appear next issue. Only a few days remain till the close of our Christmas poem contest—just time enough for a few more of the cousins to get in their work.

COMPETITION IV.

Which do you consider the ten best novels? We offer three prizes for the three best lists, the winners to be determined in the following manner: Every mention of a book will be equivalent to a vote, and the ten books having the most votes will be taken as a model, and the lists most nearly corresponding to this model will win the prizes. This is an easy contest, is open to all, and costs nothing to try, so I hope a great many will enter. It will be interesting to know just what works our fellow-readers most enjoy and to compare them with those of our choice. This contest will close December 5th. Address, as before, Miss Armand, Pakenham, Ont. Come one, come all.

ADA ARMAND.

PRIZE ESSAY—CLASS III.

BY VERNE ROWELL, BRYANSTON, ONT.

Canada—Why Do We Love Her?

The brilliant victories of our brave Canadian boys on the burning plains of South Africa, the celebrations of these victories and patriotic poems which flow so freely from our poets' pens, all tend to show the love of Canadians for their country. But soldiers, poets, and all have good reasons for their love and loyalty.

Canada is our homeland, the home of our noble ancestors, who so gallantly and freely shed their life-blood for their native land. Their brave deeds

at Queenston Heights and Lundy's Lane rank among the bravest deeds of history and shine among the brightest on the scroll of fame. It is, then, but a duty to love our fair "Lady of the Snows," and to uphold the honor of our fathers.

Canada (and how dear to the heart of each loyal Canadian is ever the name), though "the youngest of the nations," stands seventh in commerce among the vast number of countries in the world. Her ships ride safely o'er the "mountain wave" to mother England, to distant India and Australia, and to all parts of the civilized earth. She controls many of the railways in the United States, besides her own. She has one of the best systems of government, and the best of educational systems; a happy present and the brightest of futures. Why should we not love such a country and endeavor to lift her to a still higher position among the nations of the earth?

No country has more beautiful scenery than Canada. The Niagara Falls annually attracts thousands from Europe, United States, and elsewhere. All Europeans admire our Canadian woods in their autumnal glory. The stranger is charmed with the exquisite beauty of our Canadian lakes. Travellers gaze with astonishment and admiration at the grandeur of the Rocky Mountains; the mind is completely lost to other thoughts as the glance of the spectator rests on their snow-clad peaks, rising far into the clouds, or the green plain below.

So it is no great wonder that Canadians are proud of and therefore love such a fair homeland as this Canada of ours.

Fair Canada, my native land,
For thee I'll ever take my stand
Against all subtle foes,
For the land of the thistle, the
Shamrock and rose,
The land of the maple tree;
The land of the brave and the land of the free—
Sweet land of Liberty!

Continually Fizzing.

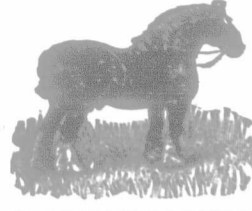
A man who stammered very much was taken up at a Police Court the other morning on a charge of being drunk and incapable. His name was Sissons. When asked his name, he began—"Ss-ss-ss-ss-ss-ss-ss—" The Bailie turned around, and said—"Stop that noise, and tell your name at once." The man again began—"Ss-ss-ss-ss-ss-ss-ss—" The Bailie very angrily turned to the prisoner and said—"I command you to stop that noise, and tell your name." The man began as before—"Ss-ss-ss-ss-ss-ss-ss—" This was more than the Bailie could stand. Turning to the Policeman, he angrily exclaimed—"What is this man charged with?" "I should say, yer Honor, that he is charged with soda water."

A Grand Offer.

The FARMER'S ADVOCATE, which always gives such excellent prizes, has this year something especially attractive to offer to its young lady readers, or to any one who would like to present to a young lady friend a pretty and significant Christmas gift. Our offer is this: For the names of two new paid-up subscribers a handsome curb link silver bracelet, with padlock and key, as shown in the above engraving. For each additional subscriber two sterling silver friendship hearts, upon which can be engraved the initials of the giver or recipient, there being room upon the several links of these bracelets for one to thirteen of these hearts. Thus, for three new subscriptions will be sent the bracelet with two hearts; for four subscriptions, the bracelet and four hearts; and so on in due proportion. These bracelets are all the rage just now. Every young girl longs to own and wear one, and the ADVOCATE wishes to help them to realize their very natural desire. To make the little task it sets them easy and pleasant, it authorizes them to promise, for one dollar, the ADVOCATE for the balance of this year, including the handsome Christmas number, up to December 15th, 1901. The ADVOCATE should be on the table of the family living-room in every Canadian home, and with a very little effort upon the part of our girl readers, who can have their own share of the pleasure and profit its varied pages afford, as well as the pretty bracelet full of love tokens upon their wrists, there is no reason why such a desirable state of things should not be arrived at before the present year comes to its close. At the same time we would call your attention to the beautiful watches offered on page 642. These are splendid watches and give perfect satisfaction. Remember, new subscribers (those not already taking the ADVOCATE). Write the address plainly. One dollar to accompany each name.

The cross-examiner was a smart man. "What did you say your name was?" was the first question. "Michael Doherty." "Michael Doherty, eh? Now, Doherty, answer me this question carefully—Are you a married man?" "Oi think so; Oi was married." "So you think because you got married that you are a married man, do you? Now tell me whom you married?" "Who Oi married? Oi married a woman." "Now don't you know better than to trifle with the Court? Of course you married a woman; did you ever hear of any one marrying a man?" "Yes. Moi sister did."

Clydesdales and Shorthorns.



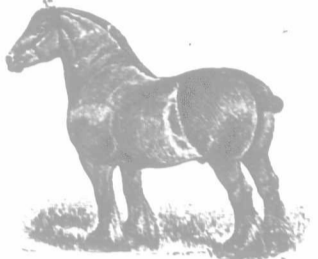
Young stallions, bulls, and heifers.

Herd headed by Best Yet—14371—and Mint-horn—21084—bulls bred by Hon. John Dryden and H. Cargill & Son.

PRICES ON APPLICATION.
D. McBeth,
Oak Lake, Manitoba

J. E. SMITH

Has received from Ontario a shipment of **two-ive Shorthorn bulls**, which are for sale. Also for sale a number of **home-bred heifers**, sired by Lord Stanley II. = 22220—, and supposed to be in calf to Golden Measure (imp.) (2315) = 26057—.



For sale, a number of Clydesdale mares and fillies, all registered; will be served by Prince Charles (imp.). All animals for sale, except the stock bulls, Lord Stanley II. = 22220— and Golden Measure (imp.) (2315) = 26057—, and the Clydesdale stallion, Prince Charles (imp.). These, being the best that money and experience could buy, are required to maintain the high reputation of the stock of the Beresford and Smithfield Farms. Come and see the stock, or write for what you want, to

J. E. SMITH,
P. O. Box 274. Smithfield Ave., BRANDON.

GOSSIP.

Donald Stewart, Westbourne, recently sold his yearling Shorthorn bull, **Topsman's Pride**, bred by J. G. Barron, Carberry, and by the celebrated **Topsman**, to Messrs. McRae & Davidson, of Minnesota, who recently purchased four carloads of choice grade heifers, most of which they procured from Macmillan Bros., Westbourne. The stock went south over the Northern Pacific.

D. Hysop & Son, Landzer Stock Farm, Killarney, Man., write: "Our stock are coming into the stables in fine shape this year. Our Shorthorn calves are particularly good, being our first crop from Royal Hope, the stock bull purchased last year, and they certainly do him credit. Three of them are bulls, and would be quite fit to head almost any herd. Our Cotswold sheep, too, have done splendidly. Our young ewes are beauties, especially the first and second prize pairs at Winnipeg's last summer fair. We have some real good rams for sale at easy prices."

J. G. Barron, Carberry, has had a most successful season with his Shorthorn herd, the calf crop being one of the best he has ever had. The imported **Nobleman** bull used on **Topsman** heifers seems to produce peculiarly pleasing results, the youngsters being broad-backed, low-set, smooth, level, and mostly good reds. Nobleman himself is thickening out and fulfilling the promise made at the summer fairs. The roan 2-year-old, **Topsman's Duke**, bred by Mr. Barron, that won 1st prize in his class at the Industrial, is going along in good shape; he is of the broad, thick, low-down type. A calf by this bull, out of a **Scarlet Velvet** dam, of Russell's breeding, is one of the best young things in the bunch, and will surely be heard from later. Judge 2nd, another 2-year-old roan, bred by the Hon. Thomas Greenway, and sired by his stock bull, Judge, has developed into a good, useful sort, with excellent quarters and good depth. In addition to the Shorthorn herd, Mr. Barron breeds Berkshires and Yorkshires.

James Bray, Oak Grove Stock Farm, Longburn, Man., has a lot of lusty Yorkshire pigs, just weaned, that he is prepared to sell at reasonable prices in order to make room in his stables. Nearly all his sows, including his prizewinners, have farrowed good litters this fall. His stock logs are in first-class condition, as are also his Shorthorn herd, which he has been adding to by careful selection from time to time. The bull, **Masterpiece**, a smooth roan bull, of excellent breeding, by Imp. Grand Sweep, out of a **Mina** by Imp. Indian Chief, although now in thin condition, having run out all season with the herd, has been in use. The young **Knuckle Duster** bull calf out of a heifer by **Cathness** is coming on well since the fair.

The Shorthorns at **Forest Home** Stock Farm, the property of Mr. Andrew Graham, Pomeroy, are in, perhaps, better shape this fall than we have ever seen them, due in part, doubtless, to the excellence of the fall pasture. The stock bull, **Robbie O'Day**, is in fine working trim, and the roan **Knuckle Duster** bull calf is growing more like his imported sire every day, a smooth, neat, well-topped roan, of excellent quality. The bulls have been pretty well sold down, but there are a few good young bulls by **Robbie O'Day** to be disposed of this winter. The show females, especially the young things, have come on remarkably well since the fair. The Yorkshire herd is also in good shape, there being some excellent young hogs and sows of suitable age for shipping.

During the past week over 1,200 head of beef cattle left our ranges for various markets. The shippers were J. D. Wylie, J. Rankin, Gordon & Ironsides, and P. Burns & Co. The stock was purchased from the Gordon ranch, Shannon Bros., Ferguson-Kennedy, F. W. Godsal, S. Douglas, T. H. Timney, W. Winterbourne, Spencer Bros., Medicine Hat Ranch, Express Cattle Co., M. McKenzie, S. Fairbairn, Ed. Clayton, J. Armstrong, C. Strong, Jas. Wright, W. P. Turner, Mrs. French, and several others with a few head. The cattle purchased by Burns & Co. were sold by weight, and ranchers express themselves as well satisfied with the way the cattle are weighing out. This shipment represented five trains of beef cattle. Large shipments will be made next week. *Medicine Hat News.*

We think it can safely be said that last week witnessed the highest price ever paid for beef steers on this range, and probably a top price for ranchers' stock in this country. The steers referred to were two animals of a shipment sent out by J. D. Wylie, of the Maple Creek Cattle Co., and purchased from Messrs. Spencer Bros. These two steers—five year-olds—weighed 1,900 lbs. each, and as they were sold by weight at the top price of the season, \$3.65 per cwt.,—between \$60 and \$70 each—weighed at the new stock yards after a ten or twelve hours' shrink. The 162 head shipped, which included 20 head from the Medicine Hat Ranch, averaged 1,437 lbs., and at the figure mentioned would bring the rancher about \$50 per head. These prices are no doubt top prices, but they furnish an illustration of the upward tendency in cattle values, which have been gradually rising from \$35 for beef a few years ago, until the present, when three and four year old range steers, sold by weight, bring from \$43 to upwards of \$50 a head. The ranchers are strictly in it this year. *Medicine Hat News.*

FLEMING'S LUMP JAW CURE

LUMP JAW QUICKLY CURED.

A case of lump jaw in your herd means immediate loss; it may mean the infection of the rest of your herd; it may result in the distribution of the germs all over your pastures. All loss and danger can be positively averted by prompt use of

Fleming's Lump Jaw Cure

The only radical cure known. Is endorsed by the most prominent ranchers and shippers of the continent. Easy to use. Is applied externally. One to three applications cure. Leaves jaw sound and smooth. Cannot harm in any way. One bottle usually cures two or three ordinary or one severe case. Price \$2.00. Sold by druggists. Can be sent anywhere by mail.

Money cheerfully refunded if the remedy ever fails.

FREE—Some important reports and an illustrated treatise on Lump Jaw. Write for them.

FLEMING BROS., Chemists
St. George, Ont.

Young Man Wanted

To learn the blacksmith and machinist business, in one of the best and most comfortable shops in the Province. Must be a good strong fellow of good habits. Apply to

J. SULLIVAN, EMERSON, MAN.

POPLAR GROVE HEREFORDS

THE LARGEST HERD IN CANADA.

STOCK OF ALL AGES FOR SALE.

J. E. MARPLES, DELEAU, MAN.

For

Galloways

APPLY TO

T. M. CAMPBELL,
Hope Farm, St. Jean Baptiste, Manitoba.

SHORTHORNS & COTSWOLDS.

The proper kind bred and kept on our farm. Good stock for sale at easy prices. Rams for sale, and fine yearling bull still here. Also bull calves.

D. HYSOP & SON, Box 492, Killarney, Man.

SHORTHORNS

Masterpiece—23750—by Imp. Grand Sweep, out of an Indian Chief dam, at head of herd. Imp. Large Yorkshires for sale.

JAMES BRAY, LONGBURN, MAN.

OWING TO DROUTH

Will sell five Holstein-Friesian heifers, two of three years old, for \$250. Fine animals, of rich breeding, sold first to the great butter-bred bull, **Johanna Rue** 2nd & 3rd De Kol (2124), at head of our herd. Also bull calves at reduced prices. Fine chance to start herd at pure-breds.

SOUTH S DE FARM CO., ST. PAUL, MINN.

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PLEASE MENTION FARMER'S ADVOCATE.

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HAVE been before the public for thirty years, and are in use today in 60,000 Canadian homes. If you want a piano or organ that is above criticism, get a "DOMINION". For catalogues address—

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Mikado Cream Separators

EXCEL ALL OTHERS IN EASE OF RUNNING, CLEAN SKIMMING, AND SIMPLICITY OF CONSTRUCTION.

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151 BANNATYNE AVE., WINNIPEG, MAN.

W. A. Doherty & Co.

ORGAN

MANUFACTURERS.

Clinton, Ontario, Canada.

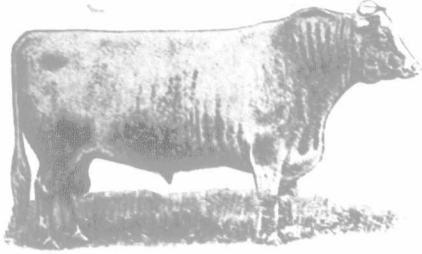
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Established 1875.

Send for Catalogue.

"PRAIRIE HOME STOCK FARM."

Bulls at head of herd:
Judge = 23419 = and Imp. Jubilee = 28858 =



**Yorkshire and Berkshire Swine,
Clydesdale Stallions and
Shropshire Sheep,
Shorthorn and Ayrshire Cattle.**

THOS. GREENWAY, Proprietor, m
JAMES YULE, Manager, Crystal City.

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Breeder and importer of Durham Cattle,
Shropshire and Southdown Sheep, and Pure-
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stock for sale. 9-3-m

**FOREST HOME FARM
SHORTHORNS**

Cows and heifers,
prizewinners at Winnipeg
and Brandon Fairs, and
others equally good.
Yorkshire pigs—a few
choice ones of both sexes.
B. P. Rock Cockerels—
large, strong, well-marked
birds. First orders re-
ceived get the choice.

Carman, C. P. R. Roland, N. P. R.
ANDREW GRAHAM,
Pomeroy, Man.

Shorthorns and Berkshires.

BREEDING AND
QUALITY RIGHT.
Write or call for prices.
3 nice young bulls
for sale now.

R. L. LANG, Spruce Bank Farm, OAK LAKE, MAN.

**THORNDALE STOCK FARM,
MANITOU.**

JOHN S. ROBSON, PROP.
SHORTHORNS
Females of all ages FOR SALE.
Write for particulars. m

LAKE VIEW RANCH

Herefords and Galloways

Young bulls for sale. For prices write
J. P. D. Van Veen, FILE HILLS P.O., N.-W. T.

JERSEY BULLS

2 high-class Jersey Bulls for sale.
Also farm lands. 4-3-m
H. R. KEYES, Midway, Man.

THREE BULLS
Fit for service, the best I ever offered, for sale. Also
some fine two-year-old and year-old heifers.
GEORGE RANKIN, Hamiota, Man.

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Tickets**

If you are going to the Old Country, or sending
for your friends, apply to our nearest railway or ticket
agent, who can supply outward and prepaid tickets
at lowest rates.
Steamers leave Portland, Maine, every Saturday;
St. John, every Wednesday; New York, every Wed-
nesday and Saturday.

W. P. F. CUMMINGS,
General Agent, C. P. R. Offices,
WINNIPEG.

LEICESTERS!

Young rams and ewes for sale. Write for prices.
A. D. GAMLEY,
Box 193, BRANDON, MANITOBA.

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MAPLE GROVE FARM.

High-class Shropshires, Rams and Ewe
Lambs for Sale.
My sheep are stock bred by John Campbell and
Hanner & Sons, the noted Ontario breeders. Won
all first prizes with my Shrops at Winnipeg this year.
D. E. CORBETT, SWAN LAKE, MAN.

CONTAGIOUS ABORTION

can positively be cured or prevented by
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West's Fluid

which is a tar product, and is also a cheap,
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Circular (specially prepared by a V.S.) on application.
Mfrs.—The West Chemical Co., Toronto.

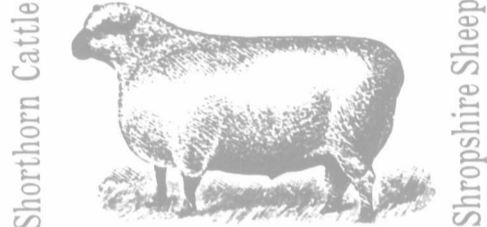
AGENT FOR MANITOBA—
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Roxey Stock Farm,

BRANDON, MAN.
J. A. S. MACMILLAN,
IMPORTER AND BREEDER OF PURE-BRED

Clydesdales, Shires, Hackneys.

STALLIONS AND MARES.



INSPECTION INVITED.

CORRESPONDENCE SOLICITED. Prices Right.
TERMS EASY.
FULL PARTICULARS ON APPLICATION.
APPLY P. O. BOX 403. m

**THE
Gold Standard Herd**



Are home from the exhibitions, where they won 27
prizes, including 17 firsts, against the strongest aggre-
gation of home and Ontario bred stock that ever
appeared in a Winnipeg showing, including first-
prize winners at Toronto in 1899. I now offer for
sale the first-prize sow under 12 months at Winni-
peg, Brandon and Neepawa; the litter of first-prize
sow; also three beautiful litters, ready to ship, of
three prizewinning sows—Rosamond, Naomis and
Jubilee Bett. Address:
J. A. MCGILL, Neepawa, Man.

Hensall Farm Berkshires

Good of all ages
Pigs FOR SALE by
Elder Bros.,
Hensall Farm, Virden, Man.

Yorkshires

15 spring boars and 20 sows for sale;
also two litters just farrowed, from
the sweepstakes sow and first-prize
sow under 2 years at Winnipeg and
Brandon.

WAWANESA, MAN. KING BROTHERS.

DR. BARNARDO'S HOME.

The managers of these institutions invite applica-
tions from farmers and others for boys and youths,
who are being sent out periodically, after careful
training in English homes. The older boys remain
for a period of one year at the Farm Home at Rus-
sel, during which time they receive practical instruc-
tion in general farm work before being placed in situ-
ations. Boys from eleven to thirteen are placed from
the distributing home in Winnipeg. Applications for
younger boys should be addressed to the Resident
Superintendent, 113 Pacific Avenue, Winnipeg, or P.
O. Box 204, and for older boys possessing experience
farm work, to Manager Dr. Barnardo's Farm
Home, Russell, Man.

PLEASE MENTION FARMER'S ADVOCATE.

The DeLaval Cream Separators

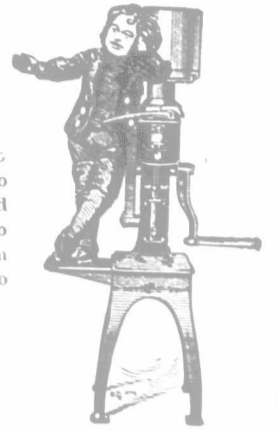
STARBUCK P. O., Man., Oct. 29th, 1900.

THE CANADIAN DAIRY SUPPLY CO.,
Winnipeg, Man.:

GENTLEMEN,—When our agent, Mr. Alex. Hay, first proposed to me to
buy one of your Alpha Baby Separators, I did not think it would pay to
invest; but after ten days' trial, however, I convinced myself that I could
not afford to be without one. I have had it about a year, and I am glad to
say it has proved to be the best investment I ever made. It will skim warm
or cold milk equally well; it is easy to clean, and, in fact, in my opinion, no
farmer milking cows can afford to be without an Alpha Baby Separator.

Yours truly,

J. S. CAWSTON.



For circulars, prices, etc., write or call on

The Canadian Dairy Supply Co.,

230 KING ST., WINNIPEG, MAN.

Maw's Poultry Farm, Winnipeg.

BREEDS BEST STRAINS OF UTILITY BREEDS.

Thoroughly acclimatized and best adapted to our climate. Have for sale stock and eggs of Mammoth
Bronze Turkeys, Toulouse Geese, Imperial Deep-keel Pekin Ducks, English Rouen Ducks, White Wyandottes,
White Leghorns, Silver-Laced Wyandottes, Light Brahmas, Hero Strain Plymouth Rocks. Homing
Pigeons from best imported Belgian stock, same as used by the army for carrying messages from
beleaguered cities. Large illustrated catalogue, giving list of prizes and medals won at all leading ex-
hibitions, with prices, description and pedigree of stock mailed free on receipt of address. I am North-
west agent for the celebrated CYPHERS INCUBATOR AND BROODER. Mr. Cyphers is the
discoverer and patentee of the diffusive principle in artificial incubation, thus saving the lives of thou-
sands of chicks that die in the shell in ordinary incubators. It is asbestos-coated and perfectly fireproof.
Supplies and regulates its own moisture, and so simple a child can operate it with success. Write for
particulars.

**Manitoba Dairy
School**

THE SIXTH SESSION
WILL OPEN ON

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A FULL COURSE OF
INSTRUCTION IN

Home Dairying,
Butter and
Cheese Making,
and all work pertaining to the
Dairy Industry.

For information and application blanks, address

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IT'S A WINNER.

So is our
Ideal Flax note-
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120 sheets of paper
with 100 envelopes,
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**STAY AT
HOTEL LELAND**

The Leading Hotel of the West.

ALL MODERN CONVENIENCES. RATES, \$2 TO \$4 PER DAY.
BUS MEETS ALL TRAINS.

W. D. DOUGLAS, Prop., Winnipeg, Man.



Owned by
H. A. Chadwick,
St. James,
Man.

As I have decided to go into the breeding of
Plymouth Rocks exclusively, I will sell at reasonable
prices my entire stock of prizewinning Brahmas,
Langshans, Partridge Cochins and Bantams.
My birds are too well known as prizewinners to
require any further reference.
Fox Terriers and pedigree Collie pups for
sale.

H. A. CHADWICK,
St. James, Man.

Will exchange my birds above mentioned for first-
class Plymouth Rocks, but only for high-class birds,
as the birds I offer are all good ones.

FORT ROUGE POULTRY YARDS

HAS FOR SALE Golden Wyandottes, Indian Games,
Langshans, Pekin ducks, Belgian hares. Seven
varieties of pigeons. Also, White Wyandottes, Barred
Rocks.

FOR PRICE AND PARTICULARS WRITE—
S. LING & CO.,
WINNIPEG, MAN.

BLACK MINORCAS.

Young stock for sale—some beauties.
Satisfaction guaranteed.
A. M. ROBERTSON,
Box 22, CALEDONIA, ONT.

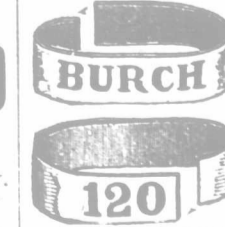
Norwood Bridge Poultry Yards.

Houdans, White Plymouth Rocks, White
Wyandottes, Bronze Turkeys, and
Pekin Ducks.

Stock from my prizewinning birds for sale. First-
class stock. Fair dealing. Reasonable prices.
JOSEPH WILDING, Proprietor,
Norwood Bridge, Winnipeg, Man.

METAL EAR LABELS

Used by all Live Stock
Record Associations.
Sheep size, per 100, . . . \$1.50
Hog size, per 100, . . . 1.50
Cattle size, per 100, . . . 2.00
Punch and Pliers for attach-
ing labels to ear, each \$1.00.
Name on one side and any
numbers wanted on reverse
side. F. S. BURCH & CO.
178 Michigan St., Chicago, Ill.



WANTED:
An experienced shepherd, single. Apply, with references, to W. H. Gibson, Beaconsfield, on Pointe Claire, P. Q.

GOSSIP.
THE DISPERSION SALE OF MR. JOHN ISAAC'S GREAT HERD OF SHORTHORNS.
The catalogue of Mr. Isaac's fine herd of Shorthorn cattle to be sold at Kinellar Lodge farm, Markham, Ont., on Dec. 18th, is out and ready for mailing on application, as per his advertisement. The catalogue embraces the pedigree sires of high-class cattle, 44 of which were imported directly from Scotland, besides several young calves born recently and not included in the list, but which also rank as imported animals, while the balance are nearly all bred from imported sires and dams. These cattle were selected for Mr. Isaac by his cousin, Mr. Campbell, late of Kinellar, and were intended for a foundation for a larger Canadian Kinellar Lodge herd than has been, the farm having been enlarged this year by the purchase of an adjoining 100 acres of land; but the critical state of Mr. Isaac's health has led to the determination to retire from business and seek a change of surroundings, and having no sons to take up the business, he has rented the farm for a term of years, and reluctantly relinquishes a herd of cattle which any man might well be proud to own. The dispersion of this herd at this time, while regrettable on account of the circumstances which render it necessary, affords an opportunity such as seldom, if ever, been offered to the breeders and farmers of Canada to secure superior foundation stock for herds or families, or for replenishing herds which have been depleted by sales, the result of the growing demand for Shorthorns in the last few years. Having been selected from a large number of herds, though mostly identified with well-known popular families of Aberdeenshire Shorthorns, there has been no close inbreeding, but high-class bulls strong in individual merit have contributed to producing the robust, fleshy animals which make up the sale list. The great majority of the 45 females are in calf to noted sires in Scotland, and several have very promising young calves at foot, while others are being bred to the excellent imported Kinellar-bred bull, *Nonpareil (5319)*, of the favorite family of that name, a son of Emancipator, sire of many good ones, including Golden Fame, sold at Mr. Flatt's Chicago sale in August for \$1,450.

So uniform in size and character are the 16 big-bodied, broad-backed cows, standing well on short legs, that it would seem invidious to make any distinctions as to which are likely to be favorites at the sale, but close up amongst the best will probably be rated the wealthy-fleshed red Wimple cow, *Glad Welcome 2nd*, by the Sittyton Secret sire, Sovereign (by the Hrawith Bud bull, Gondomar), and her dam, Mr. Duthie's Glad Welcome, by the Nonpareil bull, Norseman. She is of the most popular pattern, round-ribbed yet deep-bodied, with a thickly-fleshed back and handsome head and horns, just the kind a cow one would like to breed a bull from. The red Kinellar Rosebud cow, Golden Belle, by Mr. Bruce's Moonstone, of his magnificent Mayflower family, is another of the matrons combining size and quality in high degree, and withal is a deep milker, carrying a shapely udder and a milk mirror that would excite the envy of a dairyman. She is an outstanding instance of the dual-purpose cow, of which we would there were more. Another of the dual-purpose sort, and a grandly good one, is the roan *Jill 3rd*, by the Duthie-bred Spicebox, with Gravesend for grandsire, and descended from that fine old family so long a favorite in the herds of Captain Barclay and the Duke of Richmond. She is said to give milk enough to raise two calves well, and she looks it every inch. *Damsel 3rd*, a red 4-year-old daughter of the Collynie-bred Prince of Fashion, by Scottish Archer, sire of the Royal champion, Marengo, and of many other noted animals, is a capital representative of the excellent Dainty tribe that has done so well for a long time in the hands of Mr. Marr, of Cairnbrogie, and Mr. Wilson, of Pieriesmill. She is long, low and level, and looks like breeding well. *Lady Dorothy 3rd*, another red cow, in her 6-year-old form, sired by Redstart, a son of the great Star of Morning, whose name adds value to the pedigree of any Shorthorn in which it occurs, is of similar type as the last-named pair, while the *Lily* quartette, all reds and of uniform excellence, well represent that favorite tribe so long bred at Kinellar, and which has produced many prizewinning and high-selling cattle in this country. The Kiblean Beauty cow, *Elsie 2nd*, by the splendid Star of Morning, dam by Touchstone, sire of the champion Corner Stone, will be well worth looking after. *Rosebud 2nd*, a red 3-year-old, of the choice Kinellar tribe of that name, is a sweet young cow, a daughter of Clan Alpine, by Gondomar, and of the Princess Royal family, and has at her side a young bull calf of extraordinary promise, a son of the Lancaster bull, Prince Louis. This youngster has evidently all the elements of a champion in his composition, and will doubtless be a drawing card at the sale. Space will not admit of individual mention of all the cows in the list, and detailed reference to the strongest feature in the herd, the great group of 15 in-calf 2-year-old heifers, will have to stand over for our next issue. Suffice it now to say that we believe it is safe to state that never before has an equal number of such quality and character been offered at one sale in the Dominion. What a foundation they would make for a herd! "Big on short legs, only half expresses the description. For fine breed type and the best of Scotch pattern, for wealth of flesh and hair, depth and spring of ribs, straight lines and broad chests, their equal would indeed be hard to find. There is show-ward material, and lot of it, in this contingent, and the plums are in it. Send for the catalogue and study the pedigrees of the trio of Claretts, No. 12 and the twin sisters, then imagine something as good or better in the flesh than what you see on paper, and don't expect to be disappointed. Among the dozen yearling heifers will be found some which it will not be surprising to see selling for nearly if not quite as much money as anything in the list. Keep your eye on that Lavender heifer, No. 25 in catalogue, and on the winsome Waterress, No. 4, and be prepared to see something good for weak eyes. Look for further reference in next issue.

PLEASE MENTION FARMER'S ADVOCATE.

HORSEMEN! THE ONLY GENUINE IS

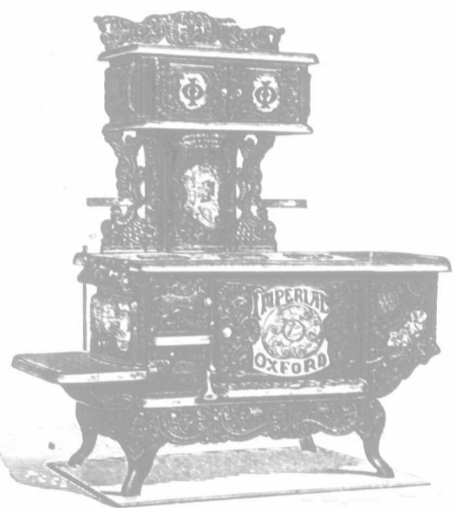
GOMBAULT'S CAUSTIC BALSAM.

None genuine without the signature of *The Lawrence-Williams Co.* Sole Importers & Proprietors for the U.S. & CANADA. CLEVELAND, O.
The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY or FIRING. Impossible to produce scar or Blemish. Every bottle is warranted to give satisfaction. Price \$1.50 per bottle. Sold by Druggists, or sent by Express, charges paid, with full directions for its use. Send for free descriptive circulars.
THE LAWRENCE-WILLIAMS CO., Toronto, Ont.

A Souvenir of the 20th Century.

The work on our 20th century Christmas number is now sufficiently advanced that we can assure our readers of a magnificent treat, both in wealth of literary and pictorial matter. Send a year's renewal for 1901 now and avoid the December rush. Do you desire the FARMER'S ADVOCATE FREE for 1901? You can secure it by sending us the names and P. O. addresses of two new subscribers and \$2.00. You may offer them the remainder of the copies of this year (1900) and the Christmas number in addition to all the copies of 1901.

OXFORD.



Here is the Secret :

You aspire to be correct in dress and have as much time to devote to personal appearance as your neighbor. This is no idle vanity. But how can you when you are compelled to spend so much time trying to make that old stove work. No trouble with the

Imperial Oxford.

Works well, is perfect in working, duplex grate. It has patented improvements, to save trouble and fuel, not found in any other range. If you have not seen it, call on your dealer.

The Imperial Oxford is a Good One.

Gurney Foundry Co.,

LOMBARD ST., WINNIPEG, MANITOBA.

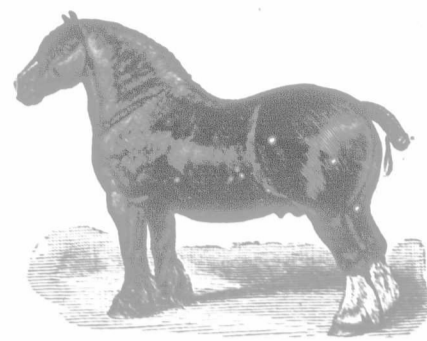
OUR PHOTOS

Are made to please you and your friends. A photo is of no use unless it does. When in Winnipeg, call at our studio, and let us prove to you that we make the best photos.

PARKIN'S STUDIO,
490 MAIN ST., WINNIPEG, MANITOBA.

WILD AND IMPROVED LANDS FOR SALE.
Several good farms at present for sale, or rent, in the celebrated Edmonton district. All improved. Terms reasonable. Apply for information to O. C. PEDERSON, Box 185, Strathcona, Alta.

CLYDESDALE STALLIONS FOR SALE.



Second consignment just landed, per SS. Marina, from Glasgow.

A High-class Lot, of Good Size and Quality, and of Most Fashionable Breeding.

Parties desirous of securing high-class horses will do well to see these or write us before purchasing.

Dalgety Bros., 463 King St., LONDON, ONT.

Send for Illustrated Price List.

Sawset.—The sawset shown here is without doubt one of the best sawsets made. These sets are usually sold at 60c. each, but on account to sell them while they last at 35c. each, or 50c., postpaid.

Eight-day Clock.—Fully guaranteed, strikes the hours and half-hours, only \$3.50.

Mouth Organs at 25c. and 50c., postpaid. We sell a beautiful celluloid one for 50c., postpaid.

Winter Mitts.—Fully lined, at 50c., 65c., and 75c., postpaid.

Horse Blankets.—Fully lined, at \$1.00, \$1.25 and \$1.50 each. We have a beautiful heavy blanket, which gives the best of satisfaction, for \$1.50 each.

Head Light Lance Tooth crosscut saw is one of the fastest crosscut saws made; is 4 gauges thinner on the back than the front, enabling it to do its work faster, quicker and easier than any crosscut saw made. This saw is fully guaranteed. Only 50c. per foot.

Crosscut Saw Handles, 25c. per pair.

Crosscut Saw Gauge.—This ought to be in the hands of every person owning crosscut saws. Will save its cost over and over again. Only 25c., or 35c., postpaid.

WILKINS & CO., 166 AND 168 KING ST. EAST, TORONTO.

FOR SALE.
CLYDESDALE stallions, mares and fillies, representing the best blood in Scotland—Prince of Wales, Darnly, Macgregor and Lord Lyon—including the great sweepstakes winner, The Marquis (1182), a grandson of Prince of Wales and Macgregor; also the first-prize 3-year-old at Ottawa this season.
THOS. GOOD, Richmond P. O., Ont. R. R. Station, Stittsville, C.P.R.

Rosedale Stock Farm.
CLYDE AND SHIRE HORSES. SCOTCH SHORTHORNS. LEICESTER SHEEP.
A choice lot of Leicester ewes and rams with superior quality and as good blood as is obtainable. My motto, "The best it none too good."
J. M. GARDHOUSE, Highfield P. O. Malton Sta., G.T.R. on Weston Sta., C.P.R.

HACKNEYS



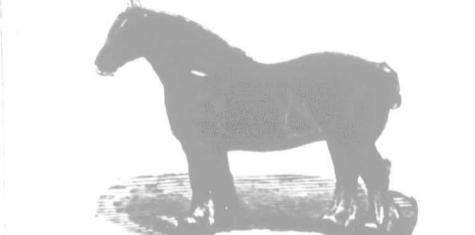
HAVE on hand, and for sale, two 3-year-old Hackney fillies (prize-winners), broken to harness and stunted to Royal Oak 75, C. H. S. R.; one Hackney stallion, and also one brood mare which should be in foal.
The above horses are offered at reduced prices in order to make room for others. Now is the time to buy cheap horses, before winter sets in.

HORACE N. CROSSLEY, "SANDY BAY FARM," ROSSEAU, DIST. OF PARRY SOUND.

HAWTHORN HERD OF DEEP-MILKING SHORTHORNS.
We are offering 5 young bulls for sale, of first-class quality, and A1 breeding.
Wm. Grainger & Son, - Londesboro, Ont.

THORNCLIFFE Stock Farm

The largest stud of Clydesdales in Canada, headed by the Champion Stallion of all ages,
"LYON MACGREGOR."



Stallions and Colts
From the best blood in Scotland and Canada. Avshire bulls and heifers from imported stock. Jersey heifers and bull calves, sired by the prize-winning bull, Distinction's Golden. Best milking strains, with good teats.
Terms reasonable.
A visit to Thorncliffe will well repay you.

ROBT. DAVIES, Thorncliffe Stock Farm, TORONTO.

Has No Competitor.

One Patent Medicine Which Has the Field to Itself.

A prominent physician was recently asked why it was there are so many "blood purifiers," "nerve tonics," and medicines for every ill except one of the most common and annoying diseases, viz. piles.

He replied, there are two principal reasons: First, physicians and people in general have thought for years that the only permanent cure for piles was a surgical operation, and that medicinal preparations were simply palliatives and not a cure for the trouble. Another reason is that piles, unlike many other diseases, is in no sense an imaginary trouble. A sufferer from piles is very much aware of the fact, and for this reason the few pile salves and ointments, etc., have been short-lived because the patient very soon discovered their worthlessness.

He continues: However, there is a new pile remedy which, judging from its popularity and extent of its sale, will soon take the place of all other treatments for piles. It has certainly made thousands of cures in this obstinate disease, and its merit, repeatedly tested, has made it famous among physicians and wherever introduced. The remedy is sold by druggists every where under name of Pyramid Pile Cure.

It is in convenient, suppository form, composed of harmless astrigent and healing oils, gives immediate relief in all forms of piles and a radical cure without resort to the knife, and without pain or interference with daily occupation.

One strong recommendation for the remedy is that it contains no cocaine nor opium, and is absolutely safe to use at any time.

One of the suppositories is applied at night, is absorbed, and the cure is natural and painless.

It permanently cures itching, bleeding or protruding piles, and is the only remedy, except a dangerous surgical operation, that will do so.

All druggists sell a complete treatment of the suppositories for 50 cents, and the Pyramid Drug Co., of Marshall, Mich., will mail free to any address a little book on cause and cure of piles, which may be of assistance in chronic cases.—Adv't.

GOSSIP.

MR. W. R. ELLIOT'S SALE OF SHORTHORNS AND OXFORD DOWNS.

The dispersion sale of the entire herd of Shorthorn cattle and flock of Oxford Down sheep, the property of Mr. W. R. Elliot, of Hespeler, Ont., to take place on Nov. 28th, as announced in our advertising columns, will afford farmers an opportunity to secure registered stock of excellent quality and breeding, as Mr. Elliot has been a careful breeder and a judicious feeder. His stock has been successful in winning many first prizes at the Guelph Central and surrounding county fairs, including the first herd prize at Guelph. A review of the catalogue of the 33 head of Shorthorns to be sold shows that the cattle are mostly young or in the prime of life, and that the pedigrees represent a number of excellent families, some of which rank high as good milkers as well as good feeders, and all having the benefit of the blood of a long list of richly-bred sires. All the females of suitable age are either suckling calves or safe in calf to the high-class 2 year-old imported Kinellar Claret bull, Masterpiece = 2870, now at the head of the herd and to be included in the sale, a red son of the Cruickshank Clipper bull, Clan Alpine, admitted to be one of the best sires in Scotland. Four strong, sappy yearling bulls of grand quality are in the sale, one of which is a son of the high-class bull, Robert the Bruce = 2873, bred from imported sire and dam, used for two seasons in the herd, and sold for a big price to go to Nova Scotia, where he won the sweepstakes at the Provincial Fair this year. He is a massive bull of grand quality, and is illustrated in the famous FARMER'S ADVOCATE picture, "Canada's Ideal." Three red and roan sons of Prince Lincoln, by Golden Robe, a son of the Cruickshank Clipper bull, Knight of St. John, a first-prize winner at Toronto Exhibition. Three strong, lusty bull calves, two reds and one roan, from 7 to 10 months old, sired by imported Masterpiece, are also in the sale, and all these young bulls are from richly-bred dams belonging to families of excellent repute. Of the 25 females, a half-dozen are members of the popular Scotch-bred English Lady tribe, descended from the imported cow of that name, bred by Mr. Marr, of Upper Mill, Aberdeenshire, and two of the young bulls in the sale are of the same favorite family. A number trace to imp. Daphne, by Harold, a cow of fine character, from which many grand cattle have descended. A few are descended from the great English show cow, Lady Isabel, a first-prize winner at Provincial and State fairs, and perhaps individually the best cow ever seen in a Canadian showing. A number of others trace to imported Beauty, whose descendants are numerous and generally of excellent feeding quality, as well as deep milkers, and all have the advantage of top crosses of good bulls, and richly-bred ones; four are daughters of the champion "Robert the Bruce." The cattle are in good, thrifty, healthy condition, and should attract a large company of buyers. The location is easy of access, being on the branch of the G. T. R. between Guelph and Harrisburg, and only a few miles from Guelph, and the date is a time which finds farmers not over busy. The flock of Oxford Downs are all registered and are said to be of good quality, and should readily find buyers, considering the active demand for sheep now prevailing. Parties interested will do well to apply for the catalogue and attend the sale.

SPRINGHURST SHORTHORNS.

The herd is largely of Cruickshank and other Scotch sorts, and is headed by the Liverghorn-bred bull, Knuckle-Duster (imported) (2276). Herd has furnished the Fat Stock Show champion three times in the last five years.

Choice young stock (both sexes) FOR SALE.

H. SMITH, - HAY, ONT.
Exeter Station on G. T. R., half a mile from farm.

IN WRITING

PLEASE MENTION FARMER'S ADVOCATE.

KENDALL'S...

SPAVIN CURE



The old reliable remedy for Spavins, Ringbones, Spittas, Curbs and all forms of Lameness. It cures without a blemish because it does not blister.
North Postage, Ont., Feb. 10, '98.
Dr. B. J. Kendall Co.
Dear Sirs—Will you please give me a remedy for heaves. I have a mare that is afflicted. I take pleasure in stating that I have cured a turb of four years' standing with your Kendall's Blisters, by using it only once and then applying your Spavin Cure. As long as I have horses, I will not be without Kendall's Spavin Cure and Kendall's Blisters in my stable.
Very truly yours,
ADOLPHUS GAUTHIER.
Price \$1.50 for \$5. As a liniment for family use it has no equal. Ask your druggist for Kendall's Spavin Cure, also "A Treatise on the Horse," the book free, or address
DR. B. J. KENDALL CO., ENOSBURG FALLS, VT.

NEW IMPORTATION

Just arrived. Personally selected from the best studs in England and Scotland.

CLYDESDALES

By the champion winners, Baron's Pride, McGregor, Flashwood, Prince Alexander, Prince of Carruchan, etc.

Shires, Suffolks, Percherons and Hackneys

By the leading sires of the day, all combining size, color, quality and action.

Fourteen first prizes and six second prizes won at the recent State Fairs of Illinois, Iowa, and Wisconsin, in the very hottest competition. Inspection cordially invited.

ALEX. GALBRAITH, Janesville, Wis.

W. D. FLATT

Hamilton, Ont., Can.,

IMPORTER AND BREEDER OF

Shorthorn Cattle.

My herd is one of the largest in America, both imported and Canadian-bred. A very choice importation of 27 head now in quarantine and due out Oct. 11. New catalogue of the herd ready for distribution Oct. 1. Address all communications to

James Smith, Mgr.,

MILLGROVE, ONT.

R. R. Station and Telegraph, Hamilton, on main line Grand Trunk R. R.

SPRING GROVE STOCK FARM

Shorthorn Cattle and Lincoln Sheep. Herd prize and sweepstake at Toronto Industrial Exhibition, 1897 and 1898. Herd headed by Topspan = 17847, champion at Winnipeg, Toronto, London and Ottawa, 1899. High-class Shorthorns of all ages for sale. Also prizewinning Lincolns. Apply



T. E. ROBSON, Ilderton, Ont.

BARRED PLYMOUTH ROCKS and GOLDEN WYANDOTTES.

For sale: The young birds of above varieties, hatched and raised in a sanitary manner, will sell very profitably. Apply to T. E. Robson, Ilderton, Ont. Wm. JAMES ROW, Avon, Ont.

PLEASE MENTION FARMER'S ADVOCATE.

GOSSIP.

SALE OF A GREAT JERSEY COW.

Mr. E. M. Jones, Brockville, Ont., writes:—Domestic cares occupy me too fully to leave time for writing, but I have just sold two cows that are a loss indeed to the whole Dominion. Such animals should never leave Canada, but Mr. Matthews, of Scranton, Pa., is the fortunate purchaser. One is Louise of H, five years old, golden fawn color, and enormous udder; and I consider her the greatest show cow in Canada. As a four-year-old, her yield was, in nine months and ten days, 7,833 pounds milk—on some days she gave 46 pounds a day. Also in nine months and ten days, although 900 lbs. of her milk was sold and used in house, from the remainder was actually churned 316 lbs. splendid butter, besides raising her calf. I have not had time to foot up the rest of her year, but as she was still milking 13 pounds a day when I got this far, you may guess the sort of cow she is. And the best of it is, that her whole year's feed, including \$7 for pasture, was only \$38.60. Truly, this cow means to her owner, "dairying for profit." I will send you synopsis of her whole year's work when I get time. As Louise is due to calve again the end of next June, what a show she will make!

With Louise went her full sister in blood, Bella of H, four years old, that, from trials-I have made of her, I expect will nearly, perhaps fully, equal Louise. I only bought her last spring, and she had received such bad care it was a disgrace, yet in worst heat of summer, on common feed of the herd, she was making over 12 pounds splendid butter a week. Both these cows are rich in the blood of Jersey Belle of Scituate, and, in my opinion, the three greatest Jersey cows ever known in America were Jersey Belle of Scituate, owned by Mr. Ellins; Ida Marigold, owned by Mr. Sweet; and Massena, owned by me. I do not know Ida's feed, but Jersey Belle and old Massena made more butter and of finer quality, and from less food, than any cows I ever heard of. And, strange to say, all three were broken color, and all three would have passed for sisters, so similar was their form and color.

HEREFORD SHOW AND SALE AT KANSAS CITY.

The Hereford breeders made a mighty showing of their cattle at the great Kansas City Show, Oct. 22nd to 26th, the entries in most sections of the class being very large, in some running from 30 to 50 animals. The awards throughout the class were made by a jury of three, two of whom served as judges and the third as referee, each member alternately serving as referee for a section. Judging from the criticism of onlookers, as expressed through the press, the decisions in many instances did not meet with popular approval. Following is the list of awards in the different sections, the judges being Messrs. W. S. Powell, Channing, Tex.; W. A. Morgan, Topeka, Kan.; and W. M. Atkinson, Roswell, New Mexico:
Bull, 3 years—1 Gudgell & Simpson, Independence, Mo.; Dandy Rex; 2 T. F. B. Sotham, Chillicothe, Mo.; Improver; 3 Clem Graves, Bunker Hill, Ind.; Dale. Two years—1 C. G. Comstock, Albany, Mo.; Gentry Lars; 2 J. Hooker, New London, Mo.; Mark Hanna; 3 F. A. Bayless, Des Moines, Iowa, Dale 3rd. One year—1 Thos. Clark, Beecher, Ill.; Perfection; 2 S. J. Gabbert, Platte, Mo.; Columbus Chief 19th; 3 E. C. Coker, Bethany, Mo.; Lomax. Calf—1 T. F. B. Sotham, Thickflesh; 2 Lancaster & Son, Liberty, Mo.; Anxious Lad; 3 W. S. Van Natta, Fowler, Ind., March On 12th.
Cow, 3 years—1 W. S. Van Natta, Columbine; 2 Clem Graves, Dolly 5th; 3 T. F. B. Sotham, Benison. Two years—1 Gudgell & Simpson, Blanche 13th; 2 O. Harris, Harris, Mo.; Betty 2nd; 3 Thos. Clark, Peerless 3th. Eighteen months—1 W. S. Van Natta, Miss March On; 2 T. F. B. Sotham, Golden Lassie; 3 Gudgell & Simpson, Modesty. One year—1 Gudgell & Simpson, Mischief Maker; 2 W. S. Van Natta, Lady Ellen; 3 Thos. Clark, Joqueline.
Heifer calf, six months and under a year—1 O. Harris, Lady Dewdrop 2nd; 2 Stewart & Hutcheon, Queenly; 3 Gudgell & Simpson, Honora 2nd; 4 T. F. B. Sotham, Nanette. Under six months—1 Van Natta & Sons, Nella March On; 2 and 3 Stewart & Hutcheon, Matilda and Tempter's Queen.
A new jury, composed of John Sparks, Reno, Nev.; W. S. Ikard, Henrietta, Texas, and Tom Smith, Crete, Ill., made the sweepstakes award as follows:
Senior sweepstakes bull, over 2 years old—1 Clem Graves, Dale, Junior sweepstakes under 2 years—1 Thomas Clark, Perfection, son of Dale, dam Milly May. Senior sweepstakes female, 2 years or over—1 Clem Graves, Dolly 5th. Intermediate sweepstakes for yearling heifers—1 Gudgell & Simpson, Mischief Maker, Junior sweepstakes heifer, one year 1 O. Harris, Lady Dewdrop 2nd.

For the Armour championship cup for best Hereford bull, any age, Messrs. Morgan and Atkinson being the judges, Tom Clark's yearling, Perfection, was crowned king.
The Sotham special, for best female any age, went to Gudgell & Simpson's yearling, Mischief Maker.

Graded Herds.—The awards for graded herds that is, for bull over 2 years, cow over 3 years, 2-year-old heifer, yearling heifer and heifer calf were: 1 Gudgell & Simpson, on Dandy Rex, Mischief Maker, Blanche 13th, Mischief Maker and Honora 2nd; 2 Clem Graves, on Dale, Dolly 5th, Lady Help, Candace and Rosamond; 3 T. F. B. Sotham, on Improver, Benison, Pure Gold, Golden Lassie, and Nanette. Young herd, under 2 years old—1 Gudgell & Simpson; 2 T. F. B. Sotham; 3 Van Natta & Sons.
The Sale of Herds.—At the combination auction sale at the close of the show, 185 Herefords of the 250 catalogued were sold at an average of \$329.45; 87 females averaged \$298.79, and 98 bulls, \$339.68. The highest price for a bull was \$510, for the yearling Columbus 17th, bred and offered by Barton Gabbert, Dearborn, Mo., sired by Columbus 3157, and sold to Frank Rockefeller, Belvidere, Kansas. Two other bulls and one cow sold for \$1,000 to \$1,000, and the highest price for a female was for the 2-year-old St. Justina, bred and owned by K. B. Armour, Kansas City, Mo., and sold for \$1,025 to G. B. Smith, Fayette, Mo.

Pure Scotch Shorthorns for Sale. Two bulls and fifteen months old, and three two-year old and two one-year-old heifers. All right. Good ones. \$7500 available station, C. P. R. S. J. PEARSON & SON, Meadowdale.

EPPS'S COCOA

GRATEFUL COMFORTING Distinguished everywhere for Delicacy of Flavour, Superior Quality, and Highly Nutritive Properties. Specially grateful and comforting to the nervous and dyspeptic. Sold only in 1-lb. tins labelled JAMES EPPS & CO., Ltd., Homoeopathic Chemists, London, England.

EPPS'S COCOA

SHORTHORNS FOR SALE, or will exchange my 4-year-old s'ock bull, Olmedo 24390, having 4 excellent Scotch top crosses on a Crimson Flower dam, for one equally well bred. Young bulls and heifers and Shropshires for sale. om GEO. RAIKES, BARRIE, ONT.

JAS. DORRANCE, SEAFORTH, ONTARIO.

BREEDER OF Shorthorn Cattle and Berkshire Pigs Young stock always for sale. om

R. & S. NICHOLSON

SYLVAN P. O., PARKHILL STATION. Scotch Shorthorns, imp. and home-bred. The Imp. Clipper bull, Chief of Stars, heads the herd. Nine bull calves for sale, 8 to 10 mos. old (extra good ones), sired by Royal Standard. Inspection invited.

SHORTHORN CATTLE AND LINCOLN SHEEP.

Imp. Prime Minister at head of herd. Seven young bulls for sale—good ones. Also a few females. Stud rans all imported from H. Dudding, Esq.; the same blood as the 1000-guinea ram.

J. T. GIBSON, DENFIELD, ONT.

SPRINGBANK FARM. Shorthorn Cattle, Oxford Sheep, and Bronze Turkeys. Young bulls for sale. om JAS. TOLTON, WALKERTON, ONT.

SCOTCH SHORTHORNS.

100 head to select from. Imp. Diamond Jubilee = 28861 = at the head of the herd. 25 grand young bulls, and cows and heifers of all ages, of the most approved breeding. om T. DOUGLAS & SONS, Strathroy Station and P. O. Farm 1 mile north of the town.

Shorthorns and Leicesters.

Herd Established 1855. A number of young bulls, cows and heifers for sale. Herd headed by imported Christopher 28859, and Duncan Stanley = 16364 =. Grand milking cows in herd. Also a number of Leicesters of both sexes, from imported foundation. om JAMES DOUGLAS, CALEDONIA, ONT.

Maple Lodge Stock Farm

ESTABLISHED 1854. SHORTHORNS—An excellent lot of young bulls, and a special value in young cows and heifers in calf to our imported Knuckle Duster. LEICESTERS—Imported and home bred—the best. om ALEX. W. SMITH, MAPLE LODGE P. O., ONT.

Bonnie Burn Stock Farm

Forty rods north of Stouffville station, Ont., offers 5 Shorthorn bulls and some heifers, 30 Shropshire rams and ewes from Imp. and Canadian bred sires, at reduced prices. om D. H. RUSSELL, Stouffville, Ont.

Shorthorns FOR SALE:

12 young bulls. *10 yearling heifers and heifer calves. 16 2-year-old heifers and young cows, several well advanced in calf to Precious Stone (imp.). Prices moderate. Write for particulars, om G. A. BRODIE, Stouffville Station, Bethesda, Ont.

JOHN DRYDEN, BROOKLIN, ONTARIO.

OFFERS SIX YOUNG SHORTHORN BULLS, ready for service, at reasonable prices. Strong, active males. om GOOD QUALITY AND CHOICE BREEDING

The Breed THAT FIRST MADE Hillhurst Famous
 THE HIGHEST-PRICED
SHORTHORN FEMALES

Ever sold in Great Britain and the sire and dam of the 4,500-guinea Duke of Connaught were bred at Hillhurst. To-day "Joy of Morning," the highest-priced Scotch-bred bull ever imported to Canada, and "Scottish Hero," brother in blood to the Royal champion, "Marengo," are in service in a herd of 65 Scotch and Scotch-topped Shorthorns in a hilly limestone district, where cool summers, green pastures and winter food more closely approach Aberdeenshire conditions than any other part of the continent. **HAMPSHIRE DOWN and SHROPSHIRE SHEEP.**

M. H. COCHRANE,
 HILLHURST STATION, COMPTON CO., P. Q.

W. G. Pettit & Son, FREEMAN, ONT.
 IMPORTERS AND BREEDERS OF
 Scotch Shorthorns
 and Shropshire Sheep

OFFER FOR SALE:
 20 Imp. bulls.
 40 Imp. cows and heifers.
 6 Home-bred bulls.
 30 Choice Home-bred heifers—1, 2 and 3 years old.
 25 Ewe lambs.
 Our importation of this year arrived home August 17th, and is one of the largest made this year. Selected by ourselves from the leading herds in Scotland.
 Our new Catalogue, with full information, is now ready to mail.
 Burlington Junction Station, Telegraph and Telephone Offices, within half a mile of farm.

THE BIG FOUR.
 Great Premium Picture Offer

For obtaining new subscribers to the FARMER'S ADVOCATE at \$1.00 per year.

- "Canada's Ideal"—Admitted by judges, breeders and artists to be the most magnificent engraving of high-class modern Shorthorns ever issued in any country. 24 x 36 inches. Twelve animals.
- "Canada's Pride"—Nine celebrated draft horses.
- "Canada's Glory"—Eleven celebrated light horses.
- "Canada's Columbian Victors"—13 celebrated Ayrshire cattle.

Your choice of any one of the above for ONE new subscriber, or all four beautiful pictures for only three new subscribers.

Our Self-Binder, HANDY, DURABLE and ATTRACTIVE.

Made to contain the 24 issues of the year. We will forward this Binder, postpaid, to anyone sending us the names of two NEW subscribers and \$2.00.

Bagster's NEW COMPREHENSIVE Teacher's Bible,

Containing the Old and New Testaments, according to the authorized version, together with new and revised helps to Bible study—a new Concordance and an indexed Bible Atlas, with SIXTEEN FULL-PAGE ILLUSTRATIONS, PRINTED IN GOLD AND COLOR.

HOW TO OBTAIN IT—

Would retail at from \$3 to \$4. We will send (carefully packed, post prepaid) this Bible to anyone sending us the names of two NEW SUBSCRIBERS to the FARMER'S ADVOCATE at \$1.00 each.

The BALANCE of this year's issues given FREE to all NEW SUBSCRIBERS for 1901.

Write for a sample copy of the Farmer's Advocate, and begin to work for these premiums right away. In every case cash must accompany the new names.

ADDRESS

The William Weld Co., Ltd., Winnipeg.

DISPERSION BY AUCTION
 OF A HIGH-CLASS HERD OF
SCOTCH SHORTHORNS
 AT MARKHAM, ONTARIO,
TUESDAY, DEC. 18TH,

Being the entire Kinellar Lodge herd of MR. JOHN ISAAC, who is retiring from farming, and will sell without reserve.

This offering of 53 head includes:

- 16 Cows
- 15 2-year-old heifers
- 11 Yearling heifers
- 6 Imported bulls
- 2 Home-bred bulls
- 3 Heifer calves.

FORTY-FOUR are imported animals, selected from first-class Scotch herds, and strong in breeding and individual merit, and are representatives of the Ury, Claret, Golden Drop, Lavender, Wimple, Rosebud, Broadhooks, Rosemary, Mina, Jilt, and Lady Dorothy tribes.

The farm is 1 1/2 miles from Markham Station, G. T. R.; 2 1/2 miles from Locust Hill, C. P. R., and 20 miles from Toronto.

Catalogues will be mailed on application to—

JOHN ISAAC,
 MARKHAM, ONT.

AUCTIONEERS:

COL. CAREY M. JONES, JOHN SMITH, M. L. A., CAPT. T. E. ROBSON, M. L. A.,
 Davenport, Iowa. Brampton, Ont. Ilderton, Ont.

IMPORTANT AUCTION SALE OF
Shorthorn Cattle and Oxford Down Sheep,

the property of Wm. K. Elliott, 1 1/2 miles north of Hespeler and 6 1/2 miles south of Guelph, on
WEDNESDAY, NOV. 28TH, 1900,

at 1 p. m.: 33 head of high-class registered Shorthorns—25 females and 8 young bulls; 22 breeding ewes, 16 ewe lambs, and 14 ram lambs—all registered. Positively no reserve. Catalogues on application. Terms of sale: 10 months' credit on approved notes, or 5 per cent. per annum discount for cash. Trains will be met at Hespeler on day of sale.

WM. R. ELLIOTT, Hespeler. THOS. INGRAM, Auctioneer, Guelph.

H. CARGILL & SON,

CARGILL, ONTARIO, CANADA.

WE have the largest herd of Cruickshank and Scotch-bred imported cattle in Canada. Herd headed by the Duthie-bred Golden Drop bull, imp. "Golden Drop Victor," assisted by the Marr-bred Princess Royal bull, imp. "Prince Bosquet." The herd was augmented in August last by a fresh importation of fifty-two head, personally selected by Sylvester Campbell, of Kinellar, an expert judge both as to individuality and pedigree. The cattle in this lot will compare very favorably with any lot yet imported. All females of suitable age are bred to the very best bulls obtainable. Correspondence or personal inspection invited. Catalogue and service list upon application.

Cargill Station is on the Farm, Half a Mile from Barns, and 70 Miles North-west of Guelph. See Catalogue for Map.



"Look at This."

SCOTCH SHORTHORN BULLS AND HEIFERS

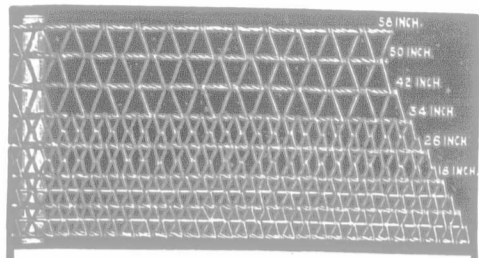
HERD ESTABLISHED IN 1872.

Such sires as imported Royal George and imported Warfare have put us where we are. Imported Blue Ribbon now heads herd.

A. & D. BROWN,
 ELGIN COUNTY, IONA, ONTARIO.

The McLaughlin Carriage Works—A little less than a year ago the extensive factory and warerooms of the McLaughlin Carriage Company, of Oshawa, Ont., were destroyed by fire, and for a few hours the people of that thriving town felt that they had suffered an irreparable loss; but a business of 30 years' standing, with the excellent reputation the Company had made for itself on the sound basis of the quality and up-to-date character of their carriages, was not to be allowed to decline even under such a serious setback as the destruction of its entire plant, but with indomitable courage rebuilding was at once determined on, and in less than a year a complete set of new buildings, with new and improved machinery, has been installed, and the Company announce in our advertising columns their facilities for turning out even a better class of work than ever before. Such enterprise is worthy of all commendation, and we wish them all success in the work of building up the reputation of Canada as a manufacturing country.

I have received instructions from Geo. Claxton to sell the following farms:
 One section, all fenced, as follows: W. 1, 30, 15, 12; frame buildings and painted; stable, 10x80; stable, 16x30; granary, 20x32; machine shed, 16x30; hog house, 16x50; shed frame to hold 100 head cattle. Frame house, stone cellar, full-size house, 18x31; kitchen, with upstairs, 16x18. This house cost \$1,800. The above buildings cost \$4,000.
 The E. 1, 19, 15, 12; 300 acres cultivated on section, and more to break; price, only \$9,000. 4 miles from Keyes.
 Also N.-E. 1, 15, 15, 12; good rich land; 80 acres broke; fenced; and only \$1,200.
 Also 1 section, north of Thomas; uncultivated; good land; N. 4, 19, 18, 12. This is situated in one of the best mixed farming districts in Manitoba. Easy terms and fair treatment to good farmer. It is a bargain. Apply to or call on
H. R. KEYES, Keyes, Man.



Ellwood Steel Wire Fences
Six styles—18 to 58 inches—best steel wires, heavily galvanized. Expansion and contraction provided for. Every rod guaranteed. Sold by local agents. If no agent in your town write to the makers.
American Steel & Wire Co., Chicago or New York.



90 HEAD
High-quality, Early-maturing
Herefords
Prizewinners.
Young bulls, cows, heifers.
The blood of "Corrector," "Eureka," "Ancient Briton," and "Rupert," on an "Anxiety" foundation. Send for illustrated catalogue.
H. D. SMITH, COMPTON, QUE.

HEREFORDS FOR SALE.
THE HERD of upwards of 90 head of registered animals; contains the blood of the best English herds, with imported True Briton and Likely Lead at the head. Stock of both sexes and all ages for sale. Correspondence or a personal visit invited.
A. S. HUNTER,
DURHAM, ONT.

Maple Glen Stock Farm.
The home of officially tested, Advanced Registry, dairy test and showing-win: A grandson of Sylvia a HOLSTEIN. A grandson of Sylvia a HOLSTEIN. A grandson of Sylvia a HOLSTEIN. Stock of both sexes and all ages for sale. Price is in keeping with breeding and performance.
C. J. GILROY & SON,
Brockville, on C.P.R. or G.T.R. Glen Buell, Ont.

WE WANT TO SELL A FEW
Holstein Heifers, coming 2 years old
THEY are of the richest and largest producing strains, fine individuals, and bred to as good bulls as there are living. We have a few bull calves and yearling bulls also for sale.
HENRY STEVENS & SONS,
LACONA, OSWEGO CO., N. Y.

Maple Hill Holstein-Friesians
SPECIAL OFFERING.
Bull calf 8 months old, sired by DeKol 2nd's Paul DeKol Duke. Bull calf one week old, sired by Daisy Teake's King. Also several fine females, all ages.
G. W. CLEMONS,
HARRISBURG STN. -OM ST. GEORGE P. O., ONT.

BROOKBANK
Is headquarters for Holstein bulls. They are going fast; be quick if you want one. In writing, state age, etc., preferred.
GEO. RICE,
Currie's Crossing, Ont.

FOR SALE
6 YEARLING JERSEY BULLS.
sired by Brampton's Monarch (imp.), and from tested cows; also registered and high-grade springer.
B. H. BULL & SON, BRAMPTON, ONT.

GLEN ROUGE JERSEYS.
WILLIAM ROLPH, Markham, Ont., offers twelve Jersey Bulls and Heifers (pure St. Lamberts), out of tested cows. Grand individuals. Prices right.

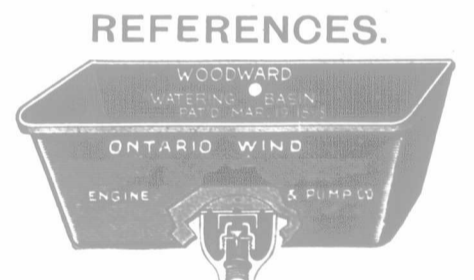
Butter Jerseys
FOR SALE:
A granddaughter of Louise of II, the great cow whose yield and cost of feed is reported in this issue, 8 months old; a son of Bella of II, full sister in blood to Louise, 7 months old; a great granddaughter of the famous cow, Massena (900 lbs. butter in one year), 19 months old, and in calf.
MRS. E. M. JONES,
Box 324, BROCKVILLE, ONT.
IN WRITING
PLEASE MENTION FARMER'S ADVOCATE.

GOSSIP.
OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS RECEIVED IN SEPTEMBER AND OCTOBER, 1900.

This class of records are made uniformly, under supervision of State Experiment Stations, at the homes of the owners of the cows. They are for seven consecutive days, and the fat is determined by the Babcock test. The equivalents of butter are calculated by the Superintendent of Advanced Registry from reports sent him from these stations. During September one report and during October nine reports were received. Summarized, they are as follows: Three full-age cows, average 6 years 11 months 4 days, 36 days after calving—milk 487 lbs., butter-fat 17.514 lbs., equivalent butter 80 per cent. fat 21 lbs. 14.3 ozs., equivalent 85.7 per cent. fat 20 lbs. 6.9 ozs. Two 4-year-olds, average 4 years 3 months 19 days, 43 days after calving—milk 447.5 lbs., butter-fat 13.170 lbs., equivalent butter 80 per cent. fat 16 lbs. 9.4 ozs., equivalent 85.7 per cent. fat 15 lbs. 7.7 ozs. Five classed as 2-year-olds, average 2 years 25 days, 15 days after calving—milk 274.7 lbs., butter-fat 8.397 lbs., equivalent butter 80 per cent. fat 10 lbs. 7.9 ozs., equivalent 85.7 per cent. fat 9 lbs. 12.7 ozs.

The best records by ages were as follows:
Susie DeKol 33688, age 7 yrs. 8 mos. 27 days, 25 days after calving—milk, 499.9 lbs.; butter-fat, 19.216 lbs.; butter, 80 per cent. fat, 24 lbs. 0.3 ozs.; butter, 85.7 per cent. fat, 22 lbs. 6.7 ozs.
Jarie Pauline DeKol 38928, age 5 yrs. 2 mos. 10 days, 42 days after calving—milk, 432.4 lbs.; butter-fat, 16.630 lbs.; butter, 80 per cent. fat, 20 lbs. 12.6 ozs.; butter, 85.7 per cent. fat, 19 lbs. 6.4 ozs.
Dirkje Von Hollingen 3rd 35256, age 7 yrs. 11 mos. 3 days, 41 days after calving—milk, 528.6 lbs.; butter-fat, 16.696 lbs.; butter, 80 per cent. fat, 20 lbs. 13.9 ozs.; butter, 85.7 per cent. fat, 19 lbs. 7.7 ozs.
Jetske Artis DeKol 46572, age 2 yrs. 4 mos. 21 days, 16 days after calving—milk, 348.6 lbs.; butter-fat, 9.891 lbs.; butter, 80 per cent. fat, 12 lbs. 5.8 ozs.; butter, 85.7 per cent. fat, 11 lbs. 8.6 ozs.
Aaggie Ideal DeKol 46571, age 2 yrs. 5 mos., 12 days after calving—milk, 306.5 lbs.; butter-fat, 8.676 lbs.; butter, 80 per cent. fat, 10 lbs. 13.5 ozs.; butter, 85.7 per cent. fat, 10 lbs. 2 ozs.
Kate Spray 2nd 49226, age 1 yr. 10 mos., 10 days after calving—milk, 209 lbs.; butter-fat, 7.768 lbs.; butter, 80 per cent. fat, 9 lbs. 11.4 ozs.; butter, 85.7 per cent. fat, 9 lbs. 1 oz.
Piebe Pauline DeKol 50431, age 1 yr. 7 mos. 29 days, 17 days after calving—milk, 241.5 lbs.; butter-fat, 7.681 lbs.; butter, 80 per cent. fat, 9 lbs. 9.6 ozs.; butter, 85.7 per cent. fat, 8 lbs. 15.4 ozs.
S. HOXIE,
Supt. of Advanced Registry,
Yorkville, N. Y., November 1, 1900.

Water Basins



Point 6.—Some of our patrons: Guelph Agricultural College; W. E. H. Massey, Esq., Dentonia Farm; H. Cargill, Esq., Cargill; T. Eaton & Co., Toronto, and up-to-date farmers all over Ontario.
Point 7. (See next issue.)
Ontario Wind Engine & Pump Co.
LIMITED.
TORONTO.

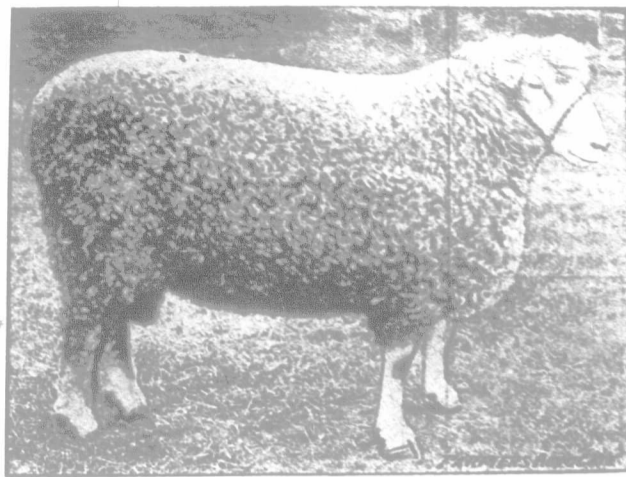
Maple Cliff Dairy and Stock Farm.
FOR SALE:
Ayrshires—6 yearling bulls, females any age.
Tamworths—40 boars and sows of different ages.
Berkshires—3 boars, a number of sows.
R. REID & CO., Hintonburg.
Farm 1 mile from Ottawa. Electric cars to farm. -om

Ayrshire Bulls: Write to **J. YUILL & SONS,** Carleton Place, for special prices on Ayrshire bulls from 14 years to 6 months. Four over 15 months, fit for service, from special milking stock. Sired by prize bull, Jock of Burnside—1684—, also females of all ages. Shropshire sheep of all ages; a number of fine ram lambs. Berkshire pigs of either sex, of the best bacon type. B. P. Rocks. -om

SHOW AYRSHIRES FOR SALE.
As we are not going to show any cattle at the fairs this year, we will sell the imported prizewinning bull, Napoleon of Auchenbrain, champion and head of first prize herd at Toronto, 1898. Also first-class 2-year-old bull and three choice bull calves of last fall. These are all fit for the showing, as we kept them for that purpose. For prices and particulars come and see, or write. **James Boden, Mgr., St. Anne de Bellevue, Quebec.**
Farm close to St. Anne Station, G.T.R. & C.P.R., 20 miles west of Montreal. -om

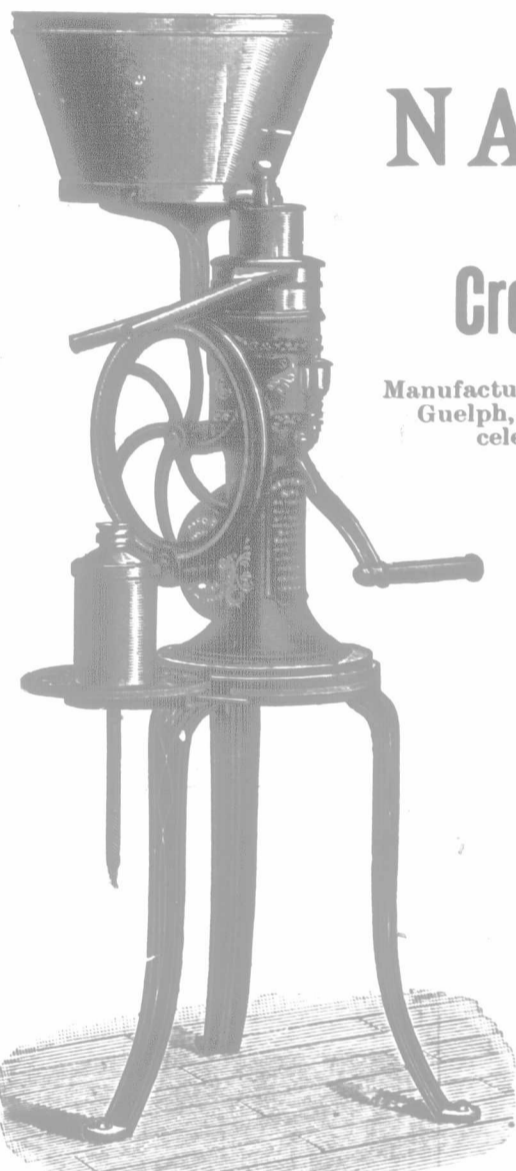
FAMOUS ALL OVER THE WORLD.
ALFRED MANSELL & CO.,
LIVESTOCK AGENTS AND EXPORTERS,
SHREWSBURY.
BRITISH STOCK selected and shipped to all parts of the world. Write for prices to **ALFRED MANSELL & CO.,** Shrewsbury, England, or to our American representative, Robert Miller, Stouffville, Ont., Canada.

..Fairfield Flock of Lincoln Sheep..



Write us for prices, or come and see.
J. H. & E. PATRICK, ILBERTON, ONT.

THE largest flock of imported Lincolns and the largest number of Royal first-prize winners of the breed in America. Representatives of this flock won the first flock prize at Toronto last year and this, and the championship at London both years. Over 60 imported sheep now in flock, and over 100 field rams and ewes, purchased in England, to follow soon. A large number of yearling rams and ewes, ram lambs and ewe lambs for sale.



THE NATIONAL FARM Cream Separator

Manufactured by the Raymond Mfg. Co. of Guelph, Limited, manufacturers of the celebrated Raymond Sewing Machines.

THE National is an up-to-date machine, leading all others in separating cream by centrifugal force. It is the farmers' choice, because it runs easy, skims fast and clean, and makes a perfect cream, containing any per cent. of butter-fat desired. It is also easier to clean than any other. The National is built of the very best material suitable for the construction of a high-speed machine, and with proper care should last a lifetime. The bearings are interchangeable and easily adjusted. Every machine is guaranteed to do good work, and a trial of the "National" is solicited before purchasing any other. The already large sale of the "National," and the growing demand for it, shows how much the Canadian farmers appreciate a Canadian-made machine that does its work so easily and well, and at the same time returns such a large profit on the small investment. Ask for the "National"; try it and buy it.

THE CREAMERY SUPPLY CO.,
GUELPH, ONT.,
General agents for Ontario.
W. G. GLENN,
469 ONTARIO ST.,
LONDON, ONT.,
Agent for the Counties of Middlesex and West. -om

The Raymond Mfg. Co'y of Guelph, Ltd.
GUELPH, ONT.

The Razor Steel, Secret Temper, Cross-cut Saw.



WE take pleasure in offering to the public a saw manufactured of the finest quality of steel, and a temper which toughens and refines the steel, gives a keener cutting edge and holds it longer than by any process known. A saw to cut fast "must hold a keen cutting edge."
This secret process of temper is known and used only by ourselves.
These Saws are elliptic ground thin back, requiring less set than any Saws now made, perfect taper from tooth to back.
Now, we ask you, when you go to buy a Saw, to ask for the Maple Leaf Razor Steel, Secret Temper Saw; and if you are told that some other Saw is as good, ask your merchant to let you take them both home, and try them, and keep the one you like best.
Silver steel is no longer a guarantee of quality, as some of the poorest steel made is now branded silver brand.
It does not pay to buy a saw for one dollar less, and lose 25 cents per day in labor. Your saw must hold a keen edge to do a large day's work.
Thousands of these Saws are shipped to the United States and sold at a higher price than the best American Saws.
MANUFACTURED ONLY BY
SHURLY & DIETRICH,
Galt, Ontario.

PLEASE MENTION FARMER'S ADVOCATE.

W. W. Chapman,

Secretary of the National Sheep Breeders' Association,
Secretary of the Kent or Romney Marsh Sheep Breeders' Association,
and late Secretary of the Southdown Sheep Society.

Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered.

Address: FITZALAN HOUSE, ARUNDEL ST., STRAND, LONDON W. W.
Cables—Sheepcote, London.

LITTLE'S PATENT FLUID SHEEP DIP AND CATTLE WASH

THE ORIGINAL Non-Poisonous Fluid Dip

Still the favorite dip, as proved by the testimony of our Minister of Agriculture and other large breeders.

For sheep. Kills ticks, maggots; cures scab; heals old sores, wounds, etc., and greatly increases and improves growth of wool.

Cattle, horses, pigs, etc. Cleanses the skin from all insects, and makes the coat beautifully soft and glossy.

Prevents the attack of Warble Fly.

Heals saddle galls, sore shoulders, ulcers, etc. Keeps animals free from infection.

No danger, safe, cheap, and effective

Beware of imitations.

Sold in large tins at 75 cents. Sufficient in each to make from 25 to 40 gallons of wash, according to strength required. Special terms to breeders, ranchmen, and others requiring large quantities.

SOLD BY ALL DRUGGISTS. SEND FOR PAMPHLET.

Robert Wightman, Druggist, Owen Sound, Ont.
Sole agent for the Dominion.

Present Offering:

Dorset lambs (either sex).
Shropshire lambs (either sex).
Chester White pigs (June and Sept. litters) of the bacon type.

For particulars, write to
R. H. HARDING, THORNDALE, ONT.

Oxford Down Sheep.

10 yearling rams, 20 ram lambs, for sale.
om **LANCELOT TASKER, Harlock, Ont.**

Fairview Shropshires.

A few good rams still on hand.
A splendid lot of ewes

(imported and home-bred), bred to my best stock rams, are now offered at good values. They are the producers of winners.

om **JOHN CAMPBELL, Woodville, Ont., Can.**

Shropshires FOR Sale

Rams and ewes of good breeding, fine lustrous fellows. Prices reasonable.

om **ABRAM RUDELL, HESPELER, ONT.**

Shropshire Rams and Ewes

Newly imported from the greatest English breeders. Home-bred rams and ewes of best quality. Scotch Shorthorns and Clydesdale horses for sale at moderate prices, and in large numbers, by

om **ROBERT MILLER, STOUFFVILLE, ONT.**

SNELGROVE BERKSHIRES

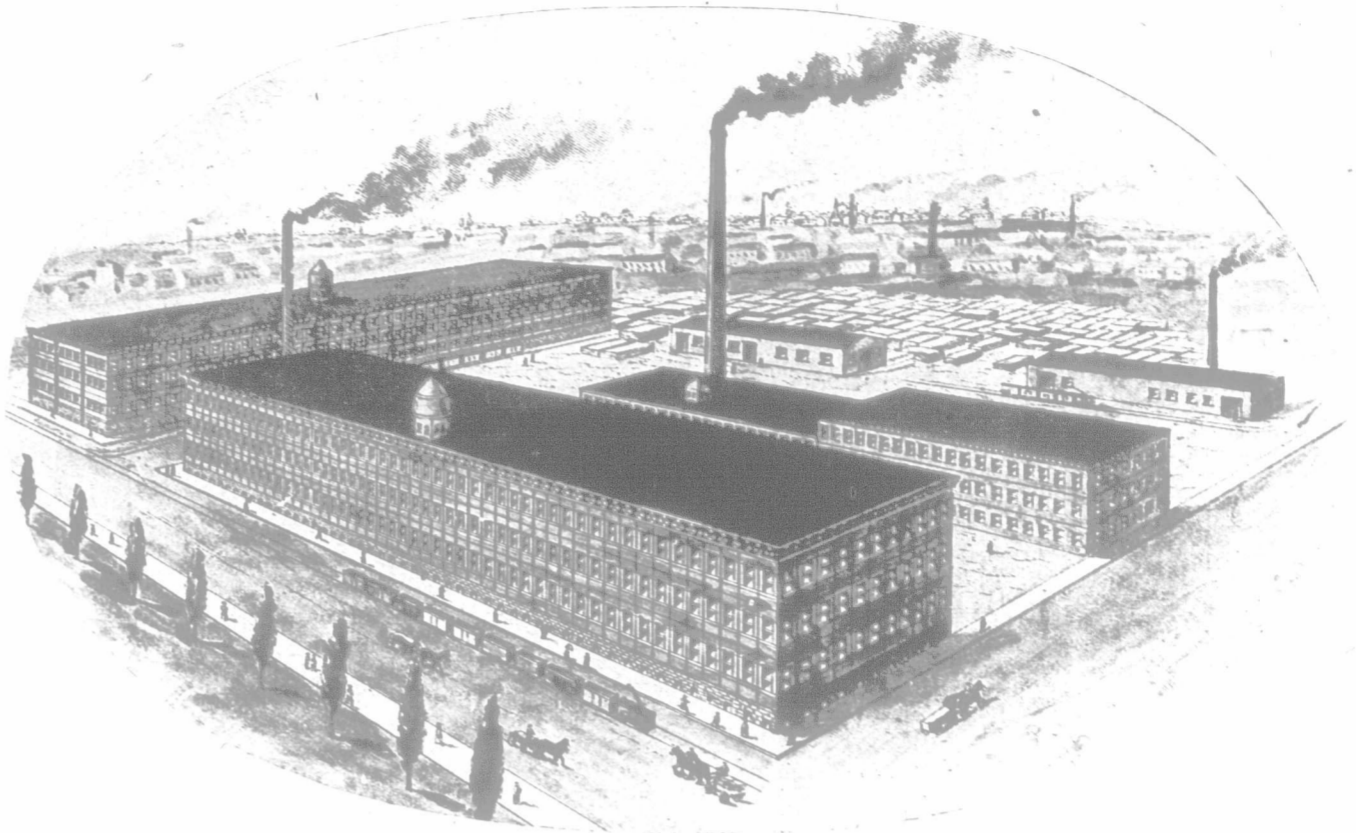
We have for sale some promising young boars and sows of different ages. Boars fit for service, sows large enough to breed. Young pigs from 4 to 8 weeks old. These pigs are got by the prize-winning boars, Colonel Grant 3550, Count Master 2712 and Countess 2501. Our herd is bred from the best strains of Large English Berkshires. Write for prices.

om **SNELL & LYONS, SNELGROVE, ONT.**

BERKSHIRES FOR SALE

(imp.), Entire, and sows of all ages. Teasdale and Scotch Shorthorn and Royal Lad 361. Write for prices.

om **S. DYMONT, BARNES, ONT.**



The new establishment of the McLaughlin Carriage Co.

OSHAWA, ONT.

From the Toronto Globe:

WHEN on the morning of December 7, 1899, the extensive factory and warehouses of the McLaughlin Carriage Company, of Oshawa, were completely destroyed by fire, the citizens of that town might well have been excused for believing they had suffered a loss that was almost irreparable. For over thirty years this enterprising company had been part and parcel of Oshawa, bound up in its prosperity, giving employment to hundreds of hands, paying out hundreds of thousands of dollars in wages, and ever for most in everything that tended to the advancement and welfare of Oshawa. The morning of December 7 last saw the splendid establishment of the McLaughlin Company in ashes, nothing remaining of the buildings, the costly plant and the expensive and varied stock of vehicles of all descriptions; a few piles of lumber only, that the flames had passed by as too insignificant to touch, marking the site where a few hours previously a great industry had stood, pulsating with life and energy and enterprise. There may at that moment have been some who thought that the commercial edifice erected at the cost of so many years and so much labor, and so suddenly destroyed, might not again arise in their midst, and that Oshawa had lost one of the principal factors in the material prosperity of the town.

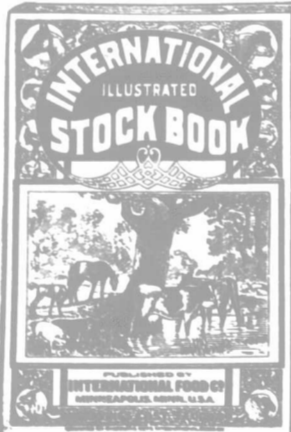
Less than a year after this event there stands, not exactly on the same site, but adjacent to it, another great factory, larger, more modern, better equipped in every way, with an increased capacity for production, again the establishment of the McLaughlin Carriage Company, and a lasting monument to the enterprise and pluck of the members of the firm.

The building is thoroughly modern in every respect, being erected on what is known as the slow-burning system, the floors being five inches thick. Profiting by past experience, the company have taken every possible precaution against fire. A sprinkling system is installed all over the factory and warehouses, while the steam pump belonging to the system has a capacity of 1,000 gallons per minute.

The machinery is all new, and every piece is of the latest and best design that money could procure. The company claim to have the largest and best equipped carriage factory in the British Empire, and have a capacity for turning out upward of 16,000 finished vehicles per annum. They have always adhered to the principle of making

"One grade only, and that the best,"

and to this policy largely they ascribe their success. The new premises are alike a credit to the town of Oshawa and to the Dominion as well. We wish the company every success in their large undertaking.



A \$3000.00 STOCK BOOK FREE.

We will mail you a copy Free, **POSTAGE PREPAID**, if you write us and answer 4 questions: 1st—Did you ever use "International Stock Food" for Horses, Cattle, Sheep or Hogs? 2nd—Is it for sale in your town in 25-lb. pails? 3rd—How many head of stock do you own? 4th—Name this paper. The engraving shows cover which is printed in 6 brilliant colors. The book is 9 1/2 by 6 1/2. It contains 133 large colored engravings of Horses, Cattle, Sheep, Hogs, Poultry, etc., with a description of the different breeds and practical points on breeding, raising and fattening stock. It also contains a very finely illustrated and valuable Veterinary Department. The engravings cost us \$3000.

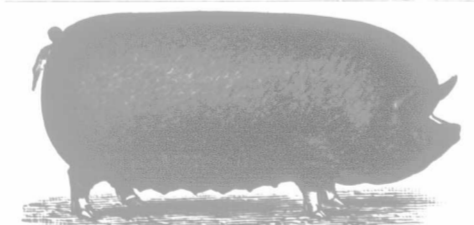
WE WILL GIVE YOU \$14. WORTH OF "INTERNATIONAL STOCK FOOD" IF BOOK IS NOT AS STATED.

"International Stock Food" is a safe vegetable stimulating tonic and blood purifier. It fattens Cattle, Hogs or Sheep in 30 days' less time and saves grain by aiding digestion and assimilation. Is extra good for breeding animals. 500,000 farmers endorse it. Many use 200 lbs. per year. It makes Colts, Calves, Lambs and Pigs grow very rapidly and only costs 1 2/3¢. Feeds for One Cent. Guaranteed to make Hogs weigh 300 lbs. at 6 months. It will save your Hogs from Cholera. Your money will be refunded if it ever fails for any use. Our 20,000 Dealers give this book FREE with "International Stock Food" in 25 lb. pails. We feed it to our stallions, brood mares, colts, driving horses, speed horses, etc., every day. Beware of inferior imitations.

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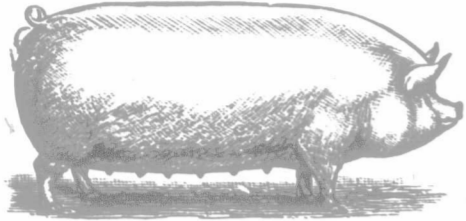
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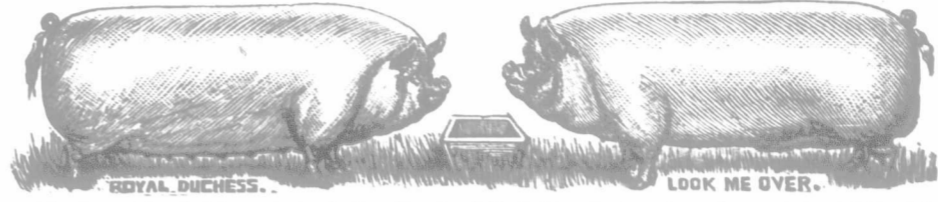
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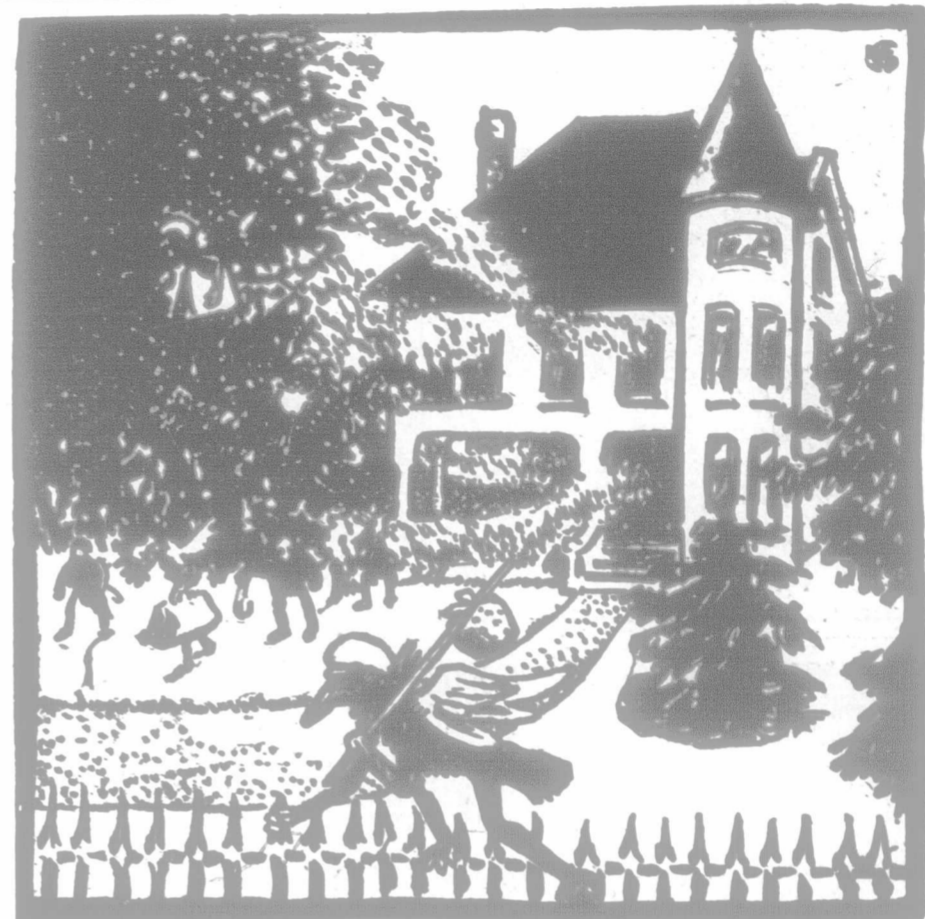
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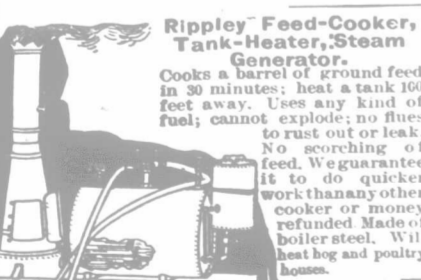
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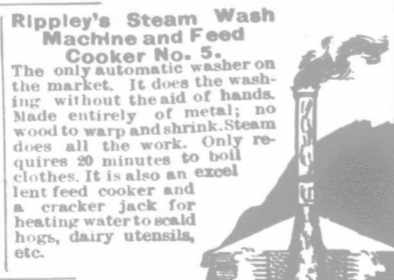
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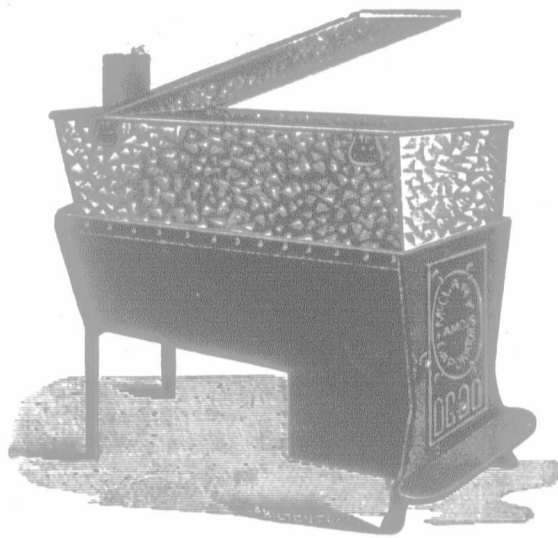
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