

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE AND SUCCEED
FOUNDED 1866

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

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A GROUP OF PRIZE-WINNING HACKNEYS AND SHIRES.
THE PROPERTY OF MR. H. N. CROSSLEY, ROSSEAU, ONTARIO.

EDITORIAL.

Mr. H. N. Crossley's Hackneys and Shires.

The group of horses that is so admirably portrayed in the life-like illustration upon our plate page for this issue represents the fine stud of Hackneys and Shires, the property of Mr. Horace N. Crossley, Rosseau, Ont. These horses have been remarkably successful as winners during the show campaign of 1903, several having won the highest honors in their respective classes, while all have succeeded in carrying off ribbons at the different exhibitions at which they have competed.

Sandy Bay, Mr. Crossley's stock farm, is situated on Lake Rosseau, Muskoka, where he has erected extensive buildings suitable to the requirements of a breeding establishment such as he is operating there.

Mr. Crossley made his first importation of horses in 1890, at which time he brought out the beautiful Hackney mare, Lady Cocking, a pair of half-bred Hackney mares, and a pair of registered Shire mares. Again in 1891 he brought out the Shire stallion, Headon Banneret, and the mares Sapphire and Headon Duchess.

In 1892 no importations were made, but last spring Mr. Crossley again returned to England, and selected the three-year-old Hackney stallion, Fireworks, the Hackney mare, Lady Bird, and the Shire stallion, Bravo II., and the winnings that the stud have achieved during the recent show season demonstrate what good judgment he has used in making his selections, for both Hackneys and Shires have gained their full share of ribbons.

The three-year-old stallion, Fireworks, standing to the left background in the illustration, won third in his class at the World's Fair, third at Toronto, and first at London. He was sired by Wildfire (1224), he by (Cook's) Phenomenon. Wildfire won many prizes, and his dam, Polly Horsley, by (Triffit's) Fireaway, won over thirty first prizes. Fireworks' dam, Pretty Polly (4574), was sired by the (Triffit's) Fireaway horse (Stewart's) Superior (1410), by which it will be perceived that Fireworks' blood lines show a combination of the most popular strains of the day.

Lady Cocking, of which the figure to the far right is an excellent likeness, is a beautiful ten-year-old mare of the true Hackney type. She gained second in the aged mare class at the World's Fair, fourth as mare of any age, and second in the cob class to harness, at Toronto, 1890. She is now in foal to Fireworks, and has bred some good ones, amongst which is Althorp Lady, that has won a number of prizes in England during this season. Lady Cocking was sired by Royal George (683), dam by (Brough's) Achilles (3).

Lady Bird, the remaining one of the three Hackneys, is a handsome four-year-old mare, imported this season. She won first in the four-year-old class at the World's Fair, second as the best mare of any age, and first in her class at the Western Fair, London.

She was sired by (Stewart's) Superior (1410), a son of (Triffit's) Fireaway, her dam being by Confidence (1265).

Mr. Crossley has been fortunate in his selections of Hackneys, as they are not only royally bred, but are individually of the highest merit, their action being particularly admired.

Bravo II., the Shire stallion standing in the right foreground in the illustration, won first in Montreal, first in Toronto, first in his class at London, and at the latter show he also won sweepstakes, beating all Clyde stallions. Bravo is a tightly built, thick, wide and weighty horse, exceedingly smooth in finish above, and with abundance of bone to carry him. He was sired by Will 'o Wisp (6574), his dam being Boadicea (3019), second dam Welcome, by Truth (4132). The Shire mare, Sapphire (79, C. S. S. B.), the last to be mentioned, but judging by her winnings not the least in point of excellence, this season in her class won first and silver medal as the best Shire mare of any age, both at Toronto and Montreal. In 1892, she won first in her class as brood mare at Toronto, also silver medal, her foal by her side also winning first, and in 1891 she won first in her class. She was sired by Northern King 2635, dam Shan's Jewel, by Master Tom 5202.

The above winnings show that Mr. Crossley has started his Shires, as with his Hackneys, in the right lines.

The Ontario Veterinary College will open its doors October 18, to commence its session of 1903-04. This well-known institution has won for itself the name of being the leading medium for obtaining veterinary knowledge in North America, and with its present efficient staff and capital management of Professor Smith it is bound to retain its popularity.

Banish the "Freak" and the "Fakir".

It is not an agreeable duty to criticise the management of some of our larger exhibitions, for we recognize how freely and unselfishly business men contribute their time and abilities to promote these annual gatherings of the people. At the same time, when they drift in a wrong direction, it is none the less a duty to frankly and fairly point it out. It is evident that the idea is now dominant that these exhibitions are for amusement, rather than for instruction and material progress, and here a fatal error is made. Being continually in touch with the thinking farmer of Canada, we but voice a growing sentiment of alarm at the way in which the side show, circus and horse race element has been pushed into prominence. The history of these things and their associations demonstrate that their inevitable tendency is demoralizing, especially to the youth. The alienation of the better class of the community from exhibitions run in this groove, and their decadence go hand in hand.

The excuse is made that the people, especially those of the city, *must have diversion*. To a certain extent the same might be said of the taste for sensational American Sunday newspapers, filled with scandal and crime, the taste for which was very largely created by avaricious publishers themselves. That there was ever any real necessity for such desperate efforts in providing so-called "attractions" for the fairs we are quite satisfied is a mistaken notion. The best British exhibitions—their name is legion—do not resort to any such questionable adjuncts, and if they did it would be no excuse for us. In proportion to the increasing sway of the jockey and the circus idea in fair management, so will the really meritorious features suffer and a positive injury be inflicted upon exhibitors, while in the end the exhibitions themselves will suffer financially, as well as in the directions we have already indicated. In the United States such has been the case, and history will repeat itself in Canada. It is no indication of a successful fair that the palatial "grand stand" be thronged, while a mere handful witnesses the products of Canadian farms, art and manufacturing skill. Better economise on the "freaks" and "fakes," and deal more generously in the prize list and on the grounds with *bona fide* exhibitors.

Was it any wonder, for example, that representatives of practically all the implement men in Canada held an indignation meeting at the late Western Fair to protest against the shameful way in which they have been shunted into a back corner, while mountebanks, snake charmers and scantily clad females flaunted themselves on the most prominent area of the whole grounds? Decent people could scarcely hear, see or move for the conglomeration of side shows. The agricultural implement men had just cause for complaint, and before another year their grievance will no doubt be redressed. That the directors, as a body, are responsible for this condition of things we do not believe, and we feel confident that these obnoxious features, and others which we have pointed out as detrimental to the true interests of exhibitors generally, will be relegated to their proper place.

By the adoption of systematic and business-like methods in conducting the fairs, the FARMER'S ADVOCATE is free to congratulate those in control upon the decided improvements effected of late years, and before another show season we hope to be able to observe in progress other reforms that are equally necessary.

Canadian Cattle Restrictions.

Sir Charles Tupper, K. C. M. G., while recently in Winnipeg, was interviewed by a representative of the FARMER'S ADVOCATE relative to the scheduling of Canadian cattle. He very kindly gave the important facts regarding this matter, with which his earnest efforts to remove have so familiarized him, and which are of such vital importance to the cattle trade and the Dominion.

The order was made on the report of the Home Government experts, and although no pleuropneumonia was found by them in Canadian cattle, something slightly resembling it, which was in no way contagious, occurred in one or two instances. The Government, however, felt bound to act on the report of their experts, and restriction was the result. The embargo having been instigated, and thousands of pounds having been spent in slaughtering cattle and examinations, it has been difficult to remove it, as after expending the public money in this way they do not like to admit their error or the misappropriation. He said that he was confident he could produce such overwhelming testimony that the Government must give way, and the restrictions would be removed. When asked as to the time such might be expected to result, he said if not this season he was sanguine in the belief that it would be early next spring.

Agricultural Depression in Great Britain.

An English writer on this subject explains what classes are most affected by the present agricultural depression in England, and cites the case of his own estate by way of explanation. He purchased his estate several years ago, previous to which the land had been untenanted for four years, but the pasturage or summer feed had been annually sold at £400 per annum. Since he purchased the estate he has tilled one-third of the land and employed six or eight men, but he finds that the transaction has been a losing one. He has expended £1,200 in permanent improvements since it came into his possession, and yet in three years out of five he has been unable to make £200 per year, while in the other two a very little over this amount was cleared. On the other hand he claims if all were seeded down to grass the annual sale of pasturage would easily net him £350 per annum; and besides this he would receive sufficient money to buy fertilizers and employ a man to keep up hedges and other repairs, so that there would be no shrinking in value.

Now, the point he wishes to bring out is, that the landlords of England are not the people that suffer most from the present depression, but rather the tenant farmers and agricultural laborers; that gradually these classes are seeking employment in the towns or leaving the country on account of the unprofitable state of this industry, much to the loss of all concerned. He further points out that the abolished corn laws had indirectly given an impetus to manufacturers by lessening the cost of living for employees, and thus providing cheaper labor by which manufacturers could successfully compete in the markets of the world. While on the other hand, not only had agriculturists received less for their products, but landed proprietors and tenant farmers had burdens shifted unto their shoulders, by taxing improvements and other unfair means of raising a revenue, that profits had gradually decreased until there was a danger of having agriculture, one great source of national wealth, undermined.

Feeding Wheat.

The protracted drouth which has prevailed in sections of the country has caused a brisk demand for feeding stuffs, bran ranging almost as high as wheat. Surely little of this product will be used, except to extend concentrated grain feeds. Every one must know that the value of wheat for feeding, when fed wisely, must be very much superior to bran. It is true that bran is a very safe supplement, but a limited amount is all that is wise to feed while wheat is so cheap.

According to D. T. Thomas, Ind., who kept an accurate account of wheat fed and gain made by hogs during a ninety days' experiment, fourteen pounds of gain can be made from a bushel of wheat fed dry and unground, which would have shown a much more rapid increase had the feed been ground, as no doubt a considerable quantity escaped mastication, passing through the entire alimentary canal in the whole state.

According to experiments conducted by Prof. Robertson at the Dominion Experimental Farm, the conclusions arrived at were that fifteen pounds of gain can be made from a bushel of common wheat, and that wheat has a feeding value about ten per cent. in excess of corn. However, it is not wise to feed wheat alone. Corn, peas and oat supplements will make a much more nearly balanced ration. Wheat is rich in mineral matter, and contains more nitrogen than other grain, making it especially valuable for growing stock. It also gives good results when fed to dairy cows.

Says Professor Henry:—A good dairy cow will give something like a pound of butter per day, and eight pounds of wheat is a good feed of that grain, so that a bushel should last a week and furnish the concentrated feed for making something like seven pounds of butter. In this way this cheap cereal can be manufactured right at home into a profitable product; not only that, but practically all the fertility which was taken from the soil by the wheat will be left on the farm, which is a matter of great importance.

Patrons of Industry Handling Wheat.

The Patrons of Industry have decided to handle grain in earnest this year. Grand President Charles Braithwaite has been elected a member of the Winnipeg Grain Exchange, and having secured offices in their building, is now prepared to handle the grain consigned to him by members of the society, and no doubt his ability and the experience gained last winter at Fort William looking into the wheat trade will be of great service to those who avail themselves of this privilege. We wish them every success in their enterprise.

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Everyone interested in dairying should not only read, but study that instructive little book, "Dairying for Profit or the Poor Man's Cow," which may be obtained from the author, Mrs. E. M. Jones, Brockville, Ont. Price, 30 cents. Over 62,000 copies have been sold, and in order to further stimulate its circulation, we will give two copies to every old subscriber sending in his own name (renewal) and that of one new yearly subscriber accompanied by two dollars.

Mr. T. D. Hodgens' Auction Sale.

In our advertising columns of this issue we would call the attention of our numerous readers to the most extensive sale of fine, light horses ever offered in the Dominion of Canada. We feel perfectly safe in making the above announcement. As the following will show, this is not a weeding-out sale. In two of the breeding departments it is the entire stud of thoroughbred race horses—nineteen in number—all of the choicest strains. The sire, Cortez, was a great race horse; his sire, King Alfonso, sired the great Foxhall that went to England and France and beat the best. Cortez' dam produced that great horse Burlington, another winner at all distances. Eight are brood mares, nearly all of which were winners and the dams of winners. The youngsters are also very promising.

The Shropshire sheep offered comprise the whole of the flock; all, except lambs, are imported and registered.

The trotting stock is also composed of choice individuals; the brood mares are bred to the best stallions, and the young stock, we predict, will hereafter win many prizes. They include such animals as Silver Star, 2,16; Noter D., trial 2,23; Gloster H, 2,20; St. Simon, 2,21, and many others too numerous to mention. In this department also Mr. Hodgens informs us that there are no culls. All two-year-olds and up to 5 years that are on the farm are in the catalogue, together with a number of fine carriage horses and saddlers; also some 12 to 14 high-bred, young, western-range mares and geldings, and a number of useful animals, the property of different owners. The thoroughbred Cleveland Coach horse is also a strong, useful animal. This sale should command a good attendance, as the best breeding stock are the only ones that will pay. Good ones pay if judiciously bred. Send for a catalogue and bring it with you to the sale.

Farm Machinery at the Toronto Industrial.

With all the vast array and increased variety of implements, there did not appear to be many novelties worth chronicling this year. Many improvements doubtless have been added, but to a certain extent these were mostly of a trivial character, and not in any degree necessary, although there were some very notable exceptions. Manual labor on the farm has become so difficult to obtain, that if it were not for the numberless appliances that have been placed in the market to lessen and take its place our crops would never be harvested. The improvements for tilling the land have made very discernible advances of recent years.

As usual, John Abell was out with a promising display of tread-powers, one, two and three-horse grain separators to suit all kinds of power and all kinds of grain, also clover hullers and grain crushers. The latter will grind any kind of grain, corn in the ear, or both together if required. He builds different sizes to suit the operator. He also had a fine selection of farm engines, both traction and plain. The firm of B. Bell & Son, St. George, had forward a fine exhibit, consisting of plows, cultivators, horse hoes and land rollers, while in ensilage and straw cutters, tread-powers and root cutters, they have an excellent choice and embrace features quite abreast of the times. The durability of their goods is well known.

Coulthard & Scott, of Oshawa, also exhibited a good selection of implements for tilling the ground and seed sowing. Their stock of cultivators, drills, etc., is very complete.

Wilkinson Plow Works, of Toronto, exhibited a good line of sulky and walking plows.

Cockshutt, Brantford, had a good line of plows, harrows and scrapers. Their riding plows and new style gang were worth examining.

T. T. Coleman, Seaford, Ont., had a capital exhibit, in which his Dale pivoted land roller takes the lead, which also it does when at actual work. Its advantages lie in perfectly adapting itself to the unevenness of the ground, while the frames being separate there is nothing to bind. It is easily oiled, and is calculated to stand for years, which cannot be said of some of the land rollers built. This firm also has some good things in root cutters and pulpers. A device is attached to these whereby all chance of the roots clogging is prevented. Grain crushers and two-furrowed gang plows are also manufactured by them.

Copp Bros., Hamilton, had a good selection of plows and other implements for tilling the ground. Their Champion spring tooth cultivator has some good features to recommend it, as also has their reversible disk harrow.

The Watson Manufacturing Company, of Ayr, Ont., showed no less than twenty-seven different kinds of implements and machines. Among these are some of the most convenient devices for assisting farm work. These embrace ensilage and chaff cutters, three styles of root cutters and pulpers, three styles of grain crushers. They also showed binders, mowers and rakes, horse-powers, jacks and circular saws for cutting fire wood. This firm deal directly with the farmer, and, as they have no agents, they claim the purchaser gains the benefit.

The Mercer binder, built at Alliston, Ont., attracted a good deal of attention. The Mercer Co. also had mowers and hay rakes on exhibition. Perhaps there was no machine within the building that received so much attention from visitors as the McCormick Bindlochine, as it is termed. Crowds were gathered about all through the exhibition. Doubtless this was partly due to the fact that there is no elevating canvass required, and the whole mode of con-

struction and manner of working are novel to the majority of sightseers. We understand that about fifty of these machines were brought into Ontario and sold the past season, and it is claimed that they will be built in Ontario for next season's trade.

David Maxwell & Son, St. Marys, Ont., had in position a most attractive exhibit, their implements drawing more than the usual amount of attention. They had four different sorts of root pulpers and cutters, which may be operated by hand or power as desired. They also exhibit sulky plows, while in harvesting machinery they have binders and mowers. Their six-foot-cut mower is most substantially built, and certainly has many good points, and their new hay rake, with steel angle bar axle and steel wheels has points that will doubtless cut quite a figure with every purchaser who takes durability into consideration.

In plows, Grout, of Grimsby, had forward his standard pattern in riding plows, which certainly are as reliable as any; his whole exhibit was quite abreast of the times.

J. Fleury's Sons, Aurora, had quite a noteworthy exhibit. Their ensilage cutters with swinging carriers are worthy of comment. In stockmen's implements they showed a full line, while in plows they had a good selection. Their double and single riding plows looked like work. They also showed a lumber and logging sleigh for general farmers' use that had some capital new features worth examining.

Sylvester Bros., Lindsay, had a full exhibit. Their harvesting and hay-making machines all appeared to be of the most satisfactory order. They also had grain crushers and root pulpers and cutters. In seeding implements their press drill seemed to be effective, as did also a clothes reel, which has several advantages.

Noxon Bros., Ingersoll, had forward a full line of harvesting machinery. Their Number Seven steel binder and improved Buckeye mower are effective and highly spoken of, while their Hoosier seed drill has gained a reputation for itself all over the Province, and their spring tooth cultivator, with and without seeding attachment, all received their full share of attention.

Provan's (of Oshawa) hay-pitching machines, which he makes a specialty of, were taken much notice of, and most deservedly, as he has made a life study of hay forks, slings, as well as the track, car and pulleys. His is arranged so that stop-blocks may be placed at any point along the track, and a loaded fork will pass through if desired; all operations are in full control of the operator. His car is double-acting and self-reversing, and is therefore always ready without a moment's notice or the slightest trouble in changing. His plan of hoisting pulleys to the peak of the barn without climbing is a feature that is worth looking into.

The Waterloo Mfg. Co. were forward with ensilage and straw cutters, horse-powers and grain crushers.

Tolton Bros., of Guelph, had forward a most useful line of implements. Their pea harvester has gained a reputation wherever used; in fact, it has lessened the cost of harvesting peas wonderfully, and has made it practicable to grow this crop on a large scale. Two of these harvesters were in motion, and showed their adaptability for picking up every straw in a flat-lying crop of peas. Another was fitted for cutting alsike clover, and looked as though it would do equally good execution. They also showed a good line of plows and harrows, as well as root-cutters and pulpers.

The Wortman & Ward Mfg. Co., of London, had a varied exhibit. Their standard line embraces Drader harrows and other implements for tilling the ground; their hayfork and slings or pitching machines are well known to be effective.

Richardson & Webster, St. Marys, Ont., showed their ensilage and straw cutter, grain crushers, and a capital horse-power, while in their gang cheese press and full line of dairy supplies their exhibit was a specially noticeable one.

J. W. Mann, Brockville, was out with his special line of seeders, disk harrows, etc.

M. T. Buchanan, Ingersoll, exhibited his hay-pitching machine. It is strongly constructed and effective in its working. No farmer can do without a hay fork and slings these days.

Frost & Wood had a very full exhibit. Their single Apron binder, improved Buckeye mower, light reapers, rakes and plows are all strongly built and neatly finished.

Thom's Implement Works, Watford, Ont., were well represented. Their line of feed and ensilage cutters has special features, which were much admired by visitors. This firm also showed horse hoes and cultivators in good variety, together with riding and walking plows of patterns that looked like work.

Massey-Harris Co. occupied the largest space in the building, and make an exhibition equal to anything ever seen in the annals of agricultural machinery.

Sawyer & Massey also made a great display in farm engines and grain crushers and separators.

The White Engine, manufactured by Messrs. Geo. White & Sons, London, attracted its full share of attention. These machines are constructed with a view of furnishing abundance of power with a small amount of fuel, and at the same time, are easily hauled on the road.

Neely & Durand, of Dorchester Station, showed their hay and grain-pitching machines.

Report of the Poultry Exhibit at Toronto.

In visiting the poultry building one is struck by the grandness of the display, not an empty coop being found, and on interviewing the judges, Messrs. Butterfield, Jarvis and Smith, they informed us it was the finest exhibition of poultry ever held in Canada, both as regards quantity and quality. The poultry industry is getting to be quite an item at our various Canadian exhibitions, and from the way the building is crowded it shows the interest the farming community take in the exhibits. When properly managed there is nothing more remunerative than poultry, and as a rule the farming community are beginning to find it out. Below will be found the number of birds in each class:—

OLD BIRDS.	
Brahmas, Dark	23
" Light	24
Cochin, Buff	13
" Partridge	11
" White	10
" Black	6
Langshan	27
Dorking, Colored	12
" Silver Gray	9
" White	4
Houdans	5
La Fleche	4
Creve Cœur	4
Wyandotte, Black	9
" White	11
Silver Laced	11
Golden Laced	7
Plymouth Rock, Barred	25
" White	15
Dominique	1
Black Red Game	11
Brown Red	8
Duck Wing	9
Pyle	8
Indian Game	12
Any other variety	5
Hamburg, Black	6
" Golden Pencilled	5
" Silver Pencilled	5
" Golden Spangled	6
" Silver Spangled	10
Red Cap	8
Javas	13
Leghorns, White	14
" Brown	20
" Rose Comb, Brown	17
" " White	11
Black Leghorn	9
Buff	4
Spanish	15
Andalusian	5
Minorcas, Black	11
" White	11
Polands, White Crested	5
" Silver Crested	4
" Golden	6
" Buff Laced	6
Any other variety	5

There were 107 entries of bantams, and about the same number of birds of 1893 as in the old class.

Bronze Turkeys	14
Any other variety	5
Geese, Bremen or Emden	6
Toulouse	9
Ducks, Rouen	9
" Aylesbury	1
" Pekin	11
" Cayuga	4

Turkeys, geese and ducks of 1893, 68 entries. The principal exhibitors were Messrs. Bogue, McNeil, McCormick, Saunders, Scott, Sage, London, Ont.; James, St. Thomas; Rice, Whitby; Smith, of Fairfield Plains; Brown, Barber & Co., Bonnick; Downs, Toronto; Wagner, Mimico; Donovan, Toronto; Gray, Todmorden. There were 281 entries of pigeons and 38 of rabbits. The turkeys of Messrs. Main, Bell and Hodson were very fine. Bogue, of London, and Colson, of Guelph, showed some very fine Pekin ducks—as I heard one man remark, they were like geese. The show on the whole was a credit to Ontario.

Pitting Turnips.

A Subscriber asks: "How shall I pit my turnips so that they will neither heat nor freeze?"

Turnips are the easiest roots to keep in pits; if gathered in fine weather and carefully covered, they should come out any time through the winter the better for storing.

It is better not to place them too thick. Long pits, about 3½ feet high, are about right; cover rather thickly with straw, and about 6 inches of earth. Place 6-inch square ventilators every 10 feet, formed of 6 and 8-inch fence boards. Cut one pair of the four boards 3 inches longer than the other two, which will allow a circulation of air after a cap is nailed on the top. It is well to select a sheltered situation, where the snow is not so apt to be blown off the pits. A fine mould is best for covering, as clay that cakes in digging is apt to leave too many air spaces where wet and frost may enter. Mangolds require much heavier covering.

An Error Corrected.

In our report of the Industrial Show, we credited Mr. S. C. Johnson's three-year-old Clydesdale stallion Balgownie with second prize honor. We find this was a mistake, and it was Mr. J. Davidson's Westfield Stamp that carried this honor, while Balgownie won third, as the official prize list in this issue states. We understand Mr. T. Little, Sand Hill, Ont., has since purchased Westfield Stamp of Mr. Davidson. He is a horse of wonderful substance, and of a type that Clydesdale men should cultivate.

Ottawa Central Fair.

This exhibition opened on the 22nd of September, under very unfavorable auspices. The whole week, with the exception of one or two days, was very wet and disagreeable; indeed the weather for several months previous had been so excessively wet that the farmers were much behind with their work, and thus did not patronize it as they have in the past years. The Montreal show coming off at an earlier date than usual had a tendency to lessen the number of exhibitors, as many of the western men would not bring their stock so far east for one exhibition. Still, in spite of all drawbacks, the citizens turned out well, and helped the management to even up, so that they could show a clear balance sheet. The Experimental Farm made a splendid exhibit, which included a working dairy, where the seeker after dairy knowledge could see the whole milk taken in, tested with the Babcock test, run through the separator, and the cream made into butter in the most approved manner. They also showed a very tastefully arranged display of the most promising varieties of grains, vegetables, grapes and other fruits, and samples of the different liquids used as fungicides and insecticides, with the formulæ for their preparation. The dog show claimed a large share of attention. The Locked Wire Fence and the Page Wire Fence Companies both had specimens of their fences erected on the grounds, and came in for a large amount of inspection from the farmers. Another centre of attraction for the farmers was the tarpaulins, horse and binder covers, stack covers and waterproof clothing of ever description, made by Mr. J. Tobin, Ottawa. He exhibited a tarpaulin, made tank-fashion, into which about thirty gallons of water was poured at the beginning of the fair, and was held perfectly through the whole ten days of the exhibition. Mr. Tobin did a rushing business, and found it almost impossible to keep up with the demand for his horse covers. A very pleasing feature of the grand parade, and one not seen at any of the other exhibitions, was the handsomely decked four-horse wagons which headed the procession. Upon the first one was arranged specimens of corn, beans, sunflowers, grains, roots and vegetables, the product of the Ottawa Experimental Farm. The three following wagons displayed the different brands of flour and feed manufactured by the McKay Milling Co., of Ottawa.

There was a regrettable falling off in all the classes of live stock, as was shown by the long rows of empty stalls.

HORSES.

This department was rather below the average as regards the quantity, but the quality was all that could be desired. Graham Bros., of Claremont, had twelve of their Clydesdales on exhibition, and won all the best prizes. They also showed a pair of Hackneys, a mare and their well-known stallion Seagull, which won first money. W. Allen, Hull, P. Q., showed a number of Clydesdales. W. H. Craig, V. S., Cornwall, Ont., showed some good thoroughbreds, French coach and carriage horses, while G. Sparks brought out his Clydes and French coach horses. W. W. Kerby, W. Hume, Ottawa, and Jas. Collander, North Gore, were the chief exhibitors in saddle horses and hunters.

CATTLE.

The absence of a number of western breeders, coupled with the fact that this is essentially a dairy section, accounted for the weakness of this show in the beef breeds. The Ayrshires were well up to the mark, with herds from such well-known breeders as Jas. Drummond, Petite Cote, D. McLachlan, Petite Cote, Jas. Johnston, Montreal, John Newman and others from Quebec, while R. Reid & Co., Huntington, J. G. Clark, Ottawa, Jas. Yuill, Carleton Place, W. M. & J. C. Smith, Fairfield Plains, represented Ontario. Both old and young herd prizes, as well as the special gold medal, were won by Jas. Drummond, Petite Cote, D. McLachlan winning the silver medal, and Jas. Johnston the bronze. J. G. Clark won second on three-year bull, and D. McLachlan first on two-year-old bull. The prizes for grade cattle for dairy purposes were principally taken by R. Reid & Co., with their splendid herd of Ayrshire grades.

Guernseys—In this class J. N. Greenshields and C. H. & W. H. McNish divided the prizes, Greenshields securing the herd prize and the majority of the red tickets. Jerseys—W. A. Reburn, St. Anne's, showed the herd which had been so successful in winning prizes at the larger exhibitions, while J. Erratt, Geo. Fowler and S. B. & B. Slinn, all of Ottawa, showed a few specimens each.

Holsteins—In this class McDuTee & Butters won herd prize, and the most of the firsts, with the herd that was so successful at Toronto and London. Jos. Fletcher, Oxford Mills, secured first and second on two-year-old heifer, and second on the herd. Gilroy & Son, of Glen Buell, received the red ticket for yearling bull.

Durhams were chiefly represented by the herds of Jas. Crerar, Shakespeare, Ont., D. Brims, Athlestan, Que., and Jas. Forth, Glen Buell, Ont. Mr. Crerar won the sweepstakes for bull and herd prize, while D. Brims secured four awards, three of which were firsts.

Galloways—This hardy breed of blackskins were represented by the herd of J. A. Neilson, Lyn, while the Messrs. McNish won a blue ticket on a yearling heifer.

Herefords—F. A. Fleming was the only exhibitor of white faces, of which he showed a number of good ones.

Aberdeen-Angus—W. A. R. Stewart, Lucasville, had it all his own way with his herd of Daddies, while Messrs. McNish secured second on a yearling heifer and heifer calf.

SHEEP.

The following were the chief exhibitors: S. Coxworth, Claremont, in Cotswolds.

In Leicesters, the eastern men received most of the prizes. D. Pringle, Huntington, Que., and J. Pringle, Athlestan, Que., both show good flocks. J. Forth, Glen Buell, also showed a few.

In Shropshires, the honors went to Quebec, J. N. Greenshields, Danville, Que., winning the bulk of the prizes, while D. Brims secured the flock prize and several others.

In Oxford Downs, the well-known western breeder, Henry Arkell, from Arkell, Ont., showed an excellent flock. A. Gilmore & Co., Huntington, Que., received one first and two seconds.

R. Shaw & Sons exhibited Southdowns and Merinoes. W. M. & J. C. Smith also showed Merinoes.

SWINE.

The show in this department was small. The principal exhibitors were:—S. Coxworth, Claremont, Berkshires; J. N. Greenshields, Danville, Que., Yorkshires; Jos. Featherstone, Streetsville, Suffolks.

Chester Whites were shown by S. B. & B. Slinn, Ottawa.

W. Allen, Hull, and the Messrs. McNish, Lyn, exhibited a few Yorkshires, while the Messrs. Smith, Fairfield Plains, showed Poland-Chinas.

Fencing as Seen at the Fairs.

Fencing is one of the most costly departments to keep up on the farm, and anything new in this line that will tend to curtail expenses is sure to meet the approval of those concerned.

In wire fences, the Locked Wire Fence Co., Ingersoll, had a sample of their fence at all the leading fall fairs. They have only been established in Canada some eight months, yet they have now agents in almost every county, who have built samples and are qualified to sell farm rights or build the fence as parties may require. This fence has many advantages. It is cheaply constructed, forms a perfect barrier from, and is not injurious to stock, while in point of durability it stands at the top of the list. The fence is formed by smooth wire, which, having a slight crimp made in it, and a bent clamp placed over the crimp, forms a space for a stay which runs from wire to wire, thus securely joining the whole of the wires, forming a truss that makes the fence perfectly rigid and strong.

M. T. Buchanan, Ingersoll, also showed a fence on something the same principle, except that a wide band with a slot and a crimp in the wire forms a place to run the wire stay.

Then there was the Page wire fence, which was described in our Sept. 1st issue. This fence is built in the shop, and has many friends. It is quickly put up, and if done right forms a strong barrier.

A new (to us) design in wire fencing is the Truss and Cable wire built by the Ontario Lead & Barb Wire Co., Toronto, Ont. This is formed by the separate cables which are made of two wires twisted together, and in which a square mesh woven between forms the truss. This makes a strong and visible fence, and if it can be placed cheaply on the market, would attract much attention. It is made by a machine in the shop.

In movable fences there were two exhibits at Toronto that are particularly handy on the farm. This consisted of the Harris fence, which is built of inch lumber, except an upright which has a foot to keep the fence from blowing down. An iron dog keeps the hurdles in place. This fence is quickly removed, and may be opened at any point. In the March issue of the ADVOCATE this fence was illustrated in the advertising columns.

Another fence which was much approved of was the Duncan Fence, also movable. This fence was built with hardwood, the bars being 2x2, with a movable end formed like an A. There was a barbed wire on the top of each hurdle. This fence is quickly removed and easily set up again.

Crowded Out.

The crowded condition of our columns this issue prevents us publishing a full report of the sheep and swine departments at the World's Columbian Exposition, Chicago. In the sheep departments Canadians were very successful; many of the winning animals in each class were bred or fitted in Canada. In the swine departments the judging is going on at the time of writing. We learn that Mr. Joseph Featherstone, M. P., has been very successful in the Essex class. The show of sheep and pigs is marvellous, both in number and quality. One of the most noticeable features is the almost total absence of inferior animals. In our next issue a very full report will be given of each class in the sheep and swine divisions.

New Appointments at the Ontario Agricultural College.

Several new men have recently been appointed to fill vacancies at the Ontario Agricultural College, and, after careful inquiry, we have no hesitation in congratulating the Minister of Agriculture on the wisdom of his selections. The following gentlemen have been added to the staff of the College:—

Wm. Rennie, of Swansea, Farm Superintendent; G. E. Day, B. S. A., Eramosa (Wellington), Lecturer on Agriculture; H. L. Hutt, B. S. A., Southend (Welland), Lecturer on Horticulture; J. B. Reynolds, B. A., Oshawa, Assistant Resident Master.

Some important, and we think wise, changes have been made in the department of Agriculture. Hitherto, the lecturing, experimental work and superintendence of the farm have been all under one man, who has spent the greater part of the time in his office, or in the College class-rooms; but henceforth the work and responsibility shall be divided: Mr. Day will be the lecturer on agriculture; C. A. Zavitz, B. S. A., will take charge of the experimental work; and Mr. Rennie will devote his undivided personal attention to the management of the farm and live stock, and the instruction of the students when at work in the farm department.

The appointment of Wm. Rennie to the position of farm superintendent has assured the success of the farm department. Mr. Rennie was born and brought up on a good farm in Scarborough, east of Toronto. For a number of years he was known as one of the tidiest and most successful farmers in Ontario. After a time he opened a seed store in Toronto, and finally became a somewhat extensive dealer in Clydesdale horses. He carried on the farm, the seed store and the horse business all together, and with marked success. Mr. Rennie is a genial, modest gentleman. He has been very successful in everything he has yet undertaken, and if he fails at Guelph it will be the first time in his life. He says the College farm is in a very different condition from what has recently been proclaimed with such a flourish of trumpets in some of the daily papers. On arriving at Guelph he found the farm so far from being anything like clean, and things generally on the farm in such a shape, that he insisted on the executive committee of the board making a thorough inspection before he entered on his duties, and he has since asked several farmers who have been misled by the statements in the papers to go to the farm and see for themselves. Already the students are beginning to express their appreciation of the new order of things under Mr. Rennie. They begin to see the difference between office management and the close, personal supervision of a sharp, competent man, who is always moving about amongst both men and students at work.

Mr. G. E. Day is a young man about twenty-six years of age. He worked on a farm in the neighborhood of Guelph till he was twenty. He then went to a Collegiate Institute and took a second-class certificate, upon which he taught public school for a time. Afterwards he went through the full course of the agricultural college, and received the degree of B. S. A. from the University of Toronto. During the past summer he has been lecturing very acceptably in connection with one of the travelling dairies in Lambton, Huron and Bruce. The farmers in the county of Bruce speak in strong terms of Mr. Day's practical knowledge and ability as a speaker.

Mr. H. L. Hutt is also a young man about twenty-seven years of age. He was brought up on a fruit farm in the Niagara district. He entered the Agricultural College in 1888, and after the completion of the course received the degree of B. S. A. from the University of Toronto in 1891. He took the highest standing in horticulture that has yet been taken by any student in the College. After graduation he went to work on his own farm, but during the past summer he has been employed at special work in horticulture under Prof. Bailey, in Cornell University, in visiting the leading nurseries and large gardens in the neighborhood of Rochester, New York and Boston, and in examining the work done in the best fruit districts of Ontario. We have no doubt Mr. Hutt will prove a successful lecturer and efficient worker in the department of horticulture.

J. B. Reynolds, B. A., the new Assistant Resident Master, is a farmer's son. For the last few years he has been well-known throughout South Ontario as one of the best and most scholarly young men in that part of the country. He has had several years experience in public school teaching, has gone through the school of pedagogy, and has completed a brilliant honor course in the University of Toronto. We understand that the students at the College are much pleased with the beginning he has made, and we feel safe in predicting that he will be a very efficient and successful assistant resident master.

Every room in the College is occupied, and the outlook is most encouraging. We congratulate President Mills on the prospect. Now, with a staff of able and loyal men about him, and backed by an intelligent, progressive Minister, he will no doubt succeed in making the Ontario Agricultural College the pride of this province.

STOCK.

Air Space in Cattle Barns.

The number of cubic feet of air required per head is a subject that we receive many enquiries about by those contemplating building stables for cattle and horses. The general plan of ventilation is paid so little attention to, that many losses ascribed to other causes are frequently from want of attention to this essential. Within a few miles of this city a cattle barn with stone basement was built, the proprietor thinking that he had succeeded in providing comfortable quarters for his cattle that would last his life time; but when during the first three years he lost a large percentage of his fattening cattle, he was thoroughly nonplussed and seriously thought of abandoning the new stables. However, he called in an expert, who quickly told him the seat of the difficulty, and condemned stables where little or no ventilation was properly provided for. In this case it was remedied by merely cutting holes in the walls just under the sills, which had the desired effect, as there has been no recurrence of the trouble since. A writer in the Surveyor gives his idea of how much trouble may arise for want of care in this matter, taken from an Old Country standpoint. By far the most fatal disease that affected dairy stock, he says, is tuberculosis, and he quotes statistics to illustrate the fact that a supply of pure air had a very direct effect in diminishing the amount of sickness among stock, and in reducing the death rate even from diseases that were not supposed to be specially associated with the condition of the atmosphere. Recent investigation had shown that tuberculosis prevailed in cows to an extent that would be held incredible if proof were not so undeniably absolute. Statistics showed that from 20 to 25 per cent. of our cattle were more or less tuberculous; but the death rate from the disease was small as compared with the number of animals suffering from it—the average death rate in dairy stocks of Ayrshire cows in the west of Scotland being, he estimated, 5 per cent. The loss to the owner, however, amounted to more. Of the remaining 15 per cent. diseased, the most part were, perhaps, sold to the butchers at low and unremunerative prices while the disease was in its incipient stages. Among those in the byre there was also a further loss incurred from diminished quantity of milk yielded by the cow during her illness. He was disposed to consider that the annual loss caused directly and indirectly in the dairy farms of the west of Scotland by tubercular disease could not be estimated at less than 7½ per cent. of the total value. In round numbers, tuberculosis caused an amount of loss to the owners of dairy stock in Scotland of nearly £410,000. In the county of Wigtown alone the loss amounted to £22,000. In Ayrshire there were 50,000 cows, the loss amounting to £49,000 per annum. In other words, extirpate tuberculosis from Ayrshire, and the farmers could pay annually £49,000 more rent. There was another matter which must not be overlooked. It could not be doubted that the presence of this disease in our milking herds constituted a distinct danger to the health of mankind. Ventilation was the primary condition of a pure atmosphere in a byre; but that could not be made effective without a sufficient cubic space. The actual amount of cubic air space required per cow had been variously estimated. The Board of Supervision recommended 1,000 cubic feet, while the Local Government Board recommended a minimum of 800 cubic feet. The lecturer was disposed to think that the space of 800 cubic feet, adopted in Glasgow on the recommendation of Dr. Russell, was what ought to be aimed at in all the south-western counties of Scotland.

Chatty Stock Letter from the States.

(FROM OUR CHICAGO CORRESPONDENT.)

The choicest native beeves sold at \$5.90; top hogs sold at \$7; fancy sheep sold at \$5, but good sheep have been selling under \$4, with holders crazy to unload. The drought has been broken throughout most of the corn-producing area, and the demand for stock and feeding cattle has sprung up wonderfully. Distillery cattle feeders are getting a harvest among the western range cattle at \$2.60 to \$3. The best western range beeves sold at \$4.75; some that had been hay-fed during the winter sold at \$5.10. The practice of hay-feeding in winter is a growing one in the far west.

Pregnant sows, within a period of two weeks on either side of farrowing time, are now commended by the States Government. The packers seem glad to co-operate.

Native "beef" cattle the first nine months of the present year averaged fully fifty cents per hundred pounds higher than the same period last year. The top price yesterday was \$5.75, being within 60c. of the highest price of the year.

Receipts of cattle at the four principal western markets last month were \$5,000 larger than in August and 100,000 smaller than in September, 1892. During the first nine months of 1893, Chicago, Kansas City, Omaha and St. Louis packers slaughtered 70,000 more cattle than the corresponding period last year.

For an all-round hog the Berkshire seems to hold her own in great shape.

Shropshires and Southdowns seem to have the right of way at the great Exposition.

The Shorthorns have lately been taking first honors in the greatest live stock markets in the

world. So far this season they have taken top prices, with Angus beeves next best. It must be admitted that the open market is a pretty good test.

The big heavy hogs are beginning to sell more readily than the light weights. For so long the small pigs have been at a premium that raisers of mature heavy porkers have felt discouraged.

It must be very gratifying to Canadians, especially those of Ontario, to see how gallantly their shepherds defended the fair fame of the Dominion for fine sheep at the World's Columbian Exposition. At the reception of Canadian sheep men at the Canadian headquarters, Lieutenant-Governor Kirkpatrick, of Ontario, on being called on for a speech, believed that in the sheep exhibit Canada had taken 60 first prizes, against 21 for the United States; 45 seconds, against 21 for the States; 42 thirds, against 21 for the States; and 30 fourths, against 23 for the States—or a total of 137 against 92. There was still another class to hear from, which might increase Canada's total. The number of sheep shown by Canada was 270, as against 300 by the United States.

Entries for the swine and sheep exhibits at the Exposition were as follows: Swine—Illinois, 214; Indiana, 132; Iowa, 91; Kansas, 23; Kentucky, 8; Michigan, 83; Minnesota, 1; Missouri, 139; Nebraska, 198; New York, 134; Ohio, 241; Ontario, 80; Pennsylvania, 53; Wisconsin, 15; total, 1,418. Sheep—Illinois, 90; Indiana, 73; Kansas, 52; Kentucky, 19; Michigan, 116; Minnesota, 17; Missouri, 55; Nebraska, 13; New York, 121; New Jersey, 22; Ohio, 86; Ontario, 431; Pennsylvania, 81; Russia, 24; Vermont, 91; Wisconsin, 75.

The display as a whole was pronounced to be one of great excellence, but the best things came from Canada or England.

Horses are selling somewhat more readily, but the approach of winter forces in many at prices which owners were unwilling to take as long as keep was at a minimum.

"Holsteins as General Purpose Animals."

(Read by T. W. Charlton before the Annual Meeting of the Canadian Holstein Breeders' Association.)

I think it is great presumption on my part in attempting to give anything either interesting or profitable on this subject to those who have been long and successful breeders of Holsteins. But as there are a good many people who are not familiar with the characteristics or merits of this breed, a brief sketch of their origin and home may be helpful, especially to those who may be searching for the most profitable kind of cattle; and among all the various breeds known at present, there is none entitled to so much merit or coming so near the requirements of a general purpose animal as the Holstein Friesian, being the product of the most favorable natural conditions.

Their home and origin, as far as can be traced, was on the fertile flats of North Holland and Friesland, noted for their fertility from a very early period, every condition of soil and climate calculated to develop a large and hardy breed of cattle. And when we find that the industrious Hollanders were the pioneers in dairy husbandry, and that their products in amount and quality have never been equalled by any other people on the same area, we see the reason of their zeal and effort to perfect a breed of cattle suited to their special industry. To them the typical dairy cow has been the image of profit.

To develop in the Holstein offspring those qualities that should add to their value for this particular purpose has been their study, not for one, but many centuries. Thus strength of heredity has been acquired and intensified through successive generations.

The breed characteristics have become so firmly established that we can depend on their being transmitted to their offspring in a remarkable degree. Some of these characteristics are:—Color (with the exception of the Anglie family, the color is almost invariably black and white, both in pure-bred and grades), rapid growth, vigor, early development, shape, large size, heavy weighing either alive or slaughtered, and gentle disposition; these qualities place them in the front rank as producers of veal and beef, and unequalled producers of milk for cheese and butter. I admit that the standing of the breed in our beef markets is not what its actual merits entitle it to, but do not be distracted by any clamor that the breed is wanting in beef quality; there is no doubt that prejudice has contributed largely in this matter. Prejudice is very likely to be the child of ignorance.

It is the lack of a knowledge of the facts that very often leads to wrong impressions and to false conclusions. There has been such a demand for pure-bred Holsteins for breeding purposes that very few have found their way to the principal beef markets hardly enough for dealers to grade them in value properly, yet without knowing how or why dealers class them unsatisfactory for the markets.

For dairy purposes the Holstein-Friesian cow is preeminently above all others in turning the products of the fields into the best and largest amount of milk for the city dairyman, or for the cheese factory or creamery. Would it not be wise then, since dairying has become a necessity to the farmers of Canada on account of the "McKinley Bill," "National Policies," monopolies and all other plagues, for the Canadian breeders of Holstein-Friesians to maintain and improve the dairy qualities of the noble black-and-whites?

Our Scottish Letter.

September is usually a busy month with Scottish farmers, but this season has been an exception to the general rule. Harvest had in most cases been finished by the middle of the month, or even earlier, and the farmers had more leisure to attend to the other interests which concerned them. Sales of Shorthorn and Aberdeen-Angus cattle, rams of all the breeds of sheep—Black-faced Cheviot, Border Leicester and Shropshire—and Clydesdale and Hackney horses, have been numerous, and prices at all of them have been well sustained. Before referring to these at length, a word must be said on farming prospects in general. The abnormal character of 1893 as an agricultural year has been frequently referred to, and possibly nothing connected with it is more striking than the different stories which would be related of it by farmers in Scotland and the north of England, and those in the west and south of England. A dry season like 1893 fits the northern part of the island to a nicety, but this year at least it has meant disaster and famine in the southern part of the kingdom. There, there is neither grass nor fodder, and many of the farmers who in recent years have gone from Scotland to England are earnestly wishing they were back again north of the Tweed. The tables are turned, and the north is the land of Goshen, while the south is like the region round about Gaza—desert. Our crops have all harvested well. There is not the bulk of grain in the stack yard which is desirable from the foddering point of view; and now that foreign countries send us such supplies of grain, this is of greater importance than it once was. The hay crop in general was an average, and in some localities it was more than an average. Those who have good supplies of it will do well, although prices—thanks to foreign friends—are less buoyant than was to be anticipated from the scarcity in the south. It is selling at present at from £5 to £8 per ton. Oats are a good crop, and the quality of the grain is excellent. Barley, curious to say, is not well colored, and to some extent disappointing. Wheat used to be the crop of the year, but this is altered now, and while many continue to grow it, less attention is paid to its price and quality than once was the case. You send such quantities of it to us from the Northwest that it scarcely pays to grow it here, except in the vicinity of large towns, where there is a good demand for wheat straw and farmers find it profitable to grow the crop for the sake of the straw alone. Beans are only grown on what we call carse land—heavy, stiff clay—which requires a great amount of hard work to get it into order. The past season has been a very favorable one for them, and the crop is better than an average. The position of the Scottish farmer at the present time is much more favorable than it was a year ago; at the same time seasons of plenty and scarcity do not affect his financial position nearly so much as they once did, because the amount of foodstuffs which are imported serves to equalize the markets so that prices maintain a wonderful uniformity. Live stock is more and more coming to be regarded as the sheet anchor of agriculture here, and recent sales have tended to illustrate this in a marked degree. The ram sales are great events, and crowds of breeders attend them from all parts of the country. So far the highest individual price has been paid for a Border Leicester ram, namely, £110, but Black-faced rams have made such prices as £87, £65 and £50. Shropshire rams are in England commanding much higher prices—making, indeed, record prices; but even in Scotland, at Mr. Buttar's sale at Corston, £30 was paid for one by an English buyer. The highest price realized for a Cheviot ram this season has been £11. This breed is not nearly so popular as it once was. It excels all the northern breeds in quality of wool, but the poor price which this commodity is now making does not warrant farmers in continuing to breed Cheviots, when breeds which, although not to be compared to the Cheviot for wool, surpass them in mutton properties can be bred to better advantage. The Black-faced ewe has much stronger maternal instincts than the female of any of the other breeds, and hence is very popular for crossing with the Border Leicester ram to produce strong, early matured lambs. Border Leicester mutton is not the first quality; the value of the breed lies in the merit of the ram for crossing with Black-faced or Cheviot ewes. The produce of the former cross are called cross-breeds, of the latter half-breeds a tacit acknowledgment of the distinct character of the Border Leicester and Black-faced breeds, and the possible intermingling of the blood of the other two breeds at an earlier period of their history.

SCOTLAND YET.

Some dairymen allow their heifers to go till two years old without breeding, thinking that it is essential to have a large, well-developed cow before the time for calving. This idea seems all right at first sight, but when we know of heifers calving at two years old, and producing in the neighborhood of two hundred and thirty pounds of butter the first season, it is worthy of consideration at what age they should be bred. No doubt some of the breeds have suffered in size by early breeding, but when the milking qualities are improved and the constitution not weakened, surely early coupling is an advantage.

Sheep Breeding in Alberta.

A VISIT TO MR. F. WHITE'S MERINO RANCH, MITFORD, ALBERTA.

BY A FARMER'S DAUGHTER.

Sheep breeding is one of the important industries which is yet in its infancy in the Northwest. It is receiving considerable attention from a few breeders throughout Alberta now, but as yet has not aroused anything like the interest the importance of the industry merits. In the Calgary district there are thousands of acres of undulating prairie lands which seem especially adapted for pastures, the grasses being those which sheep most delight in and thrive on, and they are not afflicted with the diseases so common in other countries. On the different farms of the C. A. C. and C. Company, extending from Gleichen to Swift-Current, there are something like forty thousand sheep. Next to them, and the largest individual breeder in Alberta, is Mr. Francis White, of Mitford. Besides these, there are a few ranches breeding on a much smaller scale, but in a country which can support its hundreds of thousands of sheep this may be considered only a beginning, and for a settler who has given any attention to the industry, and has sufficient capital to give him a good start, no better opening can possibly present itself. Merino Ranch, the property of Messrs. F. White & Co., is situated on the south side of the Bow River, thirty-two miles west of Calgary. It contains thirty-four thousand acres of splendid pasture land, well watered by the Bow River in front, the pumping pond at the back, besides numerous creeks and springs which intersect the ranch, making it an ideal place for sheep farming. Mr. White's first importation was made seven years ago, with twenty-one hundred Merino sheep from Montana. Since then, finding the additional price for wool did not make up for the loss in mutton, he has crossed with Shropshires, thus securing a larger sheep, getting almost the same price for wool, and finding them better mothers. The band at present numbers 4,300 sheep and 1,750 lambs, and is always kept at much the same size. In the summer the sheep are divided into flocks of from 1,500 to 2,000 each, a shepherd and three or four dogs taking care of them as they wander over the prairie. At night they are brought under shelter, and are held by portable corrals of wire netting or hurdles, the shepherds occupying tents or log huts which are erected at intervals. Their pastures are changed as often as possible, so as not to allow any distastes for the grass over which they have frequently trodden. In winter they are held in four camps; two are called the home camps, two and a-half miles apart, where all the lambs and weaker sheep are kept and fed hay two or three times a day, in the outcamps being all the strong sheep, which are only fed during very stormy or cold weather. Each of these camps consists of sheds large enough to hold 2,500 sheep, stable for horses, and cabin for shepherds. Until last winter the dry sheep were not fed, but since then Mr. White recognizes the advantages of feeding all once a day during the very cold weather. This necessitates the putting up of from 350 to 400 tons of hay for the winter supply, but the difference is more than made up by the condition in which the flocks come out in the spring. The lambing season begins about May 12th, and lasts for about five weeks, the crop generally averaging about ninety per cent. Strange to say, Mr. White informed me they had very few twins in the band, nor do they care for them, owing to the difficulty in large bands of keeping the mother and lambs together. The market for mutton is yet purely local, the dealers doing whatever shipping is done, but as it is the demand is sometimes greater than the supply. The wethers are sold off at two years old, and at that age average, dressed, from fifty to sixty lbs. At the time of your correspondent's visit shearing operations were in progress—some of the finest sights in connection with the business. The sheep are driven into a long shed which is divided into pens, the front part, on which the shearing is done, being floored. Two shearers take up their position in each pen, and they catch the sheep, shear it and tie up the fleece, some of them being so expert that they average a hundred fleeces a day. The wool is not washed, but turned into a powerful press from which it is turned out somewhat similar to a bale of hay. These bales are sowed in canvas, sold to eastern buyers, and by them shipped to Montreal, Toronto and Hamilton. The clip this year, notwithstanding the unusual severity of last winter, averaged about 5½ lbs. Unfortunately for the Northwest sheep farmer, the price of their wool has declined during the last five years, wool which then sold for sixteen cents bringing now only twelve and a-half. Mr. White, however, considers the outlook for successful sheep farming in Alberta very bright. He has had considerable experience as a breeder and manager of live stock, and is well versed in everything pertaining to sheep husbandry, so that under his efficient management the future success of the ranch seems most assured.

FARM.

Plan for Piggery.

In our July 1st issue, we offered \$5.00 as a prize for the most satisfactory plan for a piggery for the farmer. The successful competitor is Mr. Walter Cowie, Valens. Among the many essays which we have received, none have given what we would consider an ideal piggery, although by taking ideas from different papers we will endeavor to give a few plans from which farmers can select their choice and make changes to suit their conditions and ideas. The essayists favor two general styles, viz., one having pens on either side of feeding passage, or on one side only. Another plan given by D. F. Wilson, Brandon, is the octagon or eight-sided figure, which has some good points.

The important qualifications of a piggery are a good, dry location, convenient to the other farm buildings, to be substantially and cheaply built of material of a lasting nature, the building having convenience in feeding and shifting pigs, in cleaning out and saving the manure, also rat-proof and free from draught. For a building with pens on either side of the passage, a very economical width is about twenty-five feet, which allows for a five foot passage, lengthwise, between the pens, and ten feet deep for the pens, including the partitions. The length must depend on the number of pigs that are kept, which will be decided by the builder.

The material used in building will depend somewhat on condition. A frame building will answer very well, but should under all circumstances have a stone or brick foundation which should rise to two or three feet above the surface of the ground, says Wm. Thompson, Blenheim, so that when wood is used it will be up high and dry. It is necessary to have a wall that will ensure warmth, also one that will not become damp or frosty in very cold weather. A very satisfactory wall is made of fairly good lumber, nailed on the outside of studding and batoned; the inside should be covered with rough lumber, then a layer of tar paper, which should be covered with boards up to where the pigs can reach. Above that, strips of lathing answer well for holding paper in position. As will be seen, this wall has an air space which renders it frost-proof; also is not easily affected by sudden changes of weather. Recommended by D. Wylie, Cardinal, to have two thicknesses inch lumber outside, tar paper between, lined inside, and stuffed with sawdust or grout if necessary.

There is a great difference of opinion as to which is the best floor to use, some claiming a great deal for cement, while others talk up the block pavement, or a plank floor. The superior qualifications claimed for the cement floor are its lasting and easy cleaning qualities, but they are considered by others as being too cold in winter, which produces rheumatism and death of young stock. Block pavements are recommended by very few. They are objected to on the strength of their being disagreeable to clean, always damp and foul smelling. The plank surface floor has, however, no fault finders, and appears to be the best yet. It is made in the same manner as the cement floor, all but the surface. In building it, the surface soil must be removed until a solid foundation is reached, which should be filled in with small stones or gravel, then a layer of mortar, then two inches of Portland cement, in which cedar scantlings are embedded, making a plain surface. The planks can be nailed to the scantlings, making a firm floor, which will be rat-proof and healthy. It has also been recommended not to spike the floor down, but to slide the planks in under the trough from the alley without nailing, so that they can be easily removed in order to thoroughly clean and ventilate the floor, which is certainly a very important matter. It is necessary to have a gutter running lengthwise of the pen into which moisture will drain. There are three situations recommended for the gutter, one being just beneath the feeding trough, arranged so as to be cleaned out from the feeding alley and covered with a plank which is easily removed. The objection to this situation would be the disagreeable smell in the passage and near the pigs while feeding. A more favored place would be at the side of the pen farthest from the feeding passage, where all the filth will the more readily accumulate and be cleaned out every day or two. When pigs are being fed on refuse from the cheese factory or creamery, the faeces will be quite liquid. The centre situation has commendable features, says John Holborn, Belmont; it should lead through the entire building to a manure shed, where it should be thrown on long manure or muck. A slight fall should be given to the gutter, which will render it very easily cleaned with an old broom. The floor should also incline to the gutter wherever it is placed. The gutter should be flat bottomed, and wide enough to admit of a shovel or fork to be used in cleaning it.

Thos. Grayson, Moosomin, claims that the floor of the feed-room and alley requires no plank covering, but a cement or concrete surface gives best satisfaction. Cement troughs have been recommended, and we see no reason why they will not give satisfaction.

Each pen should open into a roomy yard. T. W. Smith, Scotland, recommends manure alleys. The partition dividing the yard should have gates whose ends meet the side of the pen, and when all the gates are opened an alleyway will be formed through which the manure is wheeled or drawn away.

to the shed or field, as the case may be. The gate need not cost any more than the rest of the partition, except the hinges, and will be a great convenience.

D. F. Wilson, Brandon, and others, have used and strongly recommend that the opening leading from the pen to the yard be supplied with two doors, one fitting moderately tight and hung on the side, while the other is hung from the top and allowed to swing both ways, so that the pigs can go in and out during cold weather, always shutting the door after them. This can be hooked up if necessary. That the pen should be divided into sleeping and feeding apartments is strongly advised, as in that case the bedding can be kept dry and from littering the whole pen.

Except when cement troughs are used they should be made of three planks spiked together, about ten inches wide at the bottom and twelve at the top. Strips of hoop iron should be nailed on the edges, or anywhere else that the pigs are likely to chew. The partition between the feeding passage and each pen should be about four feet high, and hung at the top so that it can be swung in at the bottom past the trough to facilitate the cleaning of the trough and pouring in feed. Recommended by H. E. Baker and others. This swinging partition should have stall-like divisions, with head plank attached, just high enough to allow pigs to get their heads in, and yet keep their feet from the trough, so that when pigs are feeding no crowding or fighting need result. (This is not shown in the illustration.) The divisions were recommended by J. H. Pedlar, Wheeler. Three-quarter-inch iron rod bent into a triangle shape and bolted at the top and bottom, appears to be the best recommended divider. According to recent experiments feeding dry meal and water separately produces satisfactory results, and where this is desired to be practised two troughs will be necessary. The water trough in that case need not be long, and can run along the side of the pen at right angles to the feeding trough. A swinging partition will answer for a door, through which the pigs can be brought into the passage and changed from one pen to another; or perhaps a handier way, but more expensive, would be to have the feeding trough and swinging partition say two and a-half feet shorter than the width of each pen, thereby leaving room for an ordinary door to be placed in that position.

The pens for breeding sows, boars and fattening pigs should be somewhat differently arranged. The sow pens need not be so large as the feeding pens. They should also be situated away from the possibilities of draught from the doors. The gutters should be very shallow, for the safety of the youngsters. If a continuous gutter is used through the entire length of the pen, John Holborn claims that the floor of breeding pens can be gradually lowered to the gutter instead of raising the gutter up to the floor. When the young pigs are old enough to help themselves at the trough a part of the pen should be divided off, and an entrance made for them to go in and out at will. W. R. Brown, Dufferin Co., has weaning pen situated next the brood pen, and when not already in use it will answer for the feeding pen before weaning. It is also convenient in this place, if it is desired, to wean the pigs by two's and three's as some prefer, as they can be caught and lifted over quickly while the sow is feeding. A low trough will be in order in this pen.

The fattening pen can be made to accommodate ten or twelve pigs very well, which should be about the outside limit.

The boar pen or pens will do much narrower than either the sow or fattening quarters, but should be connected with a grass paddock, which can be easily arranged if the pen be placed at one end of the piggery. It would be advisable to make his partitions higher and stronger than the others for safety. Recommended by W. B. Brown, Dufferin Co.

The feed-room has several locations among the numerous essays. Some would have it extend just half way across the pen, while others strongly advise that the whole width be used. The width of feed room will depend on the uses to be made of it. If simply for mixing feed one side should be enough, but as a good many feeders think they must have a furnace more room will be necessary. Again, and it looks reasonable, that the slaughtering and cutting up may just as well be done right here, which room may be utilized as a work shop during winter months. We have received some good ideas in connection with the killing and dressing room from J. Pedlar, Wheeler. For scalding use a trough seven by two feet, in which the pigs can easily be rolled by means of two chains or ropes in the hands of two men, which also answers for turning them out on the platform to be scraped. Overhead at right angles to the trough runs a track as used for the hay fork. When the carcass is ready for hanging up, attach a rope to the gambrel, run it up through the loft floor close by the track over a roller firmly attached, then along to another roller, also attached to the floor, then down to a windlass attached to the wall of the dressing room. Now, have a roller hook to catch on to the gambrel with a pulley on the track. The rope can now be removed and the pig run back for dressing. It will be most convenient to have a roller hook for each pig, then no lifting by hand need be done.

There are several reasons why a piggery should

have an upper story. Where the feed-room is large enough to hold a considerable quantity of grain, the loft can be used to hold straw for bedding, but an up-stairs granary is convenient when arranged to convey feed down by spouts with slides.

As water is an important element in the piggery, we should endeavor to have it as convenient as possible, and where not supplied by a spring or windmill, why not have the cistern up in the loft? So long as there is any fall from the roof's edge into it, it is just as well in the loft as underground, which will do away with all the pumping. Water can be conveyed to every trough if desired, and with a tap attached we have complete waterworks. This arrangement may be very useful in case of fire. Where no upper story is used a spout can be connected with the pumps outside and the inside of building, so that no carrying of water need be done.

Proper ventilation is important. When a loft is used to store bedding, the openings used for putting down straw will answer for the ventilation. A cupola on the roof is necessary to carry off the steam, thus keeping the walls dry. Perhaps a better arrangement would be to build air passages connecting the pens directly with the cupola, which will cause a draught that can be opened or closed at will.

Trees planted around a piggery provide protection from the sun in summer and storms in winter.

If a piggery is desired to be built having pens on one side of passage only, the difference in building will be just the width of one row of pens. There are some advantages, however, in one sided pens, as by it the yards can all have a southern aspect, which is a great advantage in the winter months.

When the two-row pen has only one story, and is desired to face the south, the sun can be admitted by building the north slope of roof much higher, and having a row of windows to fill in forming, a skylight perpendicularly above the centre of the building; but in most cases the two-row pen running north and south gives the best satisfaction, as the sun enters every part of the building during some part of the day, and the yards will be on the east and west sides.

The octagon has some advantages over the square or oblong shapes, as it requires much less wall than either for the same amount of space; also allows opportunities for more roomy yards. The feed-room can be arranged in the centre of the building, where also can the cistern or well be placed. The door should be on the north side, so that each yard will get sunshine at some part of the day.

For a Manitoba piggery warmth is an important feature to be sought. The walls as given above should answer very well, but care should be taken to well overlap the tar paper, or even a second layer might be put on to advantage. The roof, however, requires some change from an ordinary Ontario sheathing and shingle roof. To have it as frost-proof as possible is a desirable quality. A very good roof, recommended in an essay from that country by Thos. Grayson, Moosomin, is made by covering poplar rafters, which should be quite close together, with hay or straw, on which a layer of sods three inches thick is placed, then about an inch of fine clay well raked into the cracks. This roof is said to turn any amount of rain, and gives good satisfaction in that country.

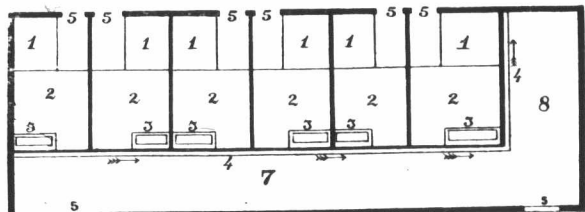


ILLUSTRATION A.

The accompanying illustration A shows the ground plan of piggery recommended by Thos. Grayson, Manitoba, with one row of pens, or one side of two-row plan. No. 1 shows position of sleeping apartment, which may be slightly elevated and enclosed by a partition just sufficiently high to hold the bedding; 2, feeding apartment; 3, troughs, which should extend across the entire pen or within the width of a door opening into the passage; 4, gutter placed beneath the trough and along the feeding passage (other positions are given above); 5, doors (those along the feeding passage will have to be placed at the ends in case of the double-row pens); 7, feeding passage; 8, feed room.

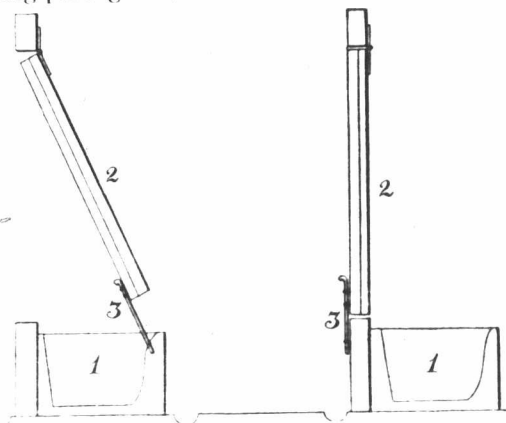


ILLUSTRATION B.

Illustration B shows the swinging partition between the feeding passage and pens. No. 1, trough; 2, partition; 3, sliding bolt to fasten the partition on either side of trough.

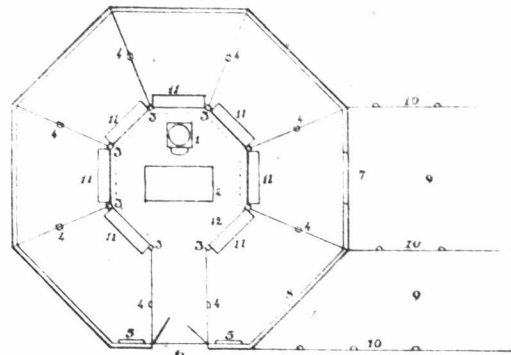


ILLUSTRATION C.

Illustration C is the ground plan of octagon piggery recommended by Alfred Eason, Manitou. No. 1 shows position of furnace; 2, feed bin; 3, posts, 4x4 inches and 12 feet long; 4, scantlings, 2x4 inches and 9 feet long; 5, windows, 2x2 feet; 6, entrance; 7, door; 9, pasture; 10, fences; 11, troughs, 5x1 feet and 1/2 foot deep.

FIRST PRIZE ESSAY.

Description of Plan for Piggery.

BY WALTER COWIE, VALENS, ONT.

Size.—28 ft. wide; 36 ft. long or more, according to number of pigs kept; 8 ft. siding.

Passage.—4 feet wide through entire length.

Pens.—10x12 feet, with swinging doors for egress to yards at side. Pens of such size ought to hold six pigs for feeding, or one sow and litter, although for latter special pens should be provided with small enclosure where sucking pigs may be fed separate from sow.

Troughs.—May be made by spiking 2-inch plank in the ordinary way that troughs are made. The front of pen should swing from bolts passed through the upright 4x4 inch supports, and be provided with a bar in the middle sliding up and down, so that the troughs may be filled without interference from the hungry hogs.

Feed-room.—6 or 8 feet wide, and the entire width of the pen; one side may be utilized for a plank boiler with sheet-iron bottom built into strong mason work, and with fire-place 18 inches at least above level of floor. The other side may be utilized for swill-barrels, etc. The whole should be separated from main pig-house by a partition.

Flues.—The feed-room should be supplied with a flue to carry off steam from boiler; two flues should also be provided for main pen.

Floor.—May be constructed of hardwood planks laid in cement upon a layer of stones covered with gravel. The planks (preferably oak) should be laid about 1 1/2 inches apart and this space filled with cement. By drawing the point of the trowel through the cement a shallow groove, say 1/2 inch deep, may be formed, which will carry down the surplus moisture to the gutters on each side of the passage.

Gutters.—May be formed in a similar way to above groove, only they should be deeper, terminating in a receptacle either in or outside the pen, which should occasionally be supplied with plaster to keep down foul smell, as well as to absorb the valuable manurial properties of the urine.

Walls.—Built balloon fashion, studs 2 feet 10 inches apart, boarded inside and out, and filled in with concrete; false girts should be placed between studs, about midway, to strengthen walls, and for nailing the outer siding to.

Gavert.—Above feed-room should be provided with bins, from which spouts lead downwards from bottom to provide easy and economical facilities for feeding.

Water.—Should be piped to pen from windmill or spring, or be provided by means of cistern or well, so as to be readily accessible.

Paint.—Paint the walls from motives of economy, as well as to make pen look neat. If paint is beyond your means, whitewash with water-lime and milk, or even with common lime. The inside of pen should be whitewashed at least once a year.

Provide a place for salt, ashes and lice destroyers, and use them.

Windows.—Place a window in wall for each pen. Have them constructed at such a height that manure can be readily loaded through them into a cart, and use the windows for such a purpose pretty frequently.

If the corn is too dry or wilted, through being over-ripe or frosted, and will not heat properly in the silo, Mrs. A. M. Bragg, a Wisconsin dairy-woman, overcomes this difficulty by sprinkling about four pails of water with a garden sprinkler on each load as it falls into the silo off the carriers.

Ranching vs. Mixed Farming.

BY "AN ALBERTA ABERDONIAN."

To the youthful mind imbued with a desire for novelty and adventure, the idea of ranching out west, with the necessary accomplishments of "roping," "branding," "broncho-busting," etc., etc., has always cast a rosy glow on the land of the setting sun, and surrounded it with a halo of romance and Buffalo Billism. Like every other pleasure in this life, the joys of anticipation in this respect are greater than the joys of realization, and the "tender foot" finds that roping may even become "hard labor," and positively "beastly, don't you know," when the bottom of the corral presents an even surface of six inches of mud; and "broncho-busting" may be very exciting, but when you get pitched on the ground you fall just as hard, and feel it just as painful as if you had fallen from a "gee-gee" at home. Moreover the ranch may be the only building in sight on the wide prairie, and your heart may be gladdened now and again by the sight of a lonely coyote sneaking around, or a neighbor dropping in may confidentially impart the information that a bear was seen two years ago in the bush at the back of the hill. Still after a time, when the novelty has worn off, it takes a pile of such like "romances" put on the top of each other to make up for the lack of society, with its luxuries and its conveniences.

Sad to relate, but nevertheless true, the halcyon days of ranching will soon be a thing of the past to a great extent. In the history of Western America we find individual cases where ranching has been remunerative, but with time the condition of markets and things in general have altered circumstances.

To make ranching, as a large concern, return a paying dividend of course depends a great deal on the individual management at the head of affairs, but there are certain conditions opposed to the successful management of ranching proper that the stockman on a small scale can more efficiently cope. The results, however, depend a great deal on the line of business that has been adopted; for instance, ranging stock for beef purposes is one thing, while stock raising is another and requires far more supervision, and it is in stock raising that the small stockman has the advantage of his more aspiring neighbor. In the first place, through being able to bestow his individual attention on his stock, in a manner, so to speak, he receives the full benefit of his investment. In stormy weather he is able to lay his hands on them and give what assistance is necessary in the shape of feed and shelter, just at a season of the year when cattle, such as weak cows and calves, in the outlying district, are at the mercy of the timber wolves, which are becoming an increasing pest and a source of loss to stockmen on the ranches. Again, his cattle and horses especially become more domesticated under such treatment, and are less liable to accidents. With horses ranging wild, mares at the foaling season will naturally take fright at anything, even the attendant going to round them up, with the result that lots of newly dropped youngsters are run off their legs in their attempt to keep up with the dam, and never recover it. Another point in favor of the small stock owner is, by employing good sires amongst his cattle and giving his herd his personal attention he reaps the benefit in the improved quality of steers, which means a good third more on the market than the lean, lanky, long-horned range steer can bring, bred and raised after the ordinary range fashion. The large stock owner cannot give the attention referred to, with his cattle scattered over an area of several miles amongst owners similarly situated to himself, with sires of all degrees of excellence running around, it could hardly be otherwise. Even although a system of co-operation amongst the surrounding owners was brought to bear on the latter point to obviate the evil by importing good bulls, it is impossible to give the thorough supervision necessary to retain the good qualities in a herd of cattle, and where stock are only handled twice a year, as is the custom, at the annual spring and fall round-ups. The day can be remembered when the greater part of the western half of America's prairie was devoted to ranching, pure and simple; to-day we mark the inroad of an agricultural population over the same area, which tells its own story. Wherever the climate and quality of the soil will allow, an agricultural class will push itself to the front, which, with its greater ratio of population and their ever increasing demands to be supplied, are a greater source of revenue to the country, and impart to it a greater value, financially, than under the old regime of ranching, and we on this side of the 49th parallel, with a climate and soil similar to our southern neighbors, must naturally allow events to shape themselves and follow the same course. The hey-day of ranching is over, and the "wild," "woolly," sombre word cowboy, with his six-shooter and his desperado sort of air, like the valiant knights of old, will soon be a thing of the past, while his place will be filled by the plain, unassuming, natural-minded, every-day farmer.

Tariff Reform.

[Paper read by Rev. Geo. Roddick, before the Farmers' Meeting, in the City Hall, Brandon.]

A mass meeting of representative farmers was held in the city in March last, and declared unanimously in favor of a reduction on certain articles, and an unanimously signed petition forwarded to Ottawa, praying for said reduction. Very little attention was given to that and many other petitions on the same subject from other portions of the Dominion. However, it was announced that the government contemplated a general revision of the tariff, and that during recess an investigation would be held. That investigation is now in progress, and as far as it has gone the manufacturers have had the inside track.

As the Hon. Mr. Foster, Minister of Finance, has intimated his intention of visiting this province in the month of September, your committee felt it necessary to call this meeting in order to formulate a memorial for presentation on his arrival.

As in the former resolutions, we ask for a reduction on five articles:—implements, lumber, coal oil, barbed wire and binder twine.

Many of you will be of opinion that we have not gone sufficiently far in our demands, but we wish to keep in line with the former resolutions, believing that half a loaf is better than no bread, and that upon these resolutions all can unite without any compromise of political principles. To go farther would be to defeat the ends which we have in view.

I need scarcely press upon your attention the importance of harmonious and united action. On such occasions manufacturers and others sink their petty differences out of sight, and present a united front in pressing their demands. Let the farmers do likewise, and we need have no fears as to the result. Politicians will find that they cannot afford to ignore the demands of 80 per cent. of the voting power of the Dominion.

Manitoba is essentially an agricultural country. Upon the produce of the soil are not only the farmers dependent, but all other classes of the community. We have no manufacturing interests of any consequence, and not likely to have for many years to come. We derive no benefit whatever arising from the increase of consumption produced by eastern manufactures. From one to two thousand miles intervene and shut out all profitable intercourse.

Again, the arrangement known as the National Policy was never intended by its founders to be permanent. Its design was to foster industries while in their infancy, and no longer. After fourteen years of this fostering care, is it not time to enquire: Has the National Policy been a failure, or has it been successful in placing our manufacturers upon their feet, so that they no longer require the aid of government leading strings? To one or other of these conclusions we must come. From the influence which these manufactures exercise over the government, from the army of agents that swarm over the country, and the manner in which they are piling up mortgages against the struggling farmers of Manitoba, we are forced to the latter conclusion, and feel that they are perfectly able to stand upon their own feet.

Manitoba is an inland country. It is situated near the centre of the continent of North America. Both the eastern and western seaboard are thousands of miles distant. To compel the farmers of this province to meet not only the enormous export and import charges, but in addition, pay a tariff of 35% on their implements and other articles necessary for the successful operation of agriculture, is to debar our produce from the markets of the world. I affirm that under existing circumstances, agriculture in Manitoba must prove a failure. In making this statement I do not disparage the country. I came here to stay, and my faith in the country has never wavered. It is true we have natural drawbacks, like every other land. We have our frosts, our hail and our drought, over which man has little or no control, and to which it becomes us to submit with due resignation. These are not more serious than the disadvantages against which other countries have to contend. But as the Brandon Times very properly puts it, in an editorial of July 20th: "Last year, to deliver a bushel of wheat here, while it cost to deliver a bushel of oats about the price of two bushels; and to deliver barley, about one and a-half." To continue such state of matters is simply impossible, for the sufficient reason that farmers can afford it.

In the interests of immigration relief is imperative. It cannot be denied that this Northwest country presents many advantages as a field for industrious settlers. Here millions may find comfortable homes. But until the present settlers obtain relief by the removal of the burden of taxation imposed by means of the existing tariff, the tide of immigration must remain very limited. In vain will the most vigorous immigration policy be adopted, with its expenditure of immense government funds, until the present grievances are fairly met.

The correspondence between settlers and their distant friends will do more for or against immigration than any other agency that can be employed. At present living is too expensive, and the price of the farmers' outfit out of all reason, to enable the settlers to exist. Compare the cost of the same implements (American make) in Manitoba with those in Dakota:—

	Dako-	Mani-
	ta.	toba.
Deering breaker plow.....	\$ 16.00	\$ 25.00
Waggon.....	60.00	90.00
McCormick binder.....	130.00	180.00
Mower.....	45.00	70.00
Rake.....	25.00	35.00
Lumber.....	16.00	25.00
Coal oil.....	16c.	50c.

Under such circumstances can the farmers of Manitoba compete with those in Dakota, or is there any inducement for additional settlement?

The lumber combine which at present exists in this province is as tyrannical and oppressive as a Ukase of the Czar of all the Russias. As lumber is so essential for the protection of man and beast in this severe climate, the high price will continue to operate against the best immigration policy that can be adopted.

In conclusion, we may add that this movement is not of a local character. It is widespread and deep-rooted, and like a similar movement across the line, will prove a "landslide" in the removal of all barriers. Our demands are moderate, reasonable and just. We ask for nothing more; we will not accept anything less. The Toronto Empire may falsify and belittle our action and cowardly refuse to open its columns for reply, party heelers and those who fatten at the government crib may oppose our efforts, but let the farmers drop old party lines, be true to themselves, to each other, and to their adopted country, and their voices will be heard above the din of all party clamor.

Saving Seed.

WRITTEN FOR THE FARMER'S ADVOCATE BY THOMPSON SMITH.

There are too many farmers who do not realize the great gain in carefully saving seed in the summer and fall from the choicest of their products. A good crop cannot be expected year after year from inferior seed. It is only an occasional time that indifferent seed will bring a good yield. I have seen very small and refuse potatoes planted, from which were grown large tubers, and an abundance of them, but if small seed is planted season after season, the yield will become poor both in quantity and quality. Now, during the gathering season is the best time to save seed potatoes. As the farmer handles the crop, he has the best of opportunities to see almost every potato, and can readily select the most perfect and place them to one side. It is a good failing to save more than you think it likely you will need, for if there is not a demand for all your seed in the spring you can eat them or sell them as well then as now; while on the other hand, if your supply falls short through unlooked-for circumstances, it is not nearly always easy to get the needed supply, even at exorbitant prices.

When possible, a farmer gains by saving his own clover and timothy seed. These seeds are most generally to be found on the market, but the cost is high and it is very uncertain about their cleanliness. I have seen fields thickly set with objectionable growth from seed that was mixed with what should have been all timothy or clover.

Now, too, is the time to save seed corn, unless it is the expectation to depend on the seedsmen for the needed supply. A great many depend on their cribbed corn for seed, which means using from what is left over in the spring, whether good or poor. Last year there were a great many through northwest Missouri and south-west Iowa who planted corn from the spring supply left in the cribs, and the general result was a very poor stand and universal replanting. It has been my practice for a number of years to commence gathering corn for seed as soon as I found it thoroughly away from the milk. I do not gather it all at one time, but am always on the watch for a fine ear when passing through the field, and am never in too great a hurry to stop and pluck it. When cutting and husking the corn I am still on my watchtower, so that by the time my crop is cribbed I have a bountiful supply stored away which I know to be of the best. That the seed may be relied on as good, without fail, I find it essential to keep the corn strictly dry during the winter, and in order to do this I usually beg a kitchen nook of my wife, where my corn not only keeps dry, but is not subjected to the cold of the extreme wintry weather. I am of the opinion, though, that freezing dry corn does not hurt the germ, but by keeping it where it is warm it is more certain to be dry all the time.

Garden seed cannot be gathered in a happen-and-by-chance method and then good returns justly expected from them next year. I carefully gather the first well-formed ripe tomato and cucumber from which to keep seed, and, as a rule, I have tomatoes and cucumbers from two to three weeks earlier than my neighbors, and of the finest fruit. I have gathered the pods of Lima beans which matured first and stored them away securely with the seeds of bunch and poled beans, radish, lettuce, onions, etc., all of which was saved from my best, so I expect to have of the best next year. If good, large heads of cabbage and cauliflower are desired, the best of the heads grown must each time be saved, setting out the whole plant from which to grow seed. It is almost no trouble to take precaution in this matter, and he who does it is always amply paid in the spring when planting time is upon us. It is, of course, trouble to put seed away and protect it properly through the winter, but it is a truth "there is no gain without labor."

Experimental Farms.

BY BOB BARCLAY, BALMORAL, MAN.

A few years ago I was, like many more, inclined to think that these establishments were a mere fad and had in a great measure been formed for the purpose of affording soft snaps and easy sits for government hangers-on, and that like many other schemes would draw money from the hard workers to make a few lazy independents happy and keep them in luxury; but after carefully watching these farms from the start and following their work closely, as well as beholding the benefits which have been generally derived from them, I have changed my mind, and must admit that they are in my opinion the most advantageous venture for a country such as ours that any government has ever promulgated or put forward; and if our farmers were, as they certainly ought to be, better acquainted with the workings of these farms and the benefits to be derived even from correspondence with the officers in charge (whom I might state I at all times find very obliging), as well as a full perusal of the regular reports furnished, they would be greatly benefited, not to say anything of the splendid opportunities given to every farmer of trying different varieties of all classes of new grains and roots, free of charge, and at little or no expense. Above all, one of the greatest boons, more especially to those located upon the prairie settlements, is in providing them with that which they sadly want—very young trees and tree seeds which will assuredly grow well. As "Rome was not built in one day," we need hardly look for or expect to find perfection at once in the arrangements of any concern, more especially of large ones, depending, as these do, so much upon weather and seasons, and including so many different species of vegetation.

About a twelvemonth ago I was much pleased to see that the Alberta people were moving for the establishment of a farm in the vicinity of Calgary, but I am afraid the matter must have fallen through, as I have heard nothing further of it since; if so, it is to be much regretted. There is not the slightest doubt that if an Experimental Farm is to be of any use or service, the proper place for it is in the district it is intended to benefit. This idea has been clearly shown as between the one at Ottawa and that at Brandon, especially as far as the tree department is concerned. In giving you my experience you also get that of others, and it is to the following effect, viz.:—That the cuttings from Ottawa are of no use, as they arrive in this country too early in the spring for setting out, and I do not care how well you tend them, you cannot save them in good order, for if you keep them dry they die out, and if you follow the instructions sent along with them they are sure to damp off, and when planted out succumb to what is generally called dry rot, and if you get one or two small living trees at the end of the season out of a hundred, you may consider yourself lucky. I have tried them myself and got others to do so different seasons with the aforesaid result. On the other hand, those received from Brandon, with exactly the same treatment in planting and cultivation, were just the reverse, and the loss by deaths only amounted to somewhere about three per cent. The rooted trees from Ottawa grew, but never were vigorous; they made comparatively little growth throughout the first season. This, I presume, arose from the fact that they were out of the ground so long in the spring. The loss by death in this class was from seven to ten per cent., while it only was two in those received from Brandon Station.

The trees raised in Manitoba were, in the first place, much finer and healthier plants, and made more headway in one season than the eastern ones did in two. In drawing your attention to this matter, I do not wish it to be understood that I am finding fault with the people at Ottawa; I am simply writing for the benefit of the farmers and others in this province, as there is really nothing more tantalizing to any one than preparing ground and spending time and labor upon that which turns out in the end to be useless. Every one who wishes to have trees around their habitation desires to have them grow speedily, and thereby acquire a good and lasting protection in the shortest time possible; therefore it is that I say, by all means let us have our young trees for Manitoba farms raised and sent out from the Brandon establishment. And there is still a stronger reason for pressing this home to those in power, viz.: Everyone is by this time thoroughly convinced that southern-raised material does not, as a rule, succeed well in a northern climate; the only exception that I know of is that raised in Rochester, N. Y. When talking upon this point to some leading worthies, I was kindly reminded that our friends in the east would kick against the transfer of the arboriculture, as this would mean doing them out of a portion of their present employment and taking money out of their pockets; but I say, let them grumble—the sooner the change is made the better, if it is going to save money at that end and a deal of vexation and trouble at this. Mr. Editor, before closing, I would like to draw the attention of those in charge at Brandon to some currant cuttings that were sent out by them last spring; they were for the most part taken from old wood which would have been nothing more or less than dead wood upon the bushes at the end of the season, only fit for pruning and burning. Now any one who really knows his business in nursery work is well aware that such stuff will never make healthy bushes, even if they

did start, and certainly they would never bear fruit worth picking. I know of a case where there were only some three or four out of a parcel of fifty showed any vitality; I do not think any of them will survive the winter. These cuttings were given. In a word, I do not and cannot see why the Brandon farm, if necessary, should not be enlarged and the staff increased so as to provide everything in the shape of not only trees and bushes, but also roots and seeds for the farmers of our province, as it is an undoubted fact that northern seed and other things suit our climate and soil far better than anything produced south of us. If we are to get supplied away from home, I say, let us get them from Alberta or some other northern point. Can you see any reason for the local government charging postage on what might be termed the business of a government concern? I consider it anything but generous, and militates materially against the benefits of the most useful institution under their supervision.

Fifty Years Ago.

BY T. B. WHITE, CLARKSBURG, ONT.

(Continued from page 298.)

The more I notice these Forestry Reports the more I think they are at fault in trying to build up a theory of which so little is known, and consequently, notwithstanding all the labor and ingenuity employed, only producing a lot of incongruous and fragmentary compositions for our instruction. In Report for 1887, page 36, we read: "I notice in American papers some criticism of an idea which should now be removed from criticism—the well-known influence of forests on rainfall. We are no longer left to conjecture on these matters," &c. Then on page 36, Report 1891, four years later, we read: "The opinions of our greatest climatologists have been divided as to the influence of forests on precipitation. But evidence, carefully and scientifically scrutinized, is accumulating which tends to show that under certain conditions at least, such influence may not be improbable." This seems like moving it from criticism the other way, and shows the folly of being so positive about things we don't know.

In Report for 1886, page 67, we are told that a cabbage emits twenty-five ounces of moisture daily, while a forest transpires millions of gallons daily. A great difference in quantity certainly, but then, there is an unmeasurable difference between a definite and an indefinite article, and to pit a cabbage against a forest to show how the farmers are drying up the country by making the change is great logic.

On page 76, same Report, we read: "The question has been asked, How is it that the great prairies of the Western States were ever fertile, while trees are said to be so necessary to fertility? This is easily answered. These prairies were in the first place of exceptional fertility, so far as regards the quality of the soil." Then turn back to page 49, and we read: "State after State is going to be drowned out, until some day the coral insect may again build his pretty castles where the people of Iowa are now digging wells for water." This last quotation is more in line with geology, which teaches that these now prairies were in the first place water, and second, that the corals built the rock foundation. Then in the third place comes the starting point for the farmer, and we ask the question: How came those bare rocks to be over-laid with ten, twenty, or more, feet of vegetable soil? This problem solved is the key to successful farming in perpetuity. But to say the prairies were in the first place of exceptional fertility as regards the soil, only shows how little some people do really know about it.

Then, in my opinion these Reports are equally astray in representing the clearing of the forests as having such a dreadful effect on the country, in causing the rivers to be so much more destructive in carrying the soil into deep waters at one time, and at other times drying them up so as to be of very little practical use; for, though there is some difference caused by this change, the alarm is a great deal more imaginary than real. If Capt. Eads did (page 49, Report, 1886) exclaim when emptying a pail of mud and water over his jetties, "There goes a mixture of one-tenth Missouri, one-tenth Illinois, one-tenth Iowa," &c., it is no reason why we should not take an intelligent view of this matter, and as far as it affects the farmers reduce the question to figures and facts, which will show there is nothing to get excited about.

It is said that the river Thames, England, carries 11,000,000 cubic feet of solid matter into the sea every year, but as the river drains an area of 6,100 square miles, it is only 1,800th part of an inch, equal to about one inch off this acreage since the Norman Conquest. I have read that Prof. Gekie has made a calculation showing that at the rate Great Britain is being washed into the sea by its rivers and streams, it will be 3,500,000 years before it is reduced to water level.

Then there is another side to this question of what the waters are doing, and though I have seen miles of muddy water in Georgian Bay, caused by summer floods down Beaver river, we are now using a gravel pit about two miles from its present limits which has evidently been the beach at some time. And in this two miles we have the busiest part of our township—our markets, our principle plum orchards, our railway, &c. So that if the tendency of the waters are to lower the mountains,

and in return build up more level or rolling land, the change, we should say, is for the better. And if, in place of going into hysterics over what we see going down the rivers, we gave more attention to keeping the land in grass along runs of water which are apt to flood, we would help to graduate this process to our present advantage. Under-draining also acts as a strainer in keeping the soil. But this cry about the farmers tearing out the heart of the country with their plows and dumping it into the sea is quite unnecessary.

On page 56, Report for 1891, we read: "For several years past the engineers of the waterworks department of Philadelphia have been making examinations of all possible sources of a suitable and adequate supply of water, and they have recently discovered how seriously the Schuylkill river, from which the city has ever drawn its supply, has been affected by the clearing of the forests, &c." The river, we are told, has in about sixty years decreased from 500,000,000 to 250,000,000 gallons per day. Well, supposing this is so, though it should not have taken much engineering to have discovered that difference, it is still 250 gallons per capita, and would be 10 gallons per day for each up to 25,000,000 people. Then it is no secret that the Delaware river, with ten or more times as much water, borders along their front street; and if the engineers have not seen it, though ostensibly looking for water, they must have really been looking for ways and means how to keep their positions and consequent remunerations. But the reason the city has hitherto drawn its water supply from the Schuylkill is, because it is the more rapid stream and furnishes the power to pump the water into Fairmount and other reservoirs as required; and any Ontario farmer who saw the Corlis engine and the exhibit of pumps at work at the Centennial will not be alarmed but they will be able to raise water out of the Delaware when needed, saying nothing about the great change in producing motive power since then. On next page we are asked: "Where will New York's water supply come from in the year 1900, when her population will aggregate 5,000,000 souls? Where does London's supply come from? They have nothing like the natural reserves to draw from that New York has, and if when they have 10,000,000 people they have to tap Lake Champlain, they should be better able to do it than they were to tap Croton when they did; and if that time does come, I think they will need the land to grow cabbages and other vegetables, rather than trees. We will have to employ some more economical way of holding water for a constant supply than re-foresting the country, as these Forestry Reports say will have to be done.

"All the rivers run into the sea; yet the sea is not full; unto the place from whence the rivers come, thither they return again." Perpetual motion!

The Farmers' Mill.

"Embracing the first opportunity, our representative visited the new farmers' roller mill," says the Portage la Prairie Liberal.

"The building of the mill originated in the desire of our farmers to have one where they could get gristing and exchange work done. The stock was readily subscribed, the work of building was let to Messrs. Stable & Gray, and the machinery was purchased from the North American Mill Building Company, of Stratford, Ont. The mill cost about \$5,000, the machinery \$15,000, or a total of \$20,000.

"The mill building, 38x50 feet, four stories high (30 feet), stands about 40 feet west of the farmers' elevator. This intervening space, roofed over, sheeted with iron inside and outside, constitutes the engine room from which power is transmitted to mill and elevator by a steel shaft 115 feet long, passing through all three divisions.

"The engine room is divided off by a brick wall, the machinery from the boilers. There are two of the latter, one 90, the other 40-horse power, solidly bricked in. There are two engines, the principal one a Brown automatic cut-off 100-horse power. The other is a 30-h. p. one. The fuel is largely obtained from the tailing and chaff of the elevator cleaners.

"Mr. Jas. Nummy is head miller. It was he who drew the plans for the mill. The work of construction was carried on under the supervision of Mr. Wm. Johnston, head millwright for the N. A. M. B. Company, of Stratford, who supplied the machinery.

"The present capacity of the mill is from 175 to 200 barrel per 24 hours, but everything is so arranged that with very little expense the capacity could be greatly increased."

The Howell Pear.

The editor of the Horticulturist has the following to say of the Howell pear:—Of the pears grown for market at Maplehurst, one of the most satisfactory of its season is the Howell. Its size, freedom from scab, wormholes and other blemishes, and clear, yellow skin at maturity, combine to make it a very attractive pear for market. It ripens about the end of September, just when the Bartlett season is over. In the estimation of fruit growers generally, the Howell is one of the best of the varieties of American pears. The tree is an upright, vigorous grower, and very productive. The quality is good, season September and October. This variety originated with Thomas Howell, of New Haven, Conn.

DAIRY.

Dairy Cows and How to Feed Them.

As the time of winter feeding again draws near, it will be interesting and instructive to know how other authorities from another country view the manner of feeding in order to obtain results in butter production. How the different breeds are looked upon from an English standpoint is also discussed in a pamphlet recently issued for the benefit of English buttermakers. It says:—

"Shorthorns are good dairy cattle, giving a plentiful supply of milk, besides fattening well. They are, perhaps, the best dairy cows for the ordinary farmer, especially in the north of England, where swedes are grown. When their milk begins to fail they can be easily fattened and sold to the butcher.

"The Jersey may be regarded as the type of a butter cow. Bulk for bulk, its milk is the richest in butterfat, having a greater proportion of large fat globules than the milk of any other breed, and their large, uniform globules enhance the value of the milk for buttermaking in three ways:—1. By separating more quickly and thoroughly with the cream. 2. Churning more readily and completely. 3. Producing more and a better quality of butter.

"Guernseys are very similar to the last named breed, but are larger, longer in body, hardier, and not so graceful. They are better for beef, and almost as good for dairy purposes.

"Ayrshires give a large amount of milk for their size. The milk is rich in casein, and the fat globules are of small size, consequently the Ayrshires are much used in cheesemaking districts.

"Red Polls are very fine milk and beef producers, and may be said to be a typical dairy breed. They retain their flow of milk longer than most other cattle.

"Cattle should be brought in from pastures in October, and before this the stables should be well cleaned out and whitewashed. Cows may run out a little each day through the winter. Some of the back end calves will be coming to the pail now, and will get full rations. Others that are drying off will have the quality of their food somewhat reduced. Everything should be done to make them as comfortable as possible. The stables should be cleaned out daily and fresh litter added. The feeding must be done at regular hours. The rations for different cows will vary somewhat, but the following are good examples:—(1) Decorticated cotton cake, 2 lb.; bean meal, 3 lb.; crushed oats, 1 lb.; hay chaff, 8 lb.; oat straw (chaffed), 10 lb.; mangels, 40 lb. (2) Linseed cake, 1 lb.; crushed oats, 2 lb.; bean meal, 3 lb.; bran, 1 lb.; rice meal, 3 lb.; clover hay, 10 lb.; straw, 6 lb.; swedes, 30 lb. (3) Cotton cake, 3 lb.; oat meal, 2 lb.; clover hay, 10 lb.; straw, 10 lb.; swedes, 33 lb. (4) Decorticated cotton cake, 1 lb.; palm-nut meal, 1 lb.; crushed oats, 2 lb.; bran, 1 lb.; meadow silage, 25 lb.; brewer's grains, 20 lb.; oat straw, 4 lb.; meadow hay, 7 lb.

"Cows that are dry (previous to calving) may receive (1) Decorticated cotton cake, 2 lb.; straw, 15 lb.; silage, 35 lb. (2) Linseed cake, 2 lb.; bean meal, 1 lb.; straw, 14 lb.; hay, 5 lb.; turnips, 40 lb.

"The different roots are fed to cattle in the order in which they arrive at maturity, thus—(1) White turnips, used first in autumn; (2) yellow turnips; (3) swedes, used in winter; (4) mangels; (5) carrots, used last in spring.

"About 6 a.m. give half the mixture of concentrated foods with a little straw. After milking, say at 8 o'clock, give one-third of the roots. If these have been steamed they may be mixed up with some of the straw chaff. At 12 o'clock the cattle get another third of the roots and some hay, or silage or brewer's grains may be given instead of the roots. At 4 p.m. the rest of the cake and meal is put into the troughs. At 7.30 p.m. give the remaining roots and some straw or hay.

"Water should be provided. It is often advisable to let the animals out into a yard for this purpose. They then get a little exercise.

"A piece of rock salt should be placed in every manger for the cattle to lick. This is better than putting a certain quantity in the food, as the animals get as much as they want. Sodium chloride is contained in large amounts in the blood. Rock salt should only be sparingly used with cows approaching their period of parturition.

"Milking will begin from 5 to 7 a.m., and 4.30 or 5.30 p.m. On some farms the cattle are milked at mid-day; but the small increase in yield does not often repay the extra labor.

"All through winter the management is very much the same. No rapid change of food should ever be made, as the cattle may be thrown off their feed for a day or two, and do not let down their milk so well for the time being.

Many United States dairymen are reporting good results from feeding their cows corn ensilage in the summer when pastures have failed. The ADVOCATE for Sept. 15th contained some Canadian testimony of value on this point.

Having tried almost every available sort of grain food for milch cows, Mr. Joseph McLeod, one of the most successful dairy farmers in the vicinity of London, Ont., states that he gets the best results, quality of milk always considered, from a mixture, half-and-half, of ground oats and wheat bran, fed dry.

Winter Dairying.

BY J. W. WHEATON, SECRETARY OF THE DAIRYMEN'S ASSOCIATION OF WESTERN ONTARIO.

One of the most interesting topics discussed at many of our dairy meetings last winter was "Winter Dairying." Farmers and dairymen are anxious to get information concerning this feature of dairying. They are beginning to realize the importance of giving more attention to dairying as a branch of farming that will return a handsome profit, if carried out intelligently and systematically. Hence any feature that will make their business more remunerative will be received with interest.

The Dominion Government, under the direction of the Dairy Commissioner, established two experimental dairy stations in 1891-92, at Mt. Elgin and Woodstock. At these stations butter was made during the winter months from milk supplied by the farmers in the neighborhood. These farmers had been supplying milk to the cheese factory during the summer, and continued to milk their cows during the winter and have it made into butter. The experiment was a very successful one; the farmers were well satisfied with the results, and the stations were continued during last winter and will be continued during the coming winter. Last winter also a few of the larger cheese factories put in apparatus for making butter, and kept their factories running all winter. These factories also gave satisfaction, and were able to make the business a profitable one. The business of winter dairying is therefore an established fact in Canada, and the sooner our farmers and dairymen understand its workings, and prepare themselves to operate it, the sooner will they place themselves in a position to realize the highest possible profit out of dairying, and be able to make money out of their cows all the year round.

The larger number of the patrons of our cheese factories, who are generally looked upon as making a specialty of dairying, milk their cows on an average seven or at most eight months of the year. It will cost about \$28.00 or \$30.00 to keep a cow properly per year, and there are few cows kept by the dairymen of this country which will give more than enough milk during a milking season of seven or eight months than will pay off this \$30.00. This being the case, the larger number of our farmers are keeping cows just for the fun of taking care of them, as they are not returning a profit, while a great many of them are keeping cows at a loss. It may seem strange that such a condition of things exists in a country where dairying is made a specialty, but nevertheless the fact remains. The chief reason is that farmers do not keep an accurate account of the cost of keeping a cow, or the cost of producing a certain quantity of milk. If they did they would only keep cows that would return a profit. A prominent dairyman has well said that the cow is a boarder, and should pay for her board week by week the year round. If our farmers would go into winter dairying, butter could be made when it commands the highest price, and cheese during the summer.

By this plan the dairyman will be able to raise his calves during the winter months. To do this his cows should come in during October. The skim milk may be returned from the creamery the same day that it is taken in perfectly sweet condition. By heating this skim milk to the normal temperature of milk (about 98 deg.), and supplying a little linseed or oil cake to take the place of the butterfat, an excellent food for calves is secured. Thus better calves can be raised during the winter months by this method than are usually raised during summer. During the winter the farmer has more time to look after his stock, and consequently the calves receive more attention and are not allowed to fish for themselves, as is frequently the case when raised during the busy summer season. A calf that is born in the autumn and fed properly during the winter will be able to forage for itself when grass appears. Then if the heifer is properly looked after during the first three years of her life, the well-developed cow is assured.

By adopting winter dairying farmers will be able to give employment to more men during the winter. An advantage to be gained by winter dairying is that the cows will be kept in better condition, and consequently will be in better trim when the spring opens up to give milk during the summer months. In proof of this, one of the leading patrons of the Mount Elgin Creamery states that during the summer of 1892 his cows gave more milk than in the summer of 1891, when his cows had been put dry quite early in the winter.

It is claimed that the returns from winter dairying will not pay for the extra food and extra care expended upon the cows. We have only to refer to the experience of those who have tried it. The butter made in the winter dairies last season brought, on an average, from twenty-three to twenty-five cents per pound. Deducting the cost of manufacturing there would be left to the patron about twenty cents per pound, and he would receive from eighty-five to ninety cents per one hundred pounds for milk, and have the skim milk to the good.

There are a few requisites that are necessary to the successful working of winter dairying. An abundant supply of good, succulent food is necessary, and the cheapest and best way to get it is through the silo. By feeding a little chopped grain with ensilage, a complete food for cows is

secured, and cows can be fed just as cheaply during the winter as during the summer on the grass. Good, warm, comfortable stables need to be provided. A cow kept in a cold stable requires more food to keep up her vitality than one kept in comfortable quarters.

The serious drought of the past few months in Ontario will doubtless prove a serious drawback to winter dairying this season. The dearth of good pasturage during August and September caused the cows to lessen their flow of milk very early in the season, making it difficult to keep up to their usual amount at this time of the year, and consequently many of the farmers will not have the milk to supply for making butter this winter. It is difficult also, though good food is supplied, to get cows back to their usual flow of milk if they have shrunk considerably for any length of time.

However, the winter creamery is of considerable interest to the dairymen, and when it is possible to secure sufficient milk arrangements will be made in many localities for manufacturing butter during the winter months. Thorough preparation is necessary for every new line of work, and until the farmer has provided himself with the proper cows, and has the right kind of food for them, the highest measure of success cannot be obtained in operating the winter dairy.

Foul Foot.

When a cow or other cloven-footed animal is seen to lift its foot, stretch it out and endeavor to lick it, the foot should be examined without delay. When the cow stands at times in manure, this lodges between the hoof, or some other matter may get there; and either acts as an irritant to the tender skin there. Vesicular eruption may then occur, with inflammation, and the skin peels off, with the result of suppuration and often ulceration. This disease is called "foot or hoof-ail," and is apt to cause trouble if neglected. In time the inflammation penetrates the foot, and the hoof may be loosened or drop off. The disease is more apt to occur with cattle that are out of condition and whose blood is thin and poor. Attention should be given at once. The feet should be washed and carefully cleaned between the hoofs. The sores should be dressed with some stimulating oleaginous mixture to excite healing and protect the raw surfaces from the air. A very good ointment, says the Agriculturalist, is made of four parts of clean lard, one part of each Venice turpentine and spirits of turpentine, and one-half part of acetate of copper (verdigris). This may be spread upon a rag or lint, and put between the hoofs, which are then bound with a soft bandage passed between the hoofs and around them, and fastened above.—[Dr. C. D. Smead.

APIARY.

Preparing Bees for Winter.

BY G. G. GUNN, GONOR.

The time of the year has arrived when we must see about preparing the tiny workers for their winter's rest. Bees should be fed by the twentieth of September, as it is hard to get them to take in the feed when the weather begins to get colder, as it generally does after that date. Now I want to say a word about the next step in the preparation, that of packing them in chaff for the winter, and I think that this should be done not later than the tenth of October, for by this date the nights are beginning to get cold. The plan which I follow is not the one of using cushions made out of canvas and stuffed with chaff, but a method which I think started in my apiary. I will try to explain it as well as it is possible. First, I take a long strip of tin about one inch in width and cut it in bits about four inches in length. I then fasten one of these pieces by one end to the bottom of the division board in such a way that it is extending backward along the bottom of the hive. I then fasten the other end to the bottom of the hive with a tack; then take two inch wire nails and put one in each side of the top of the division board, so that it will not press forward against the combs; then take dry chaff and pack it firmly behind the division board. This done, I next take a piece of canvas and cut it to the size of the outside of the bottom of the supers, or second story as some call it, and fasten it to the bottom with tacks. I then fill it with chaff, and the hive is ready for winter. After they are all ready for winter I leave them out on their summer stands until the winter sets in. I have left them out as late as the third of January, and they wintered in fine shape. Still, I think it is better to have them in by the last week in November.

A good ration for egg production can be formed by mixing 25 per cent, each of ground oats, wheat and bran, together with ten each of corn and linseed, and five of meat scraps, then cooking vegetables or steaming chopped clover hay and adding perhaps three quarts of this mixture to the bucketful. The whole grain ration must be governed by circumstances, but the best results will be obtained when the amount of corn is small, save, perhaps, in the very coldest weather.

MINNIE MAY'S DEPARTMENT.

MY DEAR NIECES:—

Instead of watching each green and flowery object day by day, as it buds and blossoms, we now see only the traces of slow and sure decay—the green fading bit by bit, until the leaves become like skeleton wings of an insect, the wind blowing through those places which were before marked with crimson and gold. The sun himself seems growing older; he rises later from his couch in the morning, and returns to rest earlier in the evening, and seems not to have that strength which he possessed when he rose in the youthful vigor of spring and the bright and cheerful manhood of summer, for his golden eyes seem clouded, and his breath thick and heavy, as he struggles through the surrounding fog. All these are marks of the seasons, telling us that the year is growing gray, and slowly tottering towards the darkness and silence of winter. A moral character, says Chateaubrand, is attached to autumnal scenes—the leaves falling like our years, the flowers fading like our hours, the clouds fleeing like our illusions, the light diminishing like our intelligence, the sun growing colder like our affections, the rivers becoming frozen like our lives—all bear secret relations to our destinies.

There is exhilaration in the air, and a new life in the wind that comes careering from the Northwest, bearing frost on its wings, and brightness to the autumn woods. The farmer is early afield, with his cheery call, as he guides his team to the late harvesting. The cornfields display their tent-like rows, with garniture of yellow pumpkins scattered between; and the buckwheat patches, no longer yielding their honied fragrance, are falling before the quick-swinging cradle, and lie like red spots upon the landscape. The orchards are brimming with rosy and golden fruit, and the chestnut burrs are showering down their treasures in the woods. Plenty reigns, and the fulness of the year has put its stamp of gladness upon all. The short, bright October days are closed in by the long evenings, and in order that these also may be bright some care and attention are required.

The dullness of life in the country is one of the complaints oftenest heard from the young people, but that is not the fault of the country; it is our own. Too little attention is paid to our social life, or rather the requirements of it. Social gatherings are not frequent enough among us, where we are surrounded with all the requisites of such recreation. Who has not been at a Hallowe'en party, where the old farmhouse blazed with light from all the windows, the huge bush-log crackled and furnished the coals to try our fate with chestnuts, melted lead, and such innocent fun? Its Hallowe'en supper is a treat long to be remembered. The lanterns which lighted the table were made from pumpkins, and a most uninviting face was carved on three sides. The cake which graced the centre held a magic ring; whoever was the lucky finder was to be married within the year. And the piece of money betokened riches; the tumbler a fate to be dreaded, for the girl who got that would be a seamstress; and the bean betokened an old bachelor. The old house resounded with merry laughter and dancing feet. These merry meetings cost little, and long remain a bright spot in the memory of the participants.

Candy for Hallowe'en.

Put one quart of brown sugar and one pint of water, a tablespoon of butter, two of vinegar into a saucepan; stir until it boils; let it boil without stirring until a drop will harden in water. Pour it on a buttered dish or pan, and when cool enough to handle pull until it gets too stiff. Clip in pieces with a strong pair of scissors.

LEMON CANDY.

Put one pint of white sugar into a pan with one half pint of water; stir until the sugar begins to grain, which may be known by dropping in water. Add the strained juice of two lemons and pour on a buttered dish.

PEANUT CANDY.

Peanut candy is always a favorite with grown persons as well as children. Put one pint of water into a saucepan with one quart of sugar; boil for half-an-hour. Add the insides of one quart of peanuts divested of their brown husks; stir for a minute and cool in shallow pans. When cold saw into small dice or oblong pieces.

ALMOND CANDY.

Put one quart of sugar in a pan, when it browns add half-a-pound of almonds, which should be quite hot; stir until all is mixed and beginning to boil again, and turn into a buttered pan. Saw it into small squares.

Popping Corn.

Upon two comely figures the glow of the firelight falls. While their strange distorted shadows dance about them on the walls:
A happy youth and maiden, from whose minds all care is gone,
Are before the glowing fireplace, deep intent on popping corn.

O'er the coals between the andirons the caged kernels move,
And their sudden burst of whiteness seems a symbol of a love
Which the happy youth and maiden have borne for many a day,
And as hourly it grows stronger, soon 'twill sweep all bars away.

The clock ticks off the moments and the time fast forward slips.

Yet the words he longs to utter still are lingering on his lips;
On his face another radiance than the firelight's seems to dawn,
And, as if to hide his feelings, he more quickly pops the corn.

The maiden sits in silence, but with wisdom of her kind
Seems to know the thoughts now rising in her dear companion's mind;
And when down from out the popper the hot, white kernels fall,
And he turns his bright face to her, then she asks, "And is that all?"

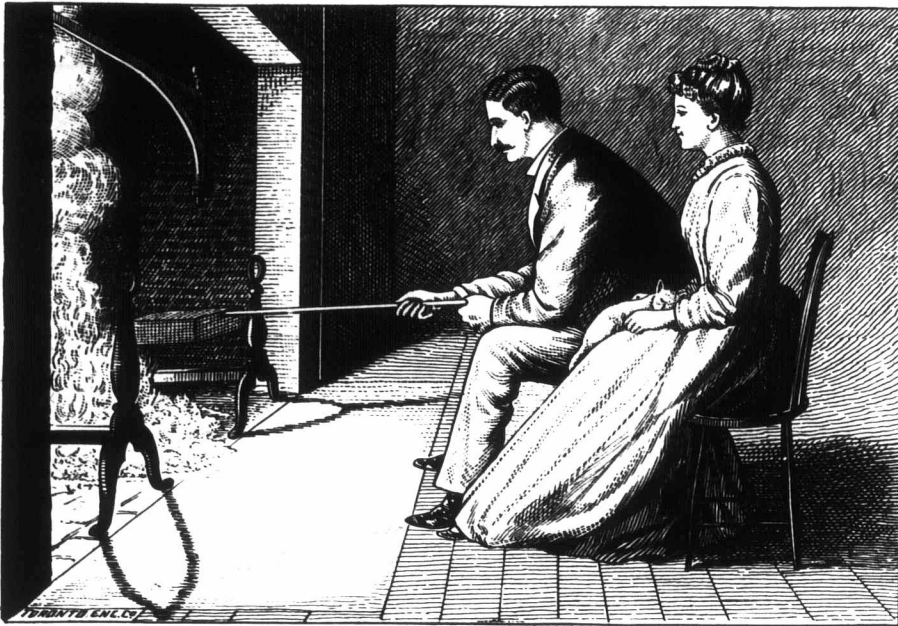
Their eyes meet; the words are spoken—the story sweet and old,
Which so long he has been learning, now with tenderest grace is told,
And at once beside the fireplace, the happy love is born,
And forgotten is the world outside, amid thoughts of Popping Corn.

John S. Barrows.

Cheerfulness.

"The mind that looks on things aright
Sees through the clouds the deep blue light."

Cheerfulness is a charm given us to make us permanently contented and happy. Long-faced, sanctimonious people are generally avoided, and justly so, for who wishes to partake of their malady? Those accustomed to look upon the sunny side of life are ever courted for the genial



POPPING CORN.

spirit they diffuse about them. A cheerful face is as beneficial as sunshiny weather. The sour person is never satisfied with being sour themselves, but seek to spread discomfort to all around them, and he is sour from the rising up of the sun until the going down of the same. When he awakens in the morning he grumbles because it is time to get up, when he gets out he grumbles at the weather, and he is never at a loss for something to grumble about when he returns home. The laughing philosopher is just the reverse they enjoy everything as they go along, and turn every little mistake into fun as it occurs through life's pilgrimage, and they always appear ten years younger than they really are. "They pass best over the world who trip over it quickly, for it is a bog if we stop we sink," says Queen Elizabeth.

"And for ever and aye we'll the grand secret prize,
That unless we are merry we cannot be wise."

This is the style of a country parson of the last century. After the service is read, he begins: "I publish the banns of marriage between Cornelius Hale, bachelor, and Tamzin Craddock, spinster, both of this parish. If any of you know cause or just impediment why these two simpletons should not be joined together in wedlock, ye are to declare it. This is the second time of asking, and I hope, before the third, seeing that Tamzin is in my own service, and well off, and Cornelius can't keep himself sober, let alone a wife, they'll have got into a more reasonable state of mind. There'll be no sermon to-day, because I had to sit up all night with my cow that is sick, and I can't afford to lose her these hard times. But it doesn't matter, for I've not seen one bit of improvement in the parish (especially among the farmers) since my last; and as that did not bring them to their senses, I don't know what will."

Our Irish Letter.

DEAR CANADIAN SISTERS AND BROTHERS:—

We are in almost a state of panic in Dublin and all its neighborhoods, regarding the great drought and the probable approach of cholera. It is always at the last moment that we thriftless Irish feel our needs. However, as a rule, when we do, we set about satisfying them, which setting about has resulted in the decision that if rain is not forthcoming before the 18th of this month, water is to be brought down from the County Kildare, a bed of filtering material prepared, and it will flow more abundantly through the canals which run in different directions through the city. Springs of water also are plentiful in Wicklow. They will all be utilized for this purpose, and will cause a great amount of work to fall into the hands of countless men who during this drought have been lying idle and aimless. It is a serious season in which to feel the want of water. Cholera is so near to us, one approaches writing of this dread disease with awe. A poor woman, a cleaner-up in the House of Commons, died after a few hours illness yesterday. It is supposed to have been the first case in London. A cloud scarcely bigger than a man's hand made its appearance on the horizon yesterday. It caused quite a sensation. We each and all hoped it would increase, which it did, but bye-and-bye sailed past us, not having left behind one single drop of rain. To-day seems drier than ever. I walked out this morning to visit a very curious place—it is an enclosure, a gate here and a gate there, leading one to suppose it "had been" a park—but the only remnant left of its ever having been one belonging to a house or castle are two long walls joined at one end by an arch. In these walls are niches. The ruin has been of such long standing that no one seems to know anything about it. If it was a house it must have been an immense one. Is it not strange that no one can tell what it was, or who it belonged to? But it is one of Ireland's antiquarian curiosities, so I tell you of it. Trees are now growing inside its ruined walls. Another land mark which I saw lately was a cairn of stones on one of our beautiful "Three Rock Mountains." These stones mark a club, which the members of, in long years gone by, named "The Hell Fire Club." Does not even the name make one creep? But I must tell "the name," if I tell its history. A number of men formed themselves into a club, to which they gave this shocking name. Their custom was to go up to it, light most tremendous fires, shut the doors and windows, and sit there all night drinking whisky, drinking themselves into a state of mad drunkenness over these fires, so that they should have a foretaste of the future they had allotted for themselves. One night (so the story goes) they left in a body to catch up their boat and go home—nothing more was ever heard of them; the boat was found drifting days afterwards empty, and so they went "home." It is a weird story, but I believe perfectly true.

I do not wish to encroach on English news, as I daresay your edition has an English correspondent; but one must talk of the colliers' strike, which threatens to assume such proportions that we find it already telling upon us. Coal has gone up like a rocket. I think a collier's life a particularly hard one, and I also think they could scarcely be paid well enough, so I trust things may end well for them. But while they wait, what must their unfortunate wives and children not suffer? The few shillings advance in price of coal per ton is so little to us, comparing it with the greatness of their sufferings. Before I end my letter I must tell you of such an amusing cartoon which has just been given me with "The Warder," a very influential Irish paper. There is a very high wall; Mr. Gladstone fiercely peering over it; shirt collars as usual well to the front, and on the ground lies "Pat," wounded and body-sore; shillelagh in the distance. Round poor Pat there is bound several coils of rope, fastening ragged-looking sheets of paper to his bruised body, on which are written "Home Rule Bill," and underneath the cartoon there is parodied the well-known "Humpty Dumpty." It is so funny I wish I could send it to you all, but wishes are futile. Good-bye.

Ever your sincere friend,

SUSAN M. STUDDART-KENNEDY.

UNCLE TOM'S DEPARTMENT.

MY DEAR NIECES AND NEPHEWS:—

The response to my call for "Word Pictures" has pleased me very much, as all those sent in are worthy of praise. So difficult has it been to judge between them that I have decided this time to award three prizes of \$1.00 each, instead of following the offer in previous issue; and in future will give two prizes of \$1.00 each, as lack of space will not admit of more than two pictures. I would like portraits for next month, but if you think them too difficult, choose any subject you prefer, but send in your work before the 20th of November.

UNCLE TOM.

UNCLE TOM'S PICTURE GALLERY.

A Canadian Autumn Day.

BY ADA ARMAND, PAKENHAM, ONT.

They sing of beauty afar who roam,
But our beloved Canadian home
Holds more of beauty unto mine eyes
Than Italy's far-famed sunny skies.

An artist's brush might dare portray
This beautiful October day.
I, tho' unworthy, shall strive to paint
The picture in words, but ah! how faint!

To depict this bright ethereal dream
My feeble words, how weak they seem!

At dawn the radiant evening Queen,
Arrayed in her robes of silvery sheen,
Smiles a soft farewell, as she sinks to rest
Where the fleecy clouds form a downy nest.

In the east gleams a halo of mellow light,
As the beautiful Day-King bursts in sight,
And smiles on the teardrops night has left,
Till earth of her diamonds is all bereft;

Then upward and onward he wends his way
Warming the heart of his fair bride, day,
With his warm caresses. The wooded land
Shows touch of a master-painter's hand;

And russet and gold, and brown and green,
With many a tinge of crimson sheen,
In purest, harmony softly blend,
Till the scene our fondest hopes transcend.

The hill-tops so soft by the cloudlets kissed
Have stolen a wreath of their azure mist;
While greeting our eyes as they southward roam
Is the neighboring church's glittering dome.

Now from the tower the bell's soft tone
Proclaims that noon-tide has long since flown;
And we westward turn, where, his course near run,
But glorious yet, reigns the monarch sun.

And the songs of his praise that we cannot hush
Now bring to his face a rosy blush,
Which reflects on hill-top and vale and tree,
Making a vision most fair to see.

The gates of evening now open wide,
And through their portals he swift doth glide.
And while we gaze on his dying splendour,
All nature is wrapped in the gloaming tender,
And filled with peace by this perfect day,
Night drops her curtain—we steal away.

An Unknown Grave.

BY FOSTER CARTER, WHONNOCK P. O., B. C.

Far from the scream of the iron horse, and farther still from the haunts of civilization, hidden away in the mountainous interior of the southern coast range of British Columbia, lies, almost unknown to mankind, a beautiful crescent-shaped lake, surrounded by lofty peaks that mark the spot of a lonely grave.

Here, on a summer's day the scenery is grand in the extreme. The sun pours down his brilliant rays from out a cloudless sky. Flocks of wild fowl besport themselves on the wide, gleaming expanse of water, which here and there the soft, subtle chinook fans into tiny ripples that lap in mystic rhythm the rocks of its iron-bound coast.

On the west shore of the lake rise, black precipitous cliffs, which as they ascend recede until their tops, aye, and half of them, are hoary with the accumulated snows of years gone by, and down whose mural declivities foaming cataracts plunge for hundreds of feet into the deep blue waters beneath.

On the east the mountain ranges that slope gently down to the water's edge are clothed with the green growth of giant cedar and hemlock forests, among whose pathless wastes the manless lion and big-horn sheep find as yet a home of freedom.

To the north can be seen, in striking contrast to the beetling cliffs on the left and the sloping mountains on the right, a flat tract of country, the unknown valley of a mighty torrent, which twines like some gigantic serpent through park-like scenery of alder groves and sandy reaches where the deer and bear are wont to roam in broad daylight.

But when the storm cloud lowers and the mountain tops are hid from view, when the north wind shrieks down those awful gorges and the angry billows dash on its rock-bound coast, when the scream of the wild fowl is lost 'mid the roar of that fearful gale: then, look! far out on those dark, growning waters is an Indian skiff, tempest-tossed, now up in the air, now down in the depths below. A faint form struggles hard, just for a moment. Then, the waves roar, and the wind shrieks on, and by and by a billow, larger than its brothers, hurls in its mad fury something against those cruel rocks. What is it? The waves leap on, the storm cloud lowers and the wind screams still, over the lonely grave of an unknown pioneer.

A Picture on Memory's Curtain.

BY A. B. PICKETT, ANDOVER, VICTORIA CO., N. B.

In the dim distance, which becomes hazy as it stretches away to the hours of childhood, a vision rises, clear, defined, distinct—different from the fitful glimpses of the many scenes which dot my memory's pictured screen. How many little events crowd together in the rush of recollection, centred around that bright spot back in the days of old when youth seemed so slow, but now appears to have gone like a flash on the expanse of heaven, leaving behind only a glow to mark its passage. And now there crowds up the scene of the old home. A river, gleaming past among the birch and cedar trees, reflects the rush of bright moonlight which pours down from over the hills. On this side the beams in their glory show an undulating meadow, stretching back from the fringe of trees to another hill which rises up until over the top the eye can see only the star-lit sky in its sombre beauty. On the edge of the wood covering part of this hill a brook babbles down its stony path, hollowing out its miniature gorge, age after age, with tireless energy. Down it falls, the arching trees meet overhead and shut out the prying beams. In those shadowy recesses how many times I have lingered, protected from the heat of a summer's day, and cooled by the draughts of air which sweep up its tortuous avenue, laden from the hay fields with the scent of flowers. The moss-grown wooden spouts lead the sparkling water into the pool which has refreshed the thirsty who come to drink its cool contents. Often have I climbed the hill at its steepest part, and rolled stones down into the splashing depths, and from that same fir-crowned hill what a vision of river and valley do I see!

Winding to this side and to that, with fields reaching down to the water, and again with steep banks rising up, it stretches on like a beautiful ribbon, until another turn hides it from our sight, and a low mountain, nearly as blue as the sky itself, miles and miles away, shuts out the view of farm and forest.

As in fancy I climb the hill still higher and gaze again, other spots I see which I have clambered over in past times.

And now I wander down the hill by the brook's side, until, where it enters the meadow, a grove of butternut trees spread about; beneath the arching trees a bridge spans the water where the lane comes in from the river road. The butternuts are falling with a quick thud, as the wind brushes the branches about, and squirrels when the dawn breaks will lay in harvest against the winter. The yellow moonbeams, dancing to the wind's music with the black shadows, ever and anon retreat to the shelter of a passing cloud, and the shadows alone sweep over the fields.

The brook sinks into the soil as we advance, and the meadow is left unbroken in front of the house.

Home again! Back to the old home where the years flew in their joys and sorrows over my childhood's hours!

Can memory forget the worn-out threshold, the weather-stained door, and the tiny paned windows? Can the sight of these not bring again before me those with whom I passed the years, gone forever in the mists of time? The father and mother who strove for the best, one of whom has reached the end of life's stony path, the other still assisting with her help and love others to clamber on, and the other companions of youth crowd forward through the mind.

But the rooms are empty: all that answers is but an echo, for another and newer home stands but a short distance away. The old house is forsaken, its duty has been done.

Change and decay are monarchs at last. From the house a road winds along the hill, until it reaches and enters another wood. On one side the forest of trees climbs upward above us, on the other the flat stretches away to the river. Beneath small culverts and bridges a dozen brooklets and streams pour down the slope. Music of trickling and running water is never absent as we pass along, and the huge evergreens above—sough in the winds and tower gloomily over the moon-lit pond, which, beside the road at the foot of the hill, shines and glitters among tamaracks and alders.

Now the road has wandered away from the old homestead, and loth to leave also, by fancy's magical aid I am carried back to other haunts, to the road leading away over the hills through the fields to spots and to places not forgotten, until at last the dawn breaks and piles a mass of rosy clouds upon the horizon. Then of a sudden the vision fades and is gone. Realities of life alone remain.

Puzzles.

1-DECAPITATION.

To ADA SMITHSON.

Dear Cousin, I read your puzzle,
I was delighted with its words,
Its first was smooth and musical,
And as delightful as the birds.

To you all the great fame is due,
Not a mite belongs to me;
And if you doubt my word in the least,
Wait till the end of the year and see.

I am sorry to be late for the Photo Group,
And sorry your pleasure to betray;
But I believe if the truth were told,
My face is far better away.

Persevere and succeed, is my motto;
And I always mean it to be;
It should be the motto of every LAST;
So now good-bye to thee.

THOS. W. BANKS.

2-SQUARE WORD.

Kind friends, this evening we greet you,
As we raise the "emblem of peace,"
In the shadows of "the moonlight,"
"To have effect" or cease.

We've brought along some "sea-weed"
Though incinerated "it may be,"
"Twill stand" upright, unshaken,
We present it now to thee.

FAIR BROTHER.

3-TRANSPOSITION.

My whole's a word of letters four,
I am "a mimic," nothing more,
Transpose and then "I'll cut or shave,"
'Tis natural for this little knave.

Again transpose, Lo! and behold!
You surely will "a plant" unfold.
Once more transpose, now mind your eye,
For I am sure "a fruit" you'll spy;

And yet again, transpose so neatly,
I'll "garner in" the whole completely.

FAIR BROTHER.

4-DECAPITATION.

Dear cousin Ed., it grieves me much
To hear you thus complain
Of tardy correspondents; sure
I'm loth to give you pain.

But "rolling stones," dear cousin,
Are very hard to trace,
Especially when, like some we know,
They go at such a pace.

A letter long ago I'd've sent,
Did I but know th' address;
A missive sent just to "St. Paul"
Would 'most get lost, I guess.

So when again you write the 'dom,
Your quill do not let slumber,
Until unto your name you add
Your street and also number.

Your puzzles with pleasure I always ONE,
Whenever I two I'll send some;
Now kindly think of the wish I send,
And be not angry at THREE old friend.

ADA ARMAND.

Answers to 15th September Puzzles.

- 1-Written. 2-Pleasure. 3-S A I N T
- 4-The, he. A R M O R
- 5-Came, mace, acme. I M B U E
- 6-In-cur-red. N O U N S
- 7-Or-at-or. T R E S S

Names of Those Who Have Sent Correct Answers to September 15th Puzzles.

Henry Reeve, Josie Sheehan, I. Irving Devitt, Morley Smithson, Joshua Umbach, Addison and Oliver Snider, Geo. W. Blyth, Thos. W. Banks, A. R. Borrowman, Frank Grayson, Minnie Moore, Geo. Rogers.

A Sermon in Rhyme.

If you have a friend worth loving,
Love him. Yes, and let him know
That you love him, ere life's evening
Tinge his brow with sunset glow.
Why should good words ne'er be said
Of a friend till he is dead?

If you hear a song that thrills you,
Sung by any child of song,
Praise it. Do not let the singer
Wait deserved praises long.
Why should one who thrills your heart
Lack the joy you may impart?

If you hear a prayer that moves you
By its humble, pleading tone,
Join it. Do not let the seeker
Bow before his God alone.
Why should not your brother share
The strength of "two or three" in prayer?

If you see the hot tears falling
From a brother's weeping eyes,
Share them, and by kindly sharing
Own you kinship with the skies.
Why should anyone be glad
When a brother's heart is sad?

If a silvery laugh goes rippling
Through the sun-shine on his face,
Share it. 'Tis the wise man's saying
For both grief and joy a place.
There's health and goodness in the mirth
In which an honest laugh has birth.

If your work is made more easy
By a friendly, helping hand,
Say so. Speak out brave and truly,
Ere the darkness veil the land.
Should a brother workman dear
Falter for a word of cheer?

Scatter thus your seeds of kindness
All enriching as you go;
Leave them. Trust the Harvest Giver,
He will make each seed to grow.
So until the happy end,
Your life shall never lack a friend.

-Exchange.

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3 NARCISSUS, assorted.
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FROM THE Bow Park Herd, to take place on WEDNESDAY, OCTOBER 25th, 1893, at Bow Park, Brantford, Ontario.

When 60 head will be offered without reserve. The unparalleled success of this herd, and high excellence of the breeding of the animals it contains, make this one of the most attractive sales of the year. Catalogues furnished on application at 45 St. Park, or the Globe office, 312 1/2-om.

ADVERTISE IN THE ADVOCATE

ADMINISTRATRIX SALE BY AUCTION OF STOCK FARM & PURE-BRED STOCK

ON NOVEMBER 1st, 1893, Comprising Pure-bred Cotswold Sheep, Clydesdale and Standard-bred Mares.

20 Cotswold Ewes and 14 Lambs (all registered), one imported standard-bred Mare, and two of her colts by Sardine (8004), one registered Clydesdale Mare with foal by her side (both mares in foal); also a number of good carriage and first-class farm horses. Farm consists of 150 acres, well-fenced and tile-drained, with good buildings, situated ten miles south of London and one mile from Glanworth Station. Address, MISS ISABELLA GLENN, Administratrix, GLANWORTH, 344-a-o.

THERE WILL BE HELD ON THE ROSS SIDE STOCK FARM, GEORGETOWN, ONT., A CREDIT SALE OF 26 Head of Thoroughbred Holstein-Friesian Cattle, on Nov. 10, '93. Also a number of first-class Roadster Horses, including one Brood Mare, Lady St. George, record 2:37. Twelve months' credit will be given. Parties coming by train will be met at Georgetown with conveyance. H.L. ROSS, Prop., Georgetown, Ont. 339-f-om.



D. & O. SORBY, GUELPH, ONTARIO,
—BREEDERS AND IMPORTERS OF—

FASHIONABLY BRED CLYDESDALES

We always have on hand a large number of imported and home-bred Clydesdales (male & female) of good breeding & quality, which we will sell at honest prices. Our specialties are good & well-bred horses and square dealing. Come and see us or write for particulars. 330-2-y-om.

ROBERT NESS, WOODSIDE FARM,

Importer & Breeder of Yorkshire Coachers, French Coachers, Clydesdales, Shetlands and Ayrshire Cattle. Prices to suit the times. ROBERT NESS, Woodside Farm, Howick P.O., P.Q. 329-y-om.

Deep Milking Shorthorns

MR. GRAINGER, London, Ont., offers for sale some exceedingly good cows and heifers. (Fair Maid of Hullett 2nd, now at test at Chicago, is only a fair specimen.) Dams made thirty pounds of butter in seven days. Come and see them; they are good ones. 338-2-y-om.

New Importation! ARTHUR JOHNSTON, Greenwood, Ont.

Reports his recently imported Cruickshank-bred safely at home, seven young bulls and six females, all of which will be sold at moderate prices. I have also exceedingly good young bulls and heifers of my own breeding for sale. Send for Catalogue. Greenwood P. O. and Telegraph Office, Clarendon Station on the C. P. R., or Pickering Station on the G. T. R. Parties met at either station on shortest notice. Come and see my cattle. 332-2-y-om.

SCOTCH-BRED SHORTHORN BULLS

Scotch-Bred Heifers, Imported Shropshire Rams, Imported Ewes, Home-bred Rams, Home-bred Ewes.

In any number. All of very best quality, and at the lowest prices. We want 500 recorded rams for ranches. Correspondence solicited. John Miller & Sons, Brantford, Ont. Clarendon Station, C. P. R., 22 miles east of Toronto. 346-2-y-om.

ADVERTISE IN THE ADVOCATE

SCOTCH-BRED SHORTHORNS FOR SALE

6 Choice Young Bulls And the Imported Cruickshank Bull

ABERDEEN HERO, Their sire. Also some nice Young Heifers, From one year old up. Prices to suit times. 322-2-y-om SHORE BROS., White Oak.

Shorthorns, Coach Horses and Berkshires. Our herd is headed by Daisy Chief=13674=, he by the famous Indian Chief=11108=, and was highly successful in the various Western Ontario fairs of the past season. A few choice young Bulls and Heifers for sale. Also registered Berkshires and a few extra choice Cleveland Bay mares and fillies, the get of Disraeli, Dalesman, etc. Write for prices, or come and see us. A. J. C. SHAW & SONS, Camden View Farm, Thamesville. 336-2-y-om.

H. CARGILL & SON, Cargill, Ont.

SHORTHORNS. Two imported bulls are now at the head of our herd. Stock of both sexes and different ages from the best imported and home-bred cows now for sale. 335-1f-om.

SHORTHORNS, BERKSHIRES, Shropshires, Plymouth Rocks & Bronze Turkeys. Write me for prices on the above. I have a grand litter of Berkshire Pigs now ready for sale. H. CHISHOLM, Montrose Farm, Paris, Ont. 342-2-y.

GREENHOUSE SHORTHORNS

Four car loads of thoroughbred and trotting horses, fat cattle and sheep, have also arrived, and will appear in their several rings next week, and give a good account of themselves no doubt.

The swine classes were judged towards the end of the week. The only classes in which Ontario breeders were represented were Suffolks, Improved Yorkshires and Tamworths. In the former class one animal owned by Mr. Joseph Featherstone, of Springfield-on-the-Credit, was a first prize winner, while in the Yorkshires that gentleman and Mr. J. E. Brethour, Burford, had the field pretty much to themselves. In the Tamworth classes Messrs. John Bell, of Amber, and James C. Velt, of Thedford, took the lion's share of the prizes.

The sheep and swine were all shipped home this week, except such as were sold—and these were pretty numerous, by the way a good many orders being also booked for delivery from home. Sales were made by D. A. Campbell, Gibson and Walker, Wm. Walker, W. H. Beattie, John McGilivray, J. G. Small & Bro., Jas. Small, Wm. Oliver, John Jackson & Son, Peter Arkell, R. Miller and D. J. Jackson.

THE GREAT MILK AND BUTTER HERD OF HOLSTEIN-FRIESIANS.

SMITH BROS., Credit Valley Stock Farm, CHURCHVILLE, PEEL COUNTY, ONT., (24 miles west of Toronto).

This is the place to get stock of best quality at reasonable prices. We have seventy-five head, including prize-takers; best strains, cows and heifers, with large milk and butter records, young bulls of superior quality. Send for catalogue. 332-2-y-om.

Holstein-Friesians.

Owing to an important change in business, our herd will be reduced one-half. Stock the choicest. Breeding the highest, and prices the lowest. All young stock bred from Silver Medal and First Prize-winning stock. Send for our new catalogue. New Dundee P.O., Ontario. A. C. HULLMAN & CO. 336-y-om.

HOLSTEIN-FRIESIAN CATTLE

Netherland, Aagie and Aris blood, along with others all of the best strains of producing blood. Write for particulars. Young Bulls and Heifers of the above tribes on hand. A grand son of Netherland Prince now for sale. G. W. CLEMONS, 334-2-y-om St. George, Ont.

SUNNYSIDE HOLSTEIN-FRIESIANS

Choose and buy the best. Sixty head of the best of the breed. All young stock bred from Silver Medal and First Prize-winning stock. Send for our new catalogue. New Dundee P.O., Ontario. M. DUFFELL & BUTTERS, St. instead, P.Q. 340-y-om.

The World's Fair Exposition.

The World's Fair Exposition will be officially closed October 31st, but the gates will remain open for some time longer, as the actual demolition will not begin immediately, and much will still remain to be seen.

The quantity of Ontario fruit arriving every day is almost overwhelming, and nothing but sheer lack of room prevents the Commissioner making a display which would fairly paralyze all other exhibitors. Among the notable features of the fruit exhibit is a sample of the Princess Louise or Wolverton Apple, a seedling grown by Mr. L. Wolverton, of Grimsby, the energetic Superintendent of the Pomological Department for the Dominion. Its large size, excellent color and fine flavor have been specially noted by the jurors. Another novelty was a basket of sweet potatoes from Brantford, the equal in size and quality of any from the Southern States. What with lemons and oranges, figs and sweet potatoes, all of which have appeared in their season on our tables, there is no telling what Ontario may do in the near future.

Quite a large party of interested spectators witnessed the boring of the big cheese by Prof. Robertson, on Friday morning. A trier thirty-three inches long was bored into the mammoth, and the plug inspected by the judges of the regular exhibit Messrs. A. F. MacLaren, of Windsor; G. E. PerLee, of New York, and A. H. Barber, of Chicago. The same scale was applied to the big cheese as to the smaller ones in the dairy barns, and it was rated at ninety-five points out of a possible one hundred. Mr. PerLee said he considered the cheese a great piece of work and a credit to the maker. The flavor, texture, &c., were very remarkable for the length of time made. The big cheese, as most people will remember, was made by Mr. J. A. Ruedtiek, at Perth, Ont., in September, 1892.

The stock barns, which have resounded to a medley of sounds for the past two months, are now in possession, for the most part, of fowls of high and low degree. The Ontario contingent, consisting of nearly 1,200 birds in seven cars, arrived to-day in charge of Mr. Henry Wade, and are now installed in their cages, to await the decision of the judges, who will begin work on Monday. The Ontario fowls will make up nearly half of the entire exhibit, and it needs no very expert observer to forecast a good measure of success for our breeders. The poultry department is under the charge of Mr. Allen Bogue, of London.

Four car loads of thoroughbred and trotting horses, fat cattle and sheep, have also arrived, and will appear in their several rings next week, and give a good account of themselves no doubt.

The swine classes were judged towards the end of the week. The only classes in which Ontario breeders were represented were Suffolks, Improved Yorkshires and Tamworths. In the former class one animal owned by Mr. Joseph Featherstone, of Springfield-on-the-Credit, was a first prize winner, while in the Yorkshires that gentleman and Mr. J. E. Brethour, Burford, had the field pretty much to themselves. In the Tamworth classes Messrs. John Bell, of Amber, and James C. Velt, of Thedford, took the lion's share of the prizes.

POULTRY FOOD

ECC PRODUCER, GROUND BEEF SCRAPS, CRANULATED BONE, ANIMAL MEAL, BONE FLOUR, OYSTER SHELLS.

SEND FOR PRICES TO W. A. FREEMAN, HAMILTON, ONT. 343-1f-om.

Champion Dairy Herd of Ayrshires at various government tests. Prize winners at the World's Columbian Exposition, Chicago. Write R. ROBERTSON, Howick, Que. 345-y-om.

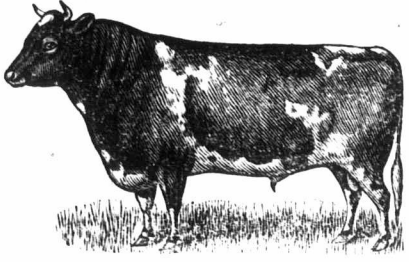
PRIZE-WINNING AYRSHIRES FOR SALE

GURTA 4th (118)

Mine is one of the largest and most successful show herds in Canada. They are finely bred and of great individual merit. Bulls, heifers and cows always on hand for sale; also a few good Leicester sheep. Correspondence solicited. Visits welcome. Address THOMAS GUY, Sydenham Farm, Oshawa, Ont. 339-2-y-om.

ADVERTISE IN THE FARMER'S ADVOCATE

DOMINION PRIZE HERD OF AYRSHIRES

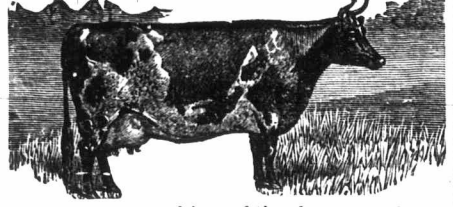


We have the oldest established, largest and best herd of Ayrshires in Canada. Choice young stock for sale at liberal prices. Satisfaction guaranteed. JAMES DRUMMOND & SONS, Petite Cote, Montreal, P.Q. 332-3-om

THE MAPLE CLIFF STOCK FARM.

Breeders of AYRSHIRE CATTLE. A grand litter of young BERKSHIRE Pigs for sale. R. REID & CO., Hintonburg, Ont. mile from Ottawa. 324-2-y-om

NOW IN QUARANTINE



Royal-bred Ayrshires of the deepest milking and prize record strains traceable back and up to date from Scotland's noted breeders. A fuller milking and other records will be furnished by catalogue to those wishing to improve their stock. Limited number of calves for sale after January, 1894. Maple Grove Ayrshire Stock Farm, Lyn, Ont., eight miles from Brockville, Ont. line G. T. R. R. G. STEACY, Importer and Breeder Ayrshires. 340

Prize-Winning AYRSHIRES FOR SALE.



I have at present one of the largest and best herds in Ontario, which has been very successful in the prize ring. They are deep milkers and of a large size. Bulls, cows and heifers for sale always on hand. JAS. McCORMICK & SON, ROCKTON, ONT. 344-2-y-om

Ingleside :-: Herefords.

Herd headed by the Medal Bull of Canada, Young Tushingham 2nd (32388). All stock registered and from prize-winners, combining the desirable blood of HORACE.

ANXIETY THE GROVE 3rd, BREDWARDINE. Choice young stock of the above strains for sale at reasonable prices.

IMPORTED CLYDESDALES. Prince of Wales and Darnley strains. Saddle horses and stylish drivers for sale. Station H. D. SMITH, two miles, G.T.R. Ingleside Farm, COMPTON, Que. 342-2-y-om

JERSEYHURST FARM, LOCUST HILL, Ont. ROBERT REESOR, importer and breeder of A. J. C. C. Jerseys of the choicest breeding, with the bull Jay St. Lambert 32813 at the head of the herd. Stock of all ages on hand and for sale. 340-2-y-om

GLEN ROUGE JERSEYS

WM. ROLPH, Glen Rouge Farm, Markham, Ont., offers for sale Jerseys of all ages from his famous herd. The world-renowned St. Lambert blood a specialty. Also registered Clydesdale Horses. 343-y-om

ABERDEEN - ANGUS CATTLE.

Prize winners from the World's Fair. Dr. Craik's show herd, now in quarantine at Sarnia, contains animals of all ages, of choicest breeding and individual merit. There are Scotch Fries, Prizes of Aberdeen, Blackbirds, Lady Fanny's and Kinochry Favorites. Catalogues and prices from JAMES KESSACK, or DR. CRAIK, 344-4-om AT QUARANTINE. MONTREAL.

GUERNSEYS!

This is the Dairy breed for ordinary farmers. Large, vigorous and hardy, giving plenty of milk. The bulls stamp these characteristics strongly on grades. Imported Bull Beaufit, son of Vice-Pros, Morton's famous butter cow (No. 1000) 14th, heads the herd. A few choice bulls and heifers for sale. Address: SYDNEY FISHER, 341-3-om Alva Farm, Knowlton, P.Q.

SHROPSHIRE AND SHORTHORNS.

Importing rams and ewes by Imp. Thomas and lambs by Imp. Beadburn ram. Both rams were first prize winners in England and Scotland. Also bulls and heifers of choice breeding and quality. W. G. PETTIT, 342-3-om Freeman P.O., Burlington Stn., G.T.R.

GREAT SALE OF ABOUT 100 HORSES

CHOICE STOCK AT THE WESTERN FAIR STABLES, LONDON, ONT., ON TUESDAY AND WEDNESDAY, OCT. 24th and 25th

STALLIONS.—Imported Cleveland Bay Coach Stallion DANDY DICK (809, foaled 1886; bred by J. E. Bedlington Slights, Whitby, Eng.; sired by Newton 246; first dam by W. Conder; 333 granddam, Folx 106; registered in Vol. IV., page 25, Cleveland Bay Stud Book. MIKE SCOTT; race record 2:23 1/2; registered in Vol. IV., page 25, Cleveland Bay Stud Book. MIKE SCOTT; race record 2:23 1/2; registered in Vol. IV., page 25, Cleveland Bay Stud Book. MIKE SCOTT; race record 2:23 1/2; registered in Vol. IV., page 25, Cleveland Bay Stud Book.

THOROUGHBREDS.—MAGGIE BRUCE, ch. m.; foaled 1883; by Bill Bruce, by Glen Athol; first dam, Tolima; bred to Cortez. MIDDLEMISS, ch. f.; foaled 1882; by Dandie Dimont; first dam, Maggie Bruce, by Bill Bruce. Chestnut Filly; foaled 1886; by Cortez; first dam, Maggie Bruce, by Bill Bruce. LADY LUCY, br. m.; foaled 1882; by Imp. Kyrl Daly; first dam, Endeavor, by Inquirer; bred to Cortez. LOT DAILY, ch. m.; foaled 1880; by Imp. Newcourt; first dam, Lady Lucy, by Imp. Kyrl Daly. ROSA DALY, bl. f.; foaled 1891; by Kedar Kan; first dam, Lady Lucy, by Imp. Kyrl Daly. Chestnut Filly; foaled 1893; by Cortez; first dam, Lady Lucy, by Imp. Kyrl Daly. ALBERTA, br. m.; foaled 1889; by Imp. Albert; first dam, Lady Lucy, by Imp. Kyrl Daly. MAY BRANCO, ch. m.; foaled 1889; by Imp. Albert; first dam, Blanch Chapman, by Rook MIPINDI; bred to Cortez. CLEOPATRA, ch. m.; foaled 1882; by Judge Curtis; first dam, Tolima, by Imp. Glen Athol; bred to Dandie Dimont. KITESTRIG, bl. m.; foaled 1887; by Imp. Strachino; first dam, Curtolina, by Judge Curtis; bred to Cortez. BROWN FILLY; foaled 1893; by Raleigh II.; first dam, Kitestring, by Imp. Strachino. CORIANDER, ch. m.; foaled 1890; by Imp. Newcourt; first dam, Curtolina, by Judge Curtis. CORA, b. f.; foaled 1883; by Raleigh II.; first dam, Curtolina, by Judge Curtis. STRATHLENE, br. m.; foaled 1886; by Imp. Strachino; first dam, Tolima, by Imp. Glen Athol; bred to Dandie Dimont. FETTER, br. g.; foaled 1892; by Fred R.; first dam, Strathlene, by Imp. Strachino. BAY COLT; foaled 1893; by Raleigh II.; first dam, Strathlene, by Imp. Strachino. COUNTESS, ch. m.; foaled 1893; by Imp. Newcourt; first dam, Tolima, by Imp. Glen Athol; bred to Cortez.

TROTTER STOCK.—BOLT, chestnut mare; foaled 1871; by Royal Revenge; first dam, the dam of Empress, 2:30; bred to Gimerack. HIGHLAND CARRIE, bay mare; foaled 1878; sired by Highland; dam, the dam of Empress, 2:30; bred to Catalogue, the son of Nutmont. ALICE G., bay mare; foaled 1884; by Albion 15195; first dam, Katie G., by Royal Revenge; bred to superior. QUEEN, chestnut mare, aged; by Toronto Chief, Jr.; she is dam of Andy C. 2:35; trial, 2:26; bred to Gimerack. ANNIE S., bay filly; foaled 1890; by Winfield Scott; first dam, Maud Richards, by Albion 15195; bred to Catalogue, son of Nutmont. ALICE EDSELL, bay mare, five years; by Edsall Star, sire of Silver Star, 2:16; first dam by Highland. GRAY MACK, gray gelding, four years; by Winfield Scott; first dam by Albion. DR. S., bay gelding, four years; by Superior; first dam, Sarah Scott, by Winfield Scott. GRAY HIRD, gray filly, three years; by Winfield Scott; first dam, Fanny, by Highland. NANCY SCOTT, gray filly, three years; by Winfield Scott; first dam, Highland Carrie, by Highland. FLASH, gray filly, two years; by Winfield Scott; first dam by Middlesex.

TERMS.—Cash; but time will be given to responsible parties at seven per cent. per annum on giving joint notes for the breeding stock owned by the undersigned. No postponement on account of bad weather. Catalogues on application. N.B.—On Wednesday, October 25th, second day of sale, there will also be offered a number of Imported Shropshire Ewes; also this year's lambs and three breeding rams, all of which have registered pedigrees. 341-

T. D. HODGENS, London, Ontario.

NONE BUT THE VERY BEST ARE KEPT AT ISALEIGH GRANGE.

This is what we claim and our customers endorse. GUERNSEYS, SHROPSHIRE AND IMPROVED LARGE YORKSHIRES. Seventy-five beautiful ewes in lamb to our imported rams, winners at England's greatest shows. In Yorkshires we imported last year the cream of the English winners at the Royal, the Liverpool and Manchester, and the Royal Cornwall and other large shows, including the first-prize boar at the Royal. Do not forget that like produces like, and send in your orders for young pigs early. Address, 333-y-om J. Y. ORMSBY, Manager Isaleigh Grange Farm, Danville, P.Q.

THE - GLEN - STOCK - FARM. SHROPSHIRE, AYRSHIRE & LARGE ENGLISH BERKSHIRES. We have a few good Ayrshire bull calves, 150 Shropshires, and also a choice lot of Berkshires, aged from 2 months upwards, for sale at reasonable prices. Visitors welcome. Write to Whiteside Bros., 333-2-y-om INNERKIP, ONT.

SHROPSHIRE - FOR - SALE

My whole flock of 60 head of Imported Rams and Ewes, a few home-bred Shearling Rams, and a choice lot of lambs of both sexes. Also a choice lot of young Yorkshire Pigs. T. H. MEDCRAFT, Sparta, Ont. 343-y-om

THE - GLEN - STOCK - FARM.

A grand lot of imp. ewes and their produce of this and last season. Also choice Chester White Pigs from prize-winning stock. W. E. WRIGHT, Glanworth, Ont. 338-2-y-om

1881 - SHROPSHIRE - 1881

My flock is established since 1881. All my ewes are imported and selected in person from the most noted English flocks. A choice lot of shearlings and lambs sired by a Bradburn ram. Write for prices to JAMES COOPER, 338-2-y-om Kippen, Ont.

Farnham Farm Oxford-Downs

Importations for 1893 arrived Aug. 4, and are a grand lot. Won at Detroit International, 1892. Mutton prize for the ten best sheep, over all breeds. Royal winning rams used in flock. Imported and Canadian-bred Rams and Ewes for sale reasonable. HENRY ARKELL, Guelph, G. T. R., Telegraph Office, Guelph. 341-2-3-om Arkell, C. P. R.

DORSET HORN AND SHROPSHIRE SHEEP, Jersey and Holstein Cattle, SHETLAND PONIES, CHESTER PIGS.

ALL THOROUGHBRED. JOSEPH STRATFORD, G. T. R., Brantford, Ont. 325-2-y-om

IMPROVED LARGE YORKSHIRE PIGS

Thirty-five choice Breeding sows from the best English breeders. Young stock of all ages, stock supplied for exhibition purposes, registered and guaranteed to be a desirable stock. Personal inspection need to be a desideratum. Personal inspection invited. J. E. BRETHOUR, Brantford, Ont. 325-y-om

W. S. HAWKSHAW, Glanworth Post Office, Ont., 7 miles south of London. 326-y-om

IMPORTED SHROPSHIRE

My stock was selected by myself, and consists of Shearling Ewes and Ewe Lambs from the leading flocks of England, and of the highest quality and breeding. Stock of all ages for sale. C. W. GURNEY, Paris, Ontario. 327-y-om

SHROPSHIRE.

A fine selection of Shearling Rams and Ewes by Royal Uffing (on a Ram and Ewe Lambs from imported ewes and sired by Royal Marquis, 170 head to select from. Address: J. & J. SMITH, Paris, Ont. 331-y-om

ISRAEL CRESSMAN, New Dundee, Ont.

Importer and breeder of Large English Berkshires. Young Hogs always on hand; got by imported stock. 328-y-om

H. J. DAVIS, Woodstock, Ont.

Breeder of High-class Large Berkshire and Imp. Large White Yorkshire Swine, short-horn Cattle. A grand lot of young pigs ready for shipment of both breeds; also boars fit for service from prize-winning stock. Stock shipped to order. Satisfaction guaranteed. Young Bull generally on hand. 332-y-om

LARGEST SHEEP EXPORTER.

1272 PEDIGREE SHEEP, including many Winners of all breeds, landed at Quebec without loss, July 26th, 92, by E. GOODWIN PREECE

Live Stock Exporter, Shrewsbury, Eng.,

Who has thorough knowledge of all the best British stocks, herds and studs; great experience in shipping, and the privilege of obtaining choicest specimens of any breed for Show and Breeding. American Buyers supplied with SELECTED STOCK AT THE LOWEST RATES. Those visiting England conducted to inspect the leading stocks to compare merits and prices before buying. Also assisted in selecting and shipping. FREE OF CHARGE (a per cent. comm. paid by seller). Flock-book certificate and all documents supplied. Highest references from leading American Importers supplied. 1889, '90, '91, '92. All buyers should communicate. Information free. 340-2-f-om

To Stockmen & Breeders.

LITTLE'S PATENT: FLUID NON-POISONOUS SHEEP DIP AND CATTLE WASH.

For the destruction of Ticks, Lice, Mange and all Insects upon Sheep, Horses, Cattle, Pigs, Dogs, etc. Superior to Carbolic Acid for Ulcers, Wounds, Sores, etc. Removes Scurf, Roughness and Irritation of the Skin, making the coat soft, glossy and healthy.

The following letter from the Hon. John Dryden, Minister of Agriculture, should be read and carefully noted by all persons interested in Live Stock: "MAPLE SHADE" HERDS AND FLOCKS. BROOKLIN, ONT., Sept. 4th, 1890.

DEAR SIR,—I cannot afford to be without your "Little's Sheep Dip and Cattle Wash." It is not merely useful for Sheep, but it is invaluable as a wash for Cattle, etc. It has proved the surest destroyer of lice, with which so many of our stables are infested, I have ever tried; it is also an effectual remedy for foul in the feet of Cattle. I can heartily recommend it to all farmers and breeders. JOHN DRYDEN.

Seventeen Gold, Silver and other Prize Medals have been awarded to "Little's Patent Fluid Dip" in all parts of the world. Sold in large tins at \$1.00. Special terms to Breeders, Ranchmen and others requiring large quantities. Ask your nearest druggist to obtain it for you; or write for it, with pamphlets, etc., to ROBERT WIGHTMAN, DRUGGIST, OWEN SOUND, ONT.

Sole Agent for the Dominion. 330-2-y-om

YORKSHIRE PIGS

Of the best type and breeding. Pairs not akin for sale at all seasons. J. M. HURLEY & SON, Belleville, Ont. Box 142. 341-y-om

J. G. MAIR, Howick, P.Q.

BREEDER AND IMPORTER OF IMPROVED LARGE YORKSHIRES. I am breeding from nothing but stock imported from the well-known herd of Saunders Spencer. At Montreal Exhibition, young stock of my breeding took all the highest honors. Orders now booked for fall litters. 342-2-f-om

C. R. DECKER, Chesterfield, Ont.

Has for sale a number of first-class Berkshire Boars ready for service; also sows six months old and younger stock. All are got by first-class boars, chiefly imported. Customers can be supplied with pairs not related. Write for prices, or come and see stock. Bright Station, G.T.R. 339-2-y-om

BERKSHIRES, COTSWOLDS JERSEYS.



Young stock of both sexes and of various ages for sale. Show Rams and Ewes, Tam Lambs and Ewe Lambs. Come and see, or address: J. C. SNELL, 332-y-om EDMONTON, ONT.

ISRAEL CRESSMAN, New Dundee, Ont.

Importer and breeder of Large English Berkshires. Young Hogs always on hand; got by imported stock. 328-y-om

H. J. DAVIS, Woodstock, Ont.

Breeder of High-class Large Berkshire and Imp. Large White Yorkshire Swine, short-horn Cattle. A grand lot of young pigs ready for shipment of both breeds; also boars fit for service from prize-winning stock. Stock shipped to order. Satisfaction guaranteed. Young Bull generally on hand. 332-y-om

ISALEIGH GRANGE FARM
Danville, P. Q.

SPECIAL OFFERING. Four grand young Guernsey Bulls—one two-year old, one yearling and two calves—all winners at the largest shows in Canada. Write quick and get prices.
IMPROVED LARGE YORKSHIRES. Orders booked now for fall pigs. We have a grand lot of sows due to farrow in October & November.
SHROPSHIRE.—A few ram lambs left; all the ewe lambs sold. Also a few choice **COLLIE PUPS**: Dogs, \$10 each; Bitches, \$7, from prize stock. Address,
J. V. ORMSBY, Manager.

STOCK GOSSIP.

In writing to advertisers please mention the Farmer's Advocate.

J. C. Snell offers Berkshires, Cotswolds and Jerseys for sale. See his advertisement in this issue.

Mr. C. R. Decker, Chesterfield, has changed his advertisement in this issue. He now offers for sale young sows and boars, many of which are got by imported boars. Pairs not related are offered. Write him for particulars.

We have made a change in Mr. Hawkshaw's advertisement this month. We are pleased to see he has made larger sales than ever for this time of year, and this, in spite of the low price of wool on the other side, speaks volumes for the high class of sheep he imports.

In this issue E. Gaunt & Sons, St. Helens, Ont., offer for sale a capital lot of Leicester sheep, including yearling rams and yearling ewes, ram lambs and ewe lambs. Their sheep are very good. The flock shown by these gentlemen was one of the best brought out this year in Canada or the United States.

Mr. J. V. Ormsby, manager of the Isaleigh Grange Stock Farm, writes us that he has sold to Mr. Luke Heaney, Denfield Lake, Que., their choice shearing ram, which was imported from the flock of Mr. John Thonger, Salop, Eng. This sheep secured second prize at both Montreal and Ottawa, the only places shown, and promises to make a grand stock ram. He has also sold to Mr. Jas. Robb, of Kayabazua, Que., a very choice ewe lamb. Both these gentlemen are pioneers in the fine stock industry in their county, and deserve great credit for their enterprise.

In a recent letter from Mr. T. H. Medcraft, Sparta, Ont., he informs us that he wishes to dispose of a number of imported Shropshire ewes and ram lambs, their produce this season. From what we have heard the ram lambs are a particularly choice lot: The ewes were selected by Mr. Medcraft two years since, and are from the flock of Mr. H. J. Shedon, Brilles House, Warwickshire, England. He also has a number of choice Yorkshires on hand, which are bred from the importation made at the same date that contained several prize-winners in England that season. Among them he now wishes to sell a number of choice young sows, which are old enough for breeding. For further particulars look up his advertisement in our last issue.

NOTICES.

Our representative has many kind words for the farmers in the vicinity of Vankleek Hill, Ont., for the kindness and hospitality shown him during his trip down east. We are also pleased to note that our readers carried off many red and blue earls for stock and roots at the exhibitions at both Lachute and the Hill. Readers of the Advocate always win.

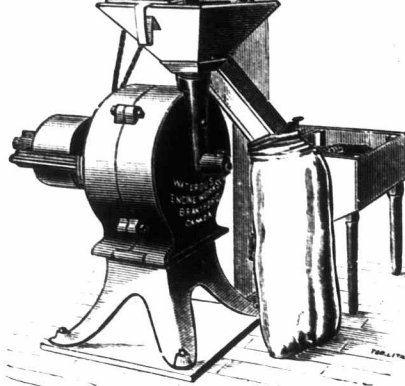
Besides taking prizes at the World's Fair, Canadians have been winning renown in other places. Our contemporary, the Country Gentleman, in a report of the show at Syracuse, has the following:—"The most pleasing part of the show-room was the fine exhibit made of polish, made by Messrs. F. Burns & Co., of Hillsburgh, Canada. Some way or other it takes our Canadian cousins to get the polish with crests as large as an ordinary cup."

Canada has not only the honor of having the biggest cheese, but also the biggest apple. Arkansas has formerly held this proud position, but had to yield the palm to British Columbia. This wonderful apple is a Red Belleheimer, weighs twenty-four and a half ounces, and measures fifteen and a half inches in circumference. It was grown by Mr. A. Clemis, Spruce's Bridge, B. C. In addition to this specimen, Mr. Clemis has on exhibition a collection of apples, all of which are of large size. Since writing the above we have heard that Idaho has come forward with a still larger apple, but cannot vouch for the truth of this statement.

Mr. L. W. Fortier, head of the immigration department, reports that though the total number of immigrants coming into the country is less than last year, the quality is better, as they are mostly men with a certain amount of means, and a large number of them are from the American side. The latest returns show that up to the end of August of this year three hundred and eighty homestead entries have been made in Manitoba and the Northwest by Americans, and they are still coming. Last month's returns will show a further increase. The entries are all for free grant lands, and do not by any means represent the total number leaving the state, as many Americans purchase land direct from the C. P. R. and other land companies.

In another column may be seen the auction sale of farm and farm stock by Mrs. Isabel Glenn, Glanworth, Ont., who is acting as administratrix to the estate of her late brother, Mr. William Glenn. The farm contains one hundred and fifty acres of choice land, in fine condition, as feeding cattle for the export trade has been carried on for the last twenty years. The farm is well fenced and the drained, and the buildings are quite up to the requirements of the farm. The situation is a good one, being close to railway station and directly between London and St. Thomas. The stock consists of registered Clydesdale brood mare and her foal at foot; standard bred mare and two of her colts, by sardine snot; also a choice lot of ear pigs and farm horses. There is also a flock of registered ton-wold sheep, the whole forming an attractive lot, and as the estate must be sold out purchasers are assured that every thing will be sold.

THE IMPROVED STANDARD CHOPPER USES BEST FRENCH BUHR STONES



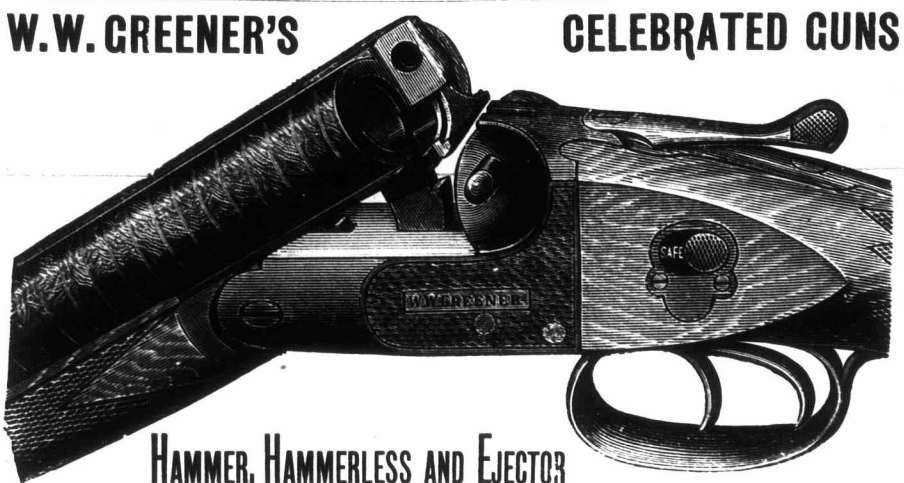
A 12x16 SHED

A Standard Buhr Stone Chopping Mill and your Threshing Engine, is all that is required to start a chopping business this Winter.
RUN 1, 2, 3, OR MORE DAYS per week, according to your trade.

Farmers Prefer Stones to Rolls or Iron Plates
150 Bags, \$9.00 to \$12.00, is a fair day's work.

Write for Circulars.
WATEROUS,
Brantford, Canada. 311-a-o

W. W. GREENER'S CELEBRATED GUNS



HAMMER, HAMMERLESS AND EJECTOR

Are the best finished and finest shooting guns in the world.

Write for Catalogue.
W. W. GREENER, Birmingham, England.

337-L-on

A Gentleman

Who formerly resided in Connecticut, but who now resides in Honolulu, writes: "For 20 years past, my wife and I have used Ayer's Hair Vigor, and we attribute to it the dark hair which she and I now have, while hundreds of our acquaintances, ten or a dozen years younger than we, are either gray-headed, white, or bald. When asked how our hair has retained its color and fullness, we reply, 'By the use of Ayer's Hair Vigor—nothing else.'"



"In 1868, my affianced was nearly bald, and the hair kept falling out every day. I induced her to use Ayer's Hair Vigor, and very soon, it not only checked any further loss of hair, but produced an entirely new growth, which has remained luxuriant and glossy to this day. I can recommend this preparation to all in need of a genuine hair-restorer. It is all that it is claimed to be."—Antonio Alarrun, Bastrop, Tex.

AYER'S HAIR VIGOR

S. COXWORTH, CLAREMONT, ONT.,
Breeder and Importer of Berkshire Hogs.

Young stock of different ages constantly on hand. Pairs supplied not akin. A few good boars of March and April litters by Hugh Clear Prince, Intend exhibiting my stock at Montreal, Toronto and Ottawa, and would be pleased to meet customers. Station and Telegraph Office—CLAREMONT, O. P. R. 332-y-on

CANADIAN BLACK BESS HERD

Of Registered Poland-Chinas
A choice lot of young pigs for sale. Elected 1st, the great ribbon winner at the head of herd, assisted by Rht's Chief, who weighs 100 pounds. Correspondence or inspection of herd solicited. J. J. PAYNE, Chatham, Ont. 332-y-on

A NEW DEPARTURE



A Wind Engine that never requires oiling. Guaranteed as durable without oil as others requiring it. Truly a "gem," and worth its weight in gold. The Gem Steel Tower combines beauty, strength, durability and simplicity. It has stood the storms because it is made on scientific principles. It is not a cheap tower, though it is economy in the end, because of its lasting qualities. We also manufacture the old reliable Halliday Standard Pumping & Geared Windmills, etc., etc. Send for large illustrated Catalogue.

ONTARIO PUMP CO. LD., (IN LIQ.),
Toronto, Ontario.
311-ff-on

THE MARKHAM HERD

Farm at Locust Hill Station, C.P.R. Registered Improved Large Yorkshire, Berkshire and Suffolk pigs. As we do not intend to exhibit, we will now sell a choice lot of show pigs of each breed.
311-y-on JOHN PIKE & SONS.

THE OXFORD HERD OF REGISTERED POLAND CHINAS

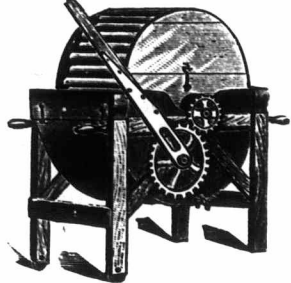
We have spared no expense in selecting the choicest individuals from the best American and Canadian herds.

TWO IMPORTED BOARS IN USE.
W. & H. JONES,
Mount Elgin P. O.
Telephone connection. 332-y-on

TAMWORTH SWINE, SHROPSHIRE, CLYDESDALES AND SHORTHORNS.

Can furnish a number of choice young pigs in unrelated pairs, bred from the best stock procurable in England. Pigs created suitable for long journeys. A few nice Shropshires for sale, bred from stock imported by such importers as John Miller & Sons, Brougham; R. Cailliet, Tyron, etc. A few of the best Clydesdales on the continent. The Granite City and Eastfield Chief at head of stud; also Shorthorns of choice breeding. Correspondence solicited. Visitors welcome. Milken Farm (Midland Division), G.T.R.
JOHN BELL, Clydesdale Farm, Amber, Ont. 332-y-on

MANITOBA



WASHER!

WASHING : MADE : EASY.
MR. T. McCROSSAN'S WASHER A WONDERFUL INVENTION—EXHIBITION YESTERDAY AFTERNOON.

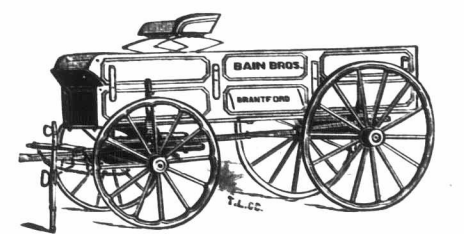
A number of people took the opportunity of witnessing an exhibition of Mr. McCrossan's Washer yesterday afternoon in the Bijou Opera House. The fair sex were well represented. They seemed interested in the working of the machine. It has been very much improved in appearance and in matters of detail since the last trial. The cylinder on which the clothes are put in is about thirty inches in diameter and fourteen inches wide. By bars, placed in the interior, three cavities are made, and as it revolves the clothes are carried to the top, when they fall down in the next cell. Each time the cylinder makes a revolution the clothes make three plunges. It is worked by a lever which has connection with a cog wheel, and so easy is the work that a small boy can turn it with one hand with ease.

The exhibition commenced at three o'clock. Twenty pieces of white clothes, including sheets, towels, cuffs and collars were put in, and after the machine had been in motion seven and a half minutes they were put through a ringer. Then a dozen pieces of overalls and smocks of the dirtiest kind, such as used by firemen, were put in. The cylinder was put in motion and the dirt fairly rolled out. The water had to be changed several times. After eleven minutes the garments were taken out and pronounced by the spectators to be being satisfactorily washed. To give it a fair trial the dirty clothes should have been soaked. Mr. McCrossan's machine turns work into play.

Winnipeg Tribune, Nov. 12, 1892.
MCCROSSAN & CO.,
566 Main Street, WINNIPEG, MAN.
42-y-on

FARM : WAGONS

IT IS THE CELEBRATED



Brantford Bain

WAGON

THAT IS GIVING UNIVERSAL SATISFACTION TO THOUSANDS WHO ARE USING THEM.

Special Features EXTRA FINISH, LIGHT RUNNING, GREAT STRENGTH, AND DURABILITY.

- OUR OTHER LINES:
Heavy Log Trucks,
Farm Trucks,
Celebrated "Moses" Farm Truck,
One-Horse Wagons,
Farm Dumps, Carts, Etc.

Correspondence solicited. Address to
BAIN BROS. MFG. CO., Ltd.
326-2-y-on BRANTFORD, ONT.

9 CORDS IN 10 HOURS



BY ONE MAN. Send for free illustrated catalogue, showing testimonials from thousands who have saved from 5 to 8 cords daily. It saws down trees, folds like a pocket knife, weighs only 41 lbs., easily carried on shoulder. One man can saw more timber with it than two men with a cross-cut saw. 72,000 in use. We also make larger sized machine to carry 7 foot saw. No duty to pay, we manufacture in Canada. First order secures the agency. **FOLDING SAWING MACHINE CO., 241 to 249 S. Jefferson Street, Chicago, Ill.**

FARMERS REQUIRING

Stack Covers, or Grain Covers. Binder Covers, Horse or Wagon Covers. : : :
Tarpaulins, etc., or anything in canvas line, can be accommodated by addressing
J. TOBIN, 257 Queen St., Ottawa.
All covers of my make are guaranteed thoroughly water proof and of the best quality at the lowest prices. Send for samples. Hundreds of testimonials. 311-2-f-on

HATCH CHICKENS BY STEAM

With the Improved Excelsior Incubator.
Simple, Perfect, Satisfying.
Thousands in successful operation. Guaranteed to hatch a larger percentage of fertile eggs at less cost than any other Hatcher. Lowest priced first-class Hatcher made.
GEO. H. STAHL, Quincy, Ill.

Early Spring Flowering For FALL Planting.
BULBS Choice Hyacinths, Tulips, Daffodils, Crocus, etc. The best bulbs at the lowest prices. Catalogue free. **ELLWANGER & BARRY**, Mt. Hope Nurseries, Rochester, N. Y.
 344-a-o

CRADLE CHURN.
 PAT. NOV. 28, 1892.

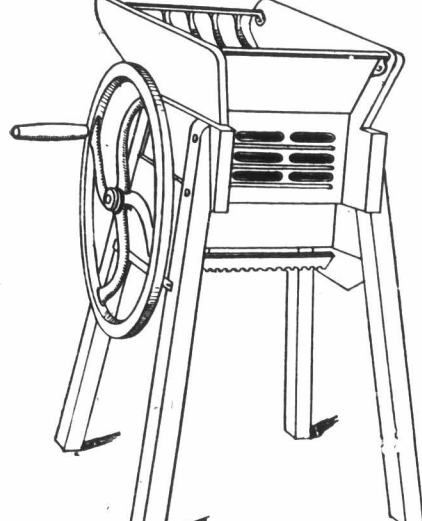
 It is a labor-saver in every respect. The easiest to clean, the best to use, and the most efficient. It allows a free circulation of air while churning, and churns with half the labor required by any revolving churn.

Address: B. R. HAMILTON & CO., Neepawa, Man., or to the WATSON MANUFACTURING CO., Afr. Ont. 337-y-o

DRS. ANDERSON & BATES, Surgeons of the Eye, Ear, Throat & Nose, 34 North James St., Hamilton, and 5 College St., Toronto. Sole agents for Prof. North's Earphone for the incurable deaf. A large assortment of artificial eyes on hand. 284-2-y

The High Speed Family Knitter
 Will knit 10 pairs socks per day. Will do all work any plain circular knitting machine will do, from homespun or factory yarn. The most practical family knitter on the market. A child can operate it. Strong, Durable, Simple, Rapid. We guarantee every machine to do good work. Beware of imitations. Agents wanted. Write for particulars.
 Dundas Knitting Machine Co., Dundas, Ontario.
 341-y-om

STOCK RAISERS!


 WE MANUFACTURE A FULL LINE OF **ROOT PULPERS AND SLICERS** (Single or Combined, and for Hand or Power.)
 SEND FOR DESCRIPTION.
DAVID MAXWELL & SONS, St. Marys, Ont. Mention FARMER'S ADVOCATE. 341-g-o

TRY OUR NEW!
STEEL GANG CHEESE PRESS
 All kinds of Cheese and Butter Factories furnished with the latest machinery.
THE "MONARCH"
ENSILAGE : CUTTER
 (Carries any length, angle or direct.)
 Full line of Fodder Cutting Machinery, Horse Powers, Grinders, Root Pulpers and Agricultural Implements. Write for prices. Satisfaction guaranteed. Address:
RICHARDSON & WEBSTER, 334-2-y-o, ST. MARY'S, ONT.


 Full line of Fodder Cutting Machinery, Horse Powers, Grinders, Root Pulpers and Agricultural Implements. Write for prices. Satisfaction guaranteed. Address:
RICHARDSON & WEBSTER, 334-2-y-o, ST. MARY'S, ONT.

HOW SHE MADE HER MONEY.

Mrs. E. M. Jones' New Book, "DAIRYING FOR PROFIT," Tells the Whole Story.
 So anyone reading it can do the same, and secure a comfortable independence. 60,000 COPIES SOLD ALREADY! Orders still pouring in. Price, 30c. by mail: four copies to one address by mail, \$1.
ROBT. Y. BROWN, Agent.
 Box 324 Brockville, Ontario, Canada.

FENCING AGAINST SNOWDRIFTS

Extracts from Letters Received by us, giving Experience with our Fence when Buried under Snowdrifts:

One of our claims for the fence is that it will not cause drifts, as a rail or wire and picket fence will do. This is no small advantage in a country where road-breaking is the principal occupation in winter. Any of the other wire fences can make the same claim, but there is this difference in places where, owing to the lay of the land, drifts are sure to abound, then comes the advantage of the Coiled Spring. It is a well-known fact that when the snow begins to melt a change of weather will freeze it to the fence, and as it settles the fence usually goes with it. There is no exception in our case, but when the snow softens again ours will come up smiling to its proper position, while barbed wire and all kinds of netting, and in fact every other kind of wire fence, will, at least, show signs of distress, if they do not surrender unconditionally. This feature should, and does, count strongly in our favor in every part of the country subject to such heavy snowfalls.

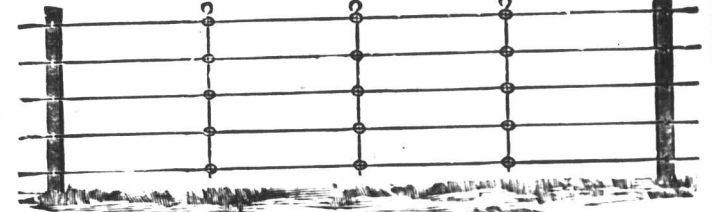
"This winter has shown its merits nicely along highways. We have had lots of snow and it drifted badly, filling the lanes and highways full where board fence, or combination fence of three boards and two barbed wires were used; but where the Page was used there was no more snow than there was in the open fields, and travel was just as easy on the road as in the field; but with the fences just mentioned the roads had to be abandoned and fences pulled down in many places, and where there were ditches or streams to cross, the road had to be shovelled to the bridges and then out into the fields again. And now the snow is gone from the fields and there is no frost in the ground; the snow fell before the ground froze, and it has been well covered since then till now, and the ground is soft and wet, so that travel makes sad work in the fields, and freezing by night, thus keeping the fields in bad condition long after the snow in the fields has gone. The roads are in bad plight, and will remain so till the drifts are gone. The Page Fence has been an eye-opener this winter. It will pay to put the Page along the highways every time, and if the farmers know their own interest it will pay them to use it around their plow land to avoid late drifts."
 JOHN MARCH.

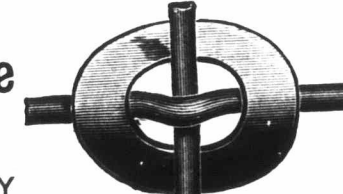
"After the big snow storm last February there was only five wires in sight, and a drift hard enough to walk on over the top wire near one end, and afterward there was rain and a freeze, and the drift became ice and bore down on the fence till it drew one of the stay wires through two staples driven hard in red oak posts, but it did not bend or damage the fence any, for now the snow is gone and I have tightened up the stay wire and the fence is all right."
 BYRON P. RUGGLES.

"I put up a few rods of 19-58 along a creek bottom a few miles from here. When the floods came this spring it spread all over the bottom. The fence became a dam, and tons upon tons of ice floated against it, damming the water above. The ice pulled the top of the fence down until it was not more than three feet from the ground. The ice hung there until it melted off. It then straightened up, but had been so long that it was stretched and loose. I hitched my stretcher to it one day as I passed, gave it a few strokes, and it was in just as good shape as the first day I put it up. Not even a cross wire broken. Talk about your tests of Royal Bunter, Sleet, Snowdrifts, etc. Here is a test compared with which the others are as child's play. I should like to see some of the fences which claim to be 'just as good as the Page, and lots cheaper,' put to a similar test."
 JAMES E. BOYS.

SEND FOR CIRCULARS AND PRICE LISTS.

PAGE WIRE FENCE COMPANY OF ONTARIO (Ltd.),
 Walkerville, - 344-a-o - Ontario.

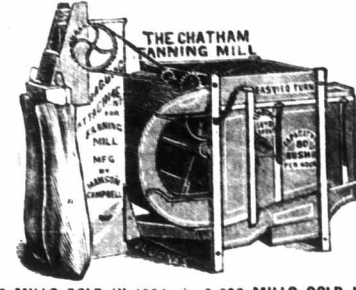
FOR STRENGTH, SAFETY, DURABILITY AND CHEAPNESS

NOTHING CAN APPROACH THE

Locked-Wire FENCE AS BUILT BY

Locked-Wire FENCE CO'Y,
 Ingersoll, - Ontario.

Apply to the above for Farm Rights and Agencies to build in any part of the Dominion. 342-a-om

ADVERTISE IN THE FARMER'S ADVOCATE.

34,000 CHATHAM MILLS NOW IN USE



More than have been sold by all the other factories in Canada put together and doubled. Over 16,000 Bagging Attachments now in use. Bagging Attachment is run with a chain belt that cannot slip. The elevator cups are also attached to endless chain belt that cannot slip nor clog. Cleaning Alsike clover and Black Eye and Marrowfat peas a special feature. The mill is fitted with screens and riddles to clean and separate all kinds of grain and seed, and is sold with or without a Bagger, but it is not wise to do without a Bagger. Satisfaction guaranteed. Send for Catalogue and prices. Sixty-five carloads sold in Ontario from January 1st to July 10th, 1893.
 335-2-c-om **MANSON CAMPBELL, Chatham, Ont.**

TORONTO FARMING
 53 KING W. COR BAL TORONTO
 ILLUSTRATIVE PURPOSES
 336-y-om

SASKATCHEWAN BUFFALO ROBES
 MANUFACTURED BY
NEWLANDS & CO.,
 Galt, Ontario.



DURABLE, WARM, HANDSOME
 (Equal in all respects to the Buffalo Skin.)
 They are thoroughly lined and trimmed; have stood rough usage for five years by farmers, livery men, doctors and others, and have given entire satisfaction.
 Patented in Canada and the United States.
 Send for Recommendations and Price Lists. 341-l-o

INDIAN GAME Cockerels for sale at from \$1.50 to \$3.00 each. This is the best known breed for improving common fowls and for the table use.
WHITE AND SILVER WYANDOTTE Cockerels at from \$1 to \$2 each; also a few Pullets at from \$1 to \$1.50 each. The Wyandottes are the best general purpose fowl. These birds are all from prize winners at Toronto and other large shows. Write to JNO. J. LENTON, Park Farm, Oshawa. 343-y-om

Trios only \$4.50!
 (Worth \$10.00).
 Choice cockerel and two fine pullets. All bred from our great prize winners. Mated not akin. For delivery September 1st. Order now and get selection from hundreds. Your money back if they don't please.
C. W. ECKARDT,
 RIDGEVILLE, ONTARIO,
 Plymouth Rock Headquarters.
 (Draw P. O. orders on Fonthill, Ontario.) 327-y-om

POULTRY - FOR - SALE
 Langshan; Buff and Partridge Cochins; Rose Comb, White and S. C. Brown Leghorns. Fowls and Chicks, all of prize-winning stock, at reasonable prices. Satisfaction guaranteed. Write **BARTLETT & GEORGE**, 52 Clarence St., London, Ontario. 343-f-om

Sweepstakes at Chicago, 1891
 B. and W. P. Rocks, W. and S. Wyandottes, W. and B. Leghorns, and Bronze Turkeys. 300 Toms and Hens, sired by 44 and 47 lb. Toms. 500 Cock's, pairs, trios and pens, mated for best results. Valuable illustrated circular, free.
F. M. MUNGER, DeKalb, Ill.
 328-2-y-om

BREEDERS' DIRECTORY.

Cards up to six line space inserted under this heading, one issue a month, \$3 per line per annum; every issue, \$5 per line. Payable in advance.

A. & G. RICE, Curries P. O., Ont., breeders of Holsteins of the best butter strains. Write for prices. 327-

ALEX. HUME, Burnbrae, Ont., breeder of heavy milking, pure and high grade Ayrshire cattle and Yorkshire pigs of good quality. 330-2-y

D. LACKWELL & McCALLUM, Martintown, Ont., breeders of registered Clydesdales, Shropshires and Yorkshires. 340-2-y

CHAMPION dairy herd of Canada. Ayrshires, three 1st prizes, Government tests for butter, quality and quantity. R. ROBERTSON, Howick, Quo. 322-2-y

DANIEL BRIMS, Athelstan, P. Q., breeder of Durham Cattle, Clydesdale Horses and Shropshire Sheep. 315-2-y

DANIEL DRUMMOND, Burnside Farm, Petite Cote, P. Q., breeder of Ayrshire cattle. 315-2-y

E. B. BALL, Lee Farm, Rock Island, Que., breeder of Standard-bred & Road Horses, Stoke Pogus St. Lambert Jerseys. 340-2-f

FRED. S. WETHERALL, Compton, P. Q., breeder of Jersey Cattle and Shropshire Sheep. 340-2-y

HILLHURST HACKNEYS.—Oldest stud in America. Purest and most fashionable strains. Aberdeen Angus Cattle, Shropshire Sheep, and Large Yorkshire Swine. M. H. COCHRANE, Hillhurst Station, Compton Co., P. Q. 330-

JAS. HUNTER, Alma, Ont., Canada, breeder and importer of Shorthorn Cattle, Clydesdale Horses and Shropshire Sheep. 322-y

JAMES I. DAVIDSON, Balsam P. O., Ont., importer and breeder of Clydesdale horses and Shorthorn cattle from the herd of A. Cruickshank, Esq., Sittyton, Scotland. Stock for sale. 326-2-y

J. D. McEWEN, Falkirk, Ont., Breeder of Border Leicester. Stock for sale. 332-f

JOHN JACKSON & SONS, Abingdon, Ontario, Importers and Breeders of Registered Southdown Sheep. 322-y

JOHN LAIDLAW, Crosslee Farm, Wilton, Grove P. O., Ont., breeder and importer of Border Leicester Sheep. Sheep for sale. Satisfaction guaranteed. 328-y

J. LEASK, Taunton, Ont., breeder of Clydesdales, Shorthorns, Shropshires and Berkshires. 343-2-y-om

JAMES STEPHEN & SONS, Brookhill Farm, Trout River, P. O., P. Q., importer and breeder of Ayrshire Cattle and Yorkshire Pigs. Young stock always on hand for sale. 315-2-y

JOS. CAIRNS, Camlachie, Ont., Breeder of Pure-bred Chester White Swine. 327-y

JOSEPH YULL, Carleton Place, P. O., Ont., breeder of Ayrshire Cattle, Shropshire Sheep, and Berkshire Swine. 31-2-y

J. P. PHIN, Breeding and Importing THE GRANGE, SHROPSHIRE SHEEP, HESPELER, Ont., a specialty. 322

LEVI SKINNER, Tyrone P. O., breeder of Shropshires and Shorthorns. Well-bred breeding stock a specialty. Satisfaction guaranteed. 322-2-y

MAPLE RIDGE SOUTHDOWNS, Guy Carr, jr., Compton Station, Quebec, also breeder of P. Rocks and Wyandottes. 340-2-y

ROBERT MARSH, Importer and Breeder of SOUTHDOWN SHEEP, Richmond Hill, Ont. 319-y

R. SANGSTER, Lancaster, Ont., breeder and importer of Scotch Shorthorns. 340-2-y

R. W. STEVENS, Lambeth, Ont., London Station, breeder of Pure-bred Registered Lincoln Sheep. Imported stock. Stock for sale. 321-2-y

SPRINGHILL STOCK FARM, Wilfred Hansel, importer and breeder of thoroughbred Clydesdales. Stock for sale. Correspondence solicited. Thorold P. O., Ont. 322-2-y

THOMAS IRVING, Montreal, breeder of Clydesdale Horses and Ayrshire Cattle. 332-2-y

T. C. McAVOY, Balsam, Ont., breeder of Clydesdales, Scotch Shorthorns, and Cotswold Sheep. Young stock of all kinds for sale. 323-2-y

T. W. HECTOR, Springfield-on-the-Credit, Ont., Importer and Breeder of Dorset Horn Sheep. The oldest flock in Canada. 331-1-y-om

W. P. McCLARY, Glenholm Farm, Compton, P. Q., breeder of Shorthorns. Young stock for sale. 340-2-y

W. H. REID, breeder of Ohio Improved Chester and Suffolk Pigs. Lockton, P. O., Ontario. All stock registered. 322-2-y

W. M. STEWART, JR., Menie Stock Yards, Seymore, Ont., breeder of Ayrshire Cattle and Berkshire Pigs. 323-2-y

W. H. BEATTIE, Wilton Grove, importer and breeder of Shropshire Sheep. A choice lot of Collie Dogs and White Holland Turkeys. 319-y

W. WHITELAW, Guelph, Ont., breeder of Shorthorn Cattle and importer and breeder of Border Leicester sheep. 319-y

W. M. SMITH, M.P., Columbus, Ont., breeder and importer of Clydesdale Horses, Shorthorn Cattle, and Cotswold Sheep. Stock for sale. Terms and prices liberal. 325-2-y

UN-NERVED, TIRED

People and invalids will find in CAMPBELL'S QUININE WINE A pleasant restorative and appetizer. Pure and wholesome, it has stood the test of years. Prepared only by K. CAMPBELL & Co., Montreal. Beware of Imitations. 334-2-y-om

ALLAN LINES SHEEP RAISING

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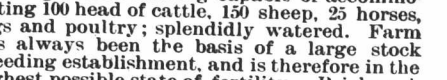


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