

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

Vol. XXXVII. WINNIPEG, MAN. JULY 21, 1902. LONDON, ONT. No. 554

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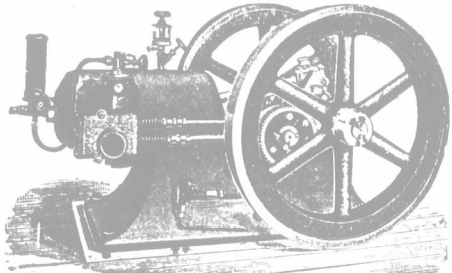
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* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE. *

Vol. XXXVII.

WINNIPEG, MAN., AND LONDON, ONT., JULY 21, 1902.

No. 554

Harvest Help.

In order to avoid, if possible, some of the difficulties experienced in the West last year in distributing the harvest helpers that were brought up from the east, this year, in addition to making inquiries through the regular crop correspondents, the Manitoba Government is placing with all station agents, lists for the receipt of applications from farmers wanting help, the number required, the wages offered, etc. After these lists have been compiled, tickets only to the number of men called for by any one station will be issued to that station at the harvesters' excursion rates. It is also proposed to check all baggage to Winnipeg, and redistribute from there after the men have become located. Those farmers who have thus filed their applications with the station agents will have first choice of the men sent to their station. The intention is to bring in one excursion in time for the harvest cutting, and others a couple of weeks later, when the Ontario harvest is well over, and the time for stacking and threshing has arrived. It is expected this year, owing to the great interest being taken by American capitalists in our cheap lands, that a strong effort will be made to inaugurate home-seekers' excursions at harvest time from the south. The harvest would be well over in the central States before it would be necessary for the men to leave, and, besides seeing the country—Manitoba and the Northwest—the harvest and threshing would afford an opportunity of earning some money, a proposition with which most home-seekers would not be disposed to quarrel.

The indications are that there will be demand, at good wages, for all the men that can be obtained.

Free Importation of Breeding Stock.

A recent despatch from Ottawa reveals a case of apparently unwarranted interference on the part of a U. S. Customs official in the matter of the importation of pure-bred live stock for breeding purposes into that country. The dispute is between Mr. H. F. Page, of Mission City, B. C., and the Collector of Customs at Sumas, Washington. The former, in October, 1901, was compelled to pay \$1,000 duty on ten Percheron horses—four stallions and six mares—entry for which had been made as pure-bred stock for breeding purposes, and claiming free entry under the existing tariff, the horses being accompanied by the proper registration papers of the American Percheron Horse Breeders' Association. The contention of the collector is that Mr. Page was taking the horses into that country for sale, and that such action was not in accordance with the spirit of the agreement. A deposit equal to the amount of duty on the valuation of the animals was claimed before allowing them to pass, and Mr. Page appeared before one of the judges of the Board of Appraisers, whose headquarters are in New York and who will render their decision some time in August. Much will depend upon the rendering of the court as to the proper reading of the regulations referred to. It is well known that large numbers of registered horses and cattle have, in recent years, under this law been taken from Canada to the States, both by American citizens and Canadians, and sold for breeding purposes with many questions being asked by the Customs authorities, so long as the proper registration papers accompanied them. It appears, of course, that it to be an unnecessary and uncalled for interference with a legitimate trade, and it is to be hoped that the court, in its wisdom, will side

with the farmer, as the free distribution of improved stock is certainly desirable in the interest of the people of both countries, and no unnecessary barriers should be placed in its way. If there is any industry in which free trade is mutually beneficial, it is in the dissemination of pure-bred stock for the improvement of the general stock of the country.

Health on the Farm Affected by Insects.

Medical investigation of the causes of certain diseases to which country people are especially exposed, prominent among which are malaria and typhoid fever, appears to have traced the origin, or, rather, the transference, of these diseases from affected or unaffected persons to certain mosquitoes and the common house fly, malaria being carried by the former and typhoid by the latter. Malaria has been called by medical men a country disease, it being generally most prevalent in swampy regions or where there are side pools of still water in the vicinity of streams. Malaria in cities, as a rule, is found only with persons who have contracted it in the country or in the suburbs, although with cities having marshy places on their borders, a malarial belt may exist, the extent of which depends upon the direction and force of prevailing winds and especially of the night breezes. The old idea that malaria is caused by breathing the miasma of swamps, it is claimed, has been exploded, and it has been discovered that the disease is contracted only through the bites of mosquitoes of the genus Anopheles. The cause of malaria is the growth and development within the red blood cells of a very minute parasitic organism belonging to the lowest group of the animal kingdom—the group Protozoa, or one-celled animals, which includes those minute creatures known as Amoebas and others, and which live in the water or in damp sands or moss, or inside the bodies of other animals as parasites. This parasite reproduces in the body by subdividing, eventually bursting the red blood cells and entering the blood serum as a mass of spores. Broadly speaking, when the blood of a human being is sucked into the stomach of a mosquito of the genus named, the malarial parasite undergoes a sexual development and gives birth to a large number of minute spindle-shaped cells known as blasts, which enter the salivary glands of the insect and are ejected with the poison into the system of the next person bitten by the mosquito. If this person happens to be non-malarious, the malaria has thus entered his system and malarial symptoms result. So far as at present known, this is the only way in which persons become malarious, and in order to avoid this result it is necessary to study and plan to avoid the bites of malarial mosquitoes, and as it is perhaps too much to expect that the average reader will study the habits and description of the different varieties of mosquitoes, which are given in full, with engraved illustrations, in an excellent bulletin, No. 155 of Farmers' Bulletins of the U. S. Department of Agriculture, by Professor L. O. Howard, Entomologist, we cannot do more than set forth as the most practical measures to be taken to prevent malaria, which are the draining or filling up with earth of swampy or low lying places where pools are liable to form; the covering of the surface of pools with a thick mat of reeds or grass, and the use of screen doors and windows, together with a thorough search of the house for mosquitoes that have found their way in, and the destruction, which must be done, of all such insects.

amount of insect powder (pyrethrum) used in a tin dish cover. Persons wishing to avoid malaria should not sit out of doors exposed to the bites of mosquitoes at night, and these having malaria should be carefully screened at night to prevent them from being bitten by mosquitoes, who, becoming thus infected, would become potential carriers of the disease. Such patients, systematically treated with quinine, the dose being always given at the beginning of the chill, will soon be rid of the disease. The time of dose is important, and the reasons for the time has been abundantly proven by the study of the life of the parasite in the blood cells.

TO PREVENT TYPHOID FEVER.—The common house fly is believed to be the principal insect agent in the spread of this disease, and this insect is especially abundant in farmhouses and other country houses in the vicinity of stables in which horses are kept. The reason for this is that the preferred food of the larva of house flies is horse manure. They are also attracted to and will lay their eggs in human excrement. Under favorable conditions they will breed, to some extent, in this excrement. They swarm in kitchens and dining-rooms where food supplies are exposed. They are found commonly in box privies, which sometimes are not distant from kitchens and dining-rooms where food supplies are exposed, with a box privy near-by, or with excremental deposits in the neighborhood, and with a perhaps unsuspected or not yet fully-developed case of typhoid in the immediate neighborhood, there is no season why, through the agency of contaminated flies alighting upon food supplies, the disease should not be spread to healthy individuals. That it is so spread is unquestionable. The remedy is plain, it consists of proper care of excreta, the destruction of flies, and the use of screen doors and screens for windows when raised, which are not expensive and can be purchased ready-made, or may, perhaps, be more cheaply home-made by a reasonably handy man. Where the old-fashioned box privy is yet in use, care should be observed to use disinfectants freely and often, fresh lime being the most convenient and to have it cleaned out occasionally, and the contents deeply buried and covered with lime. Where a good earth closet is in operation, and where a case of illness, the excreta of patients are promptly disinfected by the use of lime or solution of copper sulphate (bluestone), both of which are cheap and easily applied, flies breeding in the neighborhood will have practically no opportunity to become contaminated with typhoid germs. Horse manure, however, should also be attended to by being removed, if not daily, at least once a week, and placed in a pit or treated to liberal applications of lime. Neglect of these simple and easily practicable precautions is little short of criminal, and in many cases is doubtless the cause of much illness, suffering and expense, and the sacrifice of valuable lives, bringing grief and sorrow to the inmates of the home and breaking ties which might have grown and strengthened with mutual benefit in the passing of years. People are apt to seek to console themselves with the view that all such instances of the removal of their friends are dispensations of Providence, but in all emergencies we believe it is wiser to recognize that in this respect, as in others, Providence helps those who help themselves, and that by doing our duty in so far as we know it, by attention to the laws of health, and the principles of cleanliness, we may best cooperate with Providence in the preservation of useful lives, and the maintenance of the peace and comfort of home.

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN MANITOBA
AND N.-W. T.

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WINNIPEG, MANITOBA.

Crop Conditions.

An unusually late seeding, followed by a cold, wet, lingering June, throughout which there was comparatively little growth, except of grass, gave the pessimist a chance to croak. July, however, opened, after a few smart clearing showers in the wheat sections, warm and sunny, and vegetation responded with a rash. At this writing, grain is but little behind its average advancement, and with favorable weather from now on, harvest will be in good time. Reports from our correspondents in almost every district indicate that the crop will be a magnificent one. The straw is not as heavy as one would expect from so moist a spring, and the stand is, generally speaking, strong. All kinds of grain seem to be equally good and uniform. The acreage injured by wet will be very small, only very low-lying, undrained lands and river bottoms being seriously affected. The hay crop is abundant, all cultivated grasses having done remarkably well. Some wild-hay sloughs are, of course, flooded, and will not be available this season. Hay has fallen in a few localities. If we get extreme heat there will doubtless be damage done by hail. Insurance can, however, be obtained at reasonable cost now, and those in districts subject to such visitation should protect themselves.

Stock have done well. There has been little trouble from flies, and with the cool weather, abundant grass and no lack of water, cattle have had an enjoyable season so far. The range cattle are now running pretty freely and their condition is good.

Cultivating the Prairie Sod.

It is reported that a rancher near Calgary has succeeded in growing a special prairie cultivar of sorghum by growing up the sod-bound prairie and then stimulating the grasses to grow more luxuriantly. It is also said that the McCormicks have made up the patent and purpose mandarin and other varieties. The work is not a new one, but it is being done for the first time. The Experiment Station, Texas, experimented with the hard-panned sod, and also sowing various varieties of sorghum on disked sod, but none of these have been proven satisfactory.

Farm Siftings.

Those of us who take an interest in agricultural education have been patiently waiting for the report of the Royal Commission appointed twelve months or more ago to look into the question of an agricultural college for Manitoba. Probably the commissioners have been too busy with their summer-fallows to bother with affairs of state.

One thing certain, there will be no Manitoba College of Agriculture for a year or so yet. Better send some of our boys to the Ontario Agricultural College in the meantime. As that institution is growing in popularity, it will be necessary to make application early to obtain entrance.

There have been a good many picnics this summer, but very few Farmers' Institute meetings. The season has been much against the holding of farmers' meetings, what with the wet weather, late seeding, bad roads and delayed farm work generally. However, let us hope the authorities will make extra preparation for a good strong campaign next winter. We want men who can talk on subjects of interest in the localities to which they are sent and who know what they are talking about. Send the right men and there will be big audiences.

It's time now to overhaul the binders, secure any needed repairs, see that the canvases are all in order, buy good quality of machine oil and a first-class binder whip.

The following item from an exchange is pertinent—

"The constant buying of new farming implements keeps many a farmer's nose on the grindstone, and has sent many into bankruptcy. Some farmers seem to be unable to resist a windy agent, and buy what they do not need. Thousands of half-worn tools are thrown aside for new ones that are no better. This is one of the greatest wastes on the farm. Buy good implements, and take the best care of them, and they will last nearly a lifetime. It is always best to bring every implement home at night that is used during the day, and house it if the weather is the least suspicious. It takes but a minute to run an implement under a shed, and if a rain should come on during the night it will be kept dry. Rain rusts iron and swells wood. Rust soon destroys iron and steel, especially the threads of bolts and the more delicate parts of a machine, while the swelling and shrinking of wood checks and rots it. All the most successful farmers I know most invariably bring in the tools at the close of the day's work. When an implement is taken apart and stored away for the season, it should have a new coat of paint. The paint should be thinned with oil, then it can be applied quickly."

The Cut Arm Plowing Match.

The second annual plowing match of the Stirling Agricultural Society was held at Cut Arm, a few miles south of Saltcoats, on June 26th. Mr. and Mrs. Mess, on whose farm the match was plowed, entertained the plowmen as well as those who came to witness the contest. The thirteen contestants started promptly at nine o'clock, upon the hoisting of the signal flag by the Secretary, Mr. Hugh Porter. (This is a point that could, with profit, be taken note of by other societies in conducting plowing matches.)

The judges were Messrs. Kaywood and Melville, while Messrs. John Meal and Wm. Sangster placed the awards on the competitions for the prizes offered for teams, etc. In addition to the teams, a number of specials were given with the object of making some fun. The list of winners is given below:

Plowing—1st (cup winner)—W. T. Thompson; 2nd (\$7)—Thos. Muir; 3rd (\$6)—Jno. Green; 4th (\$5)—W. B. Thompson; 5th (\$4)—R. Green; 6th (\$3)—A. Capling; 7th (chain)—G. Mess; 8th (chain)—A. Hamilton.

Best teaming—R. Green. Best finish—T. Muir. Ours and his—J. Ritchie.

Plowman doing his work in most workmanlike manner—A. Hamilton. Best working plow—T. Muir. First to finish and in prize list—W. B. Thompson.

Plow Teams—Best mated team—W. B. Thompson. Tallest team out—H. Porter. Best kept team—T. Muir. 2nd—W. B. Thompson. Best kept harness—J. Ritchie.

Steepest Last married man—T. Muir. Oldest plowman—A. Hamilton. Youngest plowman—J. Ritchie. Man with largest family—G. Mess. Best dressed team—W. B. Thompson. Oldest plowman—A. Moore. Smallest plowman—A. Capling.

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Showing and Judging.

The benefits derived by breeders and manufacturers from exhibiting their products, the result of their enterprise and skill, at agricultural and industrial exhibitions, were in part set forth in an article in our last issue. We purpose now to pursue the subject a little further, and to advance some ideas that from experience and observation have occurred to us as being of interest to exhibitors and judges. Success in exhibiting live stock depends primarily on the production or selection of superior animals, and, secondarily, on their proper feeding and preparation for the show-ring, in order that they may show for all they are worth and make the best possible impression on the eye and mind of the judge. To make the best showing, the special feeding and fitting should not be limited to a short period, but had better be a gradual process, so that there may be no forcing, which is always liable to produce indigestion or other ailment, and thus defeat its purpose. An overfed or excessively fat animal, especially if from lack of sufficient exercise its legs have become stocky or crooked and its action clumsy and awkward, almost invariably makes an unfavorable impression on a competent judge, and leads him to seek for something more useful looking in the competing list. Heavy feeding with heating, concentrated foods is liable to put on rolls of hard-feeling fat instead of an even distribution of springy flesh and the quality of hide and hair that is pliable and pleasant to handle and is the result of the feeding of properly-balanced rations of mixed grains and oil cake. This, together with plenty of exercise, blanketing and hand-rubbing, and the polishing of horns, where there are such, the trimming of inequalities, and the training to walk gracefully and stand in the best positions, are parts of the needed preparation that may prove to be essentials in a close competition. But, back of all this, there must be the proper type of animal in conformation and quality to catch the trained eye of the expert judge, for no matter how large nor how smooth and well fitted the animal may be, if it be not of the approved type that meets the demands of present-day markets, and if a male lack the quality known as character, which indicates probable prepotency as a sire, or if a female fail to show a proper degree of femininity in head and neck and in general appearance, its chances to win are at once discounted. Size with quality and approved type is all right, but without these latter qualities it may be regarded as a disadvantage; indeed, abnormal size is not desirable in either breeding or show animals, while the happy medium in this regard, in either meat- or milk-producing animals or horse stock, is more likely to please the taste of an up-to-date judge.

When it is considered, as we believe is generally admitted, that the judges by their decisions, to a very considerable extent, set the standard of desirable type in the various breeds and classes of live stock, the need for care in their selection becomes clearly apparent, as their position is one of great responsibility, requiring a cool, clear head, careful consideration and discriminating judgment. It is not the purpose of this article to discuss the perennial question of the advantage of employing one judge or more than one for a class, though we do not hesitate to proclaim our preference for the single-judge system as the one most likely to impress a man with a due sense of the seriousness of his responsibility and the one most likely to bring about uniformity of type in the various breeds, a consummation, it seems to us, very desirable, if it means a uniformity of usefulness and excellence combined with attractiveness. Without presuming to lecture judges, we may be permitted to suggest that, from watching the work of those officiating, it has appeared to us that the work is simplified and made more satisfactory to both judges and spectators if the animals in classes shown on the halter are passed around the ring in procession, and a few of the best drawn out, from which the final selection of the winners is made, these being placed in the order of the judge's rating; and the educative value of his work to the onlookers is enhanced by his placing the whole class in order of merit, according to his judgment. By this means the distinctive type he aims to mark with his approval may be seen in so far as it can be shown with the material at hand and the consistency of his work be made manifest.

Harvesting Brome and Western Rye Grasses for Hay and Seed, and Method of Extermination.

To the Editor "Farmer's Advocate":

I have much pleasure in complying with your request for a short article on the best methods, so far found by tests on the Experimental Farm, of harvesting Brome and Western Rye grasses for hay and seed; and for the extermination of the two grasses.

Although the majority of the old settlers are conversant with the important points with regard to the seeding and cultivation of Brome and Western Rye grass, there are many new settlers who will probably require information on this work, and I therefore quote from the Northwest Experimental Farm Report of 1901 the following results of tests extending over a number of years:

SEEDING AND CULTIVATION OF BROME GRASS.

[This also applies to Western Rye grass.]

This grass is better sown alone; at least, it should not be sown with a grain crop. The grain takes too much moisture from the young grass-plants, only the most vigorous of which will survive the dry weather in September; whereas, if sown alone, all the plants have an equal chance.

It is advisable to sow the seed on land that does not blow. Summer-fallow would be the best preparation, but on account of its liability to drift, it is not safe in many parts of the Territories to use land cultivated in this way. Stubble land plowed three or four inches deep in April or May, and well harrowed after the seed is sown, is found to be quite safe from winds, as the stubble harrowed to the top prevents all drifting.

Ten or twelve pounds of seed is required per acre. More seed will give a better crop the first year, but less afterwards, as the roots thicken up each year and in three or four years make better pasture than hay.

The seed being light, long and thin, seeding by hand is the only practicable method unless seeders constructed for the purpose are available. To seed properly, a calm day should be chosen, so that all parts of the land may be evenly sown. While the plants are young, weeds are sure to make great headway, and it is necessary to keep them at least from going to seed. The quickest way to accomplish this is to go over a field with a mower, cutting just above the grass plants. If this operation has to be repeated, it will be necessary to cut the tops of the grass, but this will not injure the plants; in fact, it is an advantage in the way of giving the roots firmer hold.

The first crop of hay can be cut the next year after seeding, and will, in ordinary years, be ready early in July. Twenty days after being ready to cut for hay, it will be fit to cut for seed, if so desired.

CUTTING AND CURING FOR HAY.

Brome may be cut for hay at any time from the time it comes into bloom until the seed is well formed. If cut just after it comes into bloom, the yield will be smaller and the grass more difficult to cure, on account of the large amount of sap in the leaves and stem. Brome grass when forming seed is at the same time producing a bottom growth of leaves, which materially adds to the quantity of hay and more than makes up for the depreciation in feeding value of the seed-bearing stalks, occasioned by the production of seed. In addition to the increase in quantity through late cutting, there is the advantage of having less moisture in the grass to contend against when curing, which in unfavorable weather is a great consideration. The only drawback to late cutting is that a poor crop of grass for fall feeding is obtained. Early cutting induces the production of a good aftermath; and late cutting, the reverse.

WESTERN RYE GRASS requires to be cut for hay while in bloom, or very soon afterwards. There is no bottom growth made while the seed is maturing, and if left until the seed is ripe, the hay will be of very inferior quality. This grass is from a week to ten days later in heading out than Brome.

CUTTING HAY WITH A BINDER.

Hay may be made from both grasses by cutting with mower and curing in the usual way, or by cutting with binder and curing in stooks. The latter is the easiest and least expensive method, especially if the weather during haying-time should prove unfavorable.

Even with twine at its present high price, it is cheaper to cut with a binder, as much labor is saved in curing and drawing. With favorable weather, however, mowing and curing in cocks makes a better quality of hay.

Brome or Western Rye grass, when cut just after bloom, by mower, requires 6 to 8 days to cure before stacking or storing in a building; 12 days in swath and the balance of the time in stooks. If cut two weeks later, 3 to 4 days is sufficient.

When either grass is cut with binder, three weeks is required to cure the hay before it is in fit condition to stack. Moderate-sized sheaves, stoked north and south, 10 to 12 sheaves in a stook, gives the best results. Round stooks should never be made when the grass is intended for hay.

FOR SEED.

Both varieties produce large quantities of seed. From 400 to 600 pounds per acre is usually obtained from the first crop, after which the yield gradually decreases.

Seed ripens in from 18 to 20 days from the time of bloom, and should be cut before becoming too ripe, otherwise a great deal will be lost in handling. In cutting for seed, a binder should be used in all cases as the handling after a mower causes a great loss through shelling. Sheaves should be made of good size and stoked north and south. As with all grain crops, the riper it is when cut, the shorter the time it takes to cure for stacking.

THRESHING AND CLEANING.

The seed of both Brome and Western Rye grass is easily separated from the heads, and any make of separator is suitable for the work of threshing. The only points to be observed are: that the cylinder and concaves be as far apart as possible to permit the straw passing through freely without being broken up more than is necessary; closing off or regulating the wind from the fanner, and using screens that permit the seed to pass over or through them without delay. For this purpose, zinc screens are the best. No seed need be blown over the tail-board if the wind and speed of the machine are properly regulated.

Cleaning is rather a tedious job with the fanning mills at present in use. The seed, however, can be thoroughly cleaned by them by putting it through twice. The wind should be shut off the fanners and the machine turned slowly. Use zinc screens.



HAROLD H.

ERADICATION.

A great many farmers object to growing Brome grass on account of the difficulty of getting rid of it when it becomes necessary to do so. This, no doubt, is a consideration, but the value of the dead roots left in the soil makes up for the greater part of the work required to successfully accomplish its eradication, especially when the soil is old and liable to drift.

Breaking and backsetting in the same manner as prairie sod is usually handled has been found to be the best method of eradicating this grass. Breaking 2 inches deep early in June and backsetting 4 or 5 inches deep in August will kill all the roots, except in very wet seasons like the present. Breaking and backsetting acts the same as a fallow. It stores up moisture for the succeeding crop and kills the weeds.

Western Rye grass roots are not difficult to kill, and if plowed 4 to 6 inches deep in the spring, the land may be sown to oats, barley or fodder, with good chances of success in an ordinary season. After plowing and before seeding, a disk harrow should be used to insure a good seed-bed.

Generally, Brome and Western Rye grass produce their best crop of hay in the first year after seeding. In the second and third years the yield gradually decreases, after which the field is better pastured.

How long either variety will afford sufficient pasture to warrant its being allowed to remain, has not yet been determined on the Experimental Farm. Brome has been in pasture for five years and is producing an abundance of fodder this year.

Two, or at most three, crops of hay are cut from both Brome and Western Rye grass, when the field should be broken up if pasture is not required.

ANGUS MACKAY,

Indian Head, Supt. Exp. Farm.

The Blyth Plowing Match.

The seventh annual contest of this popular and attractive event was successfully held on the 25th June, on the Will Elder farm, recently purchased by Mr. Clarence Fox, the place memorable as the scene of the second match, five years ago, which was in every way so eminently successful. There, Tom Hill, Brandon, achieved his greatest success by work of the most finished style, never again equalled by himself and hardly ever surpassed by any other contestant in subsequent fights. For the purposes of the match on Wednesday, the day was ideally fine, and few places could be more central or better adapted as to suitability of soil and picturesque surroundings than the location chosen, and other essential conditions were favorable to a genuine contest of skill and merit.

For the highest honors (deservedly won by James Sutherland, Beresford, at last year's match) in 14-in. class, a very keen and strenuous combat was certain. The following are the contestants who took part and the awards made at the close of the match:

Men's Class, 14-in. walking plow: 1. W. Guild, Kenmay, 83 points, \$15; 2. James Sutherland, Kenmay, 82, \$12; 3. W. Turner, Carroll, 81, \$10; 4. John Stott, Brandon, 80, \$8; 5. John Torry, Blyth, 65, \$6; 6. J. C. Noble, Blyth, \$4; 7. John Bain, Blyth, 63, \$3. Judges, Messrs. Henderson and Mayhew.

Men's Class, 16-in. walking plow: 1. A. T. Elder, Blyth, 86 points, \$15; 2. W. Marshall, Blyth, 69, \$12; 3. G. Charleson, Brandon, 68, \$10; 4. W. Foster, Chater, 56, \$8; 5. Jas. Pringle, Brownthwaite, 51, \$6. Judges, Messrs. N. Reid and G. Hopkins.

Young Men's Class, under 21, 14-in. walking plow: 1. Bain Elder, Blyth, 71 points, \$15; 2. George Elder, Blyth, 58, \$11; 3. C. McCulloch, Methven, 55, \$8; 4. Fred Wells, Brandon Hills, 54, \$6. Judges, Messrs. Henderson and Mayhew.

Boys' Class, under 17, 14-in. walking plow: 1. Allan Leslie, Chater, 80 points, \$21.50; 2. E. Sopp, Brandon, 75, \$10; 3. A. Foster, Chater, 73, \$7; 4. G. Wheeler, Blyth, 59, \$5. Judges, Messrs. N. Reid and G. Hopkins.

Gang plow, 14-in.: 1. H. M. Johnston, Chater, 83 points, \$18; 2. George Boles, Brandon Hills, 82, \$13; 3. W. W. McCulloch, Methven, 74, \$9; 4. N. Nelles, Brandon, 70, \$7; 5. D. Foster, Chater, 69, \$5. Judges, Messrs. Agur and Mayhew.

Gang plow, 12-in., 3 horses: 1. T. Elder.

Sweepstakes prize, silver cup, value \$35, presented by F. O. Fowler, M. P. P.; W. Guild, Kenmay.

Silver medal, presented by J. W. Fleming, for best crown and finish on field: Jas. Sutherland, Beresford.

There was fair competition in all the classes except the three-horse gang class. The keenest was in the 14-inch walking-plow class, where James Sutherland, the champion, was making a promising effort to retain his place for this year by a successful strike-out and crown. By a failure in his crown, W. Turner lost his chance of first place, and Guild and Stott were likely to prove the most formidable disputants of the championship. But as time wore on it became evident that the tussle would be between Guild and the champion, both doing characteristically good work, Guild winning by a single point, Sutherland second, and Turner third, with work, barring the crown, of rare excellence; John Stott secured fourth place, with work that he has often excelled. Creditable work was done by Torry, Noble, Bain and T. Elder. The other class in which an interesting competition took place was the 14-inch gang plows, where George Boles was doing excellent work, which commanded the attention and praise of numerous spectators. Excellent work was likewise done by last year's champion, H. M. Johnston, Chater, who retains the first honors for this year by one point. It seems curious that both should have the same blemish in their finishes, which otherwise would have been excellent. The third place was taken by W. W. McCulloch, Methven, who did good, straight work, but was less successful in stubble covering.

In the 16-inch men's class, the competition was less keen than usual, A. T. Elder, ex-champion, taking first place; W. Marshall (his first contest) taking second; G. Charleson, Brandon, pluckily entering the arena, taking third place. Of the young men, Bain Elder and George Elder were the most successful, and of the boys, Allan Leslie and Ernest Sopp attained the greatest success. On the whole, good work was done on soil that was a trying test to the skill and experience of not a few, and if there was a seeming lack in any special feature of good plowing, it seemed to be most in the prime essential point, viz., straightness. Numerous friends from town and country were interested spectators of the proceedings. The Ladies' Aid Society largely contributed to the success of the undertaking by their excellent meals.

Mr. McKellar, Winnipeg, and Mr. Wolverton, Brandon, delivered addresses at the close, after which the distribution of the awards took place and the gathering dispersed.

Harold H. (2.04) for Winnipeg.

Harold H., by Roadmaster, the famous little Canadian trotter, whose turf performances were fully described in the last Christmas number of the "Farmer's Advocate," was sold at the Windsor (Ont.) races, recently, by Mr. Swartz, of Wingham, his owner, to R. J. McKenzie, of Winnipeg. The price is said to have been \$7,000. On July 8th, he was beaten in the match race on the Windsor track by Dan Patch (son of Joe Patchen and Zetia), who came under the wire in 2:06 1/2, the first half of the mile being made in 1:01.

Our Scottish Letter.

At this season there is little else to occupy attention than shows, and the week ending 21st June was perhaps the busiest agricultural-show week of the year. Fortunately, that date also saw the end of a long spell of cold, unseasonable weather, and the week now tapering to a close has been marked by some of the finest weather we have had for many a day. Everything is luxuriating in the sunshine, and but for the tragic postponement caused by the serious illness of the King, the country would have gone a-holidaying to some purpose. The King has always been a keen patron of agriculture, and his influence in popularizing agricultural events has been considerable. The brilliancy of the weather throughout the British Isles on this, the day set apart for the coronation, adds to the intensity of the regret everywhere expressed at what has happened.

There is every prospect now of 1902 yielding good crops of all kinds. The ground was so saturated with moisture that the excessive heat now experienced has made every kind of cereal and root almost grow up sensibly before one's eyes. Hay, however, will in general be a light crop, and early potatoes will not likely, even with the favorable turn in the weather, prove to possess much quality. The first Gervaise potatoes were this season lifted by Mr. Andrew Dougan, Straid, about a fortnight ago. This was nearly ten days later than in 1901.

Preparations for the last migratory show of the Royal Agricultural Society, at Carlisle, are now well advanced. The site is most picturesque, lying on both sides of the Eden, just outside the walls of the old city. In 1880, when the Royal Show was last held at the border town, the Citadel joint station had just been completed, and it seems but a thing of yesterday when we tried to make our way through the yard on planks well-nigh afloat. The weather was of the most wretched description, and the officials were almost at their wits' end to know how to provide decent locomotion for the visitors. It makes one feel a little older when he visits two Royal Shows at one center, and 22 years is a considerable item in the life of any man. Many changes have taken place in agriculture during these twenty-two years, and the difference is perhaps more marked in the methods of working crops than in stock. An interesting article on "Hay-making," in the Journal of the Board of Agriculture, just issued, opens up a wide field of reflection on this aspect of things. It would not be too much to affirm that America and Canada have played the chief part in effecting a silent revolution. Few implements manufactured on the other side of the Atlantic can be utilized here without greater or less modification. But the idea embodied in the machinery must ever be retained, and it is in the introduction of these ideas that American influence can be most clearly discerned. The economical benefits accruing to this country from the adoption of such Canadian machines as the Massey-Harris self-binder and cultivator, the Dux plow, and much else, can hardly be overestimated. It has very largely been through the introduction of these and like implements and machinery that the British farmer has been able to keep himself in evidence. That he has done and is doing so does not admit of question, and sooner or later it will be admitted that the agriculture of the Old Country, even in respect of scientific equipment, is fully abreast of the attainments of the new.

Very successful shows of stock were last week held at Glasgow, Stirling, and Cupar-Fife. It would be impossible to name all the other places where creditable exhibits could be seen. The best exhibits at Glasgow were found in the driving-horse section. Perhaps this impression was created by the undoubted fact that this section showed by far the greatest advance on former exhibitions. The Hackney, in spite of the numerous adverse criticisms to which he is subjected, was the principal factor in producing these animals. It is increasingly evident that if the highest class of carriage horses is to be produced in this country, the Hackney will need to furnish the foundation cross. You cannot have a high-class carriage horse without a dash of Hackney blood. If Hackney bloodless would keep this steadily in view they would do well to disarm the volubility of persons who advise with which their favorites are assailed.

One of the best and most good displays at Glasgow was that of the Scotch cow by which was presented in private sale, and also at the proceedings. A new and interesting feature was Mr. Dewar's Royal Highland cow, which has not been much seen in public exhibitions, but his stock was very good. The mares of Stirlingshire were also very good. He was bred by his own father, Mr. James Rippin. His sire was the Cavalier, bred by a Royal Gortly 9811, which was bred by a Virginia 10751, was by the new breed of Brooklyn 6517. His gr-dam was by

1334, and his g-gr-dam by Black Comet 66. Through his sire he has a strong dash of Prince of Wales blood. On his dam's side he gets the Darnley dash from the dam of Brooklyn, an uncommonly true specimen of the low-set, wide Clydesdale mare, and another dash of Prince of Wales blood. From True Blue comes the strong, weighty blood of Drumflower Farmer 286, and from Black Comet comes the Comet strain, long favorably known in the north of Scotland. This breeding is not what has been in more recent years regarded as strictly orthodox, but it involves a blending, the issue of which will be worth studying. The sensational animal of the show was Mr. Henry Gray's yearling filly, Nellie. She was bred by her owner at Hawkhill, Kincardine-on-Forth, and got by Royal Favorite, out of a mare by Flashwood 3604, own brother to Macgregor 1487; gr-dam by MacVicar, a son of Macgregor. This filly was first in her class both at Stirling and Glasgow, and at Glasgow was awarded supreme honors as the best female Clydesdale exhibited. It is nearly 20 years since a similar award was made at Glasgow. In 1884, Lord Arthur Cecil was successful in carrying off supreme honors with the famous yearling, Edith Plantagenet. Mr. Gray's filly has rare quality of limbs and the best of feet and pasterns. Her movement is faultless both in front and in rear, and she takes the eye of the judge right away. Other good fillies were shown at Glasgow by Mr. St. Clair Cunningham, whose three-year-old White Heather, by Baron's Pride 9122, was runner-up for the supreme honors; and by Mr. Davie, Cathcart, whose first two-year-old filly, by Up-to-Time, was first at Paisley and East Kilbride. The best mares were shown by Mr. Alex. Guild, whose magnificent big mare, Lady Margaret, was first in the yeld class; and Mr. J. Ernest Kerr, Harviestown Castle, showed a capital brood mare in Lady Garnet, another daughter of Baron's Pride. The male championship at Glasgow went to Mr. W. S. Park, Hatton, Bishopton, for his Paisley champion, Royal Chattan. This colt is two years old. He was bred by Mr. John Findlay, Springhill, Baillieston, and was got by the Glasgow premium horse, Clan Chattan, out of one of a first-class race of mares. Neither the three-year-old nor the yearling colts at Glasgow were much to boast about, but there is a marvellous gelding in this country called Perfection which is well worth looking at. He is four years o'd, and owned by Mr. Wm. Clark, Netherlee, Cathcart. His sire was Royal Gortly 9844, and, if report speak truly, he has been sold to an American millionaire firm for £250. Be that as it may, the likelihood is that he may find his way across the Atlantic unless some of our home fanciers develop pluck enough to retain him here.

Ayrshires at Glasgow made a creditable display. The leading winner was Mr. James Lawrie, West Newton, Strathaven, whose stock meet the requirements of the fancy. He has been very successful with a bull called Silver Heels, and two of the produce of this sire were first both in the older and in the three-year-old classes of cows in milk. The vessels are correct, level and tight, and the teats will do. Generally at Glasgow there was too much evidence that we have not yet got quite rid of the stupid craze for tight vessels and small, corky teats. The vessels are right enough, but the teats have nothing to do with dairy business. "SCOTLAND YET."

Brandon Fair.

The directors of the Brandon Fair have spared no pains in preparing for their big show on July 29th to Aug. 1st. Cheap excursion rates on all lines of railway make it possible for all to visit the fair. The exhibit of stock promises to be good. The show of horses will be particularly strong, as Brandon is the central draft horse distribution point in the Province. The race and attractions programme is up-to-date and equal to anything previously seen at this fair. It is hoped that the flood waters of the Assiniboim will have receded so that the Experimental Farm can be visited at the time of the fair, as this is always one of the great attractions to agriculturists, especially. The binder twine works are also in operation, and will be a point of interest.

To Get the Best Milk.

In answer to the question, How can we secure the very best quality of milk—(a) in summer, (b) in winter? the New York Produce Review gives the following summary:

1. Every-day delivery the year round.
2. Setting a good example with absolute cleanliness and order in and about the creamery.
3. Persistent educational work, including local meetings, visits to the farms, and comprising all the suggestions given by the class in detail.
4. The adoption of the system of securing of the cream by using the highest quality tests and separating the cream daily, with eventual premium for the most worthy sources.
5. The selection of pure milk when no improvement is possible.

The Welwyn Plowing Match.

The first Welwyn plowing match was held on the farm of D. D. McFarlane, 12-15-30, about a mile and a half south of the post office, under the auspices of the local branch of the Territorial Grain-growers' Association, on June 27th.

Owing to the wet season, the soil was not in the best of condition, consequently the scores were somewhat lower than would otherwise have been the case. This being the first match in the district, many of the young men of the neighborhood were somewhat averse to entering, and the fearful state of the roads precluded many from a distance from putting in an appearance. One contestant, however—a well-known prizewinner—arrived about 11 o'clock, having come from Brandon with his plow the previous night.

It was originally intended to have but three classes, viz., walking plows (open to all), sulky plows for men and ditto for boys under 16 years of age, the prizes in each of which aggregated about \$20.00, the first being \$12.00, second \$6.00, and third \$2.00; but the advent of the Brandon man, Jno. Stott, caused the committee to add another first prize. The score card of the Brandon championship match was used.

In the sulky class for men there were four entries, and N. E. Jamieson was awarded first place, with 63 points; Austin Wright second, with 62 points, and Andrew Jamieson third, with 54 points. The fourth contestant, W. James, but slightly over 16 years of age, secured 50 points. With the exception of the winner, who kept it throughout, all in this class exceeded their width, the weeds consequently being frequently uncut and uncovered, and all were shy of their depth, probably owing to fear of the stickiness of the subsoil. The method of forming the crown being new to all the local men, poor work was done, but doubtless a better showing will be made next year.

In the boys' class there was only one entry, that of Harry Davis, who scored 59 points and did very fair work, making a higher score than the third-prize winner in the men's class.

The local men in the walking class made but a poor showing, their plows being quite unfitted for such work. Jno. Stott, of Brandon, with a score of 83, made the best work by far on the ground, and the contestants secured several wrinkles from him which will probably be put into practice on future occasions.

The judging was most satisfactorily done by Messrs. K. McIver and John Buck, of Virden, the latter being assisted by Mr. T. Wilde; the committee in charge of the match being A. Draper, Jos. James and F. J. Collyer.

Iowa College Feeding Experiment.

An experiment of more than usual interest to stockmen has lately been completed by Iowa Experiment Stations. The object of this work, as outlined by Prof. W. J. Kennedy, was to compare the relative flesh- and fat-producing power of the different stock foods which are upon the market when used with a main ration of corn meal. An important feature of the test was the large number of animals made use of. No less than 220 ordinary range-bred steers were selected by Prof. Marshall and divided into eleven equal lots. In addition to their daily ration of corn meal, they were supplied with wheat straw for roughage and water and salt at will. All through this experiment, great care was exercised to insure uniformity of conditions for each lot. They were marketed in Chicago on June 14th, and complete details of the result will be issued by the station staff in a short time. A synopsis of this report will be published in the "Farmer's Advocate" as soon as received. Meanwhile, the following table, showing the average weight, supplementary feed used, and the valuation of each as determined by a committee of expert buyers, will be interesting:

Lot.	Supplementary Feed.	Head.	Average Weight.	Price.
I.	None	19	1,244 lbs.	\$ 7 45
II.	Oil-meal	20	1,235 lbs.	7 50
III.	Cotton-seed meal	22	1,292 lbs.	7 40
IV.	Gluten meal	19	1,321 lbs.	7 65
V.	Gluten feed	19	1,276 lbs.	7 60
VI.	Germ oil-meal	20	1,265 lbs.	7 40
VII.	Blood meal	20	1,253 lbs.	7 60
VIII.	Iowa Stock Food	20	1,201 lbs.	7 40
IX.	International Stock Food	20	1,167 lbs.	7 20
X.	Standard Stock Food	20	1,198 lbs.	7 00
XI.	Pasture	20	1,210 lbs.	7 55

It is well to remember that the places occupied by the different lots in the above list may be by no means taken as conclusive. Animals bringing the highest price per hundredweight do not always bring the most profit to their feeder. Hence, some groups at present standing near the bottom may find a place much higher when all is told.

The Necessity for a Grass Rotation.

To the Editor "Farmer's Advocate":

I am frequently having my attention drawn by discussions with other farmers to the alteration in the land which has been under cultivation for some time, and the poor yield obtained compared with that of former years, with the exception of those crops growing on new land or fallow, and it is beginning to be recognized that some rotation including grass is a necessity if we would continue to grow remunerative crops. In all the older settlements there is a steadily increasing demand for hay at a fair price, which, apart from other benefits we should reap, is an additional incentive to lay down a portion of our land to grass. But always first would be the immediate return we should receive from the greater number of the stock which our land would maintain and the benefit to future crops. The first question always asked is, "What grass is the best?" a question rather on a par with, "What stock should I keep?" and most easily answered by another one, or rather two, "What do you prefer?" and, "For what purpose do you want it?" Personally, I have only experience with two cultivated grasses, timothy and Bromo grass, and I like them both. Red-top suits this part of the country, to judge by the wild crops of it one gets, and is, if cut early enough and well saved, splendid feed for all classes of stock. Rye grass, I should think, is too light-rooted to have much recuperative effect on the land, but is a good grass for hay. For both hay and pasture, Bromo grass will be hard to beat, as it gives a green bite both early and late, and is a heavy cropper. I have found all classes of stock very fond of it and to do well on it. Mine has been cut on what I thought the ripe side, but this winter I have heard it said that horses were apt to scour when fed on it, and as I have seen no such effect from feeding it, I think possibly that it may be better to cut it more mature than other grasses. Of the clovers, none have proved satisfactory, so far as I know, but the common white clover is hardy in this country, and should be profitable to grow with timothy to improve the pasturage, especially for sheep.

We have just had a heavy hailstorm through this district, and a piece of rape I had just sown is a good object lesson in the difference between worked-out land and fresh. Half of it was old land and has a hard-baked crust on it an inch thick in consequence of the beating of the hail, whilst the other half, the second year from sod, is as mellow as ever. I prefer seeding down with barley, though many seed with wheat. One can plow late for barley, killing a good growth of weeds at the time; then use the weeder and sow the grass seed, following with the weeder again or the roller. Bromo grass is very difficult to sow by hand. I think the best plan is to drill it on summer-fallow land, mixing about an equal bulk of oats and setting the drill to sow three bushels of oats, which will be about right, actually sowing a bushel of each. The oats make grand fall feed for stock when the pastures are bare. An ideal rotation, in my judgment, would be wheat on sod, followed by oats, then barley, seeding down with the barley; hay one year, pasture the second; then break up for wheat again. But this rotation would be too short on most farms as long as wheat is king, and two crops of wheat would have to be taken to reduce the grass acreage. Where a number of stock are kept, corn might be grown also as a cleaning crop to take the place of bare fallow, sowing in drills not less than 30 inches apart (36 inches much better), and working with a scuffler between the rows. No system can be laid down to suit all farms or districts, and men will have to work out the system best suited to their business. No one, however, can deny that some system including grass in the rotation is rapidly becoming a necessity in the older-settled districts, and an interchange of ideas through the agricultural press will be of great help to us in our efforts to establish a suitable one. One great trouble is the expense attached to seeding a large acreage in the purchase of the seed. This need only extend to the first crop, as all our suitable grasses will ripen their seed here, and a man can grow his own supply and have some to sell if he wishes.

From what I read, I understand that if a man has a surplus of timothy seed, it can be converted into strawberry jam, with the aid of some sugar and strawberry flavoring, combined with a turnip or two. I bought some jam the other day, of which the foundation was sago. It is not equal to the real thing, but helps to save butter on an exclusive grain farm, and everyone knows that farmers have to pay more for butter than other people when obliged to buy it.

St. John Lake, ARTHUR C. HAWKINS.
Note.—Timothy-seed strawberry jam should, I think, be placed in the same catalogue as "strawwood hams" and "wooden nutmegs."

Americans Don't Expect to Excel Canada in High-class Bacon

Prof. Curtiss, in an address before an association of Iowa swine breeders recently, thus described the essentials of the class of pork now rapidly coming into demand:

"The 1,800-pound bullock and the 200-pound wether have disappeared from our markets, and the over-fattened hog, with his extreme weight and waste, is no longer wanted. There are also other considerations besides the proportion of fat and lean. The tendency to push our hogs to early maturity by extreme forcing and selection for the form giving excessive obesity, has also a tendency to softer tissues and a more flabby-sided carcass than can be combined with superior quality of the finished product. Fine grain, firmness of texture and a comparatively even distribution of fat and lean are the prime essentials in high-class pork products. These are the result, first, of heredity and, second, of judicious feeding of wholesome, flesh-forming feed products, succulent feeds, grass and abundant exercise.

"It is not to be expected that our country will in the near future, if ever, take rank with Denmark and Canada in the competition for the higher grades of bacon on the foreign markets, but the demand for better pork products for our home and foreign markets has already manifested itself in such a way as to command the attention of the farmer and producer. The change will undoubtedly come as a result of the modification of the type of our present popular breeds rather than through supplanting them with foreign breeds of the bacon type, although there is already a rapidly growing demand for hogs of greater activity, vitality and vigor and more prolific breeding qualities, and a firm of packers in this State has recently imported several hundred head of an English bacon type and distributed them among their customers for breeding stock.

To Dress Calves.

Calves from 3 to 6 weeks old, and weighing about 100 pounds, or, say, from 80 to 120 pounds, are the most desirable weights for shipment. The head should be cut out so as to leave the hide of the head on the skin. The legs should be cut off at the knee joint. The entrails should all be removed, excepting the kidneys; the liver, lights and heart should be taken out. Cut the carcass open from the neck through the entire length—from head to humpgut. If this is done they are not so apt to sour and spoil during the hot weather. Many a fine carcass has spoiled in hot weather because of it not being cut open. Don't wash the carcass out with water, but wipe out with a dry cloth. Don't ship until the animal heat is entirely out of the body, and never tie the carcass up in a bag, as this keeps the air from circulating, and makes the meat more liable to become tainted.

Mark for shipment by fastening a shipping tag to the hind leg. Calves under fifty pounds should not be shipped, and are liable to be condemned by the health officers as being unfit for food. Merchants, too, are liable to be fined, if found selling these slinks, for violation of the law. Very heavy calves, such as have been fed on buttermilk, never sell well in our market—they are neither veal nor beef.—[Chicago Trade Bulletin.]

Stomach of the Horse and Cow: A Contrast.

The difference in the size and capacity of the stomach of the horse and that of the cow is very striking. It is only when fully distended with food that an adequate idea can be obtained of the great contrast between them. In the case of the horse, the average capacity of the stomach is from 3 to 3½ gallons, whereas in the case of the cow it is not unusual to meet with a paunch having a capacity of from 50 to 60 gallons.

Breeders' Meetings.

A meeting of the breeders of the Polled Angus cattle is called to meet on Thursday, July 21th, at 10 o'clock, a. m., on the grounds of the Winnipeg Industrial Exhibition, in the room above the general offices. The meeting is called to discuss matters of interest to the Angus breeders.

A meeting of Shorthorn breeders, to discuss the advisability of organizing an association in Manitoba, is called to meet in the same room at 10 o'clock on Friday morning, July 25th.

To Dress Lambs.

Leave the hide on. Cut open the carcass from the neck to the hind legs—don't cut through the hind quarters, as the meat is apt to turn dark. The entrails should be properly cleaned out. Bladder must be removed. Leave nothing but kidneys during hot weather. Back-cut the hide and draw the caul fat over the back-sets. Leave head and feet on. Lambs should not weigh less than 20 lbs. When too small they are not wanted. [Chicago Trade Bulletin.]

Camera Competition.

Last year the "Farmer's Advocate" conducted a camera competition which proved decidedly popular. The large number of amateur photographers who sent in samples of their work and the artistic excellence of the photographs indicated in a surprising degree the progress that has been made in that direction. Many of the photos were quite equal in artistic excellence and execution to the work of professionals, the subjects selected showing great variety and interest. So encouraging were the results, that we have decided to announce another competition open to amateurs, and to offer much larger prizes than we did in the competition of 1901. We now offer eight prizes, as follows: 1st, \$10; 2nd, \$7; 3rd, \$5; 4th, \$3; 5th, \$2; 6th, \$1; 7th, \$1; and 8th, \$1; for the best photographs of country homes, individual animals or groups, ranch, field or garden scenes, bits of scenery, tree plantations or individual trees grown under cultivation, or anything of that nature, subject to the subjoined rules:

All photographs must be not less than 4 x 5 inches in size, mounted or unmounted, and be the work of amateurs.

All photographs must be clear and distinct in detail and well finished.

They must reach the "Farmer's Advocate" office, Winnipeg, Man., not later than October 1st, 1902.

The name of the competing photographer and post-office address, and the name and location of the scene, must be marked on the back of each photo.

Any person competing is at liberty to send more than one photograph if desired, but only one prize will be awarded to the same individual.

All the prizewinning photographs will become the property of the "Farmer's Advocate" for the purpose of illustration. We reserve the right to purchase, at 25 cents or 35 cents each, according to size, any photographs that do not win a prize.

No photograph is eligible to competition from which an engraving has previously been made, and photographs must be the work of competitors.

Mating for Early Lambs.

Mr. J. S. Woodward, of Niagara County, New York, who is regarded as an authority on nut-ton-raising, says: "Very many methods have been suggested to make the ewes accept the ram in hot weather, a very necessary thing for the winter lamb-raiser, and I think we have tried about all of them. Sometimes we have thought we had a sure method, only to find the next year that it had no merit at all. It is not natural for sheep to mate till cool weather in the fall, but there is a great difference in breeds. Take the Dorset, for instance; they have been long used for raising early lambs, and have become accustomed to breeding much earlier than any other breed. In fact, a Dorset ewe, if rightly treated, will breed at almost any time of year. But they are not plentiful enough to fill the demand for early lamb-raising, and we want to know how it can be brought about to induce the ordinary grade sheep of the country to breed out of season. Much depends upon the breed of the ram. A Leicester or Cotswold ram can hardly be induced to associate with a flock of ewes before cool nights in October, while a Dorset ram will follow with the ewes at all seasons, regardless of the heat. And there is no disputing the fact that the constant attention of the ram will have much influence in bringing the ewes into condition. I have no faith whatever in any system of medication further than the effect of feed upon the ewes. The largest percentage of ewes we ever had to drop lambs before New Year's was several years ago, when, during the great railroad strikes, we had a flock of ewes tied up in the stock-yards at Detroit for over a week. We could get nothing for them to eat but stock-yards hay—poor, wild hay—with no grain, and before we got them home they looked pretty hard. We then turned them in to good feed, put rams with them, with the result that a remarkably large proportion dropped lambs in December. Since that time I have always found that ewes that were gaining were more disposed to accept the ram, and that is the only thing upon which we place any reliance. We manage to have our ewes in such condition at the beginning of the season that by turning them in to good pasture they will begin to gain, and we also sometimes give a little extra food like wheat bran—anything to start them gaining—and then see to it that the ram is of such breed that he will persistently follow the ewe.



LADY OF THE BOYNE 5TH (IMP.).

Contributed by W. D. Flatt to the Hamilton sale on August 13th. (See Gossip, page 556.)

How to Make Firm Butter in Hot Weather.

The texture of butter is largely influenced by the temperature at which the cream from which it is obtained is churned. The warmer the cream is at the time of churning the softer will be the resulting butter and the more difficult it will be to get it to show the necessary grain and firmness of body. In very hot weather in summer much difficulty is sometimes experienced on this score, though if proper precautions are taken there need be no trouble in getting the percentage of water reduced below the standard now decided on—viz., 16 per cent. In making butter during hot weather in summer, it is a good plan to keep the cream as cool as possible for a period of ten or twelve hours before churning is timed to commence, and with the same object in view it is a good plan to have the churning performed in the early morning, when the temperature is sensibly lower than at any other period of the day. —Farmer's Gazette.

Experiments in Cheese Ripening.

Ripening of cheese in cold-storage compared with ripening in the ordinary curing-room, is the title of Bulletin 121, just issued by Profs. Dean, Harrison and Harcourt, Ontario Agricultural College. In this report the growing demand of the British market for a "fatter" cheese, or one with a softer body and texture, is pointed out. It is also shown that to produce the desirable quality, factories must be equipped with better ripening-rooms. Co-operation is commended, and the advantages of central or consolidated cold-storage stations are duly considered. The main part of the investigation, however, was a comparison of methods of ripening, and although the authors wish this report to be considered only as preliminary, it should be of special interest to all cheesemen.

CONCLUSIONS.

1. An ice cold-storage chamber, with circulation of air, may be maintained at a temperature of about 40° without moving the ice, if the building is well insulated.
2. The high percentage of moisture, 91.6 per cent., in the cold-storage made the conditions favorable for the growth of mould; yet the mould was no worse on the cheese in the refrigerator than on the cheese in the ordinary ripening-room. In both places the mould was kept in check by the use of a solution of formalin sprayed on the cheese with a hand spray-pump.
3. The acidity of the whey increased up to the time of salting the curd, when it decreased, and then increased again.
4. The saving of loss in weight by ripening at an average temperature of 37.8° for the season was over 2 per cent. on cheese weighing about 30 pounds each. This is a very important item in a large factory, and would also pay the cost of cold-storage for cheese in hot weather.
5. The quality of the cheese was the same whether placed in the cold-storage or ripened in the curing-room that put in directly from the factory in the first. Uniformity of quality was maintained when placed in cold-storage was the chief advantage.
6. An increased yield of cheese per 100 lbs. of milk may be looked for as a result of using the method of manufacture and ripening in the

lower temperature than has been commonly supposed necessary.

7. It has been claimed that cheese kept in cold-storage for any length of time will spoil quickly when exposed to an ordinary temperature. Such results were not observed in the experiments conducted, nor are they likely to occur when the cheese have been ripened for the whole period at a moderately low temperature. Further experiments are being made to settle this point.

8. A cheese put directly from the hoop into a dry box and placed in cold-storage, without any turning, ripened satisfactorily. The chief defect was in the large amount of mould on the cheese. A cheese put into a box after ripening in the ordinary room for a week gave similar results. Two cheese made from the same vat of milk as

the cheese put into the cheese-boxes, were placed on a shelf in the cold-storage, and the quality was similar to that put directly into a box from the hoop, and to that put into a box at the end of one week. The cheese-boxes should be well seasoned, if the cheese are not to be removed from the boxes. We would advise spraying the inside of box and soaking the scale-boards with formalin, to prevent mould.

9. Undesirable bacteria such as are found in cheese seem unable to grow at a temperature of 38° F., and consequently bad flavors in cheese, caused by bacteria, do not increase in cold-storage.

10. The long life of the lactic acid bacteria in cheese seem to have an important bearing on the question of ripening, checking the development of bacteria which produce bad or undesirable flavors.

11. The temperature at which cheese will cure best is not yet settled. There are involved in the question many points which require further investigation.

A copy of this bulletin may be had by applying to the Department of Agriculture, Toronto.

Composition of Cream.

The average composition of cream may be taken about as follows:

	Per cent.
Water	68.82
Fat	22.66
Casein, albumen, etc.	3.76
Milk sugar	4.23
Ash	.53
Total	100.00

Large Creamery for British Columbia.

"That the farmers of British Columbia are awake to the advantages of dairy husbandry in that Province," is evident by the fact that at Chilliwack they have formed a co-operative society and have built a new creamery, the largest of its kind west of the Rockies. The building has a desirable location near the town, at which a plentiful supply of pure fresh water may be had. It has capacity to handle the cream of 1,200 to 1,500 cows, and since winter dairying has become quite popular, it is expected that a large output will be maintained throughout the year. The butter will be sold upon the home market where a ready sale can be made at remunerative prices. Mr. J. W. McGillivray, formerly a student at the Ontario Agricultural College, is the superintendent, and Mr. T. J. McFarlane, of the Chilliwack, is the manager.



MISTLETOE 21ST (IMP.).

Contributed by W. D. Flatt to the Hamilton sale on August 13th. (See Gossip, page 556.)

Moisture in Butter.

In view of the recent enactment in Great Britain, that butter to be accounted genuine must not contain more than 16 per cent. of water, it has been deemed advisable by the Canadian Department of Agriculture to ascertain the average moisture-content of Canadian creamery butter. To this end samples of butter as packed for export are being collected for analysis. Two samples, taken a week apart, are being sent to Ottawa from each creamery, the first to be held until the second is ready, and both forwarded together. A memorandum must accompany each sample, giving the following amongst other details: Name of creamery, whether gathered cream or separator system, name and address of buttermaker, date of churning, style of churn, temperature at various stages, etc. The analysis will be made by Mr. Frank T. Shutt, Chemist at the Experimental Farm, Ottawa.

Three-months-old Chicks Wanted.

In the report of the Dominion Experimental Farms, Mr. A. G. Gilbert, manager poultry department, says the large poultry-purchasing companies in Canada call for a three-months-old chicken, as being best suited to the wants of a certain class of customers in our home and English markets. The chicks are wanted early and in numbers. There should be no difficulty in our farmers having such chickens by the end of July or beginning of August. A fear is expressed that a chicken of this age will not have weight, but Mr. Gilbert shows by his report that for years they have had no difficulty in that connection. Barred P. Rock, White P. Rock and White Wyandotte cockerels at three months old have averaged from 3 to 3½ pounds each.

Keep Pens Clean.

At no time in the year is it more important that the poultry-house be kept clean than during the sultry days of summer. A few minutes every morning, if spent in removing the droppings and in setting things in order generally, will go a long way toward making the industry profitable. It is at this time of year that disease and vermin do the greatest injury to fowl. Of the latter, certain species are to be found only in the crevices and hiding-places of roosting apartments, from whence they crawl during the night to sap the blood of our feathered friends. To check these and other pests, the walls, ceiling, partitions, nest boxes and roosts should be sprayed or whitened with lime-wash containing crude carbolic acid. It is a good practice, also, to scatter slaked lime around the windows and under the roosts each morning after cleaning up. Nowhere during this season does cleanliness mean so much as in the poultry-house.

Supply Water to Chicks.

During the hot days which are sure to come in the next few weeks, be sure your chicks are constantly supplied with pure fresh water. It is important that they be kept growing at this time. Lack of drink will check their progress. Filthy water may bring on disease. By all means supply plenty of water.

Mustard Spraying.

(From our Ontario and Eastern edition.)

Prof. M. W. Doherty, of the Ontario Agricultural College, has lately been making a tour through Western Ontario for the purpose of demonstrating that it is possible and practical to destroy wild mustard, by spraying with copper sulphate, without injuring farm crops. On Thursday, June 12th, a representative of the "Farmer's Advocate" had the pleasure of witnessing the operation on the farm of Mr. P. H. Lawson, Westminster township. Ten pounds copper sulphate (bluestone) were placed in a sack and suspended in a large pailful of warm water to dissolve. This was accomplished in about fifteen minutes, after which the solution was placed in a barrel, to which the spray pump was attached, and the whole made up to 45 gallons, an amount sufficient for one acre.

During the afternoon only about two acres were sprayed, it being the Professor's intention to have everything in readiness for the public demonstration, as advertised, for the following day. Unfortunately, however, rain that evening prevented these plans from being carried out. Later, Mr. Lawson continued the spraying according to directions until a field of twelve acres had been treated. A visit to this farm on July 5th showed the mustard practically all gone; only a few leafless stalks were to be seen, with pods half mature. These, no doubt, would have been completely killed had the spraying been done from one to two weeks earlier. The oats, in which the mustard grew quite thickly, were somewhat singed on the top leaves by the solution when spraying took place, but at our last examination—on July 5th—all signs of injury had disappeared. In an adjacent untreated field the yellow blossoms were quite thick and visible at half a mile away, but in the field treated no yellow blossoms were visible.

As a result of our close observation of this work, as well as reliable reports which have been received from other sources, we have no hesitation in recommending Prof. Doherty's method for the destruction of this most pernicious weed. A suitable spraying outfit ready to attach to a cart or wagon may be had for less than twenty dollars. The cost of copper sulphate will not exceed eighty cents per acre, and if the spraying be carefully carried out for four years, there is no doubt but that the weed will have become thin enough to be pulled by hand. The saving in moisture and plant food during that time will in itself be sufficient to pay the actual cost, and in the end the land will be greatly increased in value.

Keeping Milk in Warm Weather.

The practice of putting in a supply of ice during the winter has in many instances solved the problem of keeping milk sweet during the summer months. However, where there is one ice house to be found on small dairy farms, we venture to assert that ten of these farms could be found where such an improvement is absent. In view of this, the perplexing problem of keeping milk during the hot weather annually presents itself. The first step in the process of preserving milk in a sweet condition is that of keeping things clean at time of milking. This refers not only to cleanliness of the milker, but also to that of the utensils as well as surroundings at milking time. Milk when drawn from the animal is in a perfect condition for the absorption of odors from the surroundings. At this temperature many organisms when once present in milk multiply at an exceedingly rapid rate, and it is impossible, no matter how cleanly every stage of the milking may be, to prevent the entrance of some of these organisms that cause fermentation or souring. The only thing that can be done, apart from being scrupulously clean in every detail, is to cool the milk as rapidly as possible after it is drawn. This does not mean that the milk should be left in the stable, even should it be cool there, but rather that it be immediately removed to clean, fresh quarters, and there subjected to rapid cooling by surrounding it with water. So much the better if it can be aerated before setting. If an ice supply is not available, ordinary spring or pump water will do exceedingly well. This is usually drawn at a temperature of from 50 to 60 degrees, and it has been ascertained that when milk is suddenly reduced to this temperature, organisms are of exceedingly slow growth. Not only does this check souring or fermentation, but it causes the rapid rise of butter-fat or cream, which in most cases is the object sought. In addition to this, however, it is often necessary to keep the milk sweet during a period of twenty-four, or possibly forty-eight, hours for the purpose of utilizing it as a food for calves. In view of this the practice that we have recommended is an exceedingly good one in the absence of such dairy machinery as the hand separator.—Home-

The Law Respecting Male Animals in the N.-W. T.

This law was passed in 1897 and partially amended in May, 1900. We give its main provisions, in reply to requests from several readers. It is known as the "Entire Animals Ordinance," and copies can be had any time by applying to the Department of Agriculture at Regina.

Section 3. No stallion of one year old or upwards shall be permitted to run at large in any part of the Territories at any time.

4. Except as hereinafter provided, no bull nine months old or upwards shall be permitted to run at large in any part of the Territories at any time.

(2) The minister may by proclamation in the Gazette authorize stallions and bulls to run at large in any district named in that notice between the first day of July and the thirty-first day of December in any year.

5. If there is no pound district, any person who finds a stallion or bull running at large contrary to the provisions of this ordinance may capture and confine such bull or stallion and promptly thereafter shall notify the owner thereof if known to such captor; and if such owner do not within three days after such notice take away such stallion or bull and pay the captor thereof \$5 for his trouble and 25 cents per diem for the keep of the said stallion or bull for every day it has been in his custody, such owner shall be guilty of an offence and liable on summary conviction thereof to a penalty not exceeding \$20, together with the cost of prosecution and the fees for the capturing and keep of such stallion or bull as aforesaid, which fees shall be paid over on collection to the captor.

6. When the owner of any stallion or bull captured and confined under the provisions of the last preceding section is unknown to the captor, the said captor shall within forty-eight hours after such capture post up a notice of detention in Form A in the schedule hereto in three public places in the neighborhood of the place of capture and at the same time forward a copy of the notice to the department for publication in two consecutive issues of the Official Gazette, and the owner of such stallion or bull shall be entitled to receive delivery thereof upon paying the captor \$5 for his trouble and 25 cents per diem for the keep of such animal, together with the amount of the expenses actually incurred for advertising.

(2) In addition to advertising the capture of a stallion or bull in the Official Gazette as herein provided, the captor may also cause a copy of the notice of detention to be inserted in three successive weekly issues of the newspaper published nearest to the neighborhood in which the capture was made, and any expenditure not exceeding the sum of \$1 made for such advertising shall be reimbursed to the captor by the owner if the said stallion or bull is released by such owner or, if not so released, by the justice after the sale of such stallion or bull upon proof of such expenditure having been made.

7. If at the end of twenty days from the first publication of the notice in the said Gazette no owner be found for such stallion or bull or the payments herein provided have not been made to the captor, then upon application to a justice in Form B in the schedule hereto, verified under oath before the said justice, the said justice may, after eight days' notice posted up in three conspicuous places in the neighborhood of the place of capture (one of which shall be the post office nearest thereto) stating the time and place of sale, sell or cause the said stallion or bull to be sold by public auction, and out of the proceeds of such sale shall first pay the expenses of sale and advertising and justice's fees and then the sum of \$5 and costs of keeping to the captor and the balance to the minister.

(2) The justice of the peace shall immediately after the sale send to the department a description of the animal or animals sold, the date of the sale, the amount realized and the disposition thereof.

Running at large means "without being under control of the owner either by being in direct and continuous charge of a herder, or by confinement within any building or enclosure or fence, whether the same be lawful or not."

11. In any pound district or herd district established under the provisions of any ordinance of the Territories no stallion or bull shall be detained or sold in the manner provided in this ordinance, but (if captured) shall be taken by the captor to the nearest accessible pound, there to be dealt with as it is provided estrays may be dealt with.

12. The owner of any stallion or bull who, after receiving a notice signed by a justice of the peace that such stallion or bull is running at large contrary to the provisions of this ordinance and requiring such owner to capture and confine the same, neglects or refuses within forty-eight hours to comply with such notice shall be guilty of an offence and liable on summary conviction thereof before a justice of the peace to a penalty of \$5 for every day after the expiration of the time mentioned in said notice the stallion or bull is at large.

Brandon Fair Judges.

- Heavy Horses—J. Turner, Calgary.
- Light Horses—J. G. Rutheford, Ottawa.
- Cattle—J. C. Small, London, Ont.
- Sheep—John McQueen, Carleton Place.
- Swine and Poultry—S. Butterfield, Windsor, Ont.

Farm Zoology-II.

BY REV. W. A. BURMAN, WINNIPEG.

Having now introduced the reader to the animal world in a general way, we now proceed to consider the different classes, the habits of different animals, and their relation to the work of the farmer.

We begin with the mammals, or animals which suckle their young, and first we give a list of the classes into which they fall, both for convenience and for the purpose of illustrating the methods used by scientists to bring order out of seeming confusion. It may help to remove the impression that only the very learned can understand even the very beginnings of natural science. This is a bogey which has deterred many from attempting nature study in a simple way. For our purpose, then, we may name the following orders of mammals.

1. Beasts of prey, flesh-eaters, or Carnivora.
2. Insect-eaters, or Insectivora.
3. Bats.—Chiroptera—having winged bands.
4. Gnawers, or Rodentia.
5. Cud-chewing animals, or Ruminantia.

Thus it will be seen that, as a rule, the first live on other animals, etc.; the second and third live on insects; the last two orders on vegetation. There are, of course, exceptions, but it is interesting to notice the general arrangement as to provision for the maintenance of so many living things. Three orders, it will be seen, must have living things upon which to live, and these, no matter what they may be, like the gnawers and cud-chewers named above, are in the last resort really dependent on the plants of the earth. Where nothing can grow nothing can long live. The plants which clothe the world in beauty are absolutely necessary to keep life upon the earth. I make this remark because it is the clue to the inseparable connection between the animal world and agriculture. Just because living things cannot exist without living plants, we are and shall ever be face to face with the problems to be discussed in these papers. And if it be true that living things cannot exist without plants, it is also true that, as at present constituted, many plants could not continue the work of reproduction and would soon become extinct without the aid of insects and other living creatures.

We thus see that there is throughout nature a beautiful law of interdependence. There is a system of compensation and a balance kept between the different forces which make up the great army of living things, which cannot be seriously interfered with without bringing disaster in its train. Sometimes human agency is responsible for this, or may help to avert it. The practical purpose of these papers is, amongst other things, to consider some of these cases.

1. Beasts of Prey.

They are powerful animals, move very quickly, are endowed with keen smell and sight, and have sharp, strong teeth and often very sharp claws.

In the West we have the following families:

1. Cats.—The lynx.
 2. Dogs.—Foxes, wolves.
 3. Weasels.—Fisher, marten, ermine, skunk, badger, etc.
 4. Bears.—Black bear. (In far West, the grizzly.)
- In our next we shall give these closer study.

Judges at the Winnipeg Industrial.

Among the judges of the different classes of poultry and live stock at the Winnipeg Industrial are:

- Shorthorn Cattle—John Miller, Brougham, Ont.
- Herefords, Polled Angus and Galloways—Prof. Curtiss, Ames, Iowa.
- Light Horses—Dr. Quinn, Brampton, Ont.
- Heavy Horses—A. W. Charlton, Dufferin, Ont.
- Dairy Breeds—Alex. Hume, Menie, Ont.
- Sheep—John McQueen, Carleton Place, Assa.
- Swine—Prof. J. J. Ferguson, Michigan Agricultural College.
- Poultry—S. Butterfield, Windsor.
- Dairy—A. Smith, Strathroy, Ont.

Hog Raising Declining in England.

The live-stock statistics of England show that there are less hogs to-day in that country than at any time since 1893. For this decline various reasons are suggested. One is that the restrictions made necessary through swine fever has made hog-raising less profitable than formerly. Again, it is said that in some districts the farmers are giving up cheese and butter making, and selling their milk to dairy factories in the large cities, thus disposing of the skim milk and whey, which heretofore constituted a valuable part of their swine ration.

Water Measurements in Irrigation.

[Address of Prof. W. H. Fairfield, at Institute meeting in Southern Alberta.]

It is with some hesitation, ladies and gentlemen, that I appear before you to talk for a short time on some questions relating to the irrigation problem; because I know that many of you come from States, such as Utah and Idaho, in which the art of irrigation has reached such a high state of development that it commands the admiration of all familiar with it. Still, with irrigation, as with all other topics bearing on agriculture, intelligent discussion is always helpful, for it is by such agencies that the farmer makes his principal advancement.

Then, to begin with our district. What is it? Is it arid, semi-arid, or is it humid? That is, do we have enough rain each year to produce good crops? There is no one, I think, who will say that it is arid. We have, then, but the two latter conditions to consider. Are there seasons in which the rainfall is so scant that it becomes necessary to apply moisture artificially to produce crops? Certainly for the last two or three years we have not felt very keenly the want of the ditch. Are these seasons typical of the climate in general? If we are to believe what the venerable "old timers" tell us, they are not. According to them, there are many seasons in which there is so little rain that it is impossible to raise ordinary crops successfully. Some of these "old timers"—in fact, many of them—are stockmen and consequently are not pleased to see the settler come in, for their ranges disappear with the appearance of the incoming settlers, as snow before a summer rain. We are apt, therefore, to think that their advice is sometimes not altogether disinterested. Still, as it is the universal statement of all who have lived here for any length of time, we must believe that it is, on the whole, true.

In addition to this evidence, it hardly seems probable to me that so able and shrewd a financier as the president of the Irrigation Company, Mr. Galt, would inaugurate and push to a successful issue an irrigation scheme of such magnitude as this one is unless he were well assured that it was a necessity for the development of the country.

If, then, we may expect to have to irrigate in some seasons at least, it is of a great deal of importance to know how much water we will need. The subject, then, which naturally presents itself is the measurement of water. Until recently, it was universally the practice to use the inch or miner's inch as the unit of measure. An inch of water was defined somewhat differently in various States. It is sufficient for our purpose to define it as the amount of water that would pass through an orifice an inch square, the surface of the water to be kept a certain number of inches above the upper edge of the orifice. This inch as a unit of measure was very unsatisfactory for many reasons, the principal one being that it was not definite enough; consequently, a cubic foot was adopted as the unit by the irrigation engineers. The superiority of this over the original miner's inch might be illustrated in a crude way by supposing that instead of selling wheat by the bushel the elevator men were to sell the amount of wheat that would run out of a chute of certain dimensions at so much by the hour or day. Another reason that the miner's inch was unsatisfactory was that it was extremely difficult—in fact, to all practical purposes, impossible—to arrange it so that the small consumer should get as much in proportion as the large one. To illustrate, the man who took his twenty inches out of an opening containing twenty square inches would get much more than twice as much as the man who drew his ten inches through an opening of ten square inches. On the other hand, by the use of the weir it is possible to measure the number of cubic feet of water passing over with considerable accuracy.

Now, to go back a step, as I said, a cubic foot of water is something exact. You can weigh a cubic foot of water. If you do you will find that it would weigh sixty-two and a half pounds. If you measure it you will find that it will contain almost exactly seven and a half gallons. If your water-right calls for one cubic foot per second, you will know that you are entitled to seven and a half gallons of water every second, and in a day 648,000 gallons, or exactly 86,400 cubic feet, as there are that many seconds in twenty-four hours.

Then by availing ourselves of some of the information furnished by the extensive irrigation investigations which are being carried out by the United States Department of Agriculture at the present time, we can form a very satisfactory estimate of the amount of water necessary to give a single irrigation. Then by having the amount of water expressed thus, in cubic feet per second, it is a mere problem in arithmetic to decide how large a water-right you will need.

The term "acre foot" is used to express the amount of water necessary to cover an acre one foot deep. As there are 43,560 square feet in an acre, it takes just that number of cubic feet of water to make an acre foot. Or, another way of saying it, if your water-right should call for one second-foot, it would

take just 43,560 seconds, or nearly 12 hours, to cover an acre one foot deep.

The amount of water necessary to give a single irrigation varies with the kind of soil and subsoil, together with its temporary condition; that is, whether it is moist or dry and whether it has been tilled shallow or deep. The more porous and open a soil is, and the more open the subsoil, the more water it is necessary to apply to get the whole area wet.

For a flood irrigation of grain, it is necessary to supply such a quantity of water as would be sufficient to cover the land at least one-half foot deep on a close, compact soil, and up to two feet and over on a loose, open soil. On our soil here, after it has once been brought under irrigation, it would probably be necessary to apply enough water to cover the land from half a foot to a foot deep. On land with suitable slope and with a careful irrigation, half a foot deep might be sufficient, but probably three-fourths of a foot or more would be nearer what would be used. On land newly broken from the sod, a greater quantity would probably be required.

To illustrate what we have been saying, we will suppose that you are entitled to one cubic foot of water, and also that your neighbor is entitled to the same amount. For convenience you change water with him. For, in applying the water to the land, it is much more economical, both in time and water, to use a stream of not less than two second feet. We will say that you begin at six o'clock in the morning. Every second, two cubic feet of water is running out of your lateral and spreading itself over your land. In twenty-four hours there are 86,400 seconds, consequently you have applied twice that number of cubic feet of water, or 172,800 cubic feet, which would be sufficient to cover about five and one-fourth acres just nine inches deep. If you changed with a third neighbor and used three second feet, which would be still better, you could count on irrigating half as much more in the twenty-four hours. I may say that a stream running about two to three second feet is probably the most convenient size, for if it is much larger, one is apt to have to build larger laterals through his grain than he cares to. As you probably know, in changing water between neighbors it is customary for each one to use water two or three days to a week each time his turn for it comes.

At the rate of one cubic foot of water for one hundred and fifty acres of land, as the law in the Northwest Territories prescribes, mixed farming must be practiced. For if one has one hundred and fifty acres in wheat, it would be positively impossible to irrigate it in the four weeks or so in which it should be irrigated. However, if the farmer had his one hundred and fifty acres so divided up in mixed crops that the first he would irrigate in the spring would be hay, then perhaps some winter wheat, then his early spring wheat, barley, oats, potatoes, etc., in whatever order they were planted or when they needed it, his second foot of water would probably be ample to irrigate his full one hundred and fifty acres.

What I have attempted to do, ladies and gentlemen, in the few remarks I have made is to clear up, if even to a very small extent, some of the hazy ideas which are prevalent even among experienced irrigators, as to the amount of land one cubic foot of water per second will irrigate. I only trust that I have been at least partially successful.

Sheep-Worrying in Britain.

Sheep-worrying by stray dogs is a cause of great loss to flockmasters, and there is singular remissness in formulating schemes for a remedy. The Bill of 1900 embodied some excellent clauses, but since it went the way of the innocents nothing further has been done to end the evil. Local authorities have far too little authority in a matter of this kind. They should have power to seize and lock up stray dogs, and it should be declared legal to shoot at sight dogs found chasing sheep. At present the law in England seems to be that a dog cannot be shot except to save the life of a sheep. If he has already claimed his victim there is no further penalty for him. He must not only be caught in the act, but he must be found so worrying the sheep as to cause its death. There should be no exemptions from license, and every dog should carry a collar bearing his owner's name.—Scottish Farmer.

Sheep Destroy Weeds.

"Of the 600 weeds and grasses growing in the Northwest," writes Prof. Thos. Shaw, "it is estimated by those that have made a study of it, that sheep will eat 576 of them, while horses consume but 82 and cattle only 56. The fact is, sheep prefer many kinds of weeds to grasses, and weedy fields and horse pastures are improved by turning a small flock of sheep into them. When sheep devour the weeds they do not charge anything for the work. On the other hand, they pay the farmer for the privilege of pulling the weeds. They turn the weeds into mutton, fresh, juicy and crisp. A sheep's stomach is the most perfect receptacle that was ever made for weeds. It is sure death to every form of weed life. No weed seeds retain the power of resurrection after having been buried in that living scrubber, the stomach of a sheep."

Ottawa Notes.

ABOUT POTATO EXHIBITS.

Most agricultural associations provide a set of prizes for potatoes, field roots and grain. In the section for potatoes, prizes are given, in most cases, for separate varieties. This arrangement tends to encourage exhibitors to grow those varieties that the managing committee saw fit to put on the list—a very proper method, provided that the committee look well into the question of varieties and admit only those that are best suited to the district or county where the exhibition is held. But many of the best varieties do not come to stay. Some of them become "run out" within a year after they have become sufficiently well known in a district to deserve a place on the prize list, and on this account it is not always advisable to stipulate the name of varieties. Again, it is quite well known that there are many more names for potatoes than there are varieties. It is much easier for "would-be" seedsmen to invent new names for an old sort than to breed up a new variety. They must have something new to offer each year. To be able to discriminate between varieties of the same type is another problem with which judges are asked to cope when prizes are offered for named varieties. Potato-growers know that there are few judges such "rare birds" as to be able to distinguish Early Rose potatoes from many other varieties of the "Rose type," or the Empire State variety from others of the "Long White type." It might be added, too, that the conscience of potato exhibitors would need to be rather sensitive if they did not take advantage of the judge's inability to "guess right." Potatoes are, practically, all grown for the same purpose. All the varieties can be grouped into several quite distinct and recognized types, which really form the basis of classification for commercial purposes. Why, then, would it not be better to offer a less number but much larger premiums and encourage the introduction and growing of any variety, allowing varieties of the same type to compete one against another? This classification of potatoes has already been adopted by quite a number of agricultural associations, and seems to be meeting with a great deal of approval among potato-growers.

SHEAF AS WELL AS GRAIN.

At the approaching Ottawa Fair, in the section for seed grain, provision has been made so that each half bushel of seed will be accompanied with a small sheaf, showing the full length of straw with heads of grain. It is always difficult to judge the real merits of seed or of a variety from the grain alone. A good sample of grain may often be prepared from a crop which has been taken from a field that would not yield more than five bushels to the acre. The size of the heads of grain and the nature and quality of the straw will be considered in awarding the prizes.

CHICKEN FATTENING.

Mr. F. C. Hare, of the Department of Agriculture, is preparing a bulletin of the rearing, fattening and marketing of chickens. Mr. Hare, after visiting the poultry fattening station at Homesville, Ont., reports the work progressing favorably. He states that farmers who have reared chickens up to two or three pounds of weight at this time of the year will find it to their advantage to place them in the fattening crates recommended by the Department, for three or four weeks before they are placed on the market. Satisfactory results can be obtained in fattening chickens by taking a packing box about twenty inches high and sixteen inches wide and removing the bottom and one side of the box, and by placing laths lengthwise on the bottom of the box, 1 1/2 inches apart. It should also have laths placed up and down the front of the box, two inches apart. The boards on the top of the box should be loosened so that the chickens can be removed from it. Mr. Hare states that the chickens should be fed a thin mash of principally ground oats and sour skim milk. They do not receive any exercise and they will gain rapidly in the crates. Mr. Hare is of the opinion that there will be a good demand for dead fatted chickens this fall, and that prices will be higher than they were last fall. A large firm in Montreal has written to the Department making enquiries for a large consignment.

Strawberries a Luxury.

The season for strawberries is now over. Those who have had a small patch in the garden have enjoyed them; others who have not, surely learned to appreciate this luscious and healthful fruit more fully. They are a real luxury on any table. Some farmers fear to put down a few plants lest the work of caring for them would be too great. It's a mistake; a little labor well directed in cultivating strawberries cannot be better expended. They require a rich, somewhat moist soil, with good drainage. Spring is the best time to plant, but if that season is to be an unusually busy one, August planting may give good results. Enough plants for a farm garden may be purchased for a trifle. The principal attention required is in providing a good mulch of straw or coarse manure in winter, and occasional cultivation in summer to keep down weeds and conserve moisture. No farmer can afford to neglect the planting and care of a small patch of strawberries.

The Wide, Wide West.

Probably no Canadian has any adequate conception of the meaning of the word Canada until he has looked on the gloomy Atlantic as it breaks on Cape Breton's rocky headlands, then travelling night and day for many days, finds himself on Victoria Harbor, staring, wide-eyed, at the fitful Pacific, variable in mood as any maid.

It is hard to conceive a nobler heritage than ours. As day after day one journeys from the east, westward ever, one cannot refrain from musing on the immense possibilities that are for us. And what a nucleus for a mighty nation exists already within our borders! From the brainy Bluenose home by the sea, through the country of the peaceful, industrious habitant, past the portals of old Ontario with its million sturdy yeomen, on and on for days through New Ontario with its hardy home-brewers of every race, till at last the prairie is reached. Then a region richer in possibilities than all traversed lies beyond. For a thousand miles to the west extends the rolling prairie till lost in the foothills of the Rockies, and for many miles to the south and for many miles to the north extends the prairie till the finite mind palls in the effort to picture the boundless plains. In one little corner a lot of lusty men have made their home and called it Manitoba, but beyond, to the westward and to the northward, are many million acres with settlers here and there, men drawn from nearly every clime to find in Canada a home and a freedom not known before. Beyond the plains rise the mountains—the Rockies, the Selkirks and the Gold Range—with fertile valleys between. Among the peaks and in the rooimy valleys, and by the many lakes, and along the rushing rivers, and upon the fertile delta lands, and within the tidy islands, dwell the men from many nations who have made British Columbia what it is. Then who shall say that with such a people, with such a country for a home, such an air for inspiration, Canada is not destined to a premier place in America, in the world.

When nature smooths the plain with such mighty sweep or piles the hills with such reckless hand, the voyager is tempted often to neglect the careful consideration of the particular in a too rapt contemplation of the beauty and magnificence of the general. Such might seem to have been the writer's weakness, but habit is a powerful factor in all one does, or thinks, or says, and so, while subconsciously the above thoughts pass, the active every-day mind is occupied with the agricultural points of the country traversed.

The exceptionally early spring which delighted the heart of the eastern farmer in April and the first few days of May, did not seem to have extended west of Ontario. The fields wore a sullen, sodden look, with scarce a green blade showing, when on the 9th of May Manitoba was crossed. Many fields wore scathed faces—marks of the little-availing efforts at spring stubble firing. Eastern Assiniboia was much like Manitoba, but the further westward, the more advanced seemed the season, till, Calgary reached, a pleasing greenness covered all the land.

At Calgary, as your readers know, there was held a quite successful sale of pure-bred breeding cattle, and thither had come ranchers from all the great ranching land, the possibilities of which as a beef-producing area are even yet but imperfectly known. Your true rancher is a "husky," freedom-loving chap, quite well able to look after his own interests, be they material or moral. He has, moreover, a sublime contempt for "the man behind the plow," whose calling seems to have few attractions for the genuine "cowboy." Many however, especially among the smaller operators, are finding it necessary and profitable to cultivate some parts of their claims, and, without doubt, many more must shortly follow. Certain areas must always be the ranchers' exclusive domain, but their extent, while really immense, constitutes, comparatively, but a small part of the hundreds of millions of acres of prairie land.

Near Calgary are several large ranches. Some of these the writer was privileged to visit. About twelve miles to the west of Calgary, and north of the Bow River, lie two or three famous horse ranches. The one of particular interest just at present is the Rawlinson. It will be remembered that from this ranch, about a year ago, I think, R. Beith, M. P., brought the now famous Robin Adair. Mr. Rawlinson was able to show us a number of Robin's get of various ages, some of them of decided merit. Mr. Rawlinson is this year importing several more stallions, and it is to be hoped he does as well with this last importation as with the earlier.

Across the Bow from Rawlinson's lies the McNaughton Shorthorn ranch. This is probably as well situated a ranch as may be found in the district. It includes part of the Bow river-bottom, where the buildings stand and where some irrigation operations are carried on. A hundred feet or so higher than this bottom land lies a broad plateau of rich soil, fairly well protected from the winds, while high above this terrace, and reached by winding ways, lies the summer range. The dry range is a good enough lot, a hundred in number, some grazing "between highland and low

land," and made a very pleasing sight. On the plateau fed the new mothers with their blocky offspring at foot. In the corral, on the bottom land, were the young sale bulls and the stud bulls. The former were a very good lot, and had just been sold to "The Cochrane." The stock bulls, while not in high condition, are of good conformation and good blood, and, judging by the get, "nick" well with the "she stock." This is probably the largest herd of registered cattle in the West, but may scarcely be said to be the best, as the aim is to produce range bulls rather than animals fit to use in pure-bred herds. The existence of such a herd, as well as the various Western-bred animals of real merit sold at Calgary, demonstrates quite clearly the possibility of producing high-class stock right where it is needed for the range—a good thing for the small holder, and he is winking to the fact. Some other ranches were visited, but space will not permit remarks, since British Columbia, so seldom spoken of as a farming country, claims notice here.

Much of British Columbia is, for various reasons, really not very good farm land. The altitude is frequently an objection when grain farming is contemplated; besides this, the slope on many sections is decidedly bad. There are districts, however, where extensive ranches are operated, and other sections where grain-farming is carried on. Probably the most beautiful and one of the most fertile of these districts is the Okanagan country. Sicamous Junction is the place to leave the main C. P. R. line to reach this land of plenty, and a most beautiful trip it is from the main line to the end of the Okanagan Lake. Ranching, mixed farming, grain-farming, orcharding, hop-growing, potato-growing—and this great valleys suits them all.

The grain and potato farmers are tiring, as the land is becoming exhausted, and a creamery is being built at Armstrong. At meetings held in the Valley a strong feeling in favor of dairying was evident, and the Institute lecturers were pried with pertinent questions. These men are starting along right lines and they are bound to succeed.

Dairying in British Columbia is a peculiarly favored industry, for, where it is possible of pursuit, grass being plentiful and the pasture season long, the expense is low and butter prices are high. Creameries have, generally speaking, been a great success, and the dairying industry is capable of tremendous expansion because the market is good and practically unlimited and the industry is in its infancy. But, while dairy farming is coming in and replacing grain and potato farming, the ranching business is likely to continue, not only in the Okanagan but in many other parts of the Province, on account of the peculiar climate and geological formation.

The Coldstream Ranch, the property of Lord Aberdeen, lies three or four miles from Vernon, and on Victoria Day a most pleasant and instructive morning was spent in the company of J. B. Anderson, Deputy Minister of Agriculture for the Province, and Mr. Ricardo, the energetic and keen manager of the estate. The hopyards, over one hundred acres in extent, were doing well, and the potato fields, which include about one hundred acres, were just being planted. The strawberry garden of several acres in extent was offering well, and the cherries would, apparently, need many boxes at harvest time. Under orchard there is an area of 160 acres, and on many of the larger trees a good "set" of fruit was in evidence. The whole ranch had an air of efficient and capable management.

Ranching operations on a big scale are carried on in various districts. The basin of the Thompson River is one of the districts most suitable for ranching, and many large ranches occupy the bottom lands and the adjoining grass-covered hills and valleys. Near Kamloops is located one of the largest, the Harper. A drive of twelve miles over an easy trail brings one to the comfortable buildings in the midst of the cultivated lands. Irrigation is necessary at this point, as it is in many other parts of the Province, but alfalfa grows most luxuriantly here and rarely needs to be watered. It was nearly ready for the first cutting about the end of May. The potato crop and root crops were starting out well. In this valley, as in the Okanagan, potatoes are a staple crop wherever water is available. Large returns are harvested. The yields vary from six to thirty tons per acre, according as one's informant is a newcomer or an old-time settler: the older the settler the larger the crops. No native-born rancher was met, however, so possibly the crops mentioned above are considerably underestimated. Apologies to the Province are in order if such be the case.

The cattle were all out on the range, so we were not so fortunate as to be able to inspect them. This ranch is one of those which last winter brought in stockers from Eastern Canada. The manager spoke highly of the Eastern stuff, and evidently contemplates going back for more. Food for winter, as suggested above, is most easily secured in large quantities and of superior quality. The quantity and quality of the hay that may be grown per acre on the irrigated lands is most remarkable. At Vancouver the writer

examined some 450 tons of irrigation-land timothy hay for export to the British Government War Department in South Africa, and he had never seen timothy hay to equal it in any other part of the world. It was perfect in color, flavor and texture, and was entirely free from dust or other foreign substance. This was the first hay shipment to South Africa from the West, and should surely bring further orders.

There are some parts of British Columbia where irrigation is not necessary. Notable among these is the Fraser bottom below Yale. Agassiz is situated in this section. A most profitable day can be spent at the Experimental Farm, opposite the station, by any one interested in farming or orcharding, or by any lover of the beautiful. The Superintendent, Mr. Sharpe, is of a most genial personality and most enthusiastic where the agricultural possibilities of the country are concerned. This part of the Province is well suited for dairy farming, and creameries flourish.

Taken as a whole, the resources of the Province are marvellous, and are being developed as rapidly as is advisable in a country where each district has a climate of its own, entirely different from that of any other section and requiring careful local experiment and study. The return eastern trip was made in June, and truly a most marvellous transformation had occurred in all the great plain. Where bleak, brown slopes had been in May, the prairie was rich in knee-deep grass. Where the new-sown fields and half-burnt stubble had hurt the eye, young grain waved thick, a timely, welcome dress to mother earth in her nakedness. The West is nothing if not energetic. Even nature there does things with a rush. It is evident that if Eastern Canadians wish to retain their commercial and agricultural pre-eminence they must decide soon and resolutely on more strenuous efforts toward improvement.

J. H. GRISDALE.

The Bird's Hill Plowing Match.

The second annual plowing match under the auspices of the Bird's Hill Farmers' Institute was held on July 8th, on the farm of Wm. McKinley, about a mile from the village of Bird's Hill.

The day was perfect and the field selected admirably suited for the purpose. The young ladies of the district provided a sumptuous dinner at midday and light refreshments during the afternoon, for which a small charge was made, the proceeds going to aid the Union Sunday School.

There were five classes and fourteen contestants in all. Not as many as the previous year, owing, doubtless, to the work on most farms being rather backward on account of the wet weather in June. This year the prizes were mostly in cash, and very generous. For the walking plows, the field had a slight roll about half way down the furrow, which at the start bothered some of those used to plowing on flat land. The soil, too, was lighter than most of the contestants were accustomed to. A large concourse of people gathered in the afternoon to witness the conclusion of the match, among whom were a number from Winnipeg. The judges were Messrs. Hutchings and Richardson. But one boy entered in the class for boys 16 and under, D. Patterson, who did a very creditable job on a rather poor land. In the class for boys 20 and under there were three entries—Frank Patterson, Jack Hod-denott, and J. Rice. These boys did very fair work, although it lacked the care and finish one looks for at a plowing competition. They were ranked in the order named. In the men's (under 40) class there were four entries and interest deeply centered in this contest. The competitors were W. J. Smith, Henry Smith, J. A. Henderson, and Frank Grieves. They won out in the order named, the first three doing particularly good work, all of them opening with too high crowns and none made perfect finishes. Samuel Mizen and Wm. Knight were the only competitors in the men's (over 40) class, and were ranked in the order named. The judges assumed a practically impossible task when they undertook to decide between two gangs, a sulky and a disk, and in order to catch their train they jumped their decisions without waiting to see the finishes, placing the awards as follows: S. N. Henderson, gang, first; D. B. Gunn, gang, second; J. Wilson, double-disk, third; and J. Beattie, sulky, fourth. It is to be hoped that at future matches separate classes will be provided for the different styles of plows, so that justice may be done to the work of each. The classification in general could, we think, be improved by having separate classes for 12- and 14-inch walking plows, and also for gangs, sulkies and disks. No division might be made in the men's class by ages, but instead one open class could be arranged, and one for those who had not previously won a first prize at any plowing match.

The educational feature of this match, both for the public and the contestants, was almost entirely lost on account of score cards not being used in making the awards. With the score card, the plowman can learn the points wherein his work is considered weak, and the public, too, are assisted in forming an intelligent opinion as to what perfect plowing should be.

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to the "Farmer's Advocate" are answered in this department free.

2nd.—Our purpose is to give help in real difficulties; therefore, we reserve the right to discard enquiries not of general interest, or which appear to be asked out of mere curiosity.

3rd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer, as a guarantee of good faith, though the name is not necessarily for publication.

4th.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

Veterinary.

PARTIAL DISLOCATION OF THE PATELLA.

I have a young stallion, four years old, that has been standing service for the past season. He is a little weak in the stifle joints, yet his weakness does not seem to bother him only when he stands over in the stall, when he drags his legs and trails his toe, bringing the foot up with a jerk or quick movement. He has been this way for over a year and has not improved any. He has not been driven very much, but is permitted to run out of his stall. He is growing fast. Will he grow out of it? What remedy would you advise? Is blistering any good? Is the ailment in the joint, bones or tendons?

CONSTANT READER.

Ans.—This affection is not infrequently seen in young horses. It occurs from a relaxed or partially ruptured condition of the internal lateral ligament of the stifle, or knee-joint, which permits the patella (knee-cap) to slip in and out of its place. With regard to your horse, the case has evidently become somewhat chronic, and in consequence the usual remedies may not prove effectual or satisfactory. Give morning and evening, in food or water, for ten days: salicylate of soda, two drams. Apply by smart friction with the hand, over the whole surface of the joint, for at least ten minutes the following blister: cantharides pulverized, four drams; biniodide of mercury, two drams; vaseline, four ounces; mix. After forty-eight hours, wash off and apply vaseline to the blistered surface. Repeat in three weeks. The horse should be turned loose in a roomy, well ventilated and lighted box stall, bedded with sawdust if possible. It is not advisable to apply blisters in very hot weather.

UMBILICAL HERNIA.

We have a young pig (barrow) that has a bad rupture at the navel. Would you kindly advise us the best method of curing this rupture? The swelling is about the size of a cup, and can be reduced, but always comes down again.

Brandon, Man.

K. BROS.

Ans.—Give no food for sixteen hours. Place the animal on its back and return the contents of the sac. Gather the skin up closely to the walls of the abdomen and compress the tissues, with a previously-prepared wooden clamp, or "clam," sufficiently tight to stop the circulation of blood, but not tight enough to cause too rapid sloughing.

WHITE SCOURS IN CALF.

I have a valuable calf, two months old, which sucks its dam. The calf scours all the time. The discharge looks white, like milk. The calf is kept shut up. The dam is out on an old pasture field.

L. G.

Ans.—Your calf is suffering from what is commonly called white scours. Give the calf 2 ozs. linseed oil mixed with the same amount of lime-water. Then give a powder, morning and evening, composed of catechu, $\frac{1}{2}$ dram, and powdered chalk, 2 drams, till you see an improvement. If possible, change the food of the dam and let her have $\frac{1}{2}$ gallon of lime-water every night and morning.

RHEUMATISM.

I have a cow which for the last few weeks is very stiff when walking. Is better at night than in the morning; getting thin in flesh. I have been giving her some aconite.

J. W. M.

Ans.—Your cow is no doubt suffering from rheumatism. This disease is usually caused by cold and damp, but sometimes specific infection. Keep her perfectly quiet and in comfortable quarters. Apply hot fomentations, or flannels wrung out of hot water, to the parts. Give a dram each of bicarbonate of soda and nitrate of potash in her drinking water morning and evening. If the joints are involved, sometimes it is necessary to blister.

ERYSIPELAS.

On Thursday morning a four-year-old horse received wound on hip by backing down on a barrow tooth; wound about two inches deep. I got a vet. to dress the wound, who considered it not at all serious. Friday, horse a little stiff; Saturday, leg swollen; Sunday, swelling worse and sheath involved. Horse died Sunday night.

J. R.

Ans.—In my opinion, indeed from symptoms described, your horse died from erysipelas. This disease often follows very trifling wounds, sometimes a mere scratch in the skin through which the germ gains an entrance. Assuming that the trouble was erysipelas, I think your veterinary adviser did about all that could have been done.

TETANUS AND ARTHRITIS.

I had a mare foal on June 17th. Everything went well till June 23rd, when the foal was found lying stretched out stiff, with its head thrown back as far as possible, his neck so stiff that in trying to lift it you could raise the whole body. It died at night.

I had another foal that was never able to get up. Could walk a little when raised. Joints in legs swelled. Lived three weeks.

H. F. R.

Ans.—I think there is no doubt that your first-mentioned foal died of tetanus (lockjaw). The symptoms you describe strongly suggest that disease. The cause was probably that the germ got entrance through the navel opening of the little animal. Numerous instances of the kind are on record.

The last-mentioned foal, being always weakly, succumbed to an attack of inflammation of the joints, which a strong foal might have shaken off. The fact of those foals being sired by a Clydesdale stallion had nothing to do with their death.

INDIGESTION IN YOUNG PIGS.

I have five pigs, seven or eight weeks old, which will suddenly stop eating and knuckle down behind the shoulders as if in pain. Have been fed on chopped peas and barley, with a little bran and milk and clover. Have also another pig, three months old, which has a whitish spot on lower side of eye.

W. E. L.

Ans.—Your pigs are suffering from digestive trouble, caused by feeding too much heavy meal before the stomach was strong enough to digest it. Give each pig one ounce of raw linseed or castor oil. Turn them out where they can root in the ground, and give a teaspoonful of powdered gentian in their food morning and evening. Give no chop stronger than oats for a few weeks.

Your other pig is probably suffering from a scum over the eye caused by an injury, which will probably come all right in time. Possibly it is a cataract, in which case treatment would be useless, and blindness will result.

SCROTAL HERNIA IN FOAL.

I have a colt, six weeks old, that appears to be ruptured in scrotum. I can displace the enlargement and it will stay for a time, but will come down again.

J. B. L.

Ans.—Your colt is suffering from scrotal hernia. The chances are that no treatment will be necessary, as the great majority of such cases come all right during the first year of growth. Occasionally, however, when the rupture is very large, a loop of the bowel becomes strangulated or checked in the sac so that the contents of the bowel cannot pass through, when the little animal will show colicky pains. In that case, hold the patient down on his back and endeavor to press the intestine back into the abdomen. In such a case an operation might be necessary, and you would need to consult a competent vet. However, the chances are 50 to 1 in favor of your colt coming all right without any treatment.

CHOREA.

I have a two-year-old Clydesdale gelding that was badly bogged on the legs, but that has almost disappeared. When standing in the stable or in the fields, he jerks his legs somewhat like stringhalt, but can walk or trot all right.

T. R.

Ans.—Your colt is evidently suffering from some form of chorea. This disease usually occurs in unthrifty animals, but any animal may become affected. Get $1\frac{1}{2}$ ounces of sulphate of iron and 1 dram of arsenous acid. Mix into one dozen powders, being careful to have the arsenic thoroughly and evenly mixed, and give one powder morning and evening in his food. After he has had a dozen powders, let him go one week without treatment, and then repeat with another dozen powders. This disease is often most unsatisfactory to treat.

BURSAL ENLARGEMENT ON COLTS' KNEE.

Have a sucking colt that four days after birth had a soft swelling come on its front leg right below the knee and to one side, about 3 inches long, 2 inches wide. Colt not lame; plays and runs all right.

M.

Ans.—Your foal is suffering from an enlarged bursa of the knee joint, or probably where the tendon plays over the joint. In a strong, vigorous young animal, like your foal appears to be, the lump is frequently absorbed without any treatment. If it does not disappear in the course of a few weeks, apply the following blister lightly once a day, being careful not to make the parts raw or sore: Two drams each biniodide of mercury and iodide of potassium, and mix with 8 ounces of water.

PREMATURE PARTURITION IN SOW.

I have a young sow which pigged sixteen days before her time. Pigs either born dead or died shortly after birth. Sow fed on turneps and clover.

M. B.

Ans.—Premature birth is likely to occur in such animals usually the result of injury of some kind. Sometimes follows an attack of indigestion, and occasionally is produced by the use of ergotized food, such as the straw of

grain, especially rye or barley, and sometimes found on grass, especially on low lands. I could not offer an opinion as to what caused it in this case.

INFLAMMATION OF WOMB (METRITIS).

I had a mare which foaled on the 3rd of June. Had been slightly stiff with swelling in joints for about three weeks. The third day after foaling, her milk seemed to dry up; and got quite stiff, with spells of trembling; temperature and pulse rising; appetite gone; breathing hard and quite uneasy, standing with fore feet well under the body, and finally died.

F. H.

Ans.—There is little doubt your mare died from inflammation of womb. I think, however, that there was also a complication of parturient laminitis (founder). Treatment for metritis consists of syringing out the womb with bichloride of mercury and water, in the proportion of 1 to 1,000; an application of mustard to the loins, and then covered with heavy cloths rung out of hot water. See that the bowels are kept moving freely, and drench with stimulants, such as nitrous ether, 2 ozs., or about $\frac{1}{2}$ pint whiskey. Treatment for laminitis: Purge with 1 ounce aloes. Give 1-dram doses of nitrate of potash three times daily for two or three days, and keep the feet soaked in hot-water cloths.

Miscellaneous.

REGISTRATION OF JERSEYS.

Could you give me the name and address of the secretary of the A. J. C. C.; also cost of registry in said book?

S. J. P.

Ans.—J. J. Hemingway, 8 W. 17th St., New York. To non-members, \$2 each head, male or female; to members, \$1. All animals over two years old, double fee. For registration of dead animals necessary to complete the registration, \$1. Imported animals, \$10. Transfers are recorded free, if presented within 90 days of date of delivery; after 90 days, \$1 each. Blank forms for registry and transfer are supplied free.

FARM GOSSIP.

Don't Forget the Weeds.

When the hurry of harvest is on, don't forget that the weeds may be quietly growing in the garden. If any be allowed to seed, a large amount of the labor expended in keeping them down during early summer will be lost. Only a little time may be required to run through the beds and pull up the stray intruders. They are nearly sure to be there. Do not allow them to seed on any account.

Importing Canadian Products.

The following table, compiled from Canadian Government reports, shows the quantity and value of a few products imported into Canada from the United States during the ten months ending April, 1902. These imports are those affecting mainly gardeners and fruit-growers. Canada has a competitive free list of about \$39,000,000 worth of farm products coming from the U. S., and a long list of manufactures under moderate tariff.

Potatoes—65,092 bush., valued at.....	\$ 71,102
Tomatoes—9,281 bush., valued at.....	23,567
Peaches—3,545,223 lbs., valued at.....	91,142
Plums—32,052 bush., valued at.....	38,665
Grapes—575,609 lbs., valued at.....	36,600
Green apples—20,529 bbls., valued at.....	79,373
Dried apples—70,152 lbs., valued at.....	4,528
Eggs—638,334 doz., valued at.....	142,166

\$487,143

Burdock Killing and the Moon.

In the "Farmer's Advocate" of June 20th I notice a few lines from Mr. John B. Stone re killing burdocks. Mr. Stone is quite right in his method of cutting the burdock, but in error as to time. If a burdock's root is hollow in the full moon in June it will not become solid in the dark of the moon intervening between that time and the full moon of the succeeding month and then become hollow again, but will remain hollow after once becoming so. Burdocks cut as he describes will be killed at any time from the time they start to grow in the spring.

W. A. GRANT.

Fair Dates.

Winnipeg Industrial	July 21 to 25
Dauphin	July 29 and 30
Brandon, W. A. A. A.	July 29 to Aug. 1
Neepawa	Aug. 5 and 6
Melfort	Aug. 5 and 6
St. Paul	Aug. 6
Winnipeg	Aug. 7
Dauphin	Aug. 7
Brandon	Aug. 8
Winnipeg	Aug. 21
Regina	Aug. 21 to 24

Edmonton Fair.

The annual fair at Edmonton, Alberta, held this year July 1st, 2nd and 3rd, may be set down as a real success, the weather being fine throughout and the attendance large. Coming so early in the season, the show of vegetables was, of course, limited, but the live-stock departments of the show were well filled in most classes, the cattle, sheep and swine being the strongest features, and these were undoubtedly the best representation ever seen together at a Northern Alberta fair. Coming at a season when farmers could spare time to attend, without neglect of pressing home duties, they turned out in large numbers and enjoyed the holiday thoroughly, while profiting by the object lessons brought before them in the various live stock, poultry, dairy, domestic manufactures and other classes, besides the excellent programme of athletic sports, which feature was well planned and carried out. The judges in the live-stock departments were J. H. Reed, V. S., of the Ontario Agricultural College, Guelph, on horses, and Duncan Anderson, Rugby, Ont., on cattle, sheep and hogs. At a banquet, held in the evening of one of the days of the fair, bright, cheerful and encouraging speeches were made by a number of the officers, directors, exhibitors and visitors, among whom were Messrs. P. Talbot, M. P. P.; Frank Oliver, M. P.; O. Palmer, G. Bennie, W. R. Stewart (president of the Territorial Horse Breeders' Association), Paisley, Ganepy, Mercer, McLaughlin, President Gallagher, McPherson, Tough, Brox, McCauley, the judges (Dr. Reed and Mr. Anderson), Mayor Short, and P. F. Tins, secretary of the Association.

The horses on exhibition were not numerous, but the quality was good. There was a noticeable lack of numbers in the stallion classes. In aged Clydesdales, Mr. Andrew P. Loughlin, of Strathcona, exhibited a fine animal in "Logan" 2249, by Wigton Lad, out of Rosie O, by Corporal Logan 2nd, dam Lady McGregor, by McGregor, etc. This is a compact, bay horse, with white hind legs and face. He is a stylish fellow, with grand bone and feather, and good style and action. He is rather on the small order, weighing about 1,850 lbs., but this fact makes him the more suitable for a sire in his own locality, as many of the mares are not large.

In the class for nonregistered draft horses, there were some good exhibits. The Brackman & Ker Milling Co., of Strathcona, and Mr. R. H. Davidson, of Edmonton, each showing a good team. The brood mares with foals by side were a good lot, as were also the youngsters of all ages. The general purpose class was well represented in all sections. In this class there were two very fine teams, one pair of bays very well matched, with some Clydesdale blood, and a pair very well mated greys, with Percheron blood. It was a difficult matter to decide between these teams, but the bays owned by Albert Kuhl, of Spruce Grove, was awarded first, and the second place went to the greys owned by P. Dowling, of Edmonton.

In the carriage class the numbers were very small and the quality hardly up to the standard looked for in that class nowadays. Mr. A. P. Laughlin exhibited a very nice team, but more of the road than carriage pattern. Dr. Braithwaite, of Edmonton, showed a fine, big, clever bay horse that can move along quite fast, but lacks the action looked for in a carriage horse.

In the Standard-bred or roadster class, some animals of excellent merit were exhibited. In the class for stallions two years old, Mr. W. R. Stewart, of Macleod, showed an excellent animal, one that will probably be heard from as a turf performer, in Jack Stewart, by Hland, by Leland, by Hambletonian 10; 1st dam Miss Confusion, by Confusion; 2nd dam by Dorsey's Gold Dust, etc. In the class for two-year-old fillies, the same exhibitor had a very fine entry in the chestnut filly, "Dora Kirk," by Bob Kirk, by Wildmont, by Egmont; 1st dam Miss Franklin, by Combination; 2nd dam Fanny, by St. Joe, etc.; and Thos. Jackson, of Clover Bar, had a nice filly for second place.

In both single and double roadsters, the exhibits were of high merit. Mr. Stewart won first in both sections; Mr. John Lubbock, of Edmonton, second with team, and Mr. R. J. Manson, of the same place, second with single horse.

In the saddle classes, the exhibits were of fair quality. Dr. Acres, of Edmonton, won first in the gentlemen's saddle class with a big, three-quarter-bred chestnut, and Mr. Stewart came second with a bay, also three-quarter-bred.

The following is a list of the awards:

DRAFT HORSES (registered).—Stallions, three years and over—1st, A. P. Loughlin, Strathcona.

DRAFT HORSES (not registered).—Team—1st, Brackman-Ker Milling Co., Strathcona; 2nd, R. H. Davidson, Edmonton. Brood Mares—1st, Thos. Fulton, Strathcona; 2nd, Albert Reid, Strathcona.

GENERAL PURPOSE.—Brood Mare—1st, Albert Kuhl, Spruce Grove; 2nd, W. P. Wilkinson, Namao. Filly, or gelding, three years old—1st, W. F. Wilkinson, Namao; or gelding, two years old—1st, F. A. Pearce, New Lannon. Filly or gelding, 1 year old—1st, W. F. Stevens, Clover Bar. Foal of 1902—1st, A. Kuhl, 2nd, F. Grierson, Edmonton. Team—1st, Albert Kuhl, Spruce Grove; 2nd, F. Dowling, Edmonton. Single horse, or gelding, any age—1st, Albert Kuhl; 2nd, F. Dowling.

SADDLE HORSES.—Team—1st, A. P. Laughlin, Strathcona. Single Carriage Horse—1st, Dr. A. E. Braithwaite, Edmonton.

ROADSTERS.—Stallion, 2 years old—1st, W. R. Stewart, Macleod. Filly, 2 years old—1st, W. R. Stewart; 2nd, Thos. Jackson, Clover Bar. Team—1st, W. R. Stewart; 2nd, Jno. Lubbock, Edmonton. Single Horse—1st, W. R. Stewart; 2nd, R. J. Mason, Edmonton.

SADDLE HORSES.—Saddle Horse, 15 hands and over—1st, D. R. Stewart, Edmonton. Pony under saddle—1st, Geo. Hutton, Edmonton. Gentleman's Saddle Horse—1st, Dr. G. H. Acres, Edmonton; 2nd, D. R. Stewart, Edmonton.

The greatest need of the horse breeders appears to be the scarcity of good stallions. The writer expected to have the opportunity of looking over the horses at Calgary and some other exhibitions, but the weather in most sections has been so wet that many of the exhibitions were postponed until September.

CATTLE.

SHORTHORNS were the strongest class, and were represented by selections from the herds of Messrs. P. Talbot, M. L. A., Lacombe; G. & W. Bennie, Castle-avery, Man.; J. A. McPherson, Stony Plain; W. Gourley and M. F. Webb, between whom the prizes were divided. The first award in the section for bulls three years old and over went to Talbot's entry, a grand animal, weighing 2,300 pounds, bred by Messrs. Cargill & Son, Ontario; sired by Imp. Royal Member; dam Rosa Lee, imported in dam. Messrs. Bennie, who had 17 head on exhibition, were second in this class, first for two-year-old bulls, and first and second for bull calves and for heifer calves. In yearling bulls, S. R. English, Strathcona, was first, and W. Gourley, Edmonton, second. The first prize for cows three years old and over went to Mr. McPherson's entry, and second to Mr. Talbot's. The herd prize for best bull and three females went to Talbot, second to Bennie. The sweepstakes for best bull, any age, was awarded Mr. Talbot's first-prize three-year-old bull.

HEREFORDS were well represented by entries from the herds of Messrs. O. Palmer, Lacombe, and Jas. Tough, the latter winning first prizes for the best bull any age and for two-year-old and one-year-old heifers, while Palmer had the first-prize yearling bull, bull calf, cow, heifer calf, and herd of one bull and three females, and three second prizes.

FAT CATTLE were shown by F. G. Hutchings and Jas. Tough, the latter exhibitor winning first prizes for best heifer and the best three grass-fed cattle five years and under, while Hutchings won for best steer any age and best cow any age.

GRADE CATTLE were shown, of good quality, by D. Brox, J. Hagman, W. J. Richards, J. McPherson, T. Jones, J. A. McPherson, and F. G. Hutchings, Brox winning in cows of beef strain and Hagman in milking strain, Richards being second in the last-named section, with McPherson for honorable mention. McPherson was first in heifer calves, Brox first for yearling and two-year-old heifers, and second for heifer calf. Jones won second for two-year-old heifer, Hutchings first for steer three years old or over, and Tough first and second for two-year-old steers.

JERSEYS AND GUERNSEYS were represented by entries by R. B. Walt, who had the first-prize cow, and J. H. Dowling, who was first for heifers and second for cow.

PIGS were out in goodly numbers in the Berkshire and Tamworth classes, and a few Poland-Chinas were also forward, besides a good entry in the bacon-hog class. In Berkshires, the prizes for boars one year or over were awarded: First to W. Wingrove, Namao; second, T. Swift, Clover Bar; third, Thos. Daly, Clover Bar. Boars under a year—First, T. Swift; second, H. Crawford, Strathcona. Sow, one year and over—W. F. Wilkinson, Clover Bar. Sow, under one year—First, John Redman; second, T. Swift. Brood sow—First, J. McPherson, Tamworth—Boar, one year and over—F. C. Seaman, Strathcona, first; H. Lange, Spruce Grove, second. Sow, one year and over—J. McPherson, first; T. Daly, Clover Bar, second. Best fat pig, any sex, J. Tough, who also won first for pen of three pure-bred bacon hogs and for pen of three grade bacon hogs. Mr. Tough won on his live stock 18 first prizes and 7 seconds.

SHEEP were shown by J. S. Wilson, who won first for ram over two years, S. McCurdie, who was first for ram lamb and for two ewes, shearings or over, and T. G. Hutchings, who won first for two ewe lambs.

In poultry there was a fairly good display, C. de W. Macdonald being the principal exhibitor, and winning first prizes in Barred, White and Buff Rocks, Colored Dorkings, Dark Brahmans, Black Langshans, and Indian Game, and second for Light Brahmans. R. J. Manson won first on Light Brahmans, S. R. English first in Bronze turkeys, F. G. Hutchings first in other turkeys, second for geese, and first for Aylesbury ducks. Thos. Swift was first in geese and Pekin ducks. J. S. Wilson was first for other ducks, and John Hagman second.

BUTTER.—The competition in this class was keen and the quality in most cases of a high order. For roll butter, 5 lbs., dairy, the prizes were awarded: First to F. C. Seaman, second to W. Mitchell, third to W. F. Wilkinson. Packed butter, homemade, not less than 20 lbs.—First to J. Trimble, second to W. Mitchell, 3rd to W. J. Baldwin. Crock butter, 10

lbs.—J. Trimble, first; T. Jackson, second; J. Hagman, third. Print butter, 10 lbs.—Mrs. McPherson, first; J. Trimble, second; J. Hagman, third.

HAMS, home-cured—J. Gainer, first; Mrs. H. McKay, second. Bacon, home-cured—J. Gainer, first.

BREAD, 2 loaves, any flour—First, Mrs. Lachambre, second, Mrs. McPherson. Two loaves, Alberta flour—First, Mrs. McPherson; second, Mrs. H. McKay. Buns, native flour—Mrs. Lachambre, first; Miss Ada Redmond, second.

"Pan-American Debt."

The United States Senate has agreed to appropriate \$500,000 towards the deficit of the Pan-American Exhibition, and \$45,000 towards the expenses connected with the attendance on the late President McKinley.

Buffalo Markets.

East Buffalo, N. Y., July 14.—Cattle—Prime steers, \$7.25 to \$7.75; choice 1,200 to 1,300 pound steers, \$6.75 to \$7; fair to good, \$6 to \$6.25; choice heifers, \$6 to \$6.25; best fat cows, \$5 to \$5.80; fair to good, \$4.25 to \$4.75; export bulls, \$5 to \$5.35; fresh cows and springers, good to extra, \$50 to \$60; fair to good, \$35 to \$45; common, \$18 to \$20; feeders, \$4.25 to \$4.50; stockers, \$3.50 to \$4.25; stockers' heifers, \$3.50 to \$3.75. Veals, steady; tops, \$6.75 to \$7; fair so good, \$6 to \$6.50; common to light, \$5 to \$5.75. Hogs.—Heavy, \$8.05 to \$8.25; mixed, \$7.90 to \$8; Yorkers, \$7.75 to \$7.85; light Yorkers, \$7.70 to \$7.75. Sheep and Lambs.—Lambs, \$6.50 to \$6.75; fair to good, \$5.75 to \$6.25; culls to common, \$4.50 to \$5.50; yearlings, \$4.50 to \$5.25; wethers, \$4.25 to \$4.50; sheep, tops mixed, \$3.85 to \$4; fair to good, \$3.50 to \$3.75; culls to common, \$2.25 to \$3.25; ewes, \$3.50 to \$3.75.

Montreal Markets.

Montreal, July 17.—The few head of the best cattle sold at from 4 1/2c. to 5c. per lb.; pretty good animals, 3 1/2c. to 4c., and common stock, 2 1/2c. to 3c. A number of lean cattle were bought by canners at from 2c. to 2 1/2c. Calves sold at from \$2.25 to \$6. Shippers paid 3 1/2c. per lb. for good large sheep, and the butchers paid from 3c. to 3 1/2c. per lb. for their supplies. Lambs sold at from \$2.50 to \$4.25 each. Fat hogs sold at from 6 1/2c. to 7c. per lb., weighed off the cars.

Chicago Markets.

Chicago, July 17.—Cattle—Good to prime steers, \$7.75 to \$8.75; poor to medium, \$4.50 to \$7.50; stockers and feeders, \$2.50 to \$5.25; bulls, \$2.50 to \$5.50; calves, \$2.50 to \$6.75; Texas, \$4 to \$6. Hogs.—Mixed and butchers', \$7.30 to \$8.05; good to choice heavy, \$7.75 to \$8.17 1/2; rough heavy, \$7.30 to \$7.65; light, \$7 to \$7.75; bulk of sales at \$7.60 to \$8. Sheep—Lambs, 15c. to 25c. higher; good to choice wethers, \$3.75 to \$4.75; fair to choice mixed, \$2.50 to \$3.60.

British Cattle Markets.

London, July 14.—United States cattle, 7 1/2d; sheep, 6d; Canadian cattle, 7 1/2d; sheep, 5 1/2d. Liverpool, July 14.—Canadian cattle, 7 1/2d; sheep, 5 1/2d.

Amount of Honey Consumed by Bees.

The amount of honey consumed by a colony of bees depends upon the length of time they are active during each year. Some authorities have placed the amount as high as 200 pounds for southern countries. It is a difficult matter to determine with any degree of accuracy. In Canada, it is estimated that rarely more than 100 pounds are required for each hive, however strong.

Provide Foods Rich in Lime.

Bran is excellent for poultry, and one point in favor of bran is, that it contains a much larger proportion of lime than any other cheap food derived from grain, and as the shells of eggs are composed of lime, it is essential that food rich in lime be provided. It may be urged that the use of oyster shells will provide lime, but it will be found that it is the lime in the food that is most serviceable, because it is in a form that can be better digested and assimilated than carbonate of lime, says the American Fancier. Clover is also rich in lime; and when a mess of cut clover and bran is given the fowls they need no oyster shells or other mineral matter as a source from which to obtain a supply of lime for the eggs. Do not forget that in summer, however, all kinds of foods should be used with judgment. If the hens have a free range, give no food at all as long as they are laying, but if they begin to fall off, let bran be the leading ingredient allowed. In winter the bran and clover are even more essential, as the fowls cannot then secure green food on the range.



"There is no frigate like a Book
To take us leagues away;
Nor any coursers like a page
Of prancing Poetry."

"God Save Our King."

The whole British nation stands, as it were, in dumb bewilderment these days. Instead of the joy-bells which were to have "made the welkin ring," there is a silence, and instead of the rejoicing shouts of the gathered multitude from all the ends of the earth, there goes up the cry which, whether in joy or sorrow, is, and ever has been, a prayer, "God Save our King!"

"What I do, thou knowest not now, but thou shalt know hereafter"—and with that assurance we must strive to still the aching of our anxious hearts, for without grasping the meaning of these, to us, inexplicable dealings, we do know that behind them lies some mighty purpose which needed this trial of faith, this suffering of a King, this sorrow and suspense of a loyal people, to bring it to a perfect fulfilment.

One of the uses of suffering is the sympathy it brings. Not only are the hearts of the King's loyal subjects stirred to their very depths, but from other lands and from other peoples, kindly expressions come to us, telling that as they rejoiced with us over the glad advent of peace, so now they sorrow with us in our time of stress and anxiety. In a Boston paper, issued on what was to have been Coronation day, the writer says: "The world deeply sympathizes with England's stricken King. It has been his lot to fill the gap left by his lamented father. He has had to be the throne's representative in unnumbered functions, grave and gay. Imprisoned in the vise of princely propriety, he has been obliged to subject his health to the inevitable dangers that must come of innumerable exposures. The result is that he neared the throne broken down in health, but as striking a sacrifice for his country's honor as though he had died in the field of battle."

"Only the most thoughtless will ascribe the King's long round of strained living to natural choice. He offers an example of vicarious sacrifice for the glory of England, and is an object of true sympathy for all the world."

"No man in his senses can but feel deep sympathy for the King. It is certainly a case where a peasant might pity a potentate."

And then it adds what must surely be most true: "But perhaps the women of the world will most pity Queen Alexandra, whose beautiful face has so often adorned the public prints of late. She will suffer affliction more keenly than all the rest."

There will not be a wife or a mother in the whole Dominion of Canada whose heart to-day will not be beating in unison with that Royal wife, and whose prayers will not go up with hers, that the life so dear to her and to her children, and so essential to the British nation, may yet be spared for years to come. H. A. B.

Ingle Nook Chats.

My dear Guests,—

"Every black must have its white,
And every sweet its sour."

So sings someone whose name I cannot at present recall, but the verse has been brought to my mind by the reception of an irate note from a very irate boy, who tried one of our recent competitions, failed to win and therefore accuses "The Hostess of unfairness in awarding the prizes. As this is the very first taste of "sour" that has found its way into the cup of sweetness proffered by my Guests, I have no cause to complain. Had the imputation any foundation, I should feel it keenly. As it is, I only regret that the person in question has not borne his defeat more bravely, remembering that though

"Glorious it is to wear the crown

Of a deserved and pure success;

He who knows how to fail, has won

A crown whose lustre is not less."

It is strange the different effects similar causes produce in different people. The brave make defeat a stepping-stone to some greater victory; the pusillanimous allow themselves to be weighed down by trifles and make no further effort.

There are contributors to these contests who have tried and failed almost half-a-dozen times, yet they cheerily return for still another attempt. Those persons will eventually win (not through "favor"—all are strangers to me), because each effort leaves them stronger than before. This persistent effort is, moreover, excellent discipline and an aid in the formation of firm character, and will unconsciously leave its trace thereupon, for it is an evident fact that our every action, word, and even thought, is being built into this important life-work.

"For the structure that we raise,
Time is with materials filled;
Our to-days and yesterdays
Are the blocks with which we build."

Another competitor writes: "... We defeated ones may at least do justice to those who have won. . . . Perhaps the failures may succeed next time—'Bruce and the spider,' you know." This is the true Canadian spirit, and nil desperandum is an excellent motto. I used to see 'The Khan poems, but have not read any lately. I should like to have the one you mention. I dare not ask for space to publish the poem you ask for, as already we are obliged to condense matters very much. To what do you refer, re the "Mc" to your name? Is it to this old rhyme:

"By Mac and O you'll surely know
True Irishmen, they say;
For if they lack both O and Mac,
No Irishmen are they."

I always thought "Mc" was as much Scotch as Irish.

Indeed, "Baby," the fact of your having had a birthday recently does not excuse you from paying respects to the Nook. It is, instead, a promotion to a higher rank and to win in future will be a greater honor. Don't you be foolish enough to give up horseback riding (or reasonably short skirts, either) for ever so long yet. Do not be in a hurry to bid adieu to "the glad, wild ways of your schoolgirl days"—the necessity for doing so comes always soon enough, even when longest deferred. Keep your heart and spirits young, and your face will follow their example.

"Marie," you are a 'brick' (dear me! I hope I shall not be reproved for indulging in slang; it is so expressive sometimes), and some day you will walk hand-in-hand with success. 'Too bad your berries failed. I see you find some consolation still; that's the best way—always look for the silver lining. Do you not love pansies? Their sweet velvety faces are almost human in expression. Mipe are not as good as usual thus far. You are at liberty to change your pen-name if you wish.

OUR COMPETITION.

The result of Contest XX. will appear next issue; some of the Provinces have failed to send any representative, which is too bad.

Contest XXI. will excite more general interest, and I hope for a large attendance. Quotation No. 10 should read, "The least flower, etc." instead of "last," as printed in July 5th issue.

Where are the two hundred and twelve Guests who tried the animal contest last winter? Everybody welcome, young and old; no disgrace to fail; try, try again.

THE HOSTESS.

Ingle Nook Chats, Pakenham, Ont.

THE QUIET HOUR.

Forward, March!

"In hastening on, o'er rough and smooth,
You may be apt sometimes to stumble,
For only he who stands stock-still
Is certain to avoid a tumble.

"In forming plans and doing deeds,
You'll often make mistakes, of course,
For only he who never strives
Will never meet opposing force.

"Better to lose a dozen fights,
And yet march on courageously,
Than halt, a coward, on the field,
And fail to live, through fear to die."

The command given to the Israelites, as they began their march to the Promised Land, is also a command to us: "The Lord said unto Moses, Wherefore criest thou unto Me? Speak unto the children of Israel, that they go forward." Go Forward! Are we obeying that command? When soldiers hear the order, "Quick, march!" they don't stand in one place and mark time—taking steps, but making no real progress. Yet that is what Christian soldiers too often seem to be doing. What were we like a year or two ago? Is our character any stronger and nobler to-day? It is a solemn question for each of us, and one that it is wise to ask occasionally, as a marchant takes stock of his goods once or twice a year. How terrible it would be if the judgment pronounced against the Laodiceans should ever be pronounced against us: "I know thy works, that thou art neither cold nor hot. I would thou were either cold or hot. So then because thou art

lukewarm, and neither cold nor hot, I will spue thee out of My mouth." Are we seeking first the kingdom of God, and making the pursuit of holiness the grand object of our lives; or are we "merely playing at religion, or having religion on us as a bit of veneer?"

One thing that is very important in running our Christian race, is to aim rightly. If a man is only trying to be religious in order to get to heaven, he will probably be quite satisfied with himself and his progress. Comparing himself with his neighbors—or, rather, with what he imagines his neighbors to be—instead of with the perfect Man, he will be very apt to rest on his oars when he has reached a fair standard of worldly respectability. But we should never be satisfied with ourselves. Our business is to press toward the mark, not to pay a small premium—in the shape of good works—as a wise investment in the way of insurance for a future life. Even in worldly matters, as Kingsley says, we should not be perpetually thinking, "Will it pay me?" instead of "Is it right?" Trying to get most money for the least work. In spiritual matters it is far worse. If we think only that selfish and worldly thought, "How much will God take for saving my soul?"—which is the secret thought of too many—then we shall be in a fair way of killing our souls; so that if they be saved, they will not, at all events, be saved alive. For we shall kill in our souls just those instincts of purity, justice, generosity, unselfishness and unworldliness which make the very life of the soul.

Our aim should not be only the selfish one of saving our own souls, for our orders are to aim as high as possible: "Be ye therefore perfect, even as your Father which is in heaven is perfect." Growth is one great proof of life; without growth, how can we be sure that we have any spiritual life at all? But growth is often very slow; we certainly can't reach perfection all at once. The rule is always the same, "First the blade, then the ear, then the full corn in the ear." Life always comes from God. He keeps that secret in His own hands. Men are clever enough to make a great many things, but all the human wisdom in the world can never make the thinnest insect, or even a plant, that is alive and can grow. This being so, we must come to God for fuller life, instead of trying to clip our souls into shape from the outside. It is beginning at the wrong end to try to make the actions right, if the thoughts and desires are left without control. That is like tying fruit on a tree, fruit which is not the product of its own life and does not show of what sort it is—does not belong to it, in fact. Christ has declared Himself to be The Life, and says that He will give life to all who come to Him. As He said so sadly long ago, still He says to many to-day, "Ye will not come to Me, that ye might have life." The great and infinite God is ready to touch each one of us with the closest union and personal contact, if we will only yield our lives honestly to Him. He has a special message for each soul, "which no man knoweth saving he that receiveth it." Without Him we can do nothing, but we can "do all things" when drawing every moment's power from Him whose strength is made perfect in our weakness.

"Let each man think himself an act of God,
His mind a thought, his life a breath of God.
And let each try, by great thoughts and great deeds,
To show the most of Heaven, he hath in him."

This life of ours is a grand trust lent to us by God. The idle question, "Is life worth living?" can never be asked by one who realizes that life means opportunity. We can't afford to waste to-day, for it will never be ours to use again; and to-morrow, when it arrives, will still be to-day—full of possibilities.

"There lies no desert in the land of life—"

Even the bits which seem most dreary and desert-like, are capable of yielding a rich harvest if carefully cultivated. Are we making the most of our own particular corner in God's great vineyard, or are we wasting valuable time in looking over the fence at other spots which are not given to us to cultivate? Perhaps our task is a difficult one, and we are very apt to grumble if companions are not congenial, and if everything is not made smooth and easy for us. But let us remember that difficulties and temptations are intended to help instead of to hinder us. If they are overcome they are like rounds of a ladder on which we may mount daily higher and nearer to our God.

"Difficulties are God's errands;

Ever keep this fact in view;

Proof of trust, and how he honors,
Giving us such tasks to do.

Let us march not, moving onward,
With a heart both brave and true.

Let us march on, with our hearts
To the goal that is set before us.

Let us march on, with our hearts
To the goal that is set before us.

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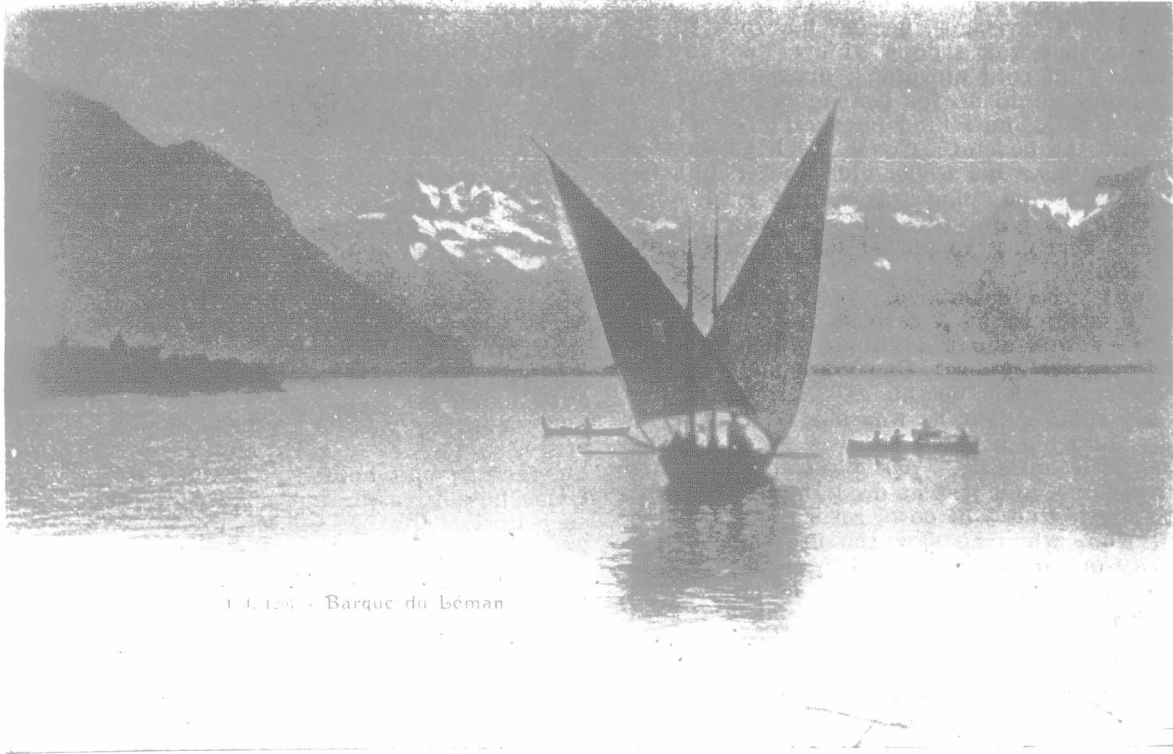
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HOPE



LAKE LEMMAN, SWITZERLAND.
Visited by "Mollie" in her travels.

Travelling Notes.

Montreux, May 25th.

I have written this on Sunday afternoon, whilst the town and the streets are one whirl of excitement, for although the Swiss are a good people and keep Sunday better than the French, they have great license during this fete. They are a simple country lot, nicely dressed and respectable, and though here, and in France, wine—their own make, sour and poor—is the common drink, I never see an intoxicated person. I read in my guidebook that Switzerland is bounded on the north and east by Germany, on the south by Italy, and on the west by France. It is a republic formed of twenty-two cantons, and the population is composed of French, German, and Italian. The German language is spoken by the inhabitants in sixteen cantons, the French in four, and the Italian in two. Its greatest length from east to west is 200 miles, and its breadth, 156. Two-thirds of its surface consists of lofty mountain chains and valleys, the higher peaks being covered in perpetual snow. The two most important rivers are the Rhine and the Rhone. In its towering mountains and vast glaciers, its beautiful lakes and smiling valleys, its numberless Alpine streams and glittering cascades, Switzerland combines various features of grand and striking scenery. This is how Lord Byron describes it:

"Above me are the Alps,
The palaces of Nature, whose vast walls
Have pinnacled in clouds their snowy scalps,
And throned Eternity in icy halls
Of cold sublimity where forms and falls
The avalanche—the thunderbolt of snow!
All that expands the spirit yet appals,
Gather around these summits, as to show
How earth may pierce to Heaven, yet leave vain
man below."

So far we have only been into French Switzerland, going from place to place on Lac Lemman, better known to us as the Lake of Geneva. It has rained more than half the time, but they tell us it has been an unusually rainy May. It seems odd that no matter where one goes, if it is too hot or too cold, or too windy or too rainy, it is always the same story—"an unusual season, its like never before heard of!" Why this should happen just when we go to these places is unanswerable. In this case we can forgive the weather, for there have been so many nice things, which quite overbalance the disagreeables. The people are all most kind and friendly, no matter what nationality, and we have been a mixed party, at some of the pensions, viz., Swiss, French, Germans, Italians, Russians, Greeks, English, and Canadians. The French language has prevailed, but nearly all speak English a little, fortunately for me, as I know but little French and less German.

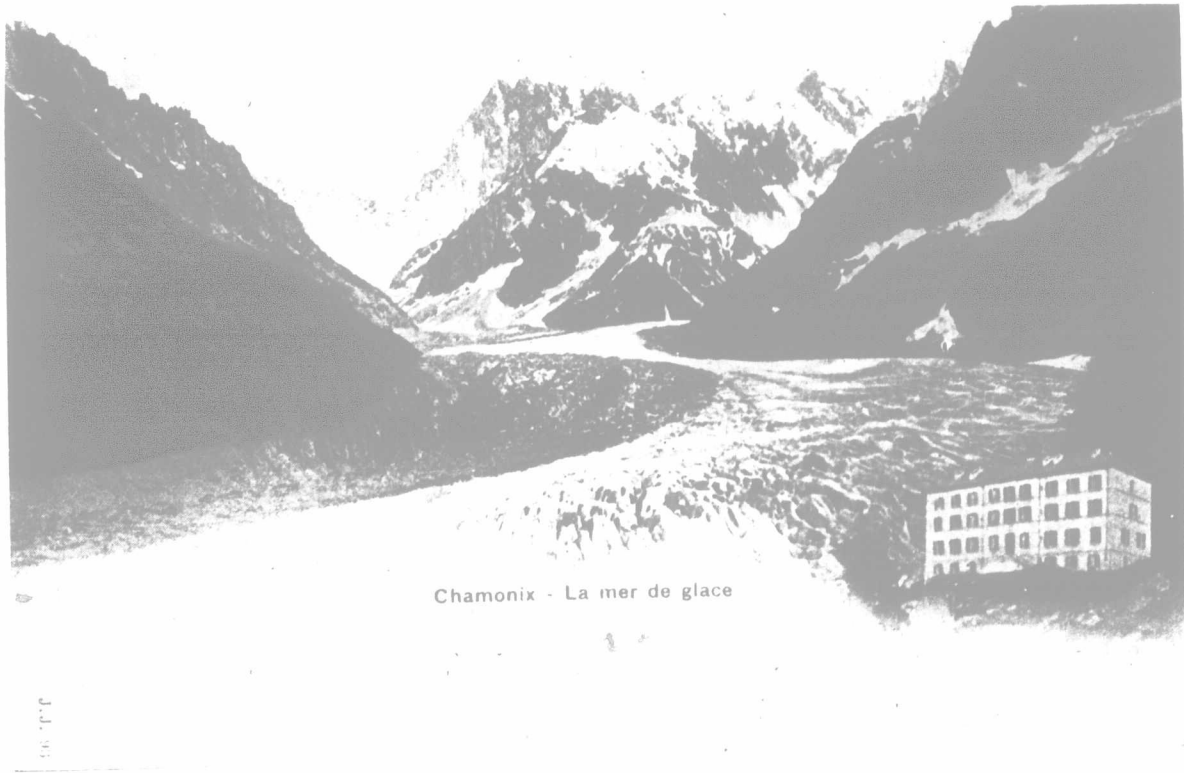
Montreux is a charming Swiss village, at the head of Lake Geneva, renowned not only for its beautiful scenery, but also for its healthy situation.

We are fortunate to be here this week, for Montreux is all in holiday attire, its streets are one mass of flags, Chinese lanterns, and flowers, the attraction being the annual "Fete de Nar-

cissus," and Battle of Flowers. Bands are playing, and hundreds of young people and little children, dressed in most picturesque style, are taking part in marches and pretty dances and minuets and singing. At the close of the programme in the park, they all go through the streets in floral carriages and big vans, and then follows a battle of flowers, somewhat similar to that which we witnessed on the Riviera, only with this difference, that here flowers are not so plentiful, except the narcissus, which grows wild and is gathered by the bushel. Confetti is used as well as flowers, so every man, woman and child, as well as the streets, are completely covered with both.

The Swiss railroad has been to us an object of friendly amusement. We had only got used to the sound as of a boatswain's pipe, of the French conductors, often resembling the cry of the peacock, when here we find the train is started by a small Christmas-horn, blown sometimes by a woman! Sleeping berths are an expensive luxury on the Continent—they will ask you from five to fifteen dollars for a single berth, so it is not strange the native prefers to doze away the night bolt-upright, or to crouch into a corner of the carriage. For myself, I have long since learned to break the journey, and sleep at some hotel over night. As one travels through this part of Switzerland, the eye falls upon a world of vineyards. In other words, the vines clothe all the little levels and vast slopes of the mountainsides as far up as the cold will let the grapes grow. There is literally almost no other cultivation, and it is a pretty sight.

On the top of the mountains are the chalets, with their kine and herds of goats. At a sharp turn in the road, the other day, a little goat-herd and his flock came full gallop upon me; the boy roughshod, with a pointed stick in his hand, and behind him a merry troop, tinkling their bells in as many tones as their rough coats were



CHAMONIX - LA MER DE GLACE, SWISS ALPS.
Visited by "Mollie" in her travels.

many-colored. The elder ones jogged along, sedate and full-uddered, in the forefront, but the kids danced, nimble-footed, deliberately foolish and frolicsome, bounding and turning upon themselves in sheer silly caprice.

There are many delightful excursions to be made round Montreux, viz.: Clarens, of which Lord Byron wrote in Childe Harold's Pilgrimage:

"Clarens! by heavenly rect thy paths are trod,
Undying Love's who here ascends a throne
To which the steps are mountains
He who hath loved not, here would learn that lore
And make his heart a spirit; he who knows
That tender mystery, will love the more"

and Vevey, where the world-known Nestle Food is made, and celebrated chocolates. Chillon is a fine old Gothic castle on the border of the lake. It is stated that a great Swiss general drew up his Helvetian forces here and quietly awaited the approach of a powerful Roman army under the Consul Cassius, grandfather of Julius Caesar's wife, B. C. 107. After a long and terrible combat, the Roman army was completely routed.

The illustrious Emperor Charlemagne, 742-814, repaired and strengthened Chillon. Bonivard, soldier, poet and patriotic reformer, enemy of Charles III., Duke of Savoy, was chained here to a pillar for four years, by the order of the Duke, until released by the Berne army in 1536. Lord Byron has made it famous in his noble poem, the "Prisoner of Chillon":

"Chillon: Thy prison is a holy place
And thy sad floor an altar—for 'twas trod,
Until his very steps have left a trace
Worn, as if thy cold pavement were a sod,
By Bonivard!
There are seven pillars of Gothic mould,
In Chillon's dungeons deep and old
There are seven columns massy and gray,
Dim with a dull imprisoned ray.
Lake Lemman lies by Chillon's walls:
A thousand feet in depth below
Its massy waters meet and flow;
'Thus much the fathom line was sent
From Chillon's snow-white battlement."

MOLLIE.

To Counteract Sunburn and Remove Tan.

If one fears to use drugs on the skin, it is pleasant to realize that few of them are more efficacious than simple remedies to be found at hand in all homes. Of these there is nothing better than fresh buttermilk for removing tan, freckles and sunburn. It has the great advantage that it does not injure the skin, but makes it soft, white and smooth. Take a soft cloth or sponge, and bathe the face, neck and arms thoroughly before retiring for the night; then wipe off the drops lightly. In the morning wash thoroughly, and wipe dry and rub the skin with a crash towel. Two or three such baths will take off the tan and summer freckles, and occasional applications of the buttermilk will keep the hands soft and smooth. If it is necessary to have the hands in dishwater or suds, rinse in buttermilk and dry with oatmeal or finely-ground cornmeal.

An old-fashioned cosmetic for tan and sunburn, which is agreeable to use, is the juice of crushed strawberries, or the milky juice, from the stalks of flowering lettuce. It should be well but gently rubbed into the skin at night, and if persevered in for a week or more the change will be markedly for the better. Vegetable compositions are much better for the skin than other kinds, and will not make it flabby, as animal oils often do.

whole, returned with wonders to relate, worked on his farm during summer, in a printing office or on the railroad during winter, ran things on too large a scale, got into debt and sold out. Is at present a veterinary surgeon in a large city.

Next was a young farmer aged about twenty-three; a capital worker, who understood his business. He had a farm of his own, but on several accounts preferred working part of his time for other farmers. He could work successfully with a four-handed team composed of two old horses (most equally matched, in that one was willing to do all the work, while the other was willing he should), one mule and one very small, cantankerous pony. During several summers he worked for us a month or two at a time and we always welcomed him as a friend. He is farming in northern Ontario, having a good home there, I believe.

One winter my husband wished to spend at his old home in the east, and looking around for a suitable person to leave in charge of the farm and stock in his absence, found a young man highly recommended. So that he could get the run of the business he came about two months before he was to be left alone. Fall work was done, some wood got up for winter use and a general knowledge of things ascertained. Snow had not fallen to any great depth and he was sure that when left alone he would be able, besides the usual work, to get up a good supply of wood. He was just the kind of man to have in a family in the lonely prairie winters: kind, genial, inobtrusive, yet always ready to give a helping hand when needed; a perfect gentleman, cultured and refined. Before Christmas time he began to have a perplexed, harassed, tried look. The horses and cattle did not seem to thrive to his liking. A stack of peas which were to be flailed out diminished very slowly, and there was no time to go for wood. The wood "teepee" grew smaller, and desperately he took time to replenish it. Oh, how many difficulties unforeseen there were! The horses got down in deep snow and tangled in their harness. The cold was so intense that mittens could not be pulled off, and it was almost impossible to get things righted. Then when the valley was reached, where there surely was left plenty of dry fallen wood, lo, wood there was none, at least none visible! We put the best face possible upon the situation, and called for retrenchments. We had then a pretty large house, and little children must be kept warm, so we shut up part of the house and only warmed what we could with one stove the remainder of that winter. He was glad, as well as we, to welcome our "lord and master" to his home in March. This gentleman is now a large property owner, but still reveling in the freedom of bachelorhood.

The following spring we found it expedient to put a stone foundation and cellar walls under our house, as the old poplar posts were rotting away, so help we must have to get out stone, burn a lime kiln, etc. We found the prospective help this time in two jolly English boys—a pair of Londoners who had never before been out of the sound of Bow Bells. They came in fine spirits, well equipped with a complete outfit of all things needful for a farm laborer except experience, but of course time would remedy that. They were plucky fellows and kept up a brave exterior, though my heart ached for them after a few days of stone-lifting and digging at the lime pit. Their hands were fearfully blistered, though they resolutely kept them out of view when possible; but instead of springing over the wagon box as they did at first, they climbed in and out like an old woman of seventy. They came from good homes and from industrious parentage and had not a bad trait of character about them, so they were destined to persevere and succeed. One of them soon found more congenial occupation, and has been for years in the employ of one of the largest farming-machine implement firms in Canada. Both they and we had a good many laughs at their mistakes, but matters all righted themselves in time, and the one who decided to stay by the farm is now a prosperous and highly-respected prairie farmer and land-owner.

The next year we hired a big, young Irish-Canadian, on recommendation of his cousin, as a practical farmer, able and willing to work. He was large and strong, there was no mistake about that, knew how to work and was perfectly able—but willing, no! He evidently left his father's house to have what he called a good time, meaning by that, time to lie in bed as long as he pleased and otherwise to shirk all work possible and get his wages. Some way he discovered that his plans did not work to suit him, and before long he pleaded homesickness and went back home to his mother. By that time we were in the middle of the summer's work and without believing, naturally, took the first offer. A young Englishman, of no particular family or upbringing, but very strong, not very anxious to work and very steady. Could play the violin tolerably, discreetly and gave our daughter some valuable instruction along that line, but that did not really render him useful as a farmer. After a while it came to the conclusion that he was not up to it. So we took him back to his old home and saw him on the train going west. He

has since been alternately ranching and spending a small fortune to which he fell heir. For the remainder of that eventful summer we had a Canadian, a married man, whose family was soon to follow him out. He was smart when he had a mind to work; had an idea he "knew it all," but was in reality very ignorant; liked pies and cakes and preserves, but disdained all common food. Chores and he had no affinity, and he must have his "spree" once in a while. "A feller could not always be working." We worried along with him for the rest of that year, and then his nice little wife and three dear little children came out, to live on the barest necessities in a shanty on a rented farm for a while; from there they moved to town, where the man did odd jobs and drank whiskey.

The following spring we hired a fine, hearty fellow from the north of England, who had with him his brother of 13 years. Both brothers were lively, singing or whistling the livelong day, the younger a perfect copy of the elder. Both had black curly hair, a wealth of it, which they brushed till it shone, and they were just as careful about everything about them. Had lots of good, comfortable clothing and used it. Came from tradespeople in their native town, and meant business. The boy should not have come till his school days were over, for he left a good mother for very precarious guardianship. He went back, I am glad to say, after a year's trial of prairie life. The man rushed through a great amount of work, getting the highest wages, but he was not a great success, as his motto was quantity rather than quality. He left this country and is now in his former home in England.

Now I have come to a "character"—I really do not know how to describe him—which side of him to take first, he had so many. Oh, but I see I have omitted one, so I must give him before I begin on my curiosity. This was a young Scotch-Canadian. An honest, steady, not over-strong farmer. He could plow, that was his strong point. He knew just how to do it his own way, and was determined to do it no other way. The trouble he found in carrying out his plan was that he had a great big mare, who thought as much of her way as he did of his; and as she was the stronger, the result frequently was that the mare would bring the other horse, plow and man all together to the stable in the middle of working hours. However, he did his work well and stayed late in the fall, but as he did not fancy this country, went back to his Ontario home.

Now for my "character." I very much fear my pen will not do him justice, but we must make an effort. He arrived on the spot, where my husband was engaged getting a load of hay with some temporary help, and enquired if a man was wanted. When answered in the affirmative, he merely replied, "Well, squire, I'm your man," and proceeded at once to business. Just then a neighbor drove up, wishing to transact some official business, and the new man said: "Go along, squire, I'll bring the load in." He had not asked nor been told where it was to be brought, but it came all right to the barn, the team put in the stable and fed, and the man came to the house for his dinner with the rest of the family, as much at home as any of them. He was of medium size, neatly though poorly dressed, and what one might call smart from the word go. As time passed on, we found, from his own description of his past career, that many allowances might be made and many praises bestowed. Born in one of the London slums, his little life lived on the streets from the time he was able to walk, holding his own against all opposers, he preferred a fight any time to a meal. His mother had three husbands and this boy belonged to the second family. Husbands all were hard drinkers and were railroad navvies. His mother kept them company in their bowls, on Sundays and holidays, though on working days keeping pretty steadily at her occupation of laundress. He admired his mother and had a most wholesome respect for her, for "was she not as tall and strong as almost any man, and could she not shake them within an inch of their lives if they misbehaved themselves?" From tender years till about fourteen, this boy carried clothes to and from his mother's laundry, presumably out of school hours. The school board tried, but in vain, to keep him at school, till, as a last resort, he was placed for a time in an institution where he was compelled to learn, not only from books, but to undergo pretty strict discipline. This was just the medicine he needed, and his conduct there was so good and his improvement so great that he was dismissed with great commendation. The poor lad begged with tears not to be turned again on the streets, but to be kept where he was. The authorities could not do so, however, as room must not be taken up except by such as he was before his incarceration. So he was perforce thrown among his former associates and amid his former environments. It was not long before he acquired an intense longing for an entire change of life and scene. He ran away from his so-called "home," and found his way to a training ship along the sea coast. His life there for a few years was rough but disciplinary, and

fitted him for what he entered soon after. He took the Queen's shilling and enlisted in the British army, was sent into Ireland on duty and remained there till a year or two afterwards, when a half-sister, who had emigrated to Canada and with whom he was a great favorite, assisted to buy him out and bring him to this country, and now he was going to "farm it." Curious apprenticeship for farm life, was it not? There are many worse hired men and many worse farmers than he was from the very first. He was not afraid to tackle anything, and would be conquered by nothing. When asked to undertake anything new, his invariable answer would be: "Won't I? That's just where I'll shine." His army life made him very precise and neat, and rainy days or in stormy weather, when there was no working out of doors, he would find something to do. Perhaps he would call out orders for every one to keep out of the woodshed and workshop, for he was going to raise a dust. And so he would, at the close of which clearing-up time the shed would look as trim and taut as the deck of a ship, even if the "squire" could not find the tools and other things that he had left "just so he could have them handy." At other rainy seasons he would bring clothes, bedding, rugs, etc., downstairs from his own room; then proceed to "hollystone and scrub the deck" till everything shone, and afterwards put all back shipshape. At threshing time he was the life of the crowd, working in work time and in the evening singing songs and otherwise making things lively. In the course of a couple of years he grew tired of the monotony of the farm, joined the N.-W. M. P., and when the call came for our brave boys to go to South Africa, he went, did his duty bravely, and now can show his medal therefor. He is at present taking a turn again at the farming, and proving he has profited by his experiences.

After he left us we found a small young man, who was by no means small in his own estimation. He was clever, had good habits, and worked very well during haying, harvest and threshing, as long as no one stepped on his toes. He went the following winter to an easy job in town, where, I am afraid, he learned to love the wine when it "stirred itself aright." Thence he proceeded to the Pacific coast, still in quest of an easy job with plenty of leisure and no boss.

The next spring a volunteer turned up in the shape of a fine, strong young Englishman, who, with his chum, came from home to learn farming. They were somewhat disappointed in their first venture, so begged us to take them both till something better offered. The "chum" found a place very soon and we kept the other on small wages. As everyone does in new work at first, he made many mistakes, and time and money had to be spent in mending breakages. But he persevered, and had just learned to manage his team and plow and keep them in good order, when the harvest began, and he fancied he could earn fancy wages farther west. So he left without notice when there was no man about the place, and we women folk were at some disadvantage. He is farming now, and whether he has a hired man for himself yet or not, probably appreciates the situation in which he left us.

In our want, we struck another young Englishman, a ranchman who was willing to spend part of every year on a farm. We had him for a few months at a time for three years, and always found him honest in his work, capable, and in every respect a good man. Still, I often felt sorry for him, as he always had a harassed, unhappy look, as if, because he was the son of a professional man, he felt that he was doing work that was beneath him. He never seemed to think that he could appear except as a drudge in his dress or manner, when the fact was that, if he had appeared according to his education and abilities, he might have taken a high stand in one of the noblest callings in life—farming.

Next in line came a steady, quiet Canadian, who had been born and brought up in Ontario. He worked even beyond his strength, and suited well except that he was not strong. He was handy and well informed, so at the end of a year he found work more suited to his strength in a town where his family resided. This brings me to the present date, when we think we have the man who suits and who is suited. He is with us now for his third year, and seems like one of the family, as he is interested in his work and appears to feel quite at home in every respect.

If these experiences throw any light upon the subject, I will not have given them in vain.

Assiniboia,

RESIDENT.

Humorous.

Professor Wilson, of Edinburgh University, was, some years ago, appointed Honorary Physician to the Queen. On the morning of his appointment he informed his pupils of the honor he had received by means of a blackboard in the laboratory, thus: "Professor Wilson—informs his pupils that he has this day been appointed Honorary Physician to the Queen." During his temporary absence from the room, one of the students added the words: "God save the Queen."

The Red River Settlement.

SOME REMINISCENCES OF FIFTY YEARS AGO.

How those yellow old papers bring back the memory of old familiar faces—most of them never to be seen again on earth, but whose lives have, more or less, left fruitful records behind them. Amongst the foremost comes the kindly, earnest, benevolent face of the first Bishop of Rupert's Land, Dr. Anderson, whose diocese might be said to have had no bounds, for it certainly could have claimed the whole northerly part of the continent of British North America, from the confines of the United States, covering at least two million square miles, some of it within the arctic zone. I remember thinking of Bishop Anderson as a kind of Robinson Crusoe amongst bishops, not only on account of his isolation, but because he seemed to be equally endowed with the faculty of making the best of things as they were and as they were not. He had such a handful of clergy, too, to help him, the exceptional few only, going forth into the wilds to carry their message. But how could they go unless they were sent, and how could their chief pastor send them forth without some practical plan for a provision for themselves and their flock? It was but pioneer work, but without pioneer work such as fell to the lot of those early settlers, both clerical and lay, the development of the Northwest Provinces, and the dioceses and missions of the big Northwest, would assuredly have been much longer delayed. Bishop Anderson was primarily a Christian pastor, then a scholar, and believing in education as a most needed factor in all progress, he at once set to work to obtain for the young people of the settlement, for the sons and daughters of his clergy, and those of the officers of the Hudson's Bay Co., some larger measure of scholastic training than had ever been possible before. In this he, too, builded upon others' foundation—a fact he recognized and was very grateful for. Some day, an old pupil of the first school established, I believe, by Mr. Macallum, as far back as the forties. Dr. Anderson filled almost every office, from principal to usher, in the St. John's College of that day, and his sister, who was the guardian angel of the Bishop himself, of his own three bright sons, and by looking after their creature comforts and smoothing over a thousand and one little difficulties, the guardian angel also of the pupils, the boys of St. John's and the girls of the sister school, St. Cross, a field's distance off. The writer can see clearly with her mind's eye—but probably less clearly from having seen her from time to time since—Miss Anderson crossing that field to the large outside storeroom built on the river's bank, followed by John Omond, the Bishop's farmer and factotum, or by his wife, who acted as cook and house-keeper for the boys; and she can see those naughty lads peeping through the chinks to find out what they were going to have for dinner, and passing on the bits of information to their comrades outside. Once it was, when an evil spirit of mischief possessed them, that they set up a derisive cry, the ringleader darting into the willows, hoping not to be caught: "Oh yes, give Mr. Thomas the shoulder, and give the boys the shanks and the neck!" They had never stopped to learn that the two latter were to make them some good wholesome soup, and that the "shoulder" was to be placed before Mr. Thomas to carve for them. I wonder if amongst the older folks of the Winnipeg of to-day there are any who were amongst that mischievous crowd? One thought brings back another as my pen runs over the page, and this little episode recalls the great difficulty it must always have been, especially in

the spring of the year, to provide meat of any kind for those hungry young folks, both of St. John's and St. Cross. If it is the early bird which catches the worm, it certainly was those earliest at the gate of the settler who happened to have a calf to spare who got that calf, and often it was but such a little, little calf! Still, worth having for the replenishment of a nearly empty winter storeroom. I have a mental vision of our own more especial storeroom now, as I write. Out of doors, of course, just opposite the old clay oven where our bread was baked and which had for its picturesque background a grove of thickly-grown trees. Directly Jack Frost began to reign, that big storeroom had to be packed and lined with food, which must last until spring. A whole poultry-yard had given up of its kind as its contribution to the winter's supply, and birds lean and birds fat, birds tender and birds tough, hung suspended from the rafters, pigs stood in rows like a regiment slain by one fell blow—each with its horrible long gaping wound, which it was always a comfort to know was given after instead of before it uttered its last despairing grunt; and where there were no pigs, there were sheep—long, scraggy, and seldom of a weight to win a prize at any cattle show (had Red River ever known of such a thing), for what farmer would care to fatten any "critter" for which there was no direct market, and which, anyway, would just have to be killed when winter came round, as it would not pay for its keep? In the center of the floor was a big square flap, which could be lifted by a large iron ring. This led to the under cellar, upon the piled blocks of ice of which reposed, in the repose which knows no waking, hundreds of frozen fish and other smaller four-legged and two-legged creatures, which before the six or seven months were over would have vanished as if they had never been. The ice was put into the "hold" of our storeroom because it would be a boon indeed during the intermediate season, not because those poor dead things required anything to freeze them more stiff and stark than they were when the laden "sleds" brought them into their last long home in our storeroom. Beef was the only meat which was, so to speak, "drawn and quartered," I suppose because the whole animal could not have been persuaded to enter the door and behave itself decorously by standing upon even two or three of its legs, as the other beasties did.

I could laugh now, in spite of my sixty-odd years, at the comical attitudes which those dead animals assumed as they stiffened into the position from which nought could move them, until after hours of gradual thawing in a somewhat higher temperature, and finally of repose behind the kitchen stove, they gave up the struggle, and by swift blows of the hatchet, followed by the masterful stroke of a sharp-bladed knife, they ceased to be either pig or sheep, but became pork or mutton for the students' table. There was one sheep which one winter had a curious fascination for me whenever I went, half awe-struck, half inquisitively, into that, to us, forbidden storeroom. It looked so comically like the man who once had owned it. Its right front foot was raised, with much the same stern air of rebuke which made the youngsters run from its still living master; it looked as if it would have shaken its reproachful head, as he so often did; but, alas! it would never shake it more, in fact, it looked as if it had died having the last word, anyway. One crisp winter's day, a wave of resistless fun swept over me, though I knew its penalty if caught. The owner of that sheep was expected. We had no such thing as door-bells in those days, and I knew that she who was on the watch to respond to the first thump upon the storm door was sure to be prompt in answering the summons. I caught that lean,

lank, reproachful-looking sheep in my arms, dragged it over the snow to that door, propped it up against the panels and hid around the corner to watch it fall prone into the arms of the disgusted handmaiden. I will let the curtain drop upon the tableau; but, indeed, in a place where nothing ever happened, even that "game" was worth the candle."

My readers, please forgive all this digression. I began with a bishop, and have ended with a dead sheep. Moreover, if I am to continue my little records from time to time, you will have to make the best of me and my memories. I cannot promise to be less erratic in the next issue than I have been in this, for a remembered face suggests a remembered incident, and out of an incident grow many remembered faces, and so it may be that to those who only know the Winnipeg of to-day, with its electric cars and its telephone wires, with its parks and its markets, and its public buildings, with its many churches, its opera houses, and its hotels, these old-time trivialities will be but dull reading. But there may be some old friend or comrade still living—left, as I am, with little but the old memories of the long ago we spent together—who may take the "Farmer's Advocate," and for old sake's sake may read with interest and share in the retrospects scribbled from time to time in its pages by—
H. A. B.

When Woods are Green.

Pleasant it is when woods are green
And winds are soft and low,
To lie amid some sylvan scene,
Where the long drooping boughs between
Shadows dark and sunlight steen
Alternate come and go.
The green trees whisper low and mild,
It is the sound of joy!
They were my playmates when a child,
And rocked me in their arms so wild.
Still they looked at me and smiled
As if I were a boy

—L.ongfellow.

A Chapter on Vegetables.

Potatoes come from far Virginia;
Parsley was sent us from Sardinia;
French beans, now growing on the earth,
To distant India trace their birth;
But scarlet runners, gay and tall,
That climb upon your garden wall—
A cheerful sight to all around—
In South America were found.
The onion travelled here from Spain;
The leek from Switzerland we gain.
Garlic from Sicily obtain;
Spinach in far Syria grows;
Two hundred years ago or more
Brazil the artichoke sent o'er,
And Southern Europe's sea-coast shore
Beet root on us bestows.
When 'Lizabeth was reigning here,
Peas came from Holland, and were dear.
The South of Europe lays its claim
To beans, but some from Egypt came.
The radishes, both thin and stout,
Natives of China are, no doubt;
But turnips, carrots, and sea kale,
With celery, so crisp and pale,
Are products of our own fair land,
And cabbages, a goodly tribe,
Which abler pens might well describe,
Are also ours, I understand.
—London Young Folks' Rural

GOSSIP.

Mr. Edwin Battye, of Gore Bay, writes a very favorable account of the crops of that locality. Considering the heavy rains of the last few weeks, the outlook is good. Hay will be plentiful, but about ten days later than usual. Grass seed has got a splendid catch. Potatoes are looking very promising. In fact, all crops will be up to the average or over. Pasture is extremely good, and consequently cattle are putting on flesh in a very satisfactory manner. Sheep and stockers average about 3c per lb. live weight.

Mr. Battye also reports a number of sales of pure-bred Shorthorns. Animals of the right type are in demand. During the first week of the present month, Mr. Battye sold four of his valuable herd to Mr. Jas. McCutcheon, Tekamah, Manitoba, namely: Miss Countess (with calf), by Rosario 22471. This heifer won 2nd prize at the Lincolnshire Show in England, 1903. She is a beautiful red, very uniform and of great heart-girth. Ladysmith 38536, and Lady Gordon 38536, both these heifers are red, very thick-fleshed and short-legged. The heifers are with calf by Royal Emperor (imp.), bred by W. S. Marr, of Upperville. Mr. McCutcheon bought as a stock bull, Winsome Arctic, imported in dam, out of Winsome Beauty 3rd, by Archibald, by Scottish Archer, out of a Sittaton Lavender cow, bred by Mr. Duthie. With stock of that class for a foundation we will expect to hear favorably of Mr. McCutcheon's herd from time to time. During the

same week, Mr. Coats, Barrie Island, also bought the young red bull, Duke of York, out of Matchless of Elmhurst 26450, by Gordon Prince 29942. Besides these, Mr. Battye has, since he returned from Scotland last September, made the following sales: Mr. Ed. Beck, Gore Bay, five cows and three calves; Mr. Arthur Johnston, Ont., one yearling heifer, Duchess of Gloster, and one calf; Mr. Thos. Ingram, Manitowaning, one cow, Fairy, Flea, and a Crimson Flower heifer, out of Crimson Fuchsia 9th, by Prince Cracksank 2nd. He also sold one bull to each of the following: Messrs. S. Wilson, W. Beckerton, J. Brown and J. Blakley, all of Manitowaning. Mr. Battye still has about forty head, and quite a number of the younger individuals of both sexes are for sale.

THE IOWA FEEDING TEST.—As the time approaches for the final report of the Iowa College experiment with different supplementary foods, the International Stock Food Co. wish it to be distinctly understood that at no time did they claim to be able to give as good results as stock handled by an Agricultural College as when fed by the stock farmer. Although realizing they were at a disadvantage they decided to try it. Then, when invited by the Iowa College to join the test, 400 lbs. of stock food was supplied free of cost, so that the experiment, therefore, shows the International Stock Food to occupy a high or low rank on the list, the promoters write that they are



BARGAINS IN STALLIONS !!

Comprising winners at the International Live Stock Show, Chicago, 1901; also in Scotland. All must be sold to clean out. Intending purchasers should not miss this chance of buying first-class individuals of the very best breeding at reasonable prices.

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prepared to guarantee the best results only to the practical stockman, and that they are prepared to send out 250 lbs. lots to farmers to feed for both months and another who is not satisfied with the results and will write free to that effect they will credit his account and the loss will not be taken. It is sold not as a feed product, but as a strictly medicinal agent, which fed a small dose, but at regular intervals, digestion and assimilation of the blood and strength in the entire system.

GOSSEP.

H. R. Lambert, Kennel, Assa., recently called at this office on his return from an extended trip among the leading breeders of pure-bred stock in Ontario and the Eastern Provinces. He concluded, after inspecting the Eastern stock, to purchase in Manitoba, as he found he could secure stock better suited to his purposes. Consequently, he selected two Hereford bulls from the herd of J. A. Marples, Deleau, Man. Mr. Lambert ranches somewhat extensively, running 180 head of grades, 15 pure-bred Herefords, and 75 head of horses. He is breeding heavy horses, using pure-bred Clydesdale stallions. The Herefords are giving the best of satisfaction, and the bull, Valentine, bred by Sir Donald A. Smith, purchased a few years ago through Wm. Sharman, has proved a very prepotent and useful sire.

J. E. Marples, the Hereford breeder of Deleau, Man., writes us under recent date: "Shortly after advertising the dispersion of the Poplar Grove Herefords, I decided not to break up the herd, but to sell the surplus stock only. Applications for Herefords of both sexes have been very numerous, and the season's sales from this herd amount to fifty head at satisfactory prices. The herd being now reduced to some seventy-five head, the natural increase will soon, however, bring it up to the old number. I have retained the cream, including nearly all of my show herd, although I shall not have time to exhibit this season. My grand young stock bull, Duxmoor Ingleside, by the Pan-American sweepstakes bull and the imported cow, Duxmoor Brenda, is developing most satisfactorily, and giving me some grand calves. I intend to keep the herd up to a high standard, second to none in the Dominion. The principal purchasers this season are as follows: J. F. Parker, near Lethbridge, twenty-two head to form the nucleus of a Hereford herd being established in Alberta. His selection comprised a splendid lot, all young, and included a few that have figured successfully in the showing, notably My Valentine, many times a prizewinner at the Winnipeg Industrial. The bull, Harold of Poplar Grove, selected to head the herd, is a grand one, and was also shown at Winnipeg last year as a calf. He is low, very thick, heavily quartered back and front, and stands upon a splendid set of legs, with an exceedingly neat and well-poised head, and, like his noted sire, has a gentle disposition. The females were: Countess of Ridgewood 766 and a 9-months-old calf; Danson of Poplar Grove 1052; an 8-months-old calf; a grand one; May Morning 1086, with heifer calf by her side; Nora 1397, with a bull calf; Maid of Poplar Grove 1165 and calf, a bull 5 months old; Jewel of Ridgewood 1385 and 9-months bull calf; Anne Laurie 1782 and 4-months-old bull calf; My Valentine 1177 and bull calf; Pride of Poplar Grove 1167 and 6-months bull calf; Primrose 1783 and bull calf. Also two young bulls, Harold of Poplar Grove 120722 and Armour Rue 1579.

Wm. Miller, Solsgrith, Man., secured the bull, Earl of Poplar Grove, a prizewinner. R. J. Christie, Varrow, Alberta, two fine bulls, Columbus 1513 and Wilton Grove 1516. W. Greaves, Lander, Man., the bull Prince Hal 1515. Geo. Harrows, Pierson, Man., the bull Perfection 1500. This young bull at 7 months old won two first prizes and diploma at Winnipeg Industrial, 1901. G. Hartley, two cows, Constance of Breezelawn 764 and Countess of Aberdeen 765. Wyatt Brothers, Virden, Man., two cows, Annie Rooney 561 and Lady May 565. Sharman & Sharman, Souris, Daisy of Ingleside 6870 and heifer calf; Madge 6865 and bull calf; Tomboy 1789 and bull calf; Floretta 121439 and bull calf; and that fine pair of two-year-old heifers, Gipsy Maid 1691 and Lady Bertha 1785. James Tough, Edmonton, Alberta, two nice heifers, Mermaid 1636 and Gertrude 2639. Wm. Ross, Bittern Lake, Alberta, the bull, Beau Donald, 1511. John Wilcox, Lamerton, Alta., bull, Viscount of Poplar Grove 1501. H. R. Lambert, Kennel, Assa., the bull, Highland Laird 188. Geo. Vincent, Brandon, the bull, Carl of Poplar Grove 1512. Mrs. H. Tripp, Deleau, Man., the cow, Eva 562. Jas. Chiswell, Lacombe, Alberta, the bull, Horace of Poplar Grove 1199. It is worth noting that at least four of the bulls are to head pure-bred herds."

A POPULAR MILLING COMPANY.

The Victoria Daily Colonist of June 14th has a page devoted to the Brickman & Ker Milling Co., whose headquarters are in Victoria, with branch mills at New Westminster, B. C., and Strathcona, Alberta, besides receiving elevators at Leduc, Wetaskiwin, Lacombe and Red Deer, Alberta, and distributing warehouses at Vancouver, Nelson and other points. The various mills, elevators and warehouses of the Company are pictured, including those in Alberta, but the picture which brings out most strongly the far-reaching enterprise of the firm is a view of the recent loading of oats at Vancouver for South Africa. The enterprise of this firm in demonstrating the value of Alberta oats, and in pushing for markets both for the finished product in its highest form of rolled oats and for the raw material, has been most beneficial to this district. Everyone in Alberta wishes the B. & K. Company continued abundant success. [Edmonton Bulletin.]

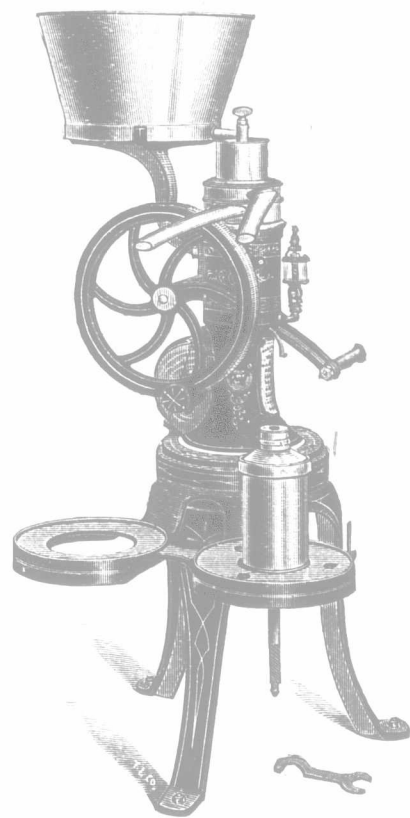
IN THE ELGIN DISTRICT.

Mr. Jas. Taylor, Elgin, Man., has for the past ten years devoted a portion of his time and attention to the breeding of Shorthorns. At present he has sixteen pure-breds, including five heifers, ten heifers, and one bull. During ten years' actual experience, Mr. Taylor has tried the stock farms of several breeders of other lines of stock, but he has not found anything in his case, to take the place of Shorthorns, and now firmly believes them to be the best all-round cattle. There is always a good demand for them at any time in the year. They are generally good milkers, fair rustlers, and are in favor as fat and beef cattle, crossing with other breeds, and easy feeders. Mr. Taylor has had no difficulty in disposing of all the stock he has had raised. He keeps his stock in good condition, and is very careful in breeding. He also takes a great pride in his stock, and at present has three fine Clydesdale horses. He raises them principally for his own use, believing them to be the best all-round horses.

Another breeder gradually wending his way to the same success is Mr. Jas. Moore, Bereford.

Don't Be Blindfolded

BY SALESMEN.



TELL THE AGENT OF THE NATIONAL CREAM SEPARATOR

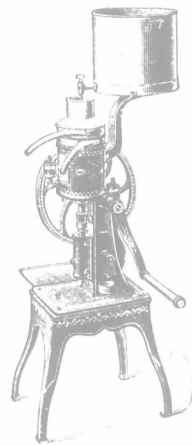
What the competitors of the NATIONAL have been saying about it. Let him show you how little truth there is in their statements.

The National recommends itself on sight. Examine this picture. Observe the practical appearance, the extreme simplicity of the gearing. If you want a separator, insist on looking at the National, of examining the gearing, note the protection for children—of cutting the parts of the bowl (just three parts), of lifting the bowl and turning the crank to see if it does not turn easier than any other separator. Look at the low-down supply can. Then bear in mind that the NATIONAL is the closest skimming separator ever built, and we know what separator you will buy.

The National is made by the Raymond Mfg. Co. of Guelph—a Canadian machine sold with a guarantee FOR TWO YEARS of absolute satisfaction to protect you. If you are going to buy a separator let us know. We've got the best machine on the market, and just want to let you try it. Write for catalogue.

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Please Mention Farmer's Advocate.

He, too, is a Shorthorn admirer, voicing in every way Mr. Taylor's sentiments. Mr. Moore at present has seven fine animals, three bulls, three heifers, and one cow. Just now he is adding principally to his own stock, but hopes in the near future to be able to put some choice animals on the market.

Some breeders say Shorthorns, others Herefords, and still others Holsteins, but Mr. John Turner, of Carroll, prefers the Polled Angus. He has a number of this breed, and they are all in first-class condition. He claims them to be equally as good rustlers as the Herefords, easily kept, and preferable as fat cattle in the American markets. Possibly Mr. Turner's preference for them is derived from the fact that he has been always able to place his young stock, male and female, to a good advantage, never in one instance having to keep over anything that was put on the market for sale. He does not claim them to be first-class milkers, but so long as a cow gives milk enough to raise a calf properly, it is satisfactory to him, and the easy way in which the stock can be kept makes up for all defects in the milking qualities. Each year will see an increase in this stock, and before long possibly one of the best kept herds of Polled Angus cattle will be found on the farm of John Turner, Carroll.



VINGENT & MACPHERSON, The Leading Western Undertakers and Embalmers. Rosser Avenue, Brandon. Write for furniture catalogue.

THE Great West Saddlery Co. (LIMITED)

make the best and most perfect fitting Horse Collars and Harness in Canada. Our Saddles and Strap work are Gems of perfection of the leather workers' art. Branches and agencies everywhere. Ask your dealer for our Horseshoe Brand Horse Collars, and take no other make if you want the best.

WINNIPEG, MAN.

MAIL ORDERS.

SHOPPING BY MAIL is easy and convenient. It saves you money every time you deal with us. We sell almost everything you can need to wear, eat or use. Write for our complete catalogue.

The F. O. MABER CO., Ltd., WESTERN CANADA'S EXCLUSIVE MAIL ORDER HOUSE, WINNIPEG, MANITOBA.

Canadian Northern Railway

\$45.00 WINNIPEG

TO Victoria and Vancouver, B. C. AND RETURN.

On sale July 11th to 15th. Good for (7) days. Stop-overs allowed.

For further information apply to any agent of the Canadian Northern Railway, or to

GEO. H. SHAW, TRAFFIC MANAGER, WINNIPEG. PLEASE MENTION FARMER'S ADVOCATE

The Western Canadian Hail Insurance Co.

AUTHORIZED CAPITAL: \$500,000.

HEAD OFFICE: WAWANESA, MAN.

The Only Company in Canada
Conducting Hail Insurance on Established Insurance Principles.

Every Policy issued is a definite contract between the Company and the assured. Payment of losses is not subject to the collection of an assessment. Loss claims are adjusted promptly on receipt of notice. Losses are paid in full immediately after adjustment. Premium rates are low and proportionate to the risk.

Full information will be furnished by any agent, or on application to

JOS. CORNELL, SEC'Y AND MGR.

TO FARMERS AND STOCKMEN

\$175 in Gold.

For years farmers and stockmen have been sending their cream to the creameries, and, as a consequence, calves have suffered. Our Carnefac Stock Food makes an excellent substitute for the cream, and to encourage the use of it we offer

THREE PRIZES AT WINNIPEG FAIR IN 1903.

THE PRIZES ARE AS FOLLOWS:

First—For the Heaviest Calf, any pure breed or grade, born after the 1st of January, 1903, fed on Carnefac Stock Food, \$100 IN GOLD.

Second—For the Second Heaviest Calf, any pure breed or grade, born after the 1st of January, 1903, fed on Carnefac Stock Food, \$50 IN GOLD.

Third—For the third Heaviest Calf, any pure breed or grade, born after the 1st of January, 1903, fed on Carnefac Stock Food, \$25 IN GOLD.

Only One Entry will be allowed from each farmer or stockman. The lithographed face of each package must be produced at time of exhibition, to show that Carnefac Stock Food has been used.

Carnefac has proven a decided success, bringing into condition and fattening where other foods fail. Send for leaflet, giving the views of veterinarians as to the merits of Carnefac. They all speak highly of it.

Put up in 11, 3 and 64 pound packages, and 25 pound pails.

Sold at 25c., 50c. and \$1 per package, and \$3.50 per pail.

W. G. DOUGLAS,

MANUFACTURER.

PRINCESS ST., WINNIPEG, MAN.

ASK YOUR DEALER FOR CARNEFAC.

YOU NEED Horse Collars



Get the best when you are buying.

PERFECTION BRAND

are the best. They are hand-stuffed and hand-sewn. They are stuffed with long straw, not short stuff cut up and fed in through a machine. They do not break in the throat, as our solid long-straw throats will not break. Try a pair of these.

Black-Leather Rims and Back RUSSET-LEATHER FACE.

Sent, express prepaid, to any address in Manitoba for \$1.10 per pair; Ontario, Assinibola, and Saskatchewan, for \$1.00; Alberta, for \$0.25 per pair. Good large bodies for heavy farm work. Satisfaction guaranteed.

Brown Back 11-inch Sweat Pads,
75 cents per pair.

A. E. WIMPERIS,

592 MAIN STREET,

WINNIPEG, - MANITOBA.

PLEASE MENTION THE FARMER'S ADVOCATE.



The "Kelsey" Warm Air Generator

THE heating of a home in Manitoba and the Territories is a question of great importance. Coal is expensive, the winters are long; therefore, it requires a large quantity of heat to keep them comfortable. "THE KELSEY" heats your home on ONE THIRD LESS FUEL than any other system. "THE KELSEY" gives you a large volume of WARM AIR (not hot air). Note the construction of the Kelsey. 200 Kelseys in successful operation West of Lake Superior.

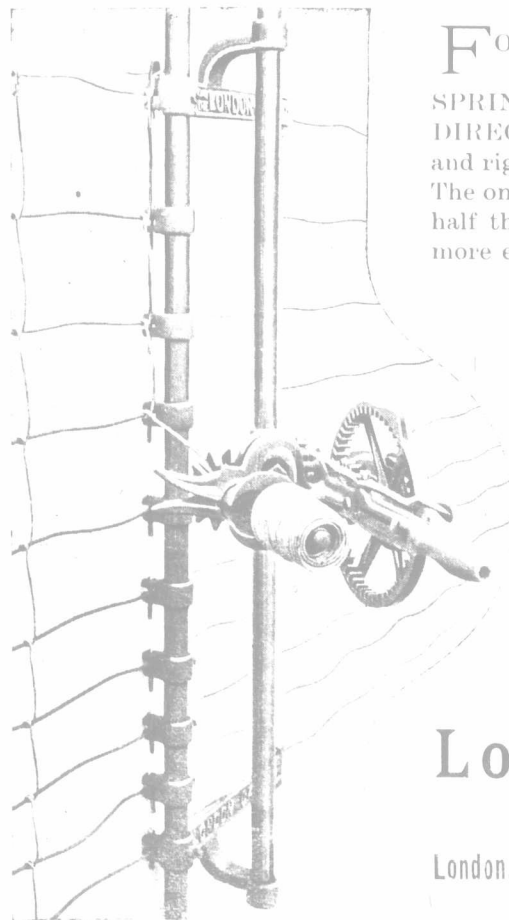
KELSEYS ARE HEAT MAKERS
FUEL SAVERS

"THE KELSEY" method of warming the air is the best method. Send for booklet.

The James Smart Mfg. Co., Limited

BROCKVILLE, ONT. SOLE MAKERS FOR CANADA. WINNIPEG, MAN.

"Marvel of the Age."



FOR PERFECT AND RAPID CONSTRUCTION OF COILED SPRING WOVEN WIRE FENCING DIRECT FROM THE ROLL OF WIRE and right on the posts where it is to stay. The only way to build a good fence. One-half the cost of ready-made fencing, and more easily erected.

THE LONDON FENCE MACHINE will be on EXHIBITION, WORKING, AT WINNIPEG, BRANDON, CALGARY and REGINA FAIRS. If you're interested, it's well worth your while to see them. When there, give your address and the length of fence you want now or next year to our representative, and we will quote you a price on wire and machine complete, delivered at your station. Don't matter if you want 1 mile or 10 miles, we can supply you.

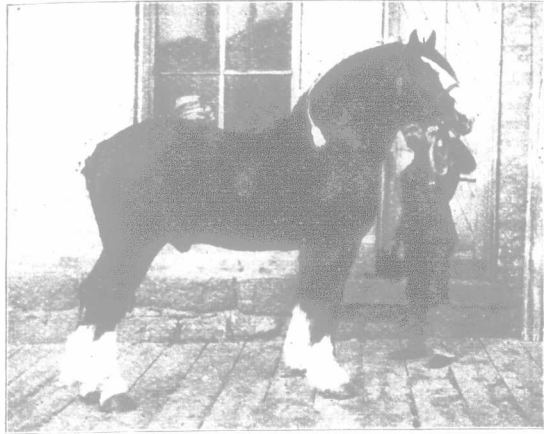
London Fence Machine Company
London, Canada.
(Limited).

Mr. J. H. ... writes: "I have bought a pair of your collars from A. E. Wimperis, and they are the best I have ever used. They are hand-stuffed and hand-sewn, and they are stuffed with long straw, not short stuff cut up and fed in through a machine. They do not break in the throat, as our solid long-straw throats will not break. Try a pair of these." ... I have bought a pair of your collars from A. E. Wimperis, and they are the best I have ever used. They are hand-stuffed and hand-sewn, and they are stuffed with long straw, not short stuff cut up and fed in through a machine. They do not break in the throat, as our solid long-straw throats will not break. Try a pair of these.

FOR SALE: DRAFT HORSES OF ALL AGES.

OWING to lack of range, we have decided to cut our herd of draft horses down to one-half and sell 2,000 head at greatly reduced prices. This great selection of mares, geldings and growthy youngsters of all ages represents the results of seventeen years of judicious mating to strictly high-class Percheron, English Shire, Clydesdale and Hackney sires. We can furnish high-grade brood mares and fillies with foal to imported and home-bred registered stallions, and have always on hand a large and first-class selection of registered and high-grade Percheron and English Shire stallions, also registered mares and fillies of same breeds. Correspondence solicited. Inspection invited.

LITTLE MISSOURI HORSE COMPANY,
W. G. CLARK, SUPT. GLADSTONE, NORTH DAKOTA.



Alex. Galbraith,
JANESVILLE, WIS.,
and BRANDON, MAN.

Importer of the best class of
STALLIONS

for the last twenty years.
Has supplied 75 per cent. of the Manitoba trade during last season. New importation of winners will arrive September 1st. Don't miss seeing them.

JAMES SMITH, AGENT,
Beaubler House,
BRANDON, - MANITOBA.

W. W. OGILVIE MILLING CO.

BY ROYAL WARRANT MILLERS TO

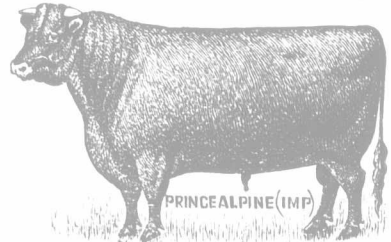
H.R.H. PRINCE OF WALES

ASK FOR

Ogilvie's Hungarian,

THE WORLD'S BEST FAMILY FLOUR.

W. S. LISTER, MARCHMONT STOCK FARM,
BREKDRR OF..... MIDDLECHURCH, MAN.

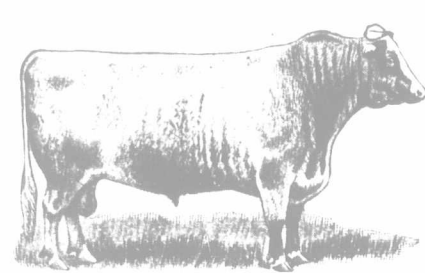


SCOTCH SHORTHORNS

Prince Alpine (imp.), of the celebrated Glenythan family, and Baronet (imp.), of the Sittyton Secret family, at head of herd.

6 BULLS over 1 year, all by imported Scotch bulls, 3 from imported dams, and many younger.
2 white bull calves at half value.
Farm seven miles north of Winnipeg. Telephone connection.

PRAIRIE HOME STOCK FARM



CLYDESDALES, SHORTHORNS, SHROPSHIRE, BERKSHIRES and YORKSHIRES.

Shorthorn herd headed by Judge, imp. Jubilee, and Ribbon's Choice, Avshires of the best quality; herd headed by Surprise of Burnside. Oak Lodge Mighty 7th and a large number of high-class sows represent the approved bacon type of Yorkshires. The Berkshire boar, Victor (Teasdale), sweepstakes at Brandon and Winnipeg, 1900, and 30 sows of faultless conformation and superior breeding, make up the Berkshire herd. Farm one mile from the station. Visitors welcome. Prices and quality right.

THOMAS GREENWAY, PROPRIETOR,
Jas. Yule, Manager. Crystal City, Man.



Hill Grove.

I am now offering one splendid young August boar and sow by H. G. Conqueror, and out of Linden Queen. Sow open or bred by April 1st. Orders booked for March, April and May pigs, from such sows as H. G. Maid, H. G. Beauty, and Duchess of Hill Grove—the best sow I ever raised.

A. E. THOMPSON, HANNAH, N. D.
Canadian shipping point, Snowflake, Man.

GOSSIP.

The elevator company has been organized, on the Snowflake branch of the stockholders are: David Christie,

La Riviere; S. Lyons, Pilot Mound; F. Windson, La Riviere; R. J. Bamford, McKenzie; E. Gosnell, Pilot Mound; Purvis Thompson, Pilot Mound; David Lang, McKenzie. The capital is \$10,000, in \$50.00 shares.

SHORTHORNS.



Will sell either of my stock bulls, Robbie O'Day = 22672 or Veracity = 3149. Also a number of young bulls, some good enough for head leaders. **YORKSHIRES.**—A few young sows to farrow in May. Orders booked for spring pigs. **PLYMOUTH ROCKS.**—Some

choice cockerels. **RYE GRASS.**—Large quantity of clean, bright seed, also clean Flax Seed. **Andrew Graham, Forest Home Farm, Pomeroy, Man.** Carman and Roland shipping stations.

GALLOWAYS:

Bulls and heifers for sale.

APPLY TO

T. M. CAMPBELL,
"HOPE FARM,"
St. Jean Baptiste, Manitoba.

RIVEREDGE FARM.

Shorthorn Cattle and Standard-bred Horses.

Herd headed by Sityton Stamp (imported). Females bred from or tracing to Windsor (imported).

A. TITUS, NAPINKA, MAN.

Breeder of Shorthorns.

Imp. Baron's Pride 2885 at head of herd. B. P. Rocks and Bronze turkey eggs for sale.

J. H. KINNEAR, SOURIS, MAN.



"What a Wise Old Chap!"

He has left his hide in good hands. Send for our circular in reference to custom tanning. We send samples of work with circular.

CARRUTHERS & CO.,

TANNERS,

and dealers in hides, wool, sheepskins, furs, tallow, etc.
9th Street, Brandon, Man.

SHORTHORNS FOR SALE

of Scotch breeding, seven bulls and forty cows and heifers, mostly all in calf or calf at foot. A few Clydesdales of both sexes.

Geo. Rankin, Melrose Stock Farm, Hamiota, Man.

OAK GROVE FARM.

Shorthorns and Yorkshires.



MASTERPIECE = 23750—red-roan, by Grand Sweep (imp.). Three young bulls by Masterpiece, and heifers by Knuckle Duster (imp.), Village Hero and Masterpiece.

Improved Yorkshire sows in pig. Boars fit for service. Orders booked now for young pigs. Pairs not akin.

White Plymouth Rock eggs.

JAMES BRAY, LONGBURN, MANITOBA.

Thorndale Shorthorns.

25 BULLS, and about **100 FEMALES,** of all ages, to choose from.

JOHN S. ROBSON, Manitou, Man.

Shorthorns, Tamworths & Yorkshires

FOR SALE. Young bulls, cows and heifers (in calf), sired by Pomeroy Favorite and Knight Templar. Young swine of both breeds and both sexes ready for shipment now. Correspondence answered promptly. **W. G. STYLES, Rosser, Man.** 7 miles north of Rosser, main line C. P. R.



SPRAMOTOR PAINT

Is a pure mineral paint in dry powder form, requiring only the addition of cold water for instant use. It's fire proof, weather proof, produces a hard enamel finish; will not rub, scale, crack, nor turn yellow with age; covers better than oil paint and at 1/2 the cost. Can be used to equal advantage on stone, brick, wood and plaster, and over oil paint or any good, firm surface. The SPRAMOTOR painting machine will paint a good sized barn in 1 hour. Fully guaranteed. Write for booklet. **SPRAMOTOR CO.,** BUFFALO, N. Y. LONDON, CAN.

ADVERTISE IN THE **FARMER'S ADVOCATE.**

CHOICE

Shorthorn Bulls FOR SALE.

All nearly 2 years old. Apply for pedigrees and particulars:

THE FOREMAN, Castle Farm, Teulon, Man.
Or **C. C. CASTLE, WINNIPEG, MAN.**

SHORTHORNS

Gold Medal herd of 1899-1900. Bulls in service are: Nobleman (imp.) and Topsman's Duke. Some good young bulls for sale.

J. G. BARRON, Carberry, Manitoba.

MAPLE GROVE STOCK FARM.

SHORTHORN BULL CALVES

FOR SALE.

From three months to eight months old. Sired by Lord Stanley 25th - 29247. Also have left a few

P. R. COCKERELS.

WALTER JAMES, ROSSER, MANITOBA.

15 mile west of Winnipeg, on main line C. P. R.

D. FRASER & SONS,

EMERSON, MAN.

Breeders and importers of Durham Cattle, Shropshire and Southdown Sheep, and Pure-bred Poland-China Pigs a specialty. Young stock for sale.

LAKESIDE SHORTHORNS FOR SALE

3 young bulls, 11 to 14 months old; quality and prices right.

R. McLENNAN, HOLMFIELD, MAN.

Lakeview Stock Farm.

SHORTHORNS FOR SALE.

I am offering for sale bulls and heifers of good quality. Cheap if sold soon.

THOMAS SPEERS,

OAK LAKE, MANITOBA.

YORKSHIRES!

Bred sows all sold. Orders taken for spring pigs from large and matured sows. Send your orders in early and have first choice. Price: \$10 each, \$18 a pair. Address:

KING BROS., Wawanesa, Man.

English Flat Coated Retriever Pups

TWO MONTHS OLD.

By Imp. Winnipeg Carlo } Champion Right- (C. K. C. 3593) } away. Tattle.

Imp. Nita (C. K. C. 3591) } Black Drake.

Phursala.

Carlo is a winner of 7 first prizes and 9 specials.

A. H. M. CLARK, 55 Sherbrook Street, WINNIPEG, MAN.

Home Bank Farm OF LARGE ENGLISH BERKSHIRES

Are still to the front. Some grand sows, bred for the spring trade. Have two fine litters ready to ship about March 15th.

Now booking orders. Call or write for prices.

Jos. Laidler, Neepawa, Man.

Pave the way to victory by investigating the merit of

Chambers' Barred Rocks.

They are always among the winners at the leading shows. Also Bull Rocks (Nugget strain), B. Hamburgs, and S. C. B. Leghorns. Eggs, \$2 for 13; \$4 for 30. **Thos. H. Chambers, Brandon, Man.**

IN THE DAIRY QUEEN

TRIPLE CREAM SEPARATOR

The water is not mixed with the milk. The most perfect and latest improved Separator made. Easy for use in a short time. Separates all the cream without labor. Men and Women can make good profits. Where we have no agent we will send a separator at agent's price to introduce it. Write for circular and prices. Economy Supply Co., 601 Main St., Kansas City, Mo.

SOMERVILLE

Steam Marble and Granite Works,
BRANDON.

MONUMENTS,
HEADSTONES,
MANTELPIECES,
CEMETERY FENCING
TABLETS, ETC.

ROSSER AVE., BRANDON, MANITOBA.

Represented by W. Somerville, M. E. D. D. Man.,
T. A. Ferguson, A. M. C. Man.

WHEN WRITING MENTION THIS PAPER.

IMPORTANT COMBINATION SALE
OF 65 HEAD OF

High-class Shorthorns

IMPORTED AND CANADIAN-BRED, SCOTCH AND SCOTCH TOPPED
AT AUCTION IN THE NEW SALE PAVILION OF THE HAMILTON STOCK-YARDS COMPANY,
HAMILTON, ONTARIO, ON

Wednesday, August 13th, 1902.

THE CATTLE ARE ALL YOUNG OR IN THE PRIME OF LIFE, AND ARE SELECTED FROM
THE FOLLOWING WELL-KNOWN HERDS:

W. G. PETTIT & SON, Freeman, 12 Head.

W. D. FLATT, Hamilton, 10 Head.

ROBERT MILLER, Stouffville, 10 Head.

CAPT. T. E. ROBSON, Ilderton, 6 Head.

H. SMITH, Hay, 5 Head.

J. M. GARDHOUSE, Highfield, 5 Head.

JAMES DOUGLAS, Caledonia, 5 Head.

GEORGE AMOS, Moffat, 6 Head.

A. C. PETTIT, Freeman, 4 Head.

Included is imported **WANDERER'S LAST** =36129= (80213), chief stock sire for the last two years in the herd of Captain Robson; also the imported Kinellar Claret bulls, **PRINCE GEORGE** (79620) and **SCOTTISH HERO** (79921), and a number of first-class Canadian-bred bulls. The females of breeding age will have calves or will have been bred to the high-class sires in the several herds represented. Look for notes in Stock Gossip.

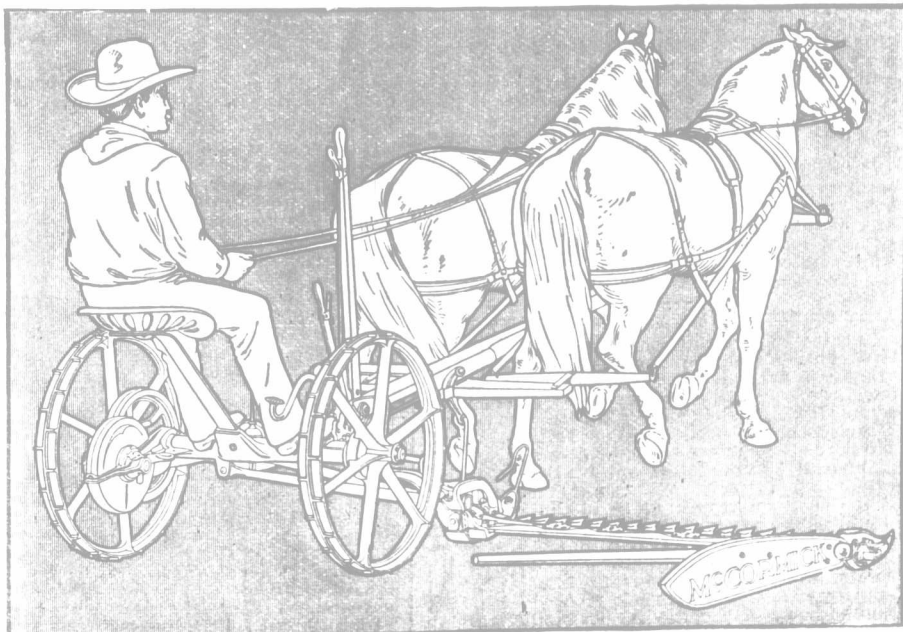
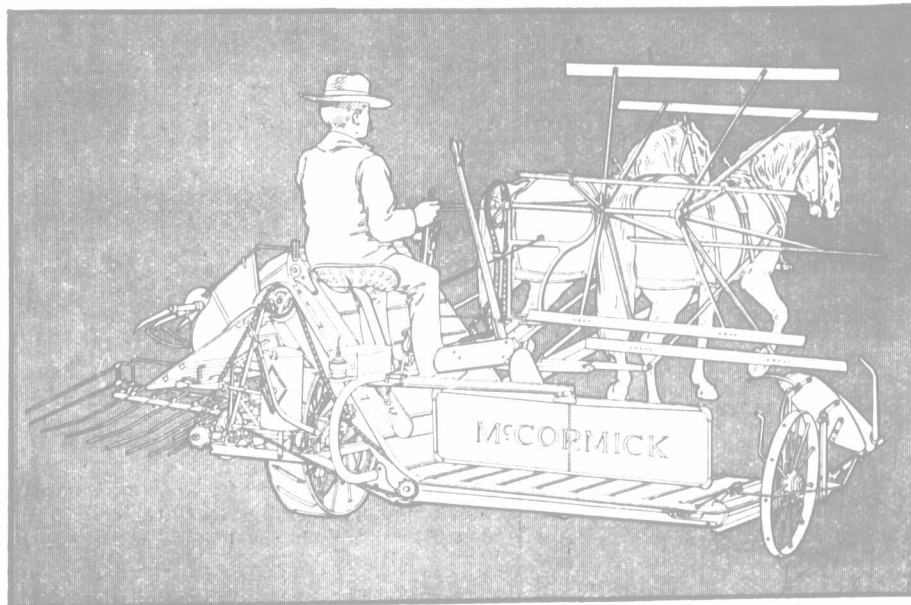
Catalogues will be issued in due time, for which applications may now be booked with

MR. W. D. FLATT, MANAGER, HAMILTON, ONT.

AUCTIONEER: COL. F. M. WOODS, ASSISTED BY CAPT. T. E. ROBSON AND OTHERS IN THE RING. om

The Man Who Buys THE McCORMICK BINDER

has the satisfaction of owning A BINDER that gives him FULLEST VALUE for his money. For seventy years THE McCORMICK CO. has been prominent in manufacturing harvesting machines, and for the season of 1902 presents the unequalled McCORMICK line,



comprising the
BEST BINDER, BEST REAPER, BEST
MOWER, BEST HAY RAKES, BEST CORN
BINDERS, BEST SHREDDERS, and the
BEST TOOL AND SICKLE GRINDERS.

The McCormick Agents are in all the
Principal Towns in Manitoba and Territories.

H. DONALDSON,

GENERAL AGENT.

PRINCESS STREET, - - WINNIPEG, MAN.

Leg and Body Wash.



When it comes to stiffness and soreness of muscles, tendons, etc., nothing equals

Tuttle's Elixir

for restoring normal conditions. Apply to the body as a mild sponge bath and put on light blanket. Sponge the legs and put on light bandages.

Used and Endorsed by Adams Express Company.

Tuttle's American Condition Powders

A specific for impure blood and all diseases arising therefrom. TUTTLE'S FAMILY ELIXIR cures rheumatism, sprains, bruises, etc. Kills pain instantly. Our 100-page book, "Veterinary Experience," FREE.

Dr. S. A. TUTTLE, 66 Beverly St., Boston, Mass. Beware of so-called Elixirs—none genuine but Tuttle's. Avoid all blisters; they offer only temporary relief, if any. LYMAN, KNIG & SON, Agents, Montreal and Toronto, Canada.

500 HORSES

FOR SALE.

Good range band; Draft and Coach bred. Can be seen at

High River Horse Ranch,

HIGH RIVER, ALBERTA.



DAIRY KING BUTTER MACHINE

The best in the world for the money. It is the most PRACTICAL, USEFUL, SIMPLE and ECONOMICAL CHURN there is made. By its use you can make the best creamery butter in from five to eight minutes. Guaranteed as represented or money refunded. AGENTS WANTED. Where we have no agent we will send a churn at agents' price to introduce it. Write for catalogue and prices.

ECONOMY SUPPLY CO., 541 Main Street, Kansas City, Mo.

E. J. C. SMITH,

Agent for Canadian Kodak Co.

Supplies of all Kinds.

Printing and Finishing for amateurs.

276 SMITH ST., WINNIPEG.

Send for Catalogue. Established 1892.

A Fireproof Roof

AND SECURE AGAINST LIGHTNING.

What every one wants, and what you can have—at moderate cost—by using

Eastlake Steel Shingles, Galvanized or Painted,

The most widely-used shingles in the Dominion for all farm buildings.

Quickly and easily applied by any handy man. Can't leak, and most durably economical.

Up-to-date farmers praise them enthusiastically.

Metallic Roofing Co., Ltd.

TORONTO MONTREAL WINNIPEG
Winnipeg Address P. O. Box 542.

What shrunk your woolsens?
Why did holes wear so soon?
You used common soap.

SUNLIGHT SOAP

REDUCES EXPENSE

Ask for the Octopus Brand.

IMP. COTSWOLD SHEEP

Five rams (year olds), both sexes (year olds), sire imp. 10 ewes (year olds), sire imp. both sexes; Yorkshire and Friesian. BROOKS & LANGMAID, Coburg.

PLEASE MENTION FARMER'S ADVOCATE.

GOSSIP.

THE GREAT SHORTHORN SALE TO MATERIALIZE AT HAMILTON, AUGUST 13TH.

It is safe to say that never before in Canada were offered at public sale so many high-class Shorthorns, selected from so many noted herds, and comprising so great a variety of representatives of first-class families and strains of blood, as will be found in the offerings from the seven fine herds drawn upon for the combination sale to be held at Hamilton, Ont., on August 13th. And from what is known of the character of these herds, it is safe to predict that in combination with this variety there will be found uniformity of excellence of type and quality in high degree, for the reason that besides the large percentage of imported animals of similar breeding and stamp included, there have been used in each of the herds for many years, and in most of them from the date of their establishment, only first-class bulls of like breeding and pattern. Never has as good an opportunity been afforded farmers and young breeders in this country to lay the foundation of families or herds on a safe and sound basis than will be found in this sale. Much depends upon starting right. It is not unusual to find the progeny of one cow selling for thousands of dollars more than that of another in a given number of years, a fact which emphasizes the importance of a good selection of foundation stock and of following it up by the use of well-selected sires as to breeding and stamp. There has never been a more promising or propitious time than the present for starting in the business of breeding pure-bred stock, or for securing good bulls for service in grade herds to improve the form and feeding qualities of the cattle on Canadian farms. Good cattle are scarce, and are getting scarcer every year, while the demand for such was never better nor the prices higher, while the prospect is clearly for a continuation of good prices for good cattle, and they are the only sort that pay a reasonable profit on their feed and the cost of raising them. There is every prospect of a bountiful supply of good feed in the country this year, and there is room for a few more good cattle in most of the pure-bred herds in the country, and many of them will be the better for an infusion of blood such as may be secured at the Hamilton sale and which will tell for good on the character of the herds into which the animals go.

The catalogue of the sale is not to hand at this writing, but in a general way the offering may be summarized:

MESSRS. W. G. PETTIT & SON have sent us their private herd catalogue, indicating the numbers they have contributed to the sale, which include the two imported Kinellar Claret bulls, Prince George, a red three-year-old, by Director, by the Prince Royal bull, Prince Horace, his dam by Sittlyton Sort, and gr. dam by Gravesend; and Scottish Hero, a roan two-year-old, by the Duthie-bred Count Amaranth, who belongs to the same family as the famous Field Marshal; dam by Kintore Hero, of the Ythan tribe, with clan Alpine, Gravesend and Vermont as sires behind these. Of the ten females from this herd in the sale, eight are imported animals, from one to four years old, and representing the Cruickshank, Orange Blossom, Fragrance, Flora, Kibblean Beauty, Jealousy, Jilt and Bessie tribes, and having for sires such noted bulls as the Duthie-bred Sittlyton Prince, of the Cruickshank Victoria tribe; Cradstone, of W. S. Marr's Bessie tribe, by William of Orange; Spicy King, bred by Mr. Marr, from the Uppermill Goldie family, by Spicy Robin, whose dam was by William of Orange; Reveller, bred by Mr. Duthie, from the Uppermill Roan Lady tribe; Red Light, of the Gordon Castle Lustre tribe; the Marr Missie bull, Lord Hampton, by Deane Willis' Bapton, Czar, and Velisarius, by the Prince Royal sire, Prince Horace, a son of the noted William of Orange.

MR. JAS. DOUGLAS, of Willowbank Stock Farm, Caledonia, Ont., contributes five very choice heifers of excellent families. Mirth 13th, by Duncan Stanley—14364—, and out of Mirth 11th—25194—, is a very short-legged, thickly-fleshed roan two-year-old, with calf to Imp. Christopher—28859—, Victoria 17th is a red two-year-old heifer of exceedingly smooth finish and good size, by Imp. Christopher—28859—, and out of Victoria 8th—16980—, one of Mr. Douglas' best cows. Queen Alice, a yearling, by Imp. Christopher—28859—, and out of Lady Clare—296121—, is a grand individual and gives promise of making a particularly good show heifer. She is large for her age, very smoothly finished, and has a thirty appearance, which speaks well for her future. Elphie 32nd, by Imp. Christopher, and out of Elphie 8th—16758—, is a real neat yearling, of a very good walking strain. Britannia 54th is a dark roan eight-months-old calf, and to all appearances will make a grand show animal. She is of pleasing form, thickly-fleshed, and stands on good straight strong legs, neatly placed. She is sired by Imp. Christopher—28859—, and out of Britannia 10th. The top sires of these heifers are noted bulls, representing some of the very best Scotch Shorthorn families. Take for example, Imp. Stanley—14364—, by Stanley, the Scotch-bred Champion Top sire, and Imp. Christopher—28859—, by Christopher, the Scotch-bred Champion Top sire, and Imp. Christopher—28859—, by Christopher, the Scotch-bred Champion Top sire, and Imp. Christopher—28859—, by Christopher, the Scotch-bred Champion Top sire.

WINNIPEG'S OLDEST FURNITURE HOUSE.



WHERE HIGH QUALITY AND LOW PRICES REIGN.

FACTS:

We do not handle any furniture but what we can recommend as being dependable. Prices quoted by us are the lowest possible figures that can be named and still uphold the worthiness of the article. The values given in this store cannot be beaten. On this point we invite comparison, and cheerfully show customers through our store for that purpose.

SCOTT FURNITURE CO.

THE WIDE-AWAKE HOUSE.

276 Main Street, WINNIPEG, MAN.

(ESTABLISHED 1870.)

BELL ART

Pianos and Organs

LAST LONGEST AND YIELD BEST RESULTS BECAUSE THEY ARE MADE FROM BEST MATERIALS, IN THE MOST CAREFUL MANNER.

THE NEW ORGAN FOR HOME USE IS THE

BELLOLIAN

ANYONE CAN PLAY IT WITHOUT STUDYING MUSIC.

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BELL ORGAN & CO., Ltd.

GUELPH, ONTARIO.

CATALOGUE No. 40 FREE ON REQUEST.

HOME-SEEKERS' RATES.

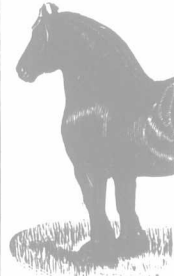
Chicago & North-western Ry.

Round-trip tickets are on sale to points in Wisconsin, Michigan, Minnesota, Iowa, Nebraska, the Dakotas and other points west and north-west at one fare, plus \$2.00, for the round trip, via the North-western Line. Tickets are good twenty-one days to return. Call on any ticket agent for particulars, or address W. B. Kniskern, G. P. & T. A., 22 Fifth Ave., Chicago.

GLYDESDALE AND HACKNEY

STALLIONS AND MARES

FOR SALE.



6 Clydesdale yearling studs,

3 fillies, and several

aged mares, which are regular breeders. Also

2 Hackney stallions, large, handsome, high-steppers, well broken to drive.

Size, action and quality combined in all. Inspection invited.

O. SORBY, GUELPH, ONTARIO.

The executive committee of the International Live Stock Show, to be held at Chicago on December 1-6, have made some notable changes in their rules. All compulsory slaughter tests are abolished, but in order to encourage the exhibition of animals from to win both on foot and on block, prizes awarded any animal that wins in both classes will be doubled by the Exposition authorities. The following changes were also made: The classes for rams and ewes two years old or over are dropped, which changes the flock to consist of one ram under two years old, two ewes under two years, and two ewe lambs. This necessarily restricts the age of the champion ram and ewe, which has formerly been allowed to any age. In the fat sheep division, the second and third prizes for Dorsets, Cheviots and Rambouillets are dropped, and the money from these classes divided among the other classes in the fat division. In the carload lot classes the new classification reads carload lots of native sheep bred east of the 98th degree of longitude. A new class is made for range-bred sheep, limited to sheep bred west of the 98th degree of longitude. The range car lot classification is two years old and over, \$100 for first prize and \$50 for second; one year and under two years, same amount. The champion carload will be taken from the native division and be made sweepstakes champion carload of the show.

At a meeting of the Board of Directors of the American Aberdeen-Angus Association, held in Kansas City the latter part of last month, it was unanimously decided to change the Association's headquarters from Harvey, Ill., to Chicago. The officers will be moved about October 15th, by which time it is expected that the new Pure-bred Live Stock Record Building will be ready for occupancy.

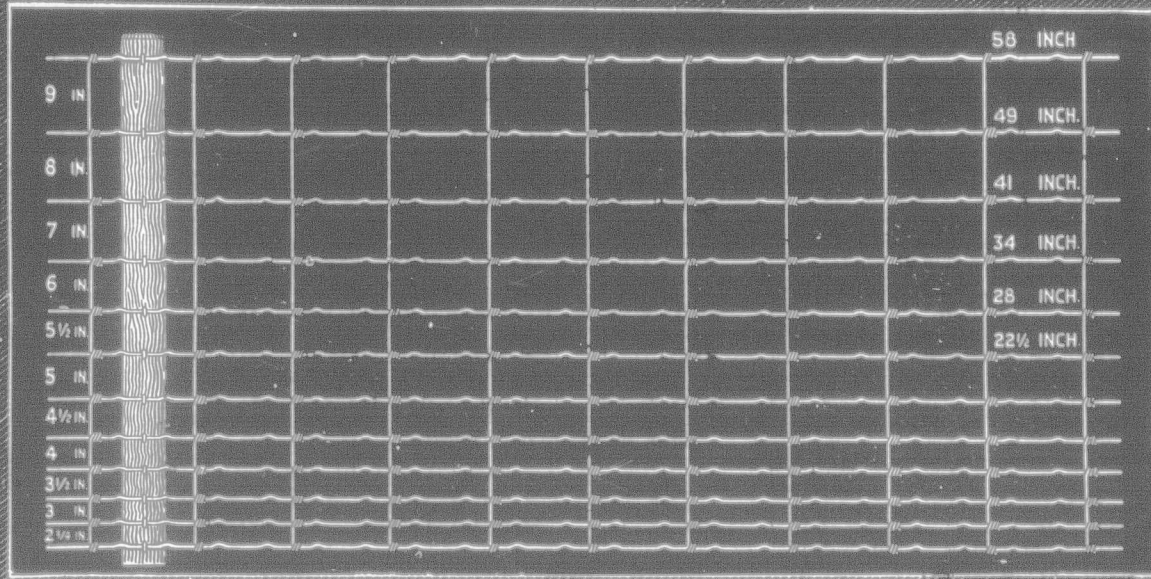
LADY OF THE ROYNE 5TH AND MISTLETOE 21ST.

In this issue we publish photo engravings of two contributions by Mr. W. D. Platt to the great combination Shorthorn sale in Hamilton on August 13th. The beautiful Missie-bred roan, Mistletoe 21st (imp.) 317, was sired March 30th, and bred by Wm. Duthie, out of Mistletoe 14, one of his best cows, and by Nonpareil Victor (207), got by Deane Willis' celebrated Victoria bull, Count Victor. The other cow portrayed, Lady of the Roan 5th (imp.) 399, was bred by Robt. Turner, carrier of Bessie, Easton and Band-lins, Scotch land, sired by the noted President 67414, as Mayberry 14, and sired by Mr. Platt's League sale 18298, was sired April 10th, 1888, out of Lady of the Roan, by Challenge Cup 298.

MANUFACTURED IN CANADA BY,
The Canadian Steel & Wire Co., LIMITED.
 HAMILTON, CANADA.

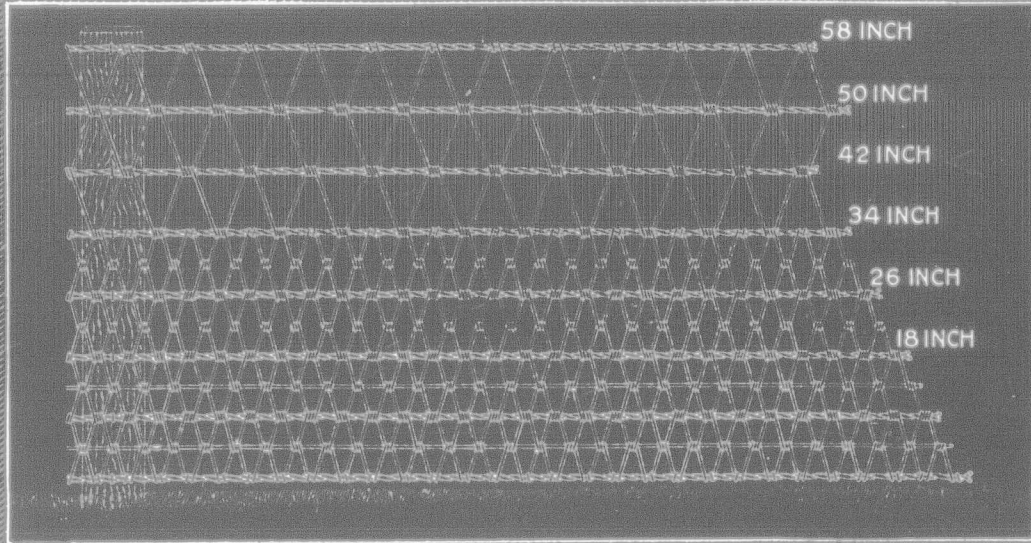
The best selling because the most satisfactory

Woven Wire Fencing



AMERICAN FIELD AND HOG FENCING

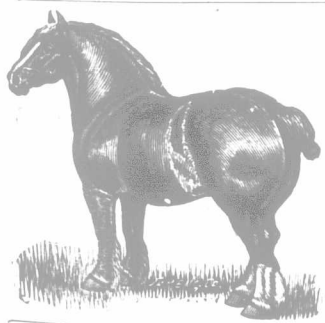
All styles and heights have stays 12 inches or 6 inches apart.



ELWOOD FIELD AND FARM FENCES.

Six styles: heights 18 inches to 58 inches.

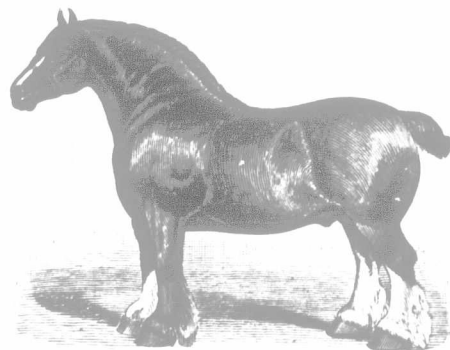
If there is no agency for either of these fences in your town, write for the agency. It is worth having



Clydesdales and Shorthorns

FOR SALE: Seven choice young stallions, and several young mares and fillies. Five young bulls and bull calves, and thirty-five excellent young cows and heifers. Mostly registered in the American Herdbook.

JOHN BRIGHT, MYRTLE, ONTARIO.



STALLIONS AND MARES.

A new importation of

Clydesdales, Shires and Hackneys

will arrive about the end of August.

Mr. James Dalgety is now in Great Britain making selections. The character of the last consignment will give an idea of the high class of horses they import, and the next shipment will be the best they have ever made, a number of prizewinners having already been secured by the firm. Intending purchasers should not miss seeing this consignment.

DALGETY BROS., London, Ontario, and Dundee, Scotland.
 LARGEST IMPORTERS IN CANADA.

GOSSIP.

JERSEY ISLAND TESTS.

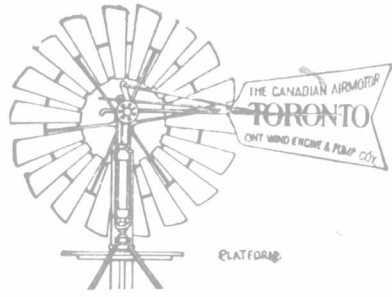
In the latter tests conducted by the English Jersey Cattle Society at the R. J. A. on the Island of Jersey, on May 28th last, the gold medal was won by Vandyke P. 8557, owned by N. Du Four, whose yield of milk was 39 lbs. 12 oz. and the butter made in twenty-four hours was 3 lbs. 2 oz. Island weight equivalent to 3 lbs. 6 1/2 ozs.

American weight. The silver medal was won by P. J. Ahier's Lady Dorothy 2nd 4993, who gave 32 lbs. 12 ozs. of milk, which made 2 lbs. 5 1/2 ozs. of butter, Island weight, equal to 2 lbs. 9 1/2 ozs. American weight. The bronze medal was won by P. E. Le Fèvre's Albani 8052, whose yield of milk was 38 lbs. 4 ozs. in twenty-four hours, which yielded 2 lbs. 11 1/2 ozs. Jersey weight, equal to 2 lbs. 15 1/2 ozs. American weight. The greatest quantity of milk given by any cow in the twenty-four hours was the yield of Origa's Queen 7559. She

gave in twenty-four hours 42 lbs. She belonged to C. J. Lalley. The only other cow giving over 40 lbs. was Fancy's Rose 8277. The only other cows credited with 2 lbs. or more of butter in twenty-four hours, given in Island weights, besides the winners of the medals, were as follows: Fancy's Rose, 2 lbs. 3 1/2 ozs.; Oxford Ixia 7100, 2 lbs.

6 1/2 ozs.; Oxford Ixia 3rd 8581, 2 lbs. 4 1/2 ozs.; Cora 4th 7135, 2 lbs. 2 1/2 ozs.; Patent 2nd 8420, 2 lbs. 1 oz.; Brave Lady F. 86445, 2 lbs. 4 oz. The thirty-five cows yielded an average of 27 lbs. 1 1/2 ozs. of milk, 1 lb. 12 1/2 ozs. of butter, equal to 1 lb. 1 1/2 ozs. American weight. The average time in milk was 124 days.

WINDMILLS



You require one that will do your work satisfactorily. The

Canadian AIRMOTOR

TERROR TO WORK.

WHY? **CAST-IRON CONSTITUTION. MECHANISM SO SIMPLE. MATERIAL THE BEST.**

ONT. WIND ENGINE & PUMP CO. LIMITED. TORONTO, ONT.
Manitoba Agents: **BALFOUR IMPLEMENT COMPANY, Winnipeg, Man.**

IMP. CLYDESDALES AND AYRSHIRES.
The three imp. stallions, Copyright, Baron Frederick and Baron Laing, and the Canadian-bred stallion, Laurentin. Ayrshires all ages; and poultry, utility breeds. Eggs for sale. -om
ROBT. NESS & SONS, Howick, Que., P.O. & Sta.

GOSSIP.

JERSEY BUTTER TESTS IN ENGLAND.

Twenty cows out of an entry of 26 competed for the English Jersey Cattle Society's prizes in the butter test at the Royal Counties Show at Reading, on June 10th (last month). The cows were milked out clean at 5 p. m. on the 11th, the next 24 hours' milk being taken for the test, at 7 a. m. and 5 p. m. The 1st prize and gold medal was awarded to Dr. Watson's Sarah, five years old, who, 73 days after calving, gave 56 lbs. 2 ozs. of milk and 3 lbs. 1 oz. churned butter in the 24 hours, a ratio of 1 lb. butter to 18.32 lbs. milk; second to Mr. C. F. Young's five-year-old Oxford Newdrop, 90 days in milk, whose yield was 50 lbs. 6 ozs. milk and butter, 2 lbs. 13 ozs., ratio 17.91; third to Dr. Watson's Sabau 2nd, 6 years old, 101 days in milk, yielding 36 lbs. 10 ozs. milk and 2 lbs. 64 ozs. butter.

Eight Guernsey cows out of thirteen entered came to the test, the first prize going to Mrs. Fowles' Princess Rhea, 6 years old, who gave, 77 days after calving, 47 lbs. 6 ozs. of milk and 2 lbs. 4 oz. butter, ratio 23.14 lbs. second to Mr. Plumtree's eight-year-old Gildare 4th, 62 days in milk, yielding 41 lbs. 10 ozs. milk and 2 lbs. 24 ozs. butter, ratio 19.44; third to Mr. Hargreave's four-year-old Sweet Sultan, 101 days in milk, yielding 35 lbs. 8 ozs. milk and 1 lb. 104 ozs. butter, ratio 21.63.

OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS.

From June 16th to July 1st, 1902, four thirty-day records, one fourteen-day record, and thirty-nine seven-day records have been accepted. Of the thirty-day records, Belle Moore Zante 52126 leads; aged 3 years 4 months 28 days; days after calving, 9; milk, 1,560.1 lbs.; butter fat, 51.827 lbs.; equivalent butter 80 per cent. fat 68 lbs. 8.5 ozs., or 63 lbs. 15.4 ozs. 85.7 per cent. fat. Korndyke Queen 2nd 54089 follows, age, 2 years 1 month 21 days, days after calving, 12; milk, 1,219.8 lbs.; butter fat, 41.372 lbs.; equivalent butter 80 per cent. fat 55 lbs. 7.1 ozs., or 54 lbs. 17.5 ozs. 85.7 per cent. fat. Inka Dancer 2nd 54150, was fourth, aged 2 years 1 month 6 days, days after calving, 10; milk, 1,014.8 lbs.; butter fat, 35.148 lbs.; equivalent butter 80 per cent. fat 48 lbs. 11.8 ozs., or 47 lbs. 11.8 ozs. 85.7 per cent. fat. The seven-day records, the highest was 143.2 lbs. milk and 4.5 lbs. butter, given by Mrs. Fowles' Princess Rhea, 6 years old, on June 16th, 1902. The lowest was 101.4 lbs. milk and 3.1 lbs. butter, given by Mrs. Fowles' Princess Rhea, 6 years old, on June 17th, 1902.

4 Imp. Clydesdale Stallions 4

Amphion, Vol. 24, 2 years old, bay; Bucepholus, Vol. 24, 2 years old, black; Voyageur, Vol. 24, 2 years old, brown; Lord Gartly, Vol. 23, 4 years old, brown. Representing the blood of Golden Sovereign, Sir Christopher, Montrave Matchless, and Royal Gartly.

GEO. G. STEWART,

ROSKRANK FARM,

P. O. and Station, - Howick, Quebec.

Newton's HEAVE, COUGH, DIS-TEMPER & INDIGESTION Cure

A veterinary specific for WIND, THROAT, & STOMACH TROUBLES. **Strong Recommends.** \$1.00 per can, dealers or direct. Newton Horse Remedy Co. (D), Toledo, O. Trade supplied by Lyman Bros. & Co., Toronto, Ont.

WM. SMITH, COLUMBUS, ONT., IMPORTER AND BREEDER OF Clydesdale Horses & Shorthorn Cattle

Shires, Shorthorns, and Leicesters.
Young stock of both sexes for sale. Imported Prince Louis = 32082 = heads the herd. Write for prices or come and see them. -om
John Gardhouse, Highfield P. O., Weston, G. T. R. and C. P. R.

DR. PAGE'S ENGLISH SPAVIN CURE

For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hock, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle, and to remove all unnatural enlargements. This preparation (unlike others) acts by absorbing rather than blister. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by DR. FREDRICK A. PAGE & SON, 7 AND 9 YORKSHIRE ROAD, LONDON, E. C. Mailed to any address upon receipt of price, \$1.00. Canadian agents: -om
J. A. JOHNSTON & CO., DRUGGISTS, 171 KING STREET, EAST, TORONTO, ONT.

Wide-Tire Metal Wheels FOR WAGONS.

Made to fit any axle, any sized wheel, any width tire. Every farmer should have a set. They are low and handy. They save labor, and the wide tires avoid cutting the farms into ruts. Write for Prices. Dominion Wrought Iron Wheel Co., Ltd., 9 AND 11 BROOK AVE., TORONTO, ONT.

BINDER TWINE SEASON 1902.

"Farmers' Special" binder twine supplied to FARMERS ONLY at 11c. per lb., baled in cotton grain bags, bound with rope halteres, and weighing 60 lbs. to the bag; length over 500 ft. per lb. quality and length guaranteed. Cash with orders; purchaser pays freight. Address orders, J. T. Gilmore, Warden, Central Prison, Toronto. Further particulars, address James Nixon, Inspector, Parliament Buildings, Toronto. -om
J. R. STRATTON, Prop. Secretary, Toronto, June 10, 1902.

INGLESIDE HEREFORDS.

A few choice heifers and young bulls by **Mark Hanna**, sweepstakes bull at Pan-American. Shropshire Sheep and Tamworth Swine. **H. D. SMITH, Compton, Quebec, Ont.**

High Park Stock Farm Galloway Cattle. A few choice young heifers and bulls for sale. Inspection invited. -om
SHAW & MARSTON (Late A. M. & R. Shaw) P. O. Box 291, BRANTFORD, ONT.

Spring Brook Holsteins and Tamworths

A few choice 2 year old heifers, 1 yearling and 2 calves, all sired by my imp. prizewinning bull, Judge Akkrum De Kol 3rd, and out of rich bred cows. Stock strictly choice. A few Tamworths to offer, on -om
A. C. HALLMAN, Breslau, Ont. (Formerly New Dundee.)

The Sunny Side Herefords.

Imp. Sunny Side Tom 1st at head, 1 and Wilton, Garfield, Grove 3rd, Diplomat and Anxiety 1st and 2nd represented. -om
A few choice young heifers and calves, inspection and selection invited. -om
W. H. SHAW, Southgate, Ont. Station, G. T. R. (Wilton Station, L., H. & B.)

NO CURE NO COST



REMOVE THE SPAVIN

Takes but one 45-minute treatment to take off most of the bad ones. Seldom known to fail. You think this claim strong because you think spavins hard to cure, but they are not. Splint, Ringbone, Curb, etc., just as easy. If Fleming's Spavin Cure ever fails it is free. Write today for our free spavin book.

R. B. McKee, Centerville, Pa., writes: "The druggist here sent to you for a bottle of Spavin Cure for a friend of mine. He took off one spavin with it, and I took off two with the rest. I think it wonderful."

Cure Fistula and Poll Evil

Cure in two to four weeks. Not one failure, nor do we believe failure possible. A scientific cure that anybody can use with perfect success. Fleming's Fistula and Poll Evil Cure will make the existence of these diseases impossible. Write us today.

Lump Jaw Will Disappear

Just as soon as all stock raisers learn what Fleming's Lump Jaw Cure will do; the disease will banish from the earth. Known and tried too long for any one to doubt its worth. Costs nothing if it ever fails.

C. L. Tamehill, Hebron, Ind., writes: "The one bottle I got from you cured four lump jaws."

Write today for instructive circulars on above. Mention this paper.

FLEMING BROS., Chemists, 36 Front Street, West, Toronto, Ont.

PAINT AND VARNISH.



Search the whole world and you will not be able to find better PAINTS and VARNISHES than the manufactures of THE CANADA PAINT COMPANY.

Made in Canada, with pure Canadian Linseed Oil Made by Canadians, with Canadian capital, and expressly suitable for the Canadian climate.

Beware of substitution, and insist upon our name being on each package.

THE CANADA PAINT COMPANY, LIMITED.



High-class Herefords

We have for sale the following choice young stock, which have been bred from imported and American sires. Intending buyers will do well to inspect the following: 18 young bulls, 2 aged bulls, 20 young heifers. Correspondence invited. -om
A. S. HUNTER, DURHAM, ONT.

Bonnie Burn Stock Farm.

40 rods north of Stouffville Station, Ont., offers Shorthorn bulls and heifers with calf, Shropshire ewes with lamb, and Berkshire pigs. All at farmers' prices. Inspection invited. -om
D. H. RUSSELL, Stouffville, Ontario.

SHORTHORNS.

THORNHILL HERD, ESTABLISHED 27 YEARS.
Imp. Royal Member and Sailor Champion now at head of herd, which are all bred on straight Scotch lines, and are of the up-to-date kind. Present offering: some choice young bulls. -om
REDMOND BROS., Millbrook Sta. and P. O. GEO. ISAAC, BOMANTON, ONT., FREEDER AND IMPORTER OF Scotch Shorthorn & Clydesdale CATTLE AND HORSES.
Forty-one head of Shorthorns arrived from quarantine 20th March, one Clydesdale stallion for sale. -om
CORONA STATION, G. T. R.

Catalogue Printing Our Specialty.

Many of the best Catalogues in Canada are produced by us. Latest type faces, designs, ornaments, and modern machinery. - Best in America. Up-to-date covers designed by special artists without extra charge.

Family Knitter

Cheapest, Simplest, Best. Price, \$8.00. Write for circular. -om
Dundas Knitting Machine Company, DUNDAS, ONTARIO.

SUMMER SESSION

From July 7th next will be held in connection with the regular work of each department of the **CENTRAL BUSINESS COLLEGE, TORONTO**
Special courses in Accounting, Shorthand Typewriting, Penmanship, etc. Vacations. Students may register for a full or partial course at any time. Circulars free. Address: **W. H. SHAW, PRINCIPAL.**

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.

ROSEVALE SHORTHORNS

Are of the up-to-date sort. We have for sale a number of young bulls and heifers of all ages. Marengo Heydon Duke (imp.) heads the herd.

Shorthorns and Berkshires

Four young bulls, 6 to 12 months old. Pigs, 2 to 6 months old. Pairs supplied not akin.

SHORTHORNS (IMP.)

Cows and heifers, imp. and home-bred. Bulls, imp. and home-bred—all ages. Representing the fashionable blood of Scotland.

SHORTHORNS:

We are offering 3 extra choice yearling bulls, all from imported sires, straight Cruickshank, with Lavendar and Miss Ramsden dams.

FOR SALE:

5 Scotch Shorthorn Durhams (bulls), 5 to 16 months; 5 young cows and heifers. Berkshire pigs, both sexes. Prices reasonable.

J. & W. B. WATT,

SALEM, ONTARIO (POST AND TELEGRAPH OFFICE)

BREEDERS OF— Shorthorn Cattle, Clydesdale Horses, Leicester and Oxford Sheep, and Berkshire Pigs.

Our herd contains such families as Matchless, English Ladies, Mildreds, Village Buds, Missies, Stamfords, Mysies, Vanillas, Clarets, and Marthas.

SHORTHORNS, SHROPSHIRE, COTSWOLDS

We are now offering a number of heifers and heifer calves; a few bull calves; a number of cows, all bred in the purple and as good as the best.

SHORTHORNS.

Fashionably bred, of both sexes and all ages. Nothing reserved.

LAKE VIEW STOCK FARM.

SCOTCH SHORTHORNS, both sexes, all ages. As good as the best.

Maple Lodge Stock Farm.

ESTABLISHED 1854. SHORTHORNS.—First-prize milking strains, best Scotch breeding. Young bulls and heifers for sale.

W. G. PETTIT & SONS

FREEMAN P. O., ONT., IMPORTERS AND BREEDERS OF

Scotch Shorthorns and Shropshire Sheep,

Make a Special Offering for May and June: One of our best stock bulls, 3 years old, red; one imp. bull, 2 years, roan; two bulls imp. in dam, 15 months; 5 bull calves from imp. cows, 12 and 11 months; 5 home-bred bulls by imp. bulls, 15 to 18 months; 5 young five imp. and home-bred cows and heifers, all ages. Catalogues on application.

Shorthorns, Berkshires, Leicesters

An offering at present the grand stock boar, Crown Prince; also some young ones.

Mercer's Shorthorns

Are represented by Missies, Stamfords, Floras, Claret Princesses, Red Roses, Fashions, Crimson Flowers, and Matchless families. Headed by Village Spirit, 2963, a son of Abbottsford. Stock of both sexes and all ages for sale.

SHORTHORNS FOR SALE:

6 yearling bulls, cows and heifers, all ages. Cows and heifers in calf to Sir James, deep milkers.

HIGH-CLASS SCOTCH SHORTHORNS

of the following families, for sale at moderate prices: Village Girls, Broadhooks, Beaufort, Roses, Missies, Clarets, Marr Floras, Nonpareils, Minax and other choice families. Write for catalogue. Shropshire rams and ewes for sale as usual.

"ORCHARD HILL" SHORTHORNS.

Herd comprises representatives of best Scotch bred families, with Lord Lavendar at head. Young animals of both sexes for sale.

NOTICES.

LUMP JAW CURE.—Here is a remedy for lump jaw in cattle that is guaranteed to cure—"free if it fails," is the way the makers put it. There is no guesswork about the results where Fleming's Lump Jaw Cure is used, as it cures in from one to three applications. It is easily applied, harmless and humane. Have also Poll Evil Cure and Cure for Spavin. Free information and book of testimonials from many users sent free to all who write Fleming Bros., 36 Front street, West, Toronto, Ont., mentioning catalogue K.

WOVEN WIRE FENCING.—The up-to-date farmer is very careful about the selection of fencing material, and justly so, for not only is the usefulness of his fields increased when wisely fenced, but also a general attractiveness has been added which is pleasing both to the owner and passer-by. When a genuine good fence has been built, the actual value of the farm has been increased far beyond the total cost of the work and material. The Canadian Steel and Wire Co., Limited, of Hamilton, Ont., furnishes many different styles of guaranteed up-to-date woven wire fencing. The "American Field and Hog Fence" is made by them. It is of six different heights, with stays from six to twelve inches apart, as required, and makes a good serviceable fence. It is manufactured in rolls of 40 rods each, and can be attached to the posts at the rate of one rod per minute. The "Wood Special" is another strong, reliable make of the same firm. It is also made in six different heights, and as many different styles. The lateral wires are coiled spring cables, with single-strand reinforcements, diagonally arranged, making a diamond mesh. Regarding mesh, there are many sizes to choose from, so that all requirements along that line can be satisfactorily met. It is claimed that 200 rods of this style of fence can be put up each day. This Company makes a specialty of farm and railroad fencing, and fully realizing that the only sure basis of success is to be obtained by carefully selecting superior material and constructing such on the most approved lines, employing at all times the best workmen, they have determined to build up a business that shall command confidence and prove a boon to wire-fence purchasers. Although this Company only began operations on the first of March, 1902, the first season's output of their thoroughly-equipped factory will reach over 2,000 tons of wire fencing, proving that their effort is being appreciated by farmers and others. Interfering wire-fence purchasers will do well to call at or write to the Canadian Steel and Wire Co., Hamilton, Ont., whose announcement will be found elsewhere in this issue of the "Farmer's Advocate."

GOSSIP.

Volume 16 of the British Suffolk Flockbook has been received at this office, for which we are indebted to the kindness of the secretary, Mr. Ernest Prentice, 64 Oxford street, Ipswich, England. It is a well-bound and clearly-printed volume of 295 pages, containing registry of some 250 recognized flocks of pure breeding, and of 375 stud rams, besides a record of prizewinnings at the leading shows in 1901 and much other useful information concerning this breed, which has become very popular with English farmers.

At E. H. Donhey's Shorthorn sale at Newton, Iowa, June 18th, the 53 head sold made an average of \$725. The 49 females sold for an average of \$754. At the sale from the herd of Martin Flynn & Sons, at Des Moines, Iowa, June 19th, the 56 head disposed of made an average price of \$115. The six-year-old cow, Canadian Duchess of Gloster 28th, bred by Thos. Allin & Bros., Oshawa, Ont., and sired by Imp. Indian Chief, sold for \$1,045, the highest price made by any animal in the sale.

Mr. Jas. Dalgety, of the firm of Dalgety Bros., Dundee, Scotland, and London, Ont., has sailed for Great Britain for the purpose of bringing out another importation of Clydesdale stallions and mares, and a few Shires and Hackneys. The members of the firm in Scotland have already secured a number of prize-winning and high-class stallions and mares, to which will be added other selections of equal excellence, and from the experience and good judgment of the firm and the character of their former importations the coming consignment to arrive about the end of August may be expected to be of high-class quality. Intending purchasers should make it a point to see them early. Read their advt.

Shorthorns, Berkshires, Leicesters

Mercer's Shorthorns

Are represented by Missies, Stamfords, Floras, Claret Princesses, Red Roses, Fashions, Crimson Flowers, and Matchless families. Headed by Village Spirit, 2963, a son of Abbottsford. Stock of both sexes and all ages for sale.

SHORTHORN BULLS FOR SALE:

A choice lot of Shorthorn bulls from 10 to 16 months old, sired by Imp. British Statesman (23729) - 20833; and cows of the Mara family. They must be sold at once. Prices away down to suit customers.

HIGH-CLASS SCOTCH SHORTHORNS

of the following families, for sale at moderate prices: Village Girls, Broadhooks, Beaufort, Roses, Missies, Clarets, Marr Floras, Nonpareils, Minax and other choice families. Write for catalogue. Shropshire rams and ewes for sale as usual.

"ORCHARD HILL" SHORTHORNS.

Herd comprises representatives of best Scotch bred families, with Lord Lavendar at head. Young animals of both sexes for sale.

Shorthorn Bulls.

Good ones. Choicely bred. Moderate prices. Send for bull catalogue. Also Scotch-bred cows and heifers.

H. SMITH, HAY, ONTARIO.

Exeter station on London and Wingham branch of the G. T. R. adjoins the farm.

Hillhurst Shorthorns AND HAMPSHIRE DOWN SHEEP.

THERE are few herds on the continent that can boast of three as good stud bulls as Joy of Morning 43903, Scottish Hero 14553, and Scottish Beau 14552. These are all imported bulls, of the richest breeding, and right well do they reflect the possibilities of the future character of the Shorthorns being bred at Hillhurst. The breeding cows at Hillhurst are of Scotch and English breeding, and are especially noticeable for their size.—Live Stock Indicator, May 15, 1902.

M. H. COCHRANE, COMPTON CO., P. Q., G.T.R., 117 MILES EAST OF MONTREAL. HILLHURST STATION.

Scotch Shorthorns BREEDING FEMALES ALL IMPORTED.

Imp. Golden Drop Victor our present stock bull. Eleven young bulls and some young cows for sale at reasonable prices.

H. CARGILL & SON,

Cargill Station, G. T. R. CATALOGUE FREE. Cargill, Ontario.

ARTHUR JOHNSTON BREEDER AND IMPORTER OF SHORTHORNS ONLY.

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For Sale: Very fine old heifers in calf. St. 28853, full calf, 11 m. = 30878, dam Flora heifer calves: John M...

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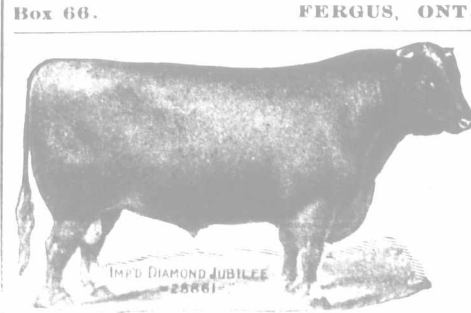
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GOSSIP.

Mr. W. H. Hunter, "The Maples" farm, Orangeville, Ont., has recently purchased from Mr. Charles W. Armour, Chicago, three fine three-year-old Hereford heifers for \$1,500. The families represented by his purchase are of choice breeding, and should prove a valuable addition to his herd. His first choice was the imported heifer, Buttermaid 2nd 138043, bred by W. T. Barneby, Saltmarsh Castle, Bromyard, England, by Hilarity, a son of Grove 3rd, and a grandson of Horace; her dam being Buttermaker, by Troquois, a get of Lord Wilton. His other selections were Garnd 138750 and Dorothy 138233, bred by Capt. F. L. Heygate, Buckland, Leominster, England, by Fine Lad. Three heifers of Fine Lad's get were recently sold to His Majesty the King for the Royal herd at Windsor.

Ridgevale Stock Farm, the property of Mr. R. W. Walker, breeder of Holstein cattle, is situated in the County of Ontario, five miles from Port Perry station on the G. T. R. and five miles from Myrtle station on the C. P. R. The present splendid herd was founded on the two richly-bred females, Madam B. 651, sired by Sir Westwood No. 12, dam Madam Dot, imp., whose milk record was 75 lbs. a day, and who cost her importers \$800.00. The other was Diploma 3rd, by Bonnie Queen's Last Boy; dam Diploma, whose two-year-old milk record was 40 lbs. a day. Her dam, Imp. Sykie, had a milk record of 75 lbs. a day. Diploma 3rd belongs to the Bonnie Queen Strain, whose superiority as heavy milkers is well known. On these cows and their progeny have been used such well-bred bulls as Butter Boy 2nd, b. Butter Boy; dam Adie Posch 4th, who made five lbs. of butter in three days, three weeks before she was two years old. Father Tensen, by Sir Archibald Mason 352; dam Maud Tensen 11011, another noted record cow. The present stock bull is Forest Prince Abberkirk 1838, by Forest Prince 1106; dam Ida Abberkirk 1813. He is a big well-proportioned animal, and is leaving a splendid lot of straight, even, level-backed youngsters. The cows of the herd are a typical dairy-type lot, showing an exceptional development of udder, averaging row on grass alone from 60 to 70 lbs. of milk a day. There are also a number of heifers in milk, two and three years old, that give from 40 to 50 lbs. of milk a day; also three-year-old heifers of the Diploma family, and by the stock bull, and several heifers from four to five months old, by the stock bull. Any or all of these heifers are for sale. At present the bulls are all gone. Mr. Walker reports the demand for Holsteins of the right kind, especially bulls, as by far the best he ever knew. His last one was shipped last week, and he had two orders to ship him at once the same day. In writing Mr. Walker, address him at Utica P. O., Ont.

A large draft of over forty Shorthorns has recently been consigned to the order of Mr. W. D. Platt, of Hamilton, Ontario. The animals were secured from a large number of leading herds, including that of Lord Rosbury at Dalmeny. From Mr. P. L. Mills, Riddington came several very pretty heifers, including Viscountess Oxford of Riddington and Queen of Oxford 9th, both sired by sons of the old-time champion bull, Marengo; Druid Charity, a Clipper heifer by Druid Stone, a son of the famous Corner Stone; Broadhocks Violet, a Broadhocks heifer in calf to Marengo; Stuyton Duke; and Electric Spark, a thick, blocky heifer, by Electric Star, a son of Morning Star. Amongst the other heifers in the group were Julia, a very good Ballechin-bred heifer, by Newton Stone, another son of Corner Stone; Maggie, 12th, a sweet roan heifer bred by the late Mr. Goodbrand, Ross-shire; Eliza, 18th, a very fine heifer, bred by Mr. Stewart, Millhill, Crieff, and sired by Lucky Pride; Daylight, a big swashy two-year-old bred by Mr. Davidson, Swinnie, Jedburgh; Fanny Byres, a level, well-colored heifer, bred by Mr. Bruce Byres; Marjory, a very thick, well-fleshed heifer, bred at Balnakyte, and by Henry Fortuné; Lucretia, a rice roan heifer, bred at Nether Dalnakyte; and Fleur de Lis, the first-prize heifer at Aberdeen in the spring. There are also some very fine animals amongst the cows, specially notable being Aggie Gray 2nd, a daughter of the Royal and Highland Society prize cow, Aggie Grace; Gay Lustre, whose dam, Chief Lustre, was a great prizewinner in her day; and Red Lady, a splendidly colored and fleshed cow, bred by Mr. Turner, Cairnton. Other cows worthy of special mention were Lady 28th, a fine young Newcastle-bred cow; Scottish Countess, another superior young cow, bred at Legars, Kelso; and Primrose 4th, also a capital young cow in calf to the Dalmeny stock bull, Villager. The bulls in the draft were mainly yearlings, amongst them being the Strathroy-bred Davidson's Pride; Duke of Lancaster; Palermo, a Jack-tailed bull; Harry Hampton, Courier of Ulmy, whose sire was the Collyer-bred bull, Prince of Beauty; and Duke of Balnakyte, a very fine young roan, bred by Angus Archer, out of a cow whose dam, Scotch Princess, was owned by the same breeding bulls. There are also several heifers in the draft. The entire lot will be sold at the best price that has ever been offered to come, and will be shipped to Canada, and will be on the voyage some of them, so sure to be further heard of from the other side. London Live Stock Journal.



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Bulls, from 8 to 18 months old; heifers, various ages, of true type and fashionable breeding; also 25 ram lambs and 15 ewe lambs, from imp. sire. Will quote prices right for quick sales.


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4 HOLSTEIN BULLS 4

FOR SALE: From 1 to 7 months old, having sires in their pedigrees from such strains as Inka, Netherland, Royal Aaggie, and Tritonia Prince, and out of imported females that have proven their worth at the fair. **THOS. B. CARLAW & SON,** Warkworth.

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 Three grandly-bred Ayrshire bull calves, 12 to 15 mos. old. Also young calves, by Napoleon of Auchinbrain (imp.), whose dam has a record of 72 lbs. of milk per day. A few choice young Berkshire and Yorkshire sows could be served before shipping. Collie pups, from Perfection Queen. Address—
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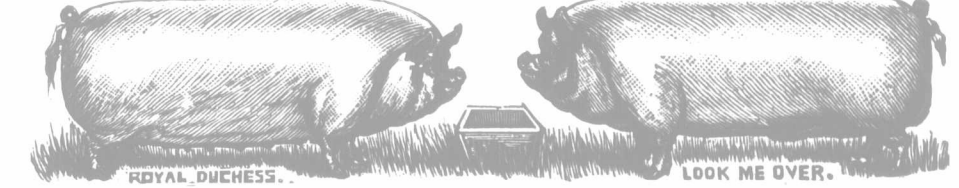
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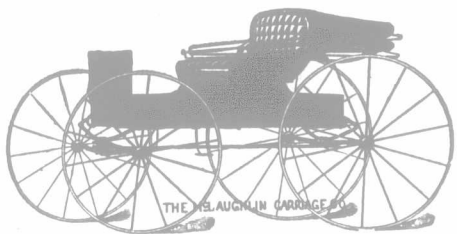
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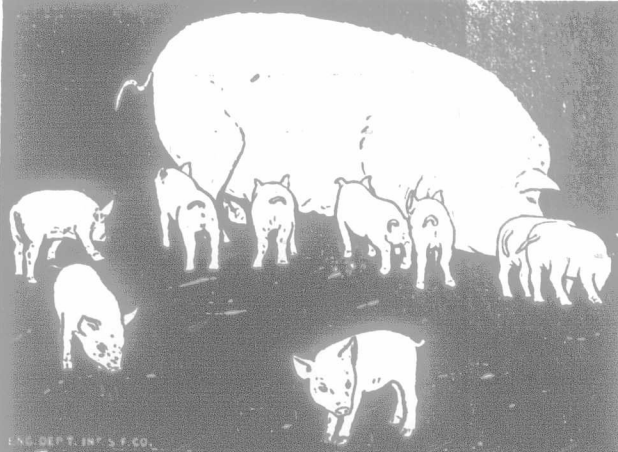
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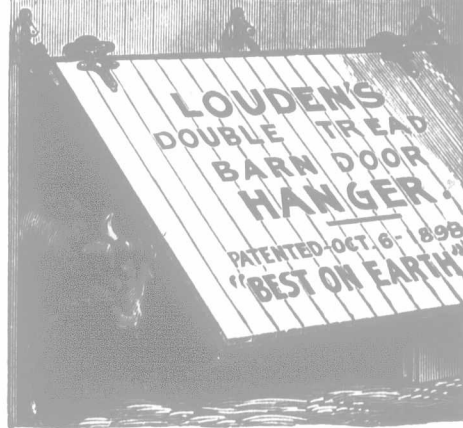
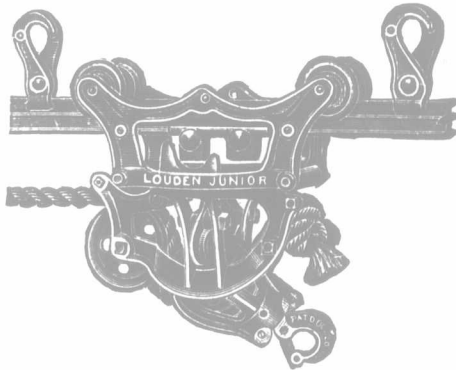
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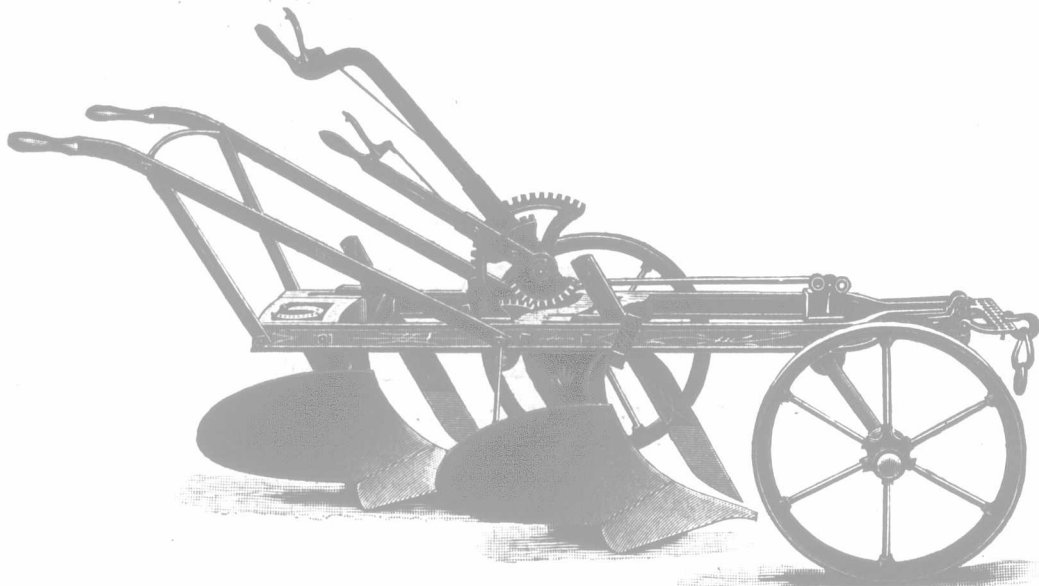
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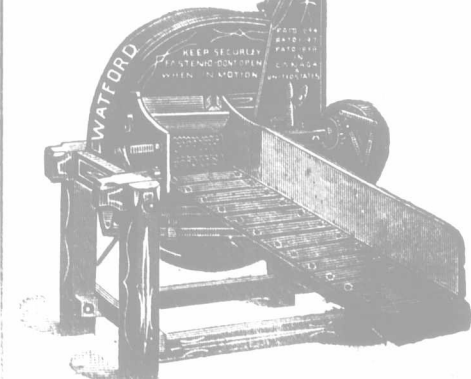
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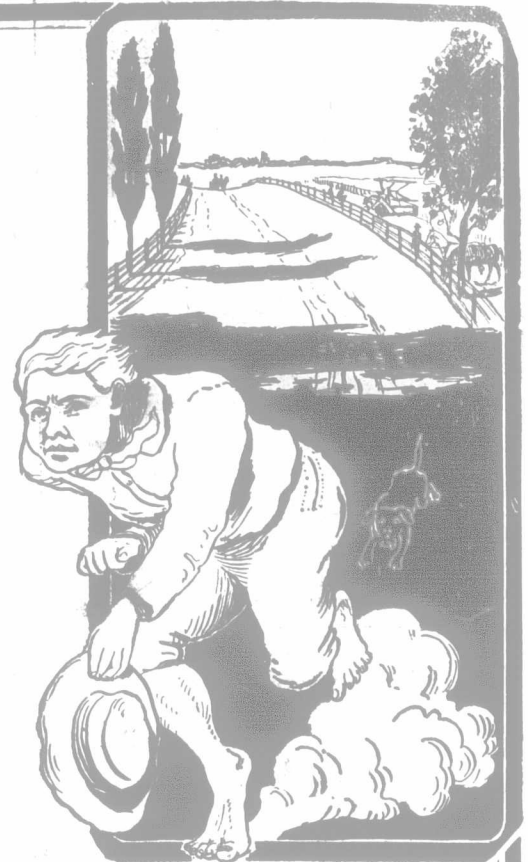
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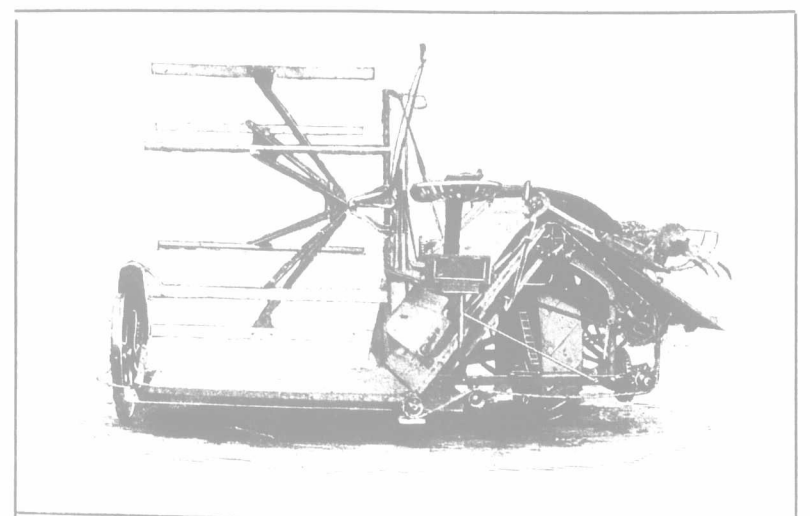
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