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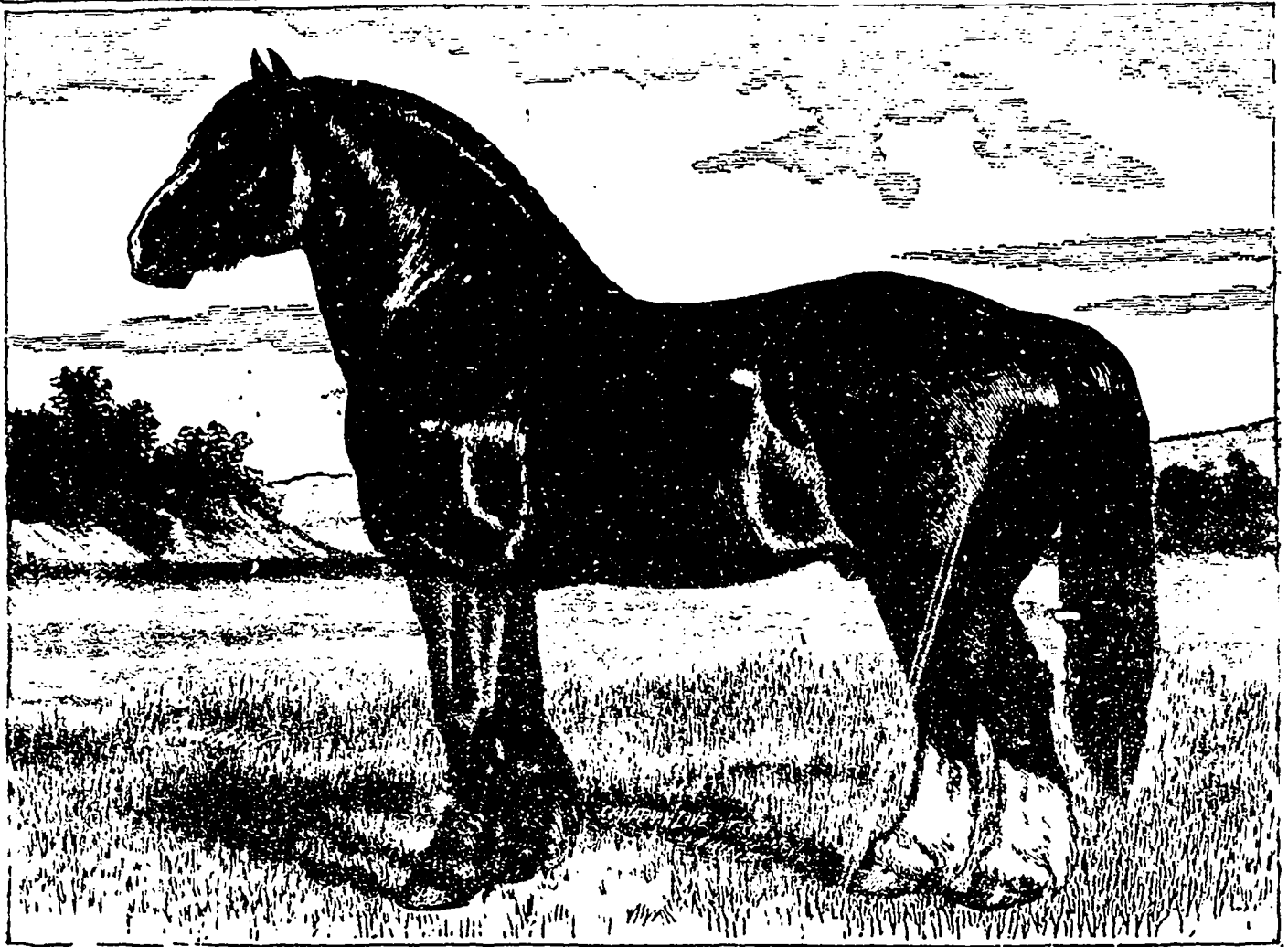
THE CANADIAN LIVE-STOCK AND FARM JOURNAL

DEVOTED TO THE INTERESTS OF THE STOCK-RAISERS AND FARMERS OF CANADA.

VOL. IV.

HAMILTON, CANADA, MARCH, 1887.

No. 2



THE IMPORTED CLYDESDALE STALLION THE MONTGOMERY (3254).

The property of Mr. Thomas Good, Richmond, Ont.

The Montgomery (3254).

This beautiful son of the "Great Macgregor" is in every respect an A1 horse and has only to be seen to be admired. In color he is a rich, dark, dapple bay, with a heavy black mane and tail, and like his sire he has a small white stripe on face, and hind legs are white to near the hocks. He has a fine pony head set gracefully on a nicely arched neck, such a neck and head as is rarely to be found on a Clydesdale, a nice sloping shoulder of good thickness, a beautiful sound body of good size carrying its thickness from shoulders to hips without any slack places, a splendid back and coupling superior, nicely rounded quarters with splendid muscle well let down to the hocks, legs broad, flat and free from grease and abundance of hair. The fore-arm is good, with broad knee and heavy, short and flat cannon bones of the best quality, and hair to satisfy the most critical observer, feet sound of medium size and the best of quality.

The Montgomery was bred by James Finlay Ross, Kirkcudbright, Scotland, the property of, (1) Wm. Montgomery, Banks of Kirkcudbright, and (2) Robt. Ness, jr., Howick, Que., who imported him in August, 1833; and he is now the property of Mr.

Thos. Good, Richmond, Ont. He was sired by "The Macgregor" (1487), he by the far famed Darnley (222); dam, Jess (1236), by Prince of Kelvin (656), by Prince of Wales (673). Grand dam, Mettle, by Gladstone (333); g. g. dam, Nanny, by Lochend Champion (448).

His sire Macgregor (1487) is regarded as one of the handsomest Clydesdales in Scotland, and is a very successful sire. One great feature of his stock is that in most cases they are marked like him. He is a great prize winner and his stock stand amongst the foremost in the prize lists of all the great exhibitions in Scotland. His g. sire Darnley (222) is one of the grand sires, a great prize winner himself and the sire of very many noted horses, amongst which are Macgregor (1487), Good Hope (1679), Top Gallant (1850), Blue Ribbon (1961), Sanquhar (2393), and others too numerous to mention here. His dam Jess (1236) is also a prize winner and is half sister to the world famed Corsewall (1420), also half sister to Wait On Me (3283), owned by Mr. John Palmer, Richmond Hill, Ont. The g. sire of Jess (1236) is the late Lawrence Drew's noted Merryton stud horse Prince of Wales (673) now owned by Mr. D. Riddell. The Montgomery's sire, g. sire, and g. g. sire Prince of Wales are

without doubt three of the greatest sires ever owned in Scotland.

The Montgomery's record as a prize winner is a remarkable one for his age. In 1884 at Montreal he was 1st as a two-year-old, also 1st and sweepstakes as the best stallion any age. In 1885 at Chateauguy he was first against all ages in a ring of six, and first as three-year-old, and sweepstakes as best of any age or breed. At the Eastern Townships' fair, held at Sherbrooke, he was first as a three-year-old, and diploma as best heavy draught stallion, also gold medal as best stallion any age. Although shown at nine different exhibitions he has never been defeated, and we may add here that his full sister gained first at the Glasgow Spring Show.

Since penning the above the sad tidings have reached us that The Montgomery (3254) is dead—another illustration of the not inconsiderable risk incurred in the ownership of first-class stock, and furnishing one more reminder of the necessity there is for a company in Canada, in which to insure valuable live stock. While the loss is very disheartening, we know Mr. Good is made of stuff that will not be daunted by any temporary reverse, as abundantly illustrated in his history.

Canadian Live-Stock & Farm Journal

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Terms, \$1.00 per Annum in Advance.

THOMAS SHAW, RIVERSIDE FARM, EDITOR.

To Subscribers.—Subscription price, \$1.00 per annum in advance. Single copies, 10 cents each; sample copies free. No names will be removed from our subscription list when in arrears and without we receive instructions to that effect. Those in arrears will be charged \$1.25.

Clubs.—Any person is at liberty to form clubs. Clubs of five copies to any address, for one year, \$4.00. Clubs of ten copies to any address, \$7.50.

To Advertisers.—Advertisements of an appropriate nature will be inserted in the JOURNAL at the following rates: For a single insertion, 18c. per line, nonpareil (12 lines makes one inch); for three months, 15 cents per line each insertion; for six months, 13c. per line each insertion; for one year, 10c. per line each insertion. Cards in Breeders' Directory, not exceeding five lines \$1.50 per line per annum. Copy of advertisements should reach us not later than the 25th of each month (earlier, if possible). If later, it may be in time for insertion, but often too late for proper classification. Transient advertisements payable in advance. No advertisement inserted less than 75c.

To Correspondents.—All communications intended for publication in the JOURNAL should reach us by the 20th of each month—sooner, if possible. We do not hold ourselves responsible for the opinions of correspondents.

Remittances may be made in registered letter at our risk. The receipt of the JOURNAL will be sufficient evidence to subscribers that their remittances have been received.

All communications to be addressed STOCK JOURNAL Co., 48 John street south, Hamilton, Ont.

HAMILTON, CANADA, MARCH, 1887.

PARTIES forwarding matter for the JOURNAL should be careful to write on only one side of the page, keeping stock notes on a separate sheet.

We take great pleasure in thanking our readers for the large number of new subscribers sent us during the past month. March is really one of the best months of the year for this work, and we hope those who have not already renewed will please do so and send in at least one new subscriber along with their renewal. See extraordinary clubbing offer for 1887, page 405, February issue.

"The greatest stumbling block to agriculturalists is a want of knowledge of their profession" So writes Mr John Airth, of Renfrew, and who shall say that this sentence is not mournfully true? And how shall this stumbling block be removed? Not by allowing them to plod on as they have been doing in the past, but by trying to show them better. Without doubt one of the best agencies for elevating them is the press, only in so many instances it fails to reach them. And those who most need its help it is most certain not to reach from their foolish prejudices as to the little value of book knowledge in farming. We hope that every reader of the JOURNAL will lend a helping hand in the work of making inroads on this class. We shall continue to write for their good as best we may, and you, we trust, shall everywhere try and persuade them to read.

THE growth of meat that will give the largest amount of profit should be the aim of those who provide meat for the shambles. To accomplish this the beasts must not be kept too long. They must be pushed along with a steady advance and then sold when first ready for what they will bring. Some years ago the aim was to produce a large beast that would bring in a large amount of money at one time, without any regard to the cost of production. But the fat stock shows have made it clear beyond the shadow of a doubt that early matured meat costs less

than that of slower growth. Fortunately the popular taste has fallen in with this view, and as a result farmers are trying to get their meat ready for the market at a much less age than formerly. That this truth, so important in its bearing on the profits of an important branch of industry in many countries, was so long in being discovered, is indeed a wonder; but no less wonderful is it that after it has been discovered, so many of the class most interested practically refuse to accept it.

SOME are of the opinion that it does not pay to keep pigs in winter—that is, that the additional expense of feed and the increased liability of pigs farrowed in the fall to go astray in winter render them so much less profitable, as compared with pigs farrowed in spring, that the margin is on the wrong side. Under no conditions can pigs be made so profitable that are farrowed in the fall for pork production as in the other case, the price of pork being equal; yet the success of the undertaking will depend much upon the conditions. If the pens are cold and damp, not roomy, ill ventilated and not well supplied with bedding, the pigs will not do well. They will certainly be kept at a loss. On the other hand, if these are all right, and the feed ration properly adjusted, they will not fail to make a good growth, especially if they have a suitable run when the weather is not too cold. With stock intended for breeding, the grand idea is to keep them in steady growth and well on their feet; but with those intended for pork, it is all-important to insure a rapid growth without sending them off their feet. If they go wrong on their feet, be not slow to use the knife, for it will not pay to keep them after. Pork raising should not be confined to the summer alone, as there is more time for caring for the pigs in winter, and sometimes spring prices are enough better to place the profit on a par with that of summer-made pork.

WHEN any important measure is to be advocated amongst farmers, too much should not be claimed in its favor, or its advocacy will rather have a tendency to repel than to attract. They always move with a caution more or less prudent, and have an inherent dread, as it were, of everything that savors of extravagance in the advocacy of a new thing. If men claim too much in the advocacy of tree planting as to its advantages, the farmer ceases to give heed. So in advocating the benefits of stock improvement or any other kind of improvement. It is always best to give the sober facts and be content to wait patiently for the proper impression to be made. There may be occasions when the whole truth had better be under than over stated, or in other words when a part had better be held in reserve, lest it should lead to premature disbelief. To illustrate. If we tell a grower of common cattle that he will make twice as much out of the improved, he will not believe us, even though this should be true. If told that a cow of a certain approved dairy breed will make a half more butter than his native, he will likely doubt it. It is better, perhaps, to lead him on by degrees, as, if we can convince him that one kind of stock is considerably more profitable than what he is keeping, he will in time try and get it, whereas if overstrong claims were made in behalf of the improved breed, he would cease to listen. Stephenson did a wise thing when he told the British parliament that his engines would travel so many miles an hour, when he himself believed at the same time that they would go much faster. Gradually the great changes of nature usually take place and gradually must the farmer be instructed and elevated.

Investing in Pure-Breds.

The wisest of the sons of men once wrote for the benefit of all who should live after him, that there is a time to every purpose under the sun. Without endeavoring to trace either the primary or the full application of this terse sentence, we may here remark, that in one sense it means that for every work in which a man may engage there are some times more opportune than others, and this applies with quite as much force to purely business transactions as to higher things.

The times for setting up in mercantile business are not equally opportune. The same may be said of embarking in any of the different phases of farming, and so of stock-keeping in common with every other branch of the great agricultural interest. Those, therefore, who are minded to engage in this work do well to give some attention to the suitability, or otherwise, of the best time to make a commencement.

To say which are the best seasons for investing in pure-breds is always a little hazardous, owing to the uncertainty that hangs over the future, as yet unveiled, and the various vicissitudes to which the material relations of countries are always liable, in common with those to which the individual is exposed. Shrewd men have amassed fortunes in dealing in branches of business always dependent on contingencies, and those same men by a single mis-step have lost all that they had gathered by a life-time of successful work. Yet any one with common discernment or reflection must see that some periods are much more favorable for investments of any kind than others. When things are booming, heavy investments are always dangerous, and even when they are depressed these are not always safe, as some industries flourish for a time in a certain country, and for certain reasons a period of languishing sets in, from which they do not recover, at least in the lifetime of one generation, for the centres of their cultivation or manufacture pass away to other climes. It may be that wheat-raising is one of these, so far as Ontario is concerned, for the great wheat-belt in the Northwest is furnishing supplies at a cheaper rate than we can. Taking periods of inflation as furnishing the best seasons for investing in pure bred stock, our farmers who are desirous of establishing herds should weigh well the facilities of the present time for enabling them to lay good foundations without incurring the risk of great outlay. The live-stock interest has suffered in common with every other interest in the country, though not to the same extent. Hence the average of prices is lower now than it has been for some years, at least in most of the lines of pure bred stock.

Now this inflation is not likely to last very much longer, and therefore we consider that the present affords a fitting time for making a commencement. Although it is almost certain that fancy prices will not flourish as in the past, it is quite likely that general averages will overtop those of to-day, on the principle of the ebb and flow of tides. The number of auction sales to be held this spring, and more especially this month, is unusually large, as will be seen by referring to our advertising columns. We hope, therefore, that our farmers will not allow the opportunity to pass without improving it. There are two classes of stock that should be particularly sought: one is females that are soon to reproduce their kind, and the other is pure, vigorous young males, such as are likely to be serviceable in the neighborhood for which they are intended. No season of the year is so suitable as the spring for investing in either class, as at this time the amount of risk to run from any form of contingency is reduced to a minimum.

We would again speak of the advisability of beginners commencing in moderation, for we have a duty to perform to the buyer equally with the seller. No man is sure that he will make a successful breeder until he has tried it, and this trial should be moderate at first. When he has proved to himself that he can succeed in the business—that is, that he can produce stock of a useful type, and that will sell at paying prices, then he may launch out extensively in the business, buying up, if he see fit, whole herds at one time.

There is great room for the extension of the business in Canada. Whole townships are yet to be found, and numerous, with scarcely a good purebred male in them of any kind. The advice to the inhabitants of these to invest is usually met by saying that if such were introduced they would not get sufficient patronage. This objection should not carry great weight, for now they can be obtained at a cost so reasonable that any one having much of any one class of stock will be abundantly repaid by the benefits accruing to himself in the improvement of his own stock.

The first persons who introduce good stock into any neighborhood, and demonstrate its superiority over the common stock of the neighborhood, will be the first to reap a reward. They may have to wait for it some time, but it will assuredly come.

Think of It, Farmers.

Mr. R. C. Brandon, of Pearldale Farm, Cannington, Ont., refers to the way in which some farmers provide for the entertainment of their sons, his object being to show the extent of the mistake they make compared with what they would accomplish if they spent a similar amount in providing for them suitable farm literature. He says: "Instead of being stimulated by love of agriculture and husbandry through the medium of such papers as the JOURNAL, they are provided with a gun and a hungry hound, and are allowed to run down a fox or shoot a rabbit for the sheer purpose of obtaining a pelt, the price of which will perchance be invested in tobacco."

We do not wish to have the boys deprived of all manly sport, but farmers who deal thus with their sons are not acting altogether wisely. Young people may be led like little brooks running through a field, to take this corner or that at the pleasure of the husbandman, but not without labor. If they are not at all inclined to follow any course of reading, there is all the more reason that the parent should be solicitous to provide such for them, after having ascertained what is adapted to their tastes and that will prove serviceable to them.

If the gun or the books only can be purchased, the gun should be left with the gunsmith, and a supreme effort made to induce the boys to get all the valuable information they can on what is to be their future life work. In the conflict between brain and muscle for supremacy, brain will assuredly win, and the farmers of the future who depend mainly on their own muscles to advance them in the future will assuredly be left. Think of it, farmers, if your sons and daughters have a taste for farm literature, do not deny them; it would be far wrong to do so, and if they have not a taste for it, help them to cultivate one, if it lies in your power to do so.

"Please find enclosed amount for renewal, with the names of two new subscribers. Your JOURNAL, I am pleased to say, commands much real interest, and this it richly deserves. You may count me a life member."—Sidney Upper, Two Rivers, Manitoba.

"I am highly pleased with the JOURNAL. Your editorials are always timely, well written and reliable. May you have the best success."—Donald Fleming, Kilsyth, Ont.

Selecting Judges for the Provincial Exhibition.

This is one of the vexatious questions connected with the management of every exhibition, and will, perhaps, never be arranged to the complete satisfaction of all parties interested, yet this is no reason why the attempt should not be made to mend the matter so far as human legislation can mend it. Because we cannot have perfect government is no reason that we should not try to have government as good as we can make it.

At the annual meeting of the Agricultural and Arts Association of Ontario, held at Guelph last September, this matter was discussed, and a motion was made proposing that in lieu of the present system, which requires each of the members of the council to furnish a quota of judges from his district, the appointment of judges be put into the hands of committees of the board, with instructions to select those whom they deemed the fittest men for the work, without so much regard to locality. This motion met with considerable support, but not enough to carry it in the meeting. We supported the motion and voted for it, and as we thought then so we think still.

The present arrangement is a good one in theory, seeming to give equal rights to every party, but in practice it has worked badly, and therefore we desire it to be changed. Exhibitors have rights as well as electoral constituencies, and their rights cannot be long ignored by an exhibition that is to command the respect of the country. The present arrangement presents a standing temptation to members of the council to appoint unfit men who may have helped to elect them, without due regard to fitness, and it compels them to choose men sometimes whom they know to be unfit, owing to the paucity of suitable men in their respective localities. Although this applies, it may be, more to the selection of stock judges than to those of any other class, it may apply in many instances to the selection of judges in other departments.

We do not know that any members of the council have acted upon the temptation, but we do know that unfit men have often been chosen, and we would naturally suppose that the members of the council would be anxious to have the temptation removed. Some have remarked that it was an insult to any certain division to "hint" that it could not furnish a first-class judge in every department. We do not simply hint this, we go the length of saying it broadly. A region where there are no Jersey cattle cannot usually furnish a competent judge of Jerseys, nor will a person who lives north of the corn belt region be likely to prove a good judge of corn. Let men be selected where they can best be found, and the fittest men for the work assigned them.

Although the motion did not carry at the meeting referred to, we are mistaken if it is not in favor with the people of the country generally. Away with those judges of sheep who do not know a Shrop from a Southdown save by the entry cards; and those judges of dairy breeds who do not know what is meant by the escutcheon of a cow, and so of all those who are equally ignorant in other lines.

We hope the association will give it a trial, and if it is found that it does not work better, it can go back again to the present system; but we have no fears that it would not be found an improvement on the plan that has been tried so long, and that has worked so badly.

We hope that our friends who favor this will let us hear from them, and also those who are in love with the present system.

Rambling.

The village of Durham, on the beautiful Saugene, is scattered, and the region in the neighborhood hilly. The lands are in some parts light, and the farmers in the neighborhood are wisely pushing dairying as a means of retaining their fertility. Some purebred stock is being introduced, and the breeding of good horses is rapidly extending. H. Parker and C. McPhayden are amongst those who have introduced Shorthorns.

The south riding of Grey has a flourishing farmers' institute, and the president, Mr. James Murdoch, of Yeovil, and the secretary, Mr. W. Irvine, Lamlash, are laboring faithfully to scatter useful knowledge through this medium. Here, as elsewhere, the farmers are foolishly allowing party politics to hinder the usefulness of the institute. How many centuries is it going to take farmers to rise to a full knowledge of the glorious privileges of their birthright, and to refuse to sell them for less than half a mess of pottage? Those privileges are inalienable, unless self-forfeited, and it does seem sad that so many value these so lightly. O fellow farmers! why should it matter whether a Liberal or Conservative gives a paper on the enrichment of the soil, or whether the majority of the listeners are Grit or Tory? If any manna is to fall, take your measure and go and get some, whoever else may go or stay.

EXETER,

in South Huron, is fast becoming interested in the production of good stock, and many good horses and cattle, mostly of the Shorthorn types, are now being raised in the neighborhood. The institute held there February 1st and 2d, was very successful, good papers and pleasant and earnest criticism being the order of the day. In Mr. S. Smellie, of Hensall, the president, and Mr. R. McMurdy, Kippen, secretary, the institute finds solid assistance. In the evening some four or five hundred people were entertained with addresses on agriculture, with music interspersed. It is well when the farmers and townspeople see eye to eye in this matter, and mutually assist each other. Mr. Samuels, a merchant of Exeter, lent a helping hand, hence one reason for the great success of this meeting. It is very pleasing when the people of the town and country meet together to drink in enjoyment and instruction from the same fountain, and all the more so when that fountain flows from the pure reservoirs of rural life.

SIMCOE,

in the county of Norfolk, has its institute and in good hands. Mr. A. W. Smith, the president, is alive to the interests of the farmers, as is also the secretary, Mr. H. Glazebrook. Dairying abounds in this region, and is gradually rooting out that suicidal system of selling coarse grains off the farm. Good stock is being fast introduced. A. W. Smith has a fine Ayrshire herd; J. B. Carpenter, Simcoe, of gold medal prize farm fame; H. Trinder, W. Dawson, Vittoria, and Messrs. C. H. & J. Shand, Port Dover, are amongst the breeders of Shorthorns, and a good class of horses are now being grown.

HUNTINGDON,

in a county of the same name, on the south side of the St. Lawrence and in the Province of Quebec, is prettily situated on the banks of the Chateauguay, the fertile basin of which is filled with good farmers, a goodly number of them being stock men. Dairying, too, has taken a deep root here, owing largely to the efforts of Mr. D. M. McPherson, of Lancaster, who runs no less than 60 cheese factories in the "Allan Grove" combination, and who has for years past been

known by the designation of the "cheese king." Mr. McPherson's whole soul is in his business, as every man's ought to be, and must be, who moves his fellows. Both with tongue and pen he is urging the patrons of his factories to bring their cows up to the 5,000 pound per season standard of milk, and to use every possible precaution in saving the fertilizing properties of their farms from every form of waste. He is also soon to back up the wisdom of his theories by actual demonstration on a farm of his own. With a mechanical genius that is a treasure to its possessor, and a blessing to the people when rightly directed, he deliberately invents better ones when existing methods and contrivances do not suit him, and disinterestedly lays them down upon the altar of his country. Unlike the Greeks who banished Demosthenes and raised lofty monuments to his genius when dead, the people of the St. Lawrence counties are showing their appreciation of one of the most wonderful products of the region by bestowing upon him tokens of their good will while yet alive. Mr. McPherson is now president of the Eastern Dairyman's Association, of the dairy association of the county of Huntingdon, and of the Glengarry Farmers' Institute. The Glengarry Institute was held at Lancaster, and it, too, is favored with a live Secretary in Mr. W. J. McNaughton.

We think highly of the county of Huntingdon, and also of that of Glengarry, and we admire the people of both counties from what we saw of them. In Glengarry especially, almost every man of them is well built, and muscular, but we only saw representatives of the frontier townships. Whether it is the oatmeal used that accounts for it we cannot say; we only mention the fact. The St. Lawrence was crossed on the ice. It is six miles wide here, and the country on the immediate Southern border is low and uninviting. The way to Huntingdon passes a hop-yard of 400 acres, undoubtedly the largest one in the Dominion. It occupies the site of an ancient pine forest, which grew upon a soil of light sand, too light to support the ordinary forms of crop vegetation. An enterprising American firm bought the land cheap, and now it is covered with a forest of hop-poles throughout its long length and breadth. A compost is made by the mixing of muck, ashes, lime, etc., and in this way the hops are coaxed into the production of a good growth.

On the right and but a few miles distant rise the Adirondack mountains beyond the Trout river. These are in the State of New York, and the far off homesteads on their sides were inviting in their appearance.

Within a few miles of Huntingdon the country rapidly improves. Beautiful sugar maple groves line the sides and crest of the gentle swells, comfortable homesteads and long lines of highway shades are the order of the day. And here, as elsewhere in Quebec Province, the forest trees, like the inhabitants, are crowding each other. Beneath the snows of Huntingdon we thought we could read a good deal. Loose working soils and open subsoil, with gravel under the sugar maples that grew upon the ridges, and a land of much productiveness, or the trees tell a tale untrue. The ice coating of the forests, like ten thousand looking-glasses, reflected the color of the trees as richer than their wont, and gave even a tint of hope to the buds viewed in the light of spring. It wanted but a ray of sunshine to fill the land with emeralds and crystals such as some people say resemble those that adorn the better land.

Prof. J. W. Robertson, D. M. McPherson II. Bissell (Algonquin), Dr. Baker, Montreal, and others, gave the farmers both of Huntingdon and Glengarry bread and pure grape wine in their addresses, and the meetings were very profitable.

Huntingdon has a large amount of good stock. Amongst those keeping good Clyde horses are A. & J. Bell, Athelstane, Robt. Ness, Howick, and Messrs. Somerville & Stevens, Huntingdon. Shorthorns, D. Brims, Athelstane, and A. Gilmore, Huntingdon. Ayrshires, J. Holdsworth and A. Muir, both of Huntingdon. The only breeders of Shorthorns in the riverward side of Glengarry that we have heard of are R. R. Sangster and R. McLennan, both of Lancaster.

Morrisburg, county Dundas, with its admirable secretary, Mr. Whitney, held its Institute on the 9th Feb., with a moderate attendance. At this meeting Mr. D. Derbyshire, Brockville, gave his fine paper "The girls and boys of the farm," with its underlining of incisive irony in those portions of it where most required; and Mr. P. McIntosh, Cass' Bridge, a good paper on stock raising.

Do Sheep Deteriorate When Bred Long on the Same Farm?

The opinion is frequently expressed that sheep deteriorate if kept long upon the same farm, and that to keep up the stamina of the flock the foundation will have to be frequently changed.

At a meeting of the Farmers' Institute of South Huron, held at Exeter early in February, some of the speakers declared with a good deal of positiveness that sheep, to do well, must be frequently changed, and they spoke, they said, from that high standpoint, experience. Since that time we have been informed by Mr. Henry Trinder, of Simcoe, Ont., that for twenty-seven years he has kept sheep upon his farm without any other change save that of the introduction of a new ram occasionally, and this is only the change that has to be made in all kinds of breeding, and that they are now quite as good and even better than when he commenced with them. Here, then, we have the experience of a man in Norfolk Co. running counter to the experience of men in Middlesex and Huron. What is it, we are led to ask, that makes the difference? Who will answer?

We hope it may not be conclusively established that sheep cannot be efficiently sustained on the same pastures, for this, it seems to us, would so sorely discourage all breeders of first-class sheep, that in absolute despair they would give up the business. When one goes to large expense in importing sheep, and from a very select foundation, he does not expect that they will so deteriorate in a few years, that he will require to sell them off and import a new foundation. Breeding under those circumstances would be absolutely discouraging. Who will come forward and harmonize these experiences so antagonistic?

Amongst Our Friends.

"Every number of your JOURNAL becomes more valuable to the farmer and stock-raiser than its predecessor. Such enterprise on your part will reap a rich reward, though it may prove to be slow."—John Douglas, Tara, Ont.

"I consider your JOURNAL well worth the money to any farmer or stock-raiser."—J. H. Turner, Bottineau, Dakota.

"Having taken the JOURNAL for the past years, and valuing it as the best stock and agricultural paper printed, we feel it our duty to do all in our power to further its circulation."—Angus Gillanders, Ridgeway, Ont., Augustus Gosnell, Highgate, Ont.

"I am well pleased with your JOURNAL; it should be in every farm house in the Dominion."—Jos. Yuill, Carleton Place, Ont.

"I only wish I could afford the time to look for more subscribers than those sent, as I feel it the duty of every one who has been privileged with reading the JOURNAL to work for it. I feel assured that I am not saying too much when I assert that it is the best journal published in the Dominion."—Jas. Burns, Greenbank, Ont.

Publication of the Shorthorn Herd Books.

When in Toronto a few days ago, we were favored with a view of the proof sheets of a large portion of the first volume of the Dominion S. H. H. B. It gives evidence of great care in the compilation, and the profuse notes interspersed by the secretary, the materials of which have been gathered at a great expenditure of labor, will be of value in all time. It is a great matter for the Shorthorn interest that an editor has been found so capable, and at the same time so willing to spare no pains in getting necessary information, and better than all so thoroughly reliable. This is our own conviction, and we do not hesitate the risk of expressing it here, for reliability in a public office where such large risks are at stake is above all price, and the whole public should have the consolation of knowing it when their interests are safe.

The first volume it is confidently hoped will be out in about three months, and others will follow much more rapidly, as the further the stream of research flows downward, the fewer the obstructions in its channel. We have heard some whisperings, bringing to the surface a degree of impatience felt at the delay of the publication of the volumes, but those who utter them have no adequate idea of the enormous amount of research required in their compilation.

For the CANADIAN LIVE-STOCK AND FARM JOURNAL.

In-and-In-Breeding.

BY W. LINTON, AURORA.

(Held over from February.)

History tells us that Mr. Bakewell was the first great improver of our domestic animals, and his greatest achievements were with his Leicester sheep. Although he made a vigorous attempt to improve what were called the Long-horned cattle of his day, his attempts resulted in almost total failure, but his efforts with the cart-horse were somewhat more fortunate, and in his sheep-breeding he made a grand success.

The question naturally arises, how did he do this? He did not run about the country picking up a sheep here and there, and mating them, to produce a flock, trying to improve them by crossing. He selected the best of his own flock, and continued to select the best until they were all related one to another, so that when the rams were used in other flocks, they stamped their own characteristics on the offspring, with a degree of certainty that they could not have done had they been bred in any other way.

It must frequently have been observed that animals sold at shows and at Shorthorn sales, though good in themselves, and it may be descended by several crosses from purely-bred and perhaps well-formed Shorthorns, rarely, in their progeny, meet the expectations of their purchasers. What is the reason of this? and why are the hopes of those persons so often disappointed? If you look into the herd book, and examine the pedigrees of these animals, I think you will almost invariably find in them recent new crosses of animals of different families not related in blood. The progeny of such crosses, when good, I can never consider otherwise than good by accident, for however excellent the parents themselves may have been, it is my conviction that the chance of them producing good animals is in proportion not so much of their own apparent excellence, or the number and qualities of their ancestors of different families, as to the number of recent good crosses they may have had of the same blood or family. It is this continued relationship in blood which gives character to a herd or flock, and fixes its qualities, either good or bad, according to the skill and perseverance of the breeder.

It would seem as if every ancestor or cross introduced more or less new elements, and that every new element multiplied immensely the possible number of new combinations in the progeny. When many of the new elements introduced by a cross are similar to those already possessed by the cow or herd, as the case may be, the chances of producing animals resembling the parent is greatly increased, and character and uniformity in the herd is obtained or approached; but where many of the new elements introduced by a cross are dissimilar to those already obtained in the herd, the number of possible new combinations is increased, and of course the chance proportionately increased of producing animals unlike their progenitors, and unlike each other, and greater variety and uncertainty is the result; hence in herds so bred there is but little uniformity of type. We sometimes see in them a good animal, but very often a bad one; and we frequently see own brothers and sisters with little or no resemblance.

The principle enumerated above, if carried to an extreme, would lead to the conclusion that the closer the affinities of the animals bred from, the greater the probability of good produce, provided those mated were themselves good; so that when own brothers and sisters are good, they ought to be put together, and if their produce should prove good, they ought also to be mated, and so on indefinitely. Now the mistake in the above deduction it seems to me is in the "and so on," or in carrying the system to extremes.

The practice of breeding from animals allied in blood has been followed by the Messrs. Colling and other eminent breeders with results so satisfactory that it would seem, if not carried to an extreme, to be the best, as it certainly seems the natural course in breeding. We know that gregarious animals, in a state of nature, roam in flocks, with which they are very jealous as to the admission of strangers; so that the individuals comprising each flock must be related in blood, probably by many different relationships. Perhaps from this cause, as well as from similarity of habits and food, uniformity results, and these flocks have a fixed and steady type, and do not degenerate. The Chillingham wild cattle, which sprang from one cow and her own bull calf, affords a striking proof that animals may be bred from near relationships for many generations, without suffering any diminution of their hardiness, or any deterioration of their good qualities.

The Messrs. Booth's herd has been bred for many years from animals related in blood by manifold relationships. There is no one animal in the herd that is not related to each of the others in many different ways, but the practice of breeding from the closest affinities—that is, from brother and sister, and from parent and offspring—has not been adopted by them as a general rule, never beyond what was considered the necessity of the particular case, or as a mere experiment.

If there be then any error in breeding in-and-in, as it is called, from good animals, and I confess I think there is, it can only be from carrying the practice to an extreme, or, in other words, continuing to breed from the closest affinities. The laws of nature have limits which cannot be passed with impunity. What is good in certain quantity is not necessarily so in double that quantity; what is good in moderation is invariably bad in excess.

The practice of breeding from animals related in blood has, in the hands of the gentlemen above named, produced the happiest results; but, in less judicious hands, it might, no doubt, be carried too far. From what has been said another question will

suggest itself: If it be true that breeding from good sire and dam does not necessarily ensure a good progeny, can it be true that "like begets like?" I answer, that I believe that maxim to be true in a certain sense, but it undoubtedly is not true in the popular sense in which it is used, and I believe that it has led many a young breeder astray, by inducing him to believe that when he had purchased a good looking sire and dam he had secured all the necessary conditions for a good progeny. There is no more prevalent error amongst young breeders, and there can scarcely be a more fatal one.

An animal has certain qualities apparent to the hand and eye. It also has hidden qualities that neither the hand nor eye can detect, but which descend to the offspring, and when the animal has been crossed with another animal of different blood will produce new combinations, palpable and unexpected.

The above maxim is true then in this sense, that though the offspring may appear unlike either parent, yet the particular properties of the parents are not lost in the offspring. They are inherited, but in combination may have produced effects that probably had not and could not, with any degree of certainty, have been foreseen. That these qualities are not lost is evident, as it has been experienced that peculiarities of even remote ancestors will show themselves from time to time, more or less frequently, according to the skill and perseverance of the breeder, or the lack of this.

The Messrs. Booth have, by long continued and skilful selection, produced good animals, and by persistently using (with occasional exceptions) animals of the same blood or family, they have obtained uniformity in type. One result is that there is rarely, if ever, produced in their herds a bad or indifferent animal. The chance of this is reduced to a minimum, and so fixed are the qualities of the beast, that to whatever part of the world members of it are removed, whether to Canada, Australia, or the continent of Europe, they invariably preserve their uniformly high character.

I would not wish to be understood as saying, that a cross of new blood ought never to be introduced into even old established and good herds, but I do say that such crosses in such herds ought to be used rarely and with great caution, and that their use should be confined to a portion only of the herd until the full effect can be ascertained.

In commencing a herd or flock, we would advise—"determine what class of animals shall be used. In deciding this question, recollect that no farm was ever large enough, nor a lot so contracted, as to breed and raise successfully two breeds of any one class of animals." Let there be no division of the energies on different breeds. It is well to warn the inexperienced against purchasing stock from breeding farms, where the concentration of one man's knowledge of breeding, feeble at best, is divided and diluted by a variety, or by even two kinds of cattle or horses. A man who grasps at so much has but a limited idea of his own powers, or of the full scope and compass of what is comprised in the term, a fine stock-breeder. It takes a fine man to manage a fine herd well—one steady and industrious in his habits, and with the organs of perception and reflection well developed; he must be at the same time an artist and a physiologist, fond of his art and his calling, and ardent in his desire to carry these to a successful and happy issue.

"At the inception of your valuable paper, I never imagined that it would be so grandly successful as it has been. It is very highly esteemed (and justly so) in the Lower Provinces. May continued prosperity be yours."—Paul C. Black, Falmouth, N.S.

Sheep Husbandry.

BY JOHN CAMPBELL, JR., WOODVILLE, ONT.

This very practical paper was read by the writer at the Wentworth Farmers' Institute in Feb., 1886, and is now given to our readers by the kind permission of the author:

Sheep farming, as well as all branches of farming, is at present suffering from the general depression that prevails not only in Canada, but is more or less felt throughout the civilized world. During the American civil war, and for some years afterwards, the high price of wool caused farmers to give special attention to raising sheep, and because of the greater importance of wool than mutton, it of course followed that greater efforts were made to produce heavy fleeces of saleable wool, than carcasses of superior quality, for which there was not so good a demand. However, as years past on, conditions changed. The American war ended, so that there was again time to cultivate the Southern cotton fields, the produce of which once more came into competition with wool; the consequence being that wool fell off in price, and sheep farmers in the States, as Geo. Waring, jr., says in his "Handy-Book of Husbandry," slaughtered hundreds and thousands of sheep for their pelts alone, and the farmers turned their attention to other branches of industry. With us such wholesale slaughtering did not take place, though for some time the business was but fairly profitable. A few years later on, a change for the better took place, when the British markets became available for our surplus beef cattle and mutton sheep. Since then the production of good mutton and early maturing sheep has been the aim of those who bred from a financial standpoint. It is all very well for wealthy, independent farmers, or for men who retire from business, and farm for pleasure, to breed whatever class of animals they take a fancy to, but for those of us who are obliged to farm for profit, fancy must be buried out of sight, and that class bred which is most in demand, providing that we have the facilities to do so. For various reasons, but comparatively few farmers can raise pure-bred sheep with success. One reason is that breeders, like poets, "are born not made;" another, that capable persons have not the necessary capital, or having the capital, are not located in a district suitable for the breed which they wish to invest in. It certainly is a fact that all parts of our Province are not equally suitable for the different breeds, and I have no doubt the time will come when each will find its place, just as they have found it in Britain. To say which is the best of the existing breeds, either pure or for crossing purposes? would require great courage, but this much can be safely said; that when wool made the money, long-wooled heavy-shearing sheep gave the best returns, but now when mutton of fine quality, and wool of medium fineness, are in greater demand, few will dispute that the Downs are the sheep for profit and that they have come to stay. Of the Downs, three varieties are bred in Ontario. The Southdowns were the first brought in, and they are quite numerous; the Shropshires came next, and have rapidly increased, and lastly, the Oxfords, of which we have but few flocks. Each of these has its advocates, but it is well to remember that at the Experimental Farm, Guelph, year after year the Shropshire Down grade in competition with the grades of other breeds, all having similar care and feed, gave the greatest profit. Also in England the Shrops have taken the lead, and are known as the "rent-paying" sheep. It may be said by some, that at present there is nothing made in raising sheep of any kind, for the home or British market. While this may in a certain sense be true, still there is a very good reason why, at least in the British markets, the shippers of our Canadian live sheep are not able to compete more successfully with the sellers of frozen, or otherwise preserved mutton carcasses from New Zealand and other countries. Have we produced the class of mutton which shippers can ship with advantage? It costs the same to send across the ocean a third-rate beast as a first, so that when times are dull and margins small, the former will be handled with loss, unless bought at a low price from us in the first place. Have we not often read the advices given by commission men, "Not to send coarse heavy old ewes, discarded rams or mixed lots, but to send good young ewes and wethers to dress 70 to 80 pounds of carcass each; and if they show dark faces and legs, so much the better, as the old country butchers in dressing, leave head and legs on

the carcass to show their customers, which is proof to them of superior quality, and for which they will pay an extra penny a pound.

Though every farmer cannot make the breeding of pure-breds a success, there are but few, if any, who cannot produce mutton for home use and for the market profitably. Is not the time fast approaching when stock-raising will be our principal agricultural industry, and will not sheep breeding form an important part of it? Our situation this present year is a new, and rather an unpleasant one, when, owing to the great and general failure of the spring wheat, the price of wheat should be much higher, and would, only that Manitoba wheat brought East by the C. P. R. in such large quantities keeps down the price. In the past, a short wheat crop would cause the price to be higher than outside markets would warrant, but now, no one will question, whatever his politics be, that the C. P. R. is doing us, in Ontario, a present injury. This, like many disappointments, may yet prove a "blessing in disguise," for if we cannot grow wheat at such a cost as will enable us to compete with the North-West farmers in our own market, or in foreign market, we certainly can grow beef and mutton of such quality, and at a cost that will enable us to successfully compete in the best markets, with any country under the sun. This brings us back to our subject, and the next thing to consider is: how are we to produce the required mutton sheep? The remarks we shall make in answering this question will in the main apply to pure breeding also. While it is absolutely necessary that the ram we select should be of a fixed type, it does not follow that the ewes should be so, nor would it be profitable, as it is only animals that have been bred pure for many generations that will almost invariably transmit to their progeny, whatever their qualities may be, and therefore are more valuable to produce breeding stock than mutton sheep. The general points of a good flock of ewes are, good size, full chest, well sprung rib, medium bone, heavy fleece of good quality, prolific nature and a disposition to mature early. If a flock is deficient in any point, a ram in which this point is fully developed should be used.

Breeding age.—Ewes should not be bred until they are about 19 months old, and except in the case of valuable ones, should after two or three years, be fed off for the butcher. Rams are used from the age of eight months to eight years and over. There is a great difference of opinion about using lambs. I think that an early, well developed lamb, is quite as capable, without injury, to serve a limited number of ewes, as a late, ill-cared for shearerling. I have known one—a Shropshire Down—to get 95 strong lambs in one season, and to be useful the next, but 15 ewes is the outside number to which one should be used, and if moderately worked as a shearerling, will be in his prime, when from two to four years old.

Time of coupling.—Much depends on the object of breeding. He with the thorough breeds, who figures in the show ring, will have the ewes served in September and October, that the lambs may drop in February and March, and the person who aims at supplying the market with early lambs, does well to have them drop about the same time. For those who are within reach of a good market, I think the above a capital plan, as the ewes not having lambs to suckle during the summer, improve in condition, and so require but light feeding in winter, and the culls are easily fitted for sale; but for the farmer who sells his lambs later on, or who keeps them over till the following year, the proper time to couple is, after the middle of November; the lambs then drop late in April, when the grass is soon ready for them. In this way a flock can be cheaply wintered, and with plenty of grass, but little grain is required. The objections to this method are, that it is somewhat difficult to have the ewes in good wintering condition, and also to get the culls into good shape to sell well. These are, however, more than counterbalanced by the facts, that less care, less grain and less expensive buildings are required.

Care of rams.—If the ram is young, or though full grown, if the flock is large, he should be kept separate, fed moderately with grain when on service, and turned to the ewes for an hour or two daily. In a small flock I do not think it necessary to keep the ram apart, except when being fed.

Care of pregnant ewes.—If put into winter quarters in good flesh, there is no reason why the ewes should be highly fed. I fully believe that more loss of valuable sheep and lambs is caused by stuffing, than by starv-

ing, at that time. Pea straw, cut a little green, and well saved, fed in the morning; not more than two pounds of turnips each at noon, and good clover hay (if mostly alsike, all the better), fed at night, will give satisfactory results. Mangolds fed previous to lambing are injurious; timothy hay is not good, and the dry straws of wheat, oats and barley are poor feed for sheep at any time. Breeding ewes should not be closed in a warm house, but should be kept in a separate place from horses, cattle, etc., where they can have plenty of exercise, and also have a clean, dry place to lie on.

Lambing time.—For early lambing, a warm place is indispensable, as a newly dropped lamb will soon perish in frosty weather, if exposed. Though among the most helpless and awkward at first, lambs in a short time get to be strong and hardy. If a lamb gets chilled, a good remedy is to place it in hot water—as hot as the hand will bear—and when revived, dry thoroughly with soft cloths, and afterwards with heat from a fire. When housed, ewes soon to lamb should be separated from the flock, and well, but not deeply bedded, for a ewe having dropped lambs in filth is apt to disown them. Because of the adhering dirt, she will not lick them, and appears to become disgusted at their looks. If too much straw is used, it bothers the young lambs, when trying to rise and suck. It is at this time the careful shepherd will watch his flock closely and will not grudge it, as it is only during the lambing season that much labor is required. One lamb cannot find the teat, another is starving, as its young dam has but little milk the first day or two, and a third is suffering from *pinning*—that is, the first excrements being so adhesive as to clog the passage, and finally close it, will cause death, unless relieved. After lambing, the ewes should have warm drinks, with a little oatmeal and bran stirred in, then in a few days, ground oats and peas may take the place of the oatmeal, and the quantity fed gradually increased, until all they will eat may be fed with safety twice a day. That, with a liberal supply of clover hay and mangolds, with all the water they will drink, will cause both ewes and lambs to thrive. When two or three weeks old, the lambs should have a place made for them to run into, where some crushed grain is placed for them to nibble at, and it is surprising how soon they will learn to eat heartily, which, of course, greatly relieves the ewes, and hastens the growth of the lambs. Even with those that come on the grass, this could be done by making a pen near where the sheep generally lie, and they would soon find their way into it.

Docking.—This should be done when they are about ten days old. A good way is to rest the tail on a block, and while one person holds the lamb and pulls the skin back towards the body, another with a chisel and mallet can cut it off quickly within 1½ inches of the body. If it is observed that the bleeding is profuse (from which death sometimes results), it can be easily stopped, by tying a small cord quite tight around the stump, but it should be removed in two hours, as there is a danger of its injuring the tail, if left on too long.

Castration.—It is not necessary to perform this operation on the early lambs intended for the spring markets, but for later lambs, even if to be sold off in the fall, the neglecting of it often causes much vexation and loss. For suppose a feeder goes to the market to buy a lot of lambs, to fatten in the winter, or to carry over until the following season, he will bid but a low price for a lot, in which he sees a number of rams among the ewes. The chances are, that if he buys them, and when only partly fat, they will drop lambs, which he does not want, and it spoils them also for carrying over. As to the operation itself, it should be done early, but not until the docked tail is healed.

When it is considered that sheep in Ontario are so very free from disease of every kind, that the labor in attending them is so light, compared with that required for cattle, that they give returns twice a year, that it is so convenient to have a sheep or lamb at hand to dress during the warm weather, when fresh meat is a luxury in many farmers' houses, and that the Americans draw so largely upon our flocks, for breeding stock, the wonder is, that any farm, throughout the length and breadth of our fair Province, could be found without its flock.

"I feel that you are doing a beneficial work to the community."—J. E. Brethour, Burford, Ont.

"I like your JOURNAL very much after a three years' trial."—J. Sanderson, Shanty Bay.

Milk Fever.

This terrible disease, so well described by our veterinary editor in a former issue, is much more common when cows are coming in on grass than at any other time. Recognizing this fact Mr. James Drummond, of Petite Cote, Montreal, informs us that it is his practice to keep cows coming in on the grass in the stable for a few days prior to the calving, and also after that period. With him that has proved a perfect antidote. It is surely a very simple one. We would like very much to know if any one else of our readers has tried this, and if so, were the results similar? By an interchange of experience in this way we can all of us become helpful to one another. Any reader having a piece of useful information—something that he knows would be helpful to others—is surely very selfish if he keeps it away from them.

FOR THE CANADIAN LIVE-STOCK AND FARM JOURNAL.

The Clydesdales of Hillside.

Hillside is located in Russell county, about eighteen miles from Ottawa, the capital, and three miles from Bear Brook station on the Canada Atlantic railway, running from Ottawa to Montreal, contains over 200 acres of land, about 150 acres cleared and under cultivation; partly fenced and ditched, and as the owner, Mr. Wm. Eadie, is a gold medalist as a ploughman, we will suppose it is well cultivated. Mr. Eadie emigrated to Canada about forty years ago from Cambullang, in Lanarkshire, Scotland, where he was born, and started to clear the farm which then was a wilderness. After an absence of 28 years he sailed for Glasgow to visit his aged parents and friends, and on his return imported the far-famed stallion Young Campsie Jock (5463), sired by M. D. Riddell's Young Campsie (929), noted as a prize winner all over Scotland. Campsie Jock was a prize-winner in Scotland as well as in Ontario. After travelling four seasons he died at the age of seventeen. He was a noted stock horse, and we might safely say he laid the foundation of the Clydesdale breed in that part of Ontario. Mr. Eadie was also the owner of imported Wellington, bought from the Messrs. Love & Prown, of western Ontario. After keeping him in the stud for three years he sold him to Mr. Carter, of Seaforth, for the sum of \$2,000. In 1883 another consignment of a mare in foal and a two-year-old stallion, Colquhoun (3956), was brought out. This horse was sired by Good Hope (1679), a horse which, after travelling a number of seasons, was taken to Australia, where so many good sires go. Colquhoun has for his grandsire the noted Darnley (222). He is 11 years old, weighs about 1,900 lbs., is a dark dappled brown, and, unlike his predecessors, has no white. He is of the blocky type, and a magnificent mover, and has already made himself famous in the stud. The mare Jess (5361), sire Baron of Renfrew (1579), dam Lilly of Renfrew (2804), was bred by John Paton, in Renfrew. Jess took a great many prizes in Scotland, and was never beaten in Canada. She took first at Provincial Exhibition held at Ottawa in 1884, as best imported Clyde mare and foal. She is a stylish beast, weighs 1,710 lbs., and drives like a roadster. Her first foal, Prince Royal (103), was never beaten wherever exhibited, taking first at the Provincial at Ottawa in 1884 as best foal on the grounds, is two years old, dark brown, has for dam Jess (5361), for sire Tarbrooch (2459), for grandsire Druid (1120), which is known all over Scotland as a prize winner, and for great grandsire the far-famed Prince of Wales (673). No horse is more royally bred. There are also a one-year-old filly, Canadian bred, and a stallion foal from the dam Jess (5361) and sire

Colquhoun. Both are fine specimens of the Clydesdale breed.

In all Mr. Eadie is the owner of five pure bred Clydes, which will compare very favorably with the good ones of his breed. He is also the owner of a goodly number of half and three-quarter bred stock.

SUBSCRIBER.

Purebreds in North Ontario.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

Kindly permit me to correct an unconscious mistake made in a short communication to the JOURNAL in August last, regarding stock matters in Brock, etc. I therein stated that we kept the only imported bull in our township. I really meant the north half of our township, but by an oversight all was included. My attention having been drawn to the error, which rather militates against some very enterprising stockmen in the south part of our township, I wish to put the matter right in justice to them, and I therefore send you the following interesting notes.

Mr. Geo. Hadden, Wick, has an imp. Cruikshank bull at the top of his herd of very fine grades, and some very nice specimens of pure-blooded Shorthorns. Mr. Hadden is an ardent breeder of both horses and cattle, and highly improved ones, and although I do not know the details of his profits in this direction, I do know that years ago he abandoned the idea of making his wealth out of "wheat," and his continued and successful acquisition of "real estate," together with the grand bank barns which he has built, speak volumes for the thrift, energy and intelligence of Mr. Hadden and his family.

Mr. James Rennie, also of Wick, has long since established his reputation as a breeder of very high grade Shorthorns, and as a rule carries off the red ticket at our principal fairs in this line. He is also breeding a very fancy class of general purpose horses. A visit to his extensive and well arranged cellar, barn and stables usually convinces an observer that Mr. Rennie merits the enviable reputation of being the most clever "feeder" in this part of Ontario.

Mr. Robert Kay, Vroomanton, a man of good quality and a stockman of worth, has by continued and unflinching exertion for years, built up perhaps the best general purpose herd of Shorthorns in our township. Mr. Kay is a renter or tenant, and his mode of operation, which speaks so well for both pocket and farm, is not as a rule blended in tenant farmers. Milk and butter have been conspicuous objects, while good proportions, beef and tallow have not been overlooked in the building of this man's herd. Horse breeding is also conducted with profit on his farm.

A man widely known and a stock breeder in every sense of the word: a successful exhibitor in the past and present, and perhaps the most central figure in the stock breeding arena of north Ontario is William Shier, Sunderland. This man started with a determination to succeed in stock breeding ten years ago, and has so carefully cultivated the various methods of the "line," that the reader while perusing the following sketch of his operations will naturally conclude that his anticipations have been more than realized. In 1876 Mr. Shier purchased two females from Mr. Bell, Atha, and one from Mr. Moffat, Saintfield, also the noted stock bull Statesman 2d, which bull, if memory serves, took high honors at one of our provincial fairs held at Toronto in the past, and was bred by Ontario's old veteran, J. J. Davidson, of Balsam. In '77 three more grand cows were added to the number from the herd of Wm. Miller, Atha. The years '80 and '82 found stock bulls coming from the herds of Messrs. Major & Son, Whitevale, and Miller, Brougham; '83 saw the acquisition of another choice female from Major & Son, while '85 still increased the popularity and usefulness of the herd by placing at its head the imported Campbell-Kinellar stock bull, bought from Arthur Johnston, Greenwood. Fourteen animals in all, at an average price of \$235 each—a large average price.

The reader will readily see the responsibility and risk there is in the business of stock breeding. Here we have \$3,290 invested in placing this herd, without counting the capital invested in one of the most useful barns in the province. This amount of money invested at the usual rate of interest would contribute enough to keep the ordinary family supplied with all their wants, comfort, relaxation, and a little pleasure, besides relieving them from care, labor and anxiety. Here allow us to remark that

scores of our wealthy farmers are pursuing the latter course—of investing thousands at interest, minus the relaxation or the more laudable industry of stock improvement.

But as we shall see, the first cost, as an earning investment, has been turned to better account by Mr. Shier. During the above ten years his herd has "tolled" off 31 head of Shorthorns. Seventeen, mostly calves, realized for breeding purposes \$172.50 each, while 14 were sold as heaves at an average of \$97.50 each. We will thus see on reflection that the herd has through direct sales produced from pure bred animals alone the handsome sum of \$4,297, or above \$1000 more than the first cost, and this without counting anything of the profits arising from the grades, which were fairly good. The herd still contains 18 head—6 bulls and 12 females, 8 of whom belong to the Crimson Flower and 5 to the Stamford families of Shorthorns. The students of herd book lore know the value of the above strains. To sum up the results and calculate the present value of the herd we would be safe in saying that the original investment must have earned for Mr. Shier at least a clear, legitimate profit of 60%.

A good flock of Shrops, with the famous stock ram "Gold Medal," bought from Mr. J. Campbell, jr., of Woodville, Ont., and which appeared in the Oct. JOURNAL, at its head, is also kept, and the latest enterprise of Mr. Shier is the acquisition of an imp. Clyde mare. Success to such men.

Just a few words more before closing this letter. With a large stock of horses and cattle and a large farm to look after, there is not as a rule much time to canvass for the JOURNAL, but with the ever increasing features of interest and benefits derived from its perusal, which we have done from its inception, we feel it a duty to present this kind of literature to the farmer whose sons, instead of being stimulated to a love of agriculture and husbandry through the medium of such papers, are, for their spare time in the winter, provided with a gun and a hungry hound to run down a fox or shoot a rabbit for the sheer purpose of obtaining a pelt, the price of which, perchance, will be invested in a future supply of tobacco for the mutual comfort of all concerned. Such pictures are often reproduced in this Canada of ours, and we only wonder such boys remain on the farm so long before the inevitable "runaway." Keep on; the fourth volume grows in strength. Send a few sample copies.

R. C. BRANDON.

Pearldale Farm, Cannington, Ont.

Windmill Power.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

Dear sir,—I have read your journal with much interest and profit during the past, am particularly pleased with your plan of barn, and the few words you said about it; but would like to ask if you have now tested the practical working of a wind engine. Is it entirely satisfactory for farm purposes? I have been thinking of putting in one for the last year, but have hesitated, doubting whether the power is steady enough to run machinery which has to be tended. In automatic feeding such as can be arranged for grinding, and in pumping, I have no doubt of its use, but for threshing and hay cutting or ensilage cutting, I am doubtful as to its advantage. I would also like to know if a sixteen foot mill is equal in practical working capacity to a four horse sweep power, as I understand is asserted by the makers. The investment in a windmill and concomitants is considerable, so that trustworthy information on such points would be valuable to many of your readers.

Knowlton, P. Q.

S. A. FISHER.

The windmill on our barn has proved entirely satisfactory for pumping. It is also quite satisfactory in chaffing feed when there is a good breeze. In grinding, our mill is too small and weak, but if we had an I. X. L. mill, with a stiff breeze I am satisfied the windmill has abundance of power to do the work satisfactorily, as much as a sweep horse power with four horses. Of course much forethought is required in using a windmill as the medium of power. You must be forehanded with everything and keep a supply ahead. Since the erection of our mill we have never been out of water, and although we have been out of chaffed feed, it need not have been so had we improved the opportunities furnished by the winds. We have not

tried our mill as a power to drive a thresher, nor in cutting ensilage. We do not look on it hopefully as a power for either of these kinds of work, as we might be anxious to do both when we could have no wind, but as a medium for pumping, chaffing and grinding a sixteen foot geared Halliday will answer very well. Threshing and cutting ensilage have both been done by them successfully, but we can conceive the disadvantage of having to stop either of these kinds of work, where several hands are required, by the falling of the wind.

FOR THE CANADIAN LIVE-STOCK AND FARM JOURNAL.

Breeding Heavy Horses.

The large number of heavy draught stallions of fairly good quality which have recently been brought into the province gives us an opportunity to select whatever seems to us to suit the mares to be used as breeders. In deciding which horse shall be bred to any particular mare, look the mare over carefully. One is big-headed and low in the neck; for her use a high crested and fine headed horse. Another is crooked in the hind limbs; then use a horse free from this defect. A third has a predisposition to bog-spavin; see that the horse has not. Is your mare inclined to stock or swell about the heels on standing a few days in the stable; breed her to a horse clean, lean and flat boned, having no tendency about the legs to fleshiness. The stamp of mare that should not be served by a Clyde is the animal with ewe neck and low withers, as many of the colts of first cross get are greatly depreciated in value by this very undesirable characteristic. In short, to raise a colt free from any of the defects of the dam, use a horse every time where there is no room for suspicion that he is faulty in the same points. The hap hazard manner of using the first and probably the cheapest horse that comes along, as has been too often the case with the farmers, accounts for so many washy, weedy, unmarketable animals being on our hands, and likely to remain there.

In this matter too many have been rent wise and dollar foolish. There is a wide disparity in the price of a scrub, or even what is too often called a general purpose colt, and one with two or more crosses of good Clydesdale blood. Allowing each one to be well fed and put upon the market at four years old, the one will meet with buyers at \$100 while the other will be readily taken at twice this figure, the difference of first cost, viz: use of stallion, being from \$6 to \$10, and surely every one will admit that the one will be as easily and cheaply fed as the other.

We now inquire which of our heavier breeds are best suited for breeding to our common mares. I will here quote the words of Mr. Wortz, a gentleman who has handled for the American market thousands of all classes of horses and who purchased in South Grey as long as he thought there was anything left worth purchasing. He says, "Use a good Clyde at \$20 in preference to any of the other heavy breeds at \$10, because in the first cross of a Clyde his mark will be more clearly made on his stock than in the second or third cross of any of the others," and we believe three-fourths of the horse raisers of America will support him in his opinion.

It is not the object of the writer to boom any particular breed. Some will be inclined to champion some of the other heavy breeds. When such is the case we will agree to differ, yet at the same time my preference is for the Clyde.

The heavier breeds are by many considered to have a soft streak in their composition, especially the Clyde. Some of them may have this tendency, but what breed is there that does not occasionally have for its repre-

sentative a washy specimen? It is often from a want of knowledge of the true characteristics of the Clyde that many farmers apply to that breed epithets not very complimentary.

An instance of this once came under the notice of the writer which I will here cite. Three or four neighboring farmers all happened together in a western town, and all were ready to start simultaneously. One of the teams was a pair of good Clydes. The owners of the others thought to have a good laugh at the Clyde man by agreeing among themselves to start ahead of him and make the pace so hot that by the time the first watering place was reached, five miles out, the big team would be pulled up smoking like lime kilns. A start was made, the Clyde man wondering what had got into his neighbors, yet he determined to follow. When a halt was made the laugh was all the other way, the Clyde team being the coolest by far.

Taking it all in all, we look upon the breeding of a good class of heavy horses as the most profitable farm industry to-day, not excepting the production of beef or either of the forms of co-operative dairying.

ROBERT WATSON.

Varney, Ont.

Commence With One.

A subscriber, from the township of Maryborough, Ont., writes thus

"I am very fond of pure bred stock, but the want of means prevents me from having any. I have twelve cows, but would rather have half the number of pure bred if means would permit."

In such a case we advise: get *one* female, and it may not be long until a nice little herd will be gathered from a small outlay. A fair specimen can be got now of a pure bred of several of the breeds for \$100, which is not an extravagant price. Frequently a cow carrying a calf can be got for this sum. It is much better in many cases to commence in this way, for where a good deal is expended in the outset, and there is accident or loss, it is severely felt. Many breeders have failed, who invested largely at first, who would have succeeded had they been content to move more slowly.

Manitoba for Live Stock.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR, I am so much pleased with the JOURNAL that I think every farmer in Manitoba should take it. It teaches us all what kind of stock to keep and how to keep them, and dozens of other things connected with farming that ought to be known. I would like very much to see a herd of Aberdeen-Angus cattle here. I am satisfied they would do splendidly. In fact, this is the place for anything that can eat grass, and if we have to feed grain or roots, we can raise them as cheap as they can be raised anywhere.

WILLIAM MCKELVY.

Gladstone, Man.

Agricultural Advance in New Brunswick.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—Although this place is still the domain of scrubby and its corresponding system of cultivation, as yet only the thin end of the wedge of improvement having made an entrance, the future is hopeful. Our Government has made a great start in the horse line, which I hope will be beneficial to the province. On the 30th March next they intend to leave to agricultural societies or responsible parties 18 imported stallions, including 6 Clydes, 2 Shires, 4 Percherons, 2 Cleveland Bays, 1 English coach horse, 1 Morgan and others. The province is divided into six agricultural districts, and each district is to have three horses, and the animals are to be handed back again to the Government in September.

W. W. HUBBARD.

Burton Hill, N. B.

The Clydesdales of Shamrock Avenue Stock Farm.

The birthplace and home of Mr. Thomas Good, the present proprietor of this improved and improving farm, was settled on by his parents in the spring of 1842. In June of that year he was born in what might justly be called the heart of the wilderness. In subduing this the senior Mr. Good was very successful, and is now, along with her who shared his struggles and triumphs, living in the quiet enjoyment of the fruits of their well-earned successes.

Having wooed and won and married the daughter of Mr. Thomas Garland, of Ashton, Ont., at an early age, when most young men are trifling with what is at the same time life's sternest and loveliest reality, he at once set to farming in downright earnest, and added field to field until Shamrock Avenue was made to include within its outline no less than 400 acres of choice clay loam land, with an additional 100 acres of finely timbered land about four miles distant.

Shamrock Avenue is situated within two miles of the village of Richmond, and 18 miles from the city of Ottawa. Three hundred and fifty acres are under cultivation, including grain, hay and pasture. The buildings are numerous and scattered, owing to the land having been built upon while in separate lots of 100 acres each, and though large accommodation for man and beast is provided, the buildings are not quite in keeping with the march of modern improvement, save a stallion stable, which is very complete of its kind.

The farm is well fenced with good cedar wood log fences, and is well watered with a never-failing spring and a sufficiency of wells. One feature of this farm greatly to be admired consists in the numerous neat little groves of timber preserved in the different fields for the shelter of stock in summer. We have had occasion once and again to call the attention of our farmers to the worth of these groves, and once more we counsel those who are without them to plant them.

Mr. Good has been breeding Leicester and Cots wold sheep for a number of years, and has latterly gone into some choice Southdowns; but as a stock-breeder his chief aim and ambition is in horse-breeding. From his earliest days he has been a fancier of good horses, and has bred a great many fine ones. He is one of the warmest patrons of the Agricultural Society of the county of Carleton, and has been a successful prize-winner, as is abundantly proved by the large number of the coveted reds in his possession.

His first venture as a stallion owner was in 1881, when he purchased from Mr. John Lahmer, county of York, the coach horse Liberal, and in 1882 the grand old Clydesdale stallion Sir William Wallace (806), from Messrs. A. & R. Wells, Aurora. Sir William proved himself one of the finest stock horses ever imported, and after four successful seasons for Mr. Good died in August, 1885.

Nothing daunted by the loss, he placed at the head of his stud by the payment of a large price, the highly furnished son of Macgregor, The Montgomery (3254), more fully described on the first page of this issue. He also purchased two brood mares and a suckling colt from Mr. John Stewart, county Bruce, Ont. These were Belle of Richmond (3527), and Corran Bell (4365). The former is a light bay with white feet, and small stripe on face; is a heavy, low-set, thick mare, with great bone and hair, and such as in Scotland would be called "a good kind to breed from." She was bred by A. Mitchell, Campbelltown, Argyle-shire. Her sire was Prince of Wales (3364), by Prince David (643), by Prince of Wales (673), and her dam Bell of Clochkiel (2543), by Doncaster (238).

The latter is a dark bay in color, with stripe on face and white hind legs. Bred by Mr. W. McKinnon, of Kintyre, and foaled in 1881, she was sired by Dreadnought (241), by Farmer 286, and out of the dam Floss (3912) by Doncaster (238).

Of the Clydes bred at Shamrock Avenue we mention three, Lord Carleton (200), 2496, foaled May 6th, 1885; Sir William Wallace (214), 2486, foaled 20th July, 1886, and Lady Carleton (38), 2975.

Lord Carleton (200), 2496, was the first pure-bred Clyde stallion foaled in the county of Carleton, and Lady Carleton (38), 2975, a full sister, was the first pure-bred Clyde filly. They are both by Sir William Wallace (806), and the dam Belle of Richmond (3527). Lord Carleton is a bright bay with small star and one hind foot white, a large, strong-boned colt. Lady Carleton in color and markings is an exact counterpart of Lord Carleton, and, like him, possesses true Clydesdale character. Sir William Wallace (214), 2486, is brown in color, and, like his sire, Sir William Wallace (806), has white face and legs. His dam is Corran Bell (4635). Being a late colt he is at present under size, but in quality would not be easily beaten.

In addition to the pure-breds there are on the farm a number of highly bred mares noted as prize-winners and gold medalists, of which we will only stay to notice at present the old brood mare Jess, about 22 years old, and carrying foal to Doncaster. She is certainly one of the highest types of a coach mare to be found in Canada, and to this mare, through the results of judicious mating, Mr. Good attributes much of his success in the show-rings.

The Ottawa valley is fast becoming a Clydesdale centre. What it lacks in quantity is fully made up in quality, some of the best Clyde horses of the Dominion being owned there. In addition to those owned by Mr. Good we may mention Mr. Clarke's Baron of Auchendoir and Windsor (2509); Mr. Conroy's Vanguard by Lord Lyon, Mr. White's Peter the Great, Mr. Click's St. Clair of the Isles, Mr. Blain's Rising Sun, and Mr. Eadie's Colquhoun.

We are glad to learn that the enterprise of those men and others whose names we have not been able to secure is being appreciated by their neighbors, as their stock horses are doing a successful business. May the good work extend till the valley shall be filled with good horses and good stock in the different lines.

Sustaining Life at Exhibitions.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

DEAR SIR, In your December number you refer to "Sustaining Life at Exhibitions," not animal, but human life, and your remarks there please me much. Last fall I attended a fair, at which I had the pleasure of enjoying meals as you talk of in a tent, it was put up by the Methodists of the village not far away. The food was excellent and the ladies very kind to every one. The only drawback that I could see was, that the last day being cold, the gentlemen might have relieved the ladies more than they did. They made the further mistake of putting an ill-tempered man at the door, whose place would have been much better filled by any one of the young ladies in attendance. The softening, civilizing, inspiring, and elevating influence of such an arrangement at Exhibitions would of itself repay the outlay, and in addition would bring revenues to the good causes that need them so much.

R. S. REID.

New Edinburg, Ont.

"Your paper in many respects is above all praise. I think it contains more fresh and original matter than any other published in the interests of the Canadian farmer. In our home we especially admire the beautiful diction, and choice and eloquent language which grace the editorials."—J. H. Ferguson, Brantford, Ont.

The Dorset Horned Sheep.

The only flock of this handsome and useful breed of sheep in Canada, so far as we are aware, is owned by Mr. Valancey E. Fuller, of Oaklands Farm, Hamiltion, Ont., and those represented in the engraving were drawn from life by actual and correct measurement and without exaggeration. In each case they are true likenesses, showing alike good qualities and defects. They were imported by Messrs. E. & A. Stanford, Markham, Ont., from their native chalk downs in Dorsetshire in the summer of 1885, and if we mistake not they are a breed which have come to stay.

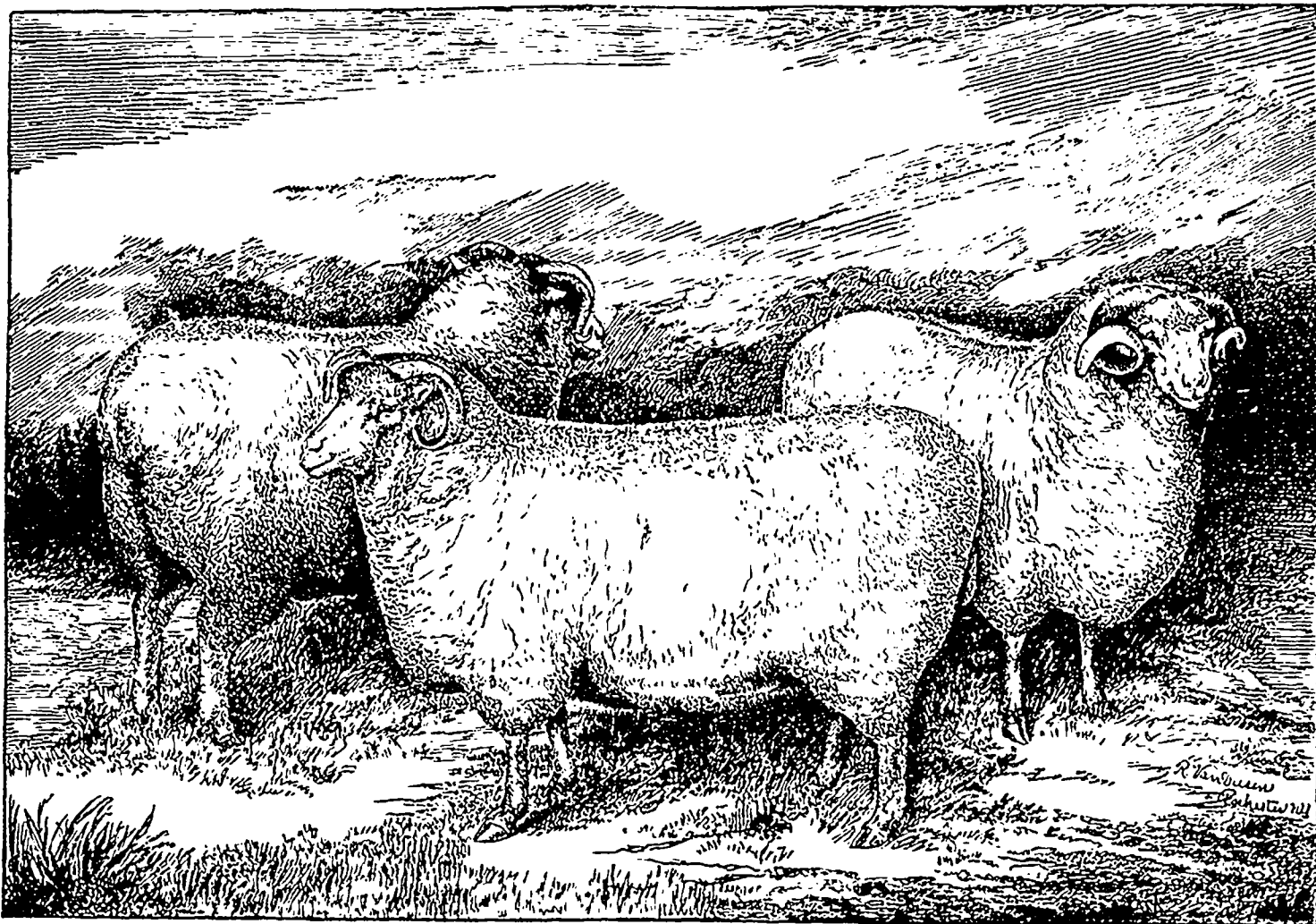
We see no reason why they should not stand exceptionally well the climate of Canada, with the blood in their veins of their hardy progenitors and their close, well-fitting garment of wool, well up on head and fore top and well down all over the belly and legs as far as the knee.

But it is their mutton qualities and wonderful prolificacy that are so full of promise for the future that we believe awaits them in Canada. For long time they have been bred in England to supply the London market, and breeding them with this end in view has induced those early maturing qualities which are so desirable. In Canada as in England it has been dem-

crumpling. Some of the ewes of this lot were again with lamb. In one pen were ewes with lambs, though not yet a year old, and in another, ewes that had not yet come in, having been purposely kept from breeding earlier. In other lots were ram lambs about one year old, to the number of seven head, which, judging from appearance would weigh about 175 lbs. A pen of five yearling ewes of this flock, lambed in the spring of 1885 and weighed 14th Jan., 1886, weighed 980 lbs, and three ram lambs 540 lbs.

The flock numbers 39 head, breeding ewes and rams, not including the lambs.

We are more than pleased thus to be able to hail



First Prize Yearling Ewe, Toronto Exhibition, Provincial Exhibition and Dominion Exhibition, 1886. Weight at 22 mos. old, 221 lbs.

Ewe, 3 years old. Weight, 208 lbs.

First Prize Ram, Toronto Exhibition, Provincial and Dominion Exhibitions, 1886. Weight at 10 months old, 180 lbs.

GROUP OF DORSET HORNED SHEEP.

Property of Valancey E. Fuller, Oaklands Farm, Hamilton, Ontario, Canada.

Their good qualities are numerous and important. They are a nice, prim looking sheep, lithe and gentle in their movements and shy, but not annoyingly so. Their snow white faces and feet, and their strong curved horns give them an ancient, interesting look. The face is long and tapering and the carriage graceful. The body is strong and vigorous, good in the breast and exceptionally so in the ham, and the wool is of a degree of fineness that will take the market well. If we mistake not it will rank next in fineness to the wool of the Merinos when it is assigned a place in the Canadian market. The fleeces weigh from ten to twelve pounds from the shearling rams, and those of the ewes from five to ten pounds according to age.

onstrated that they will breed twice a year, but even though they breed but once so as to produce lambs in November, they would be very profitable as mutton sheep, furnishing a supply for the Christmas and Easter markets.

In one lot we saw in their quarters at Oaklands (15th Feb.) some ten ewes suckling eighteen lambs—great stalwart creatures which would make a good load for one to carry. Two of these dropped on the 15th and 17th of November, 1886, respectively weighed 81½ lbs. and 85½ lbs. They were weighed in our presence and at our request. Some of the young creatures had horns already five inches long and broad and flat, already giving evidence of

the introduction of this breed of sheep into Canada. As their grazing qualities are good, we see no reason why they should not soon become numerous. It also affords us no little pleasure to be able to present to our readers through the kindness of Mr. Fuller, the first sketch of the breed ever given in any agricultural paper in America.

The Willow Lodge Herd of Shorthorns.

This fine herd of cattle, owned by Mr. J. C. Snell, Edmonton, and to be sold as announced on April 7th, is made up mainly of representatives of the Kinellar herd of Mr. Sylvester Campbell, of Aberdeenshire, Scotland, whose herd has been bred with close care

and rare judgment, and has produced a very large number of high class animals, a goodly proportion of which have been imported to Canada and have made their mark in the show rings and in the herds of this country.

Willow Lodge has long been famous for good Shorthorns, and in the several successful public sales, which have been made there representatives of the Kinellar herd have figured amongst those, making most satisfactory prices. Many of our readers will remember the sale at the Lodge in 1874, when imp. Golden Drop, from Kinellar, went out of the ring under a bid of \$7,225, and her yearling daughter followed to the same bidder at \$1,005; and these were considered only moderate prices in those days, for it was just after the "boom" had gone over. It is to the advantage of the farmer and the young breeder of the present day that he needs not to be a millionaire in order to be possessed of a good cow—even an imported cow—if his ambition runs in that direction. Fancy prices are not looked for in these times, and good animals can be bought at figures the farmers can afford to pay.

A glance over the pedigrees in the catalogue of the forthcoming sale, and a comparison with the animals indicated, will satisfy anyone that they harmonize with Mr. Snell's favorite motto, "A good beast with a good pedigree." Uniformity of type is one of the noticeable features in the herd, and it is a uniformity of goodness. "Long, low and level" is a description which applies throughout the herd in a marked degree, and this type of Shorthorn is much sought for at the present time. Early maturity and good feeding qualities are certainly desirable in these days when two-year-old beef is called for as the rule.

We have not space for a detailed description of the animals, but may say that in addition to the seven imported cows from Kinellar, all of which have or will have calves at foot for the sale, and which are an even lot of low set, thick fleshed cows with neat heads and horns, there is a red two-year old Ury heifer, numbered 15 among the Uries, a model specimen of the breed, and no doubt will be a favorite. Her excellence comes to her honestly, for she is half sister (being from the same dam), to Mr. Simmons' fine young bull Sir Christopher, who was so popular at the fairs last fall. Her sire, Sir Charles, from imp. sire and dam, is a bull of fine quality and character. A half dozen yearling and two-year-old heifers and as many heifer calves, all by imported bulls from Sittyton and Kinellar make up a bevy of beauties. A number of matronly cows well gone in calf and most of them due by the sale day, and a few really good young things of other well known standard families, full of individual merit, make up the list of females.

At the head of the list of bulls stands imported Count of the Empire (51037), bred by Mr. Cruickshank, of Sittyton; a typical Cruickshank bull, if short legs, thick flesh and constitution be the standard. With a neat head and horns, a powerful neck, broad chest, full crops, deep fore rib and flank, he makes a very useful head for the herd, and we are told is proving very sure. The lieutenant of the list is Glamis, a red two-year-old son of imported Lord Glamis (48192), bred at Sittyton and from an Isabella cow descended from Kinellar, a show bull in any company and a first prize and sweepstake bull at Port Perry last fall. He combines style and substance and feeding qualities in a marked degree. A half dozen younger bulls, but all of which will be a year old before the sale, are a uniformly good lot.

We trust Mr. Snell may not be disappointed in his expectations of seeing a large attendance of farmers and stockmen at Willow Lodge on April 7th, where we are sure they will meet a warm welcome and good treatment.

Our Scotch Letter.

(From our Aberdeenshire Correspondent.)

GOOD PROSPECTS FOR ABERDEENSHIRE SHORTHORNS.

Depression sets heavily on almost every interest in this country. Rents are falling, when farms come into the market, from 30 per cent. to 50 per cent., and it is a question if the bottom has been reached. Farmers who are bound by leases are threatening even in the law abiding county of Aberdeen to adopt the Irish "plan of campaign" if the landed proprietors do not accept their terms; and if a local Dillon should chance to spring up there is no saying to what extreme length an agrarian agitation might in present circumstances be carried in Scotland. I am glad, however,

to note one bright speck on the horizon—an increased interest in our Scotch Shorthorn, which, in one instance I am about to refer to, has taken very practical shape.

THE CANADIAN LIVE STOCK JOURNAL had the first information of a transaction which was regarded among stock breeders with pardonable pride, by which Field Marshal, one of the best bulls of the day, was transferred for a time from the herd of Mr. William Duthie, Collynie, to that of Her Majesty The Queen, at Windsor. The other day Mr. Duthie sold a son of Field Marshal to Major Barton, Straffan House, Dublin, owner of one of the best herds in Ireland, and if rumour speaks true, a Collynie bred bull is now being tried at the great headquarters of the Shorthorn race—at Warlaby itself! Canada has absorbed a large amount of our best Shorthorn blood, and another batch of the very best that could be got has just been shipped to Mr. Luther Adams, of Lakeside Stock Farm, Iowa. Mr. Adams, I believe, owned a Bates herd, which is to be replaced by a herd of Aberdeenshire Shorthorns, which has been bought by his manager, Mr. W. Miller, and the selection he has made, consisting of 20 females and 11 males, does great credit to his judgment. Good service has been done in the interests of the breed by preparation of catalogue, containing descriptive notes of great value, and the full pedigree of Mr. Adams' stock. The introductory remarks are so much to the point that I could not do better than make therefrom a brief extract: "The object," says the writer, who apparently has made himself well acquainted with his subject, "which the Aberdeenshire breeders have persistently kept before them is not so much to form an array of aristocratic names in the pedigree, as to make genuine good animals, whose dams and sires for generations have possessed those qualities which they desire to cultivate in their herds. These may be given in order as follows: (1) constitution; (2) quality, i.e., aptitude to put on flesh; (3) form, having the flesh even and deep on the valuable parts; (4) substance (weight not height); (5) style." In this you see the controlling influences that have produced the Aberdeenshire Shorthorn of the present day. Aberdeenshire breeders have aimed at a system of rearing as natural as possible. The calves all suckle, each cow rearing at least one calf. From the middle of May till October they are kept in the fields day and night, and in winter depend for food chiefly on turnips and oat straw. Calves, from before weaning till they go to the grass, are allowed either a moderate supply of linseed cake or bran with oats or barley, mixed. It is very properly remarked that the climate is changeable and trying, being frequently wet and cold even in summer, and consequently robustness of constitution is indispensable. This contention with climate on the part of breeders has proved an advantage to their herds, purging out the delicate ones and leaving a hardy race of cattle to go on with. Long legs, big bones and narrow frames are eschewed, and Aberdeenshire men take most readily to an animal that shows thickness, width and early maturity, and in cows, animals that have good formed vessels and a good supply of milk. Thus the standard that our leading breeders in Aberdeenshire set before them is admirably summed up.

About one half of Mr. Adams' stock were bought from Mr. Duthie, Collynie, but are largely of Sittyton blood, about one-third are direct from Sittyton and the remainder are chiefly from Uppermill. A few of the families represented may be mentioned, Violas, Duchesses of Gloster, Missies, Secrets, Lustres, Lady Fragrants, Carnations, Floras and Violets. There are other strains of equal merit and repute in their collection, which, however, not only combines good breeding, but great individual merit. Their sires include some of the best bulls of the day, and of these I would simply mention, Field Marshal (so well known); Cumberland (said to be the best bull and the best getter now at Sittyton); Athabasca (one of the best bulls ever used at Uppermill); William of Orange (a very superior Sittyton bull); Heir Apparent (now in Mr. Cochrane's herd in Canada); Elocutionist (own brother to Jesses' Green's, Innerkip, Earl of Mar), and a Violet bull named Baron Violet. There are several animals of exceptional quality among the females, such as Viola 5th, 29th Duchess of Gloster, Simplicity Collynie (a perfect beauty of great promise); Golden Brest of the Golden Mint tribe, Flora 90th and several from a great milking family, and Glen Ythan 4th, a rare beefing sort. Mr. Adams has had the great good fortune to secure Cupbearer (52692), a two year old roan, by the noted sire, R.C. Roy (45484),

now in Canada. This bull, Cupbearer, was first at the "Royal Northern," at Aberdeen last year, and is a great favorite of Mr. Duthie, who reckons him almost, if not, quite equal to Rob Roy himself. It will be remembered that he was bought by another Canadian some time ago, but he had to relinquish his bargain, owing to the closing of your ports to foreign cattle. Scottish Chief and Harvester are the most promising of the bull calves. Several high bred Clydesdales, English coaching horses and Shropshire sheep were shipped for the Lakeside Stock Farm, along with the Scotch Shorthorns. I will follow with interest the fortunes of Mr. Adams' fresh herd.

QUIDAM.

Where are they?—or the Shorthorns of Thirty Years Ago.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR—About thirty or thirty-five years ago there were some Shorthorns in this town that, if they could be placed back to-day, would be worth a gold mine to the owner of them. Colonel Stevens Baker, of this town, purchased a Shorthorn bull named Prince, a thoroughbred, if I remember right. He bought him of Col. L. G. Morris, of Fordham N. Y. He was a large, white bull with a few red spots on him.

As milkers we have nothing of the kind at the present day to match them. His get were large and very showy, many of the cows weighing from thirteen to eighteen hundred pounds in good milking flesh, and I have had some of them that would give on grass alone fifty to seventy pounds per day, and would milk up to time of calving, on good early cut hay alone, and keep in good condition. Such steers and oxen, one may travel this Province over and fail to find them to-day.

I remember very well my father having a pair of oxen that he kept until they were eight years old, which never ate a bushel of extra feed until the last year he kept them, and the pair weighed fifty-two hundred and thirty pounds the day he sold them. He sold them for three hundred dollars, not a bad price for a working pair of oxen. They were kept two years longer and sold in Boston for one thousand dollars and their live weight was seventy two hundred pounds. Now what has the world gained by breeding for beef and lost such a race of Shorthorns?

I have known a cow of that same stock to bring up two good show calves that would carry off the prizes at the county fair. Now it takes about the milk of three of the fashionable Shorthorns of the present day to raise one calf, or one has to keep a drove of such cows as "Scrubbers" to furnish milk to bring them up on, or raise them on concentrated food, which is expensive for the ordinary farmer.

Within the last thirteen years I have had three pedigreed Shorthorn bulls, and they have all disappointed me as milking stock, their get being about as good as males for milk. I have always been an admirer of Shorthorns, but am beginning to think that it is a waste of time and money for the farmers of this Dominion to breed Shorthorns for milk and beef combined.

FARMER.

Cowansville, P. Q.

The Outlook for Stock in Manitoba.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—Continue your war against the scrubs with unabated vigor. They are the curse of the older countries and I do not want to see them get a foothold here. I live in the centre of one of the finest tracts of land for cattle and horse-breeding purposes that can be found in Manitoba, and it would indeed be a pity if we did not take every pains to improve our natural advantages by breeding from only the very best class of stock.

While we have such men in our midst as the Messrs. Sharman & Sharman in the thoroughbred cattle, sheep and pig line, and Messrs. Jameson & Kirchoffer, and Mr. H. R. Jameson in the horse-breeding business, there is no excuse for the intelligent farmer breeding from any but the best class of stock. Messrs. Sharman & Sharman supply bulls of the purest breeding at a very moderate price, consequently always have a number of orders booked in advance. These gentlemen had a really triumphal march with their herd this fall, having won a principal share of the prizes at Winnipeg, Carberry, Brandon and Glenwood shows. They keep on importing a su-

perior class of stock all the time, thereby doing an incalculable amount of good to this country.

In the horse line Mr. H. R. Jameson takes the lead, having a fine ranch about three miles from this town, with a large stock of a very superior class of brood mares, and a most excellent imported Shire horse, Bosbury Boy, at the head of his stud. The colts left by this horse for the last three seasons require only to be seen to be appreciated. They average about 1000 lbs. weight as yearlings, and any for sale are eagerly snapped up at top prices. Bosbury Boy is a descendant of old Honest Tom, and you can easily trace the blood of the old horse in the colts. The Shire horses seem to be the prime favorites here, so Mr. Jameson thinks of going into the importing business on a large scale.

There is no doubt but this is going to be a magnificent country for horse and cattle-breeding, as well as wheat-raising. We have any amount of cheap feed, splendid climate (we have got quite over our fear of the weather), and good markets for all we can raise. The farmers are discovering that wheat-raising by itself is not going to realize a fortune for them, so they are gradually going into the stock business, with the very best results. I only wish I could afford to distribute about fifty copies of your JOURNAL monthly through this Souris valley; I think it would be a paying business for some of your advertisers to do so.

RICHARD B. KIRCHOFFER.

Souris Plum Creek,
Manitoba, Dec. 30, 1886.

Treatment of Young Foals

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—I have read with a good degree of interest accounts of the fatality among young foals during last spring, and the remedies as well. My opinion is that a great deal of it is caused by constipation of the bowels. Colts are never out of danger from that till the mother's milk has passed through them, which can be easily seen by the light creamy color of the discharge. I have been interested in horses and colts for over forty years at any rate, and the result of my experience is, that a couple of spoonfulls of fresh butter or clarified butter, given to the colt as soon after birth as possible, is one of the best, if not the very best thing, to insure a natural passage of the bowels, before any trouble has begun.

If this is worth anything you are welcome to it; it has been worth a good deal to me. I could say a good deal about that complaint and its treatment, but the simple preventive I have mentioned is sufficient.

Millar's Corners, Ont.

COR.

Consistency.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—Your contemporary, the *Advocate*, has surely been making itself ridiculous. Just think of this paper abusing pedigreed stock for years, and then going up to the Messrs. Groff's pedigreed prime fat beef Short-horns and giving its readers such a dish as appeared in the February issue! It speaks of "gold medals in abundance," and grown from "one good animal." They "began by feeding well, and making them the fattest on the continent, and they (the Messrs. Groff) are known as feeders the continent over." These are in substance the writer's words, just such animals as the *Advocate* elsewhere styles "lumps of tallow." Our friend is on the right track now—*keep him there*. Suggest a visit to some other of the good stock farms. You can make a good paper out of this; go for him, he has fallen (is it unwittingly?) into a pit, not of mire, but of gold. STOCKMAN.

Lambeth, Ont.

It is to us a matter of the most intense satisfaction to behold the man who has wandered so long in the lonely waste places of Ontario, those parts which are the domain of "scrubbery," sitting and clothed and in his right mind. We could not feel in our heart to "go for him" now. We feel more like taking him by the hand, and giving him our hearty congratulations. Like his penitent prototype of the Gadara hills, we trust that henceforth he will go up and down amongst the inhabited places of Ontario, with the *Advocate* under his arm, trying to undo the gross wrong which he has done to his countrymen in the past.

The Farm.

No greater proof is required to show that the JOURNAL is highly appreciated and doing a good work in Canada than the fact that many new subscribers have this year ordered back volumes from its beginning. This idea is also well sustained by its steadily increasing subscription list. We here desire to thank those numerous friends who have already done good work for the JOURNAL, and hope that those who have not yet renewed will send at least one new subscriber with their renewal. See extraordinary clubbing rates in February issue.

THE precise value of clover as a fertilizer has been a subject of much discussion, both in and out of the agricultural press. Of the fact that it is useful as a fertilizer, there has not been the shadow of a doubt, but the mode of using it for this end has given rise to very adverse opinions, some taking the view that it should not be ploughed under before cutting, and others that it may be thus used with very great advantage. It seems to us that no cast-iron rule of practice should be laid down in this matter. In some soils it may be ploughed under with great advantage, as in the case of those which are light and sandy, while on those which are heavier there may be less reason for this. On light soils wheat has often been grown for a long term of alternate years by the use of no other fertilizer, but it does not follow that this would be the result on all soils. The price of hay should also be considered before a crop is ploughed under, and the prices of meat should not be overlooked. Although opinions may differ as to the wisdom of ploughing under clover, there can be no difference of view as to the wisdom of growing it largely.

AN old farmer in Ohio, who says that he has hired farm help for the last thirty years, in writing to the *Country Gentleman*, makes the following statement, which all farm laborers should ponder: "As I look back I can trace the history of many of the young men who worked for me, and without an exception those who saved the bulk of their wages have become men of property, while those who drew and spent their wages as fast as they were earned, are now living from hand to mouth." It may seem a small matter to a young man laboring on a farm to save but \$100 a year, but it is not in the possession of the cash alone that the chief value consists, but in the habit of economy that enabled this workman to save this \$100. At the end of the second year the sum at his command is \$206, supposing there is no advance wages, and at the end of the third year \$312, and thus the interest accumulates along with the principal. The young man is all the while acquiring experience which is worth a great deal to him, so that by the time he is able to rent a farm or to buy one and make a good payment on it, he is able also to work it to advantage. This experience he has gained in a measure at the expense of his employer, and the thought of this will go far as compensation for the long hours he has worked. The workman on the farm who makes no endeavor to better his condition in life is not the most serviceable assistance the farmer can get. Far better is the help of that man who intends to own a farm some day himself.

Mixed Grasses.

The time is now at hand when grasses are to be sown, and in this country, where grass is to be henceforth king, it is of great moment as to which varieties we will sow, and the respective quantities. The old-time timothy and red clover meadows will, we be-

lieve, soon be a thing of the past; yet they will, in all probability, continue to form the basis of our meadows in all time, they are so well adapted to the soil and climate of Canada.

During the past season we have both seen these mixed grasses growing in all the luxuriance of a crowded growth, and conversed with a number of farmers in various sections who have practiced growing them for a longer or shorter term of years, and with one accord they speak in high terms of their value. The determination expressed by them to extend the area of their growth is the best possible proof of the worth of those grasses, as men never pursue what is novel very long for its own sake, unless they can affix to it the seal of profit.

Yet we believe at the same time, that they must be sown with the expectation that their sojourn will be but temporary, as permanent pastures, such as Europe furnishes, can never be sustained by Canada, the nature of our climate sternly forbidding it. The only forms of permanent pasture that we can possess will be found to consist mainly of June grass, Kentucky blue grass and white clover. Yet we are equally convinced that the time has come when no grass should be laid down, even for meadow purposes, without being composed of a number of grasses, unless they are sown for the purpose of producing seed.

The fineness of the hay thus produced renders it very much more valuable, as there is then no loss whatever from part of it being uneaten. A much greater return in weight will also be obtained from a given area, and the increased nutritive value is almost surprising. Then there is a better aftermath for fall pasture where this may be desired. Altogether the practice contains so many advantages that we would rejoice to see every farmer in the land sow a piece this present season, but remember it must be never with the expectation that it will be but little more abiding than our ordinary meadows.

We favor sowing these grasses in the ordinary way. It is not absolutely necessary to set aside a piece of land and sow the grasses alone. Ground in that state which is likely to secure a good catch of timothy and clover will also secure a good catch of mixed grasses, even though in both cases it should produce a crop of grain at the same time.

It is impossible to give a formula as to varieties and quantities that will apply equally well to all parts of the country, owing to the wide difference in the character of the soil and other conditions. Alsike clover, which in most places should form a leading factor in the mixture, will not do well in dry, gravelly soils, and should not be sown there, and so of the other varieties, each has its favorite conditions, and these are different from some of the others. The following, however, may be found serviceable in a way, as a sort of guide in determining both the varieties and the quantities of each per acre that may be sown:

Clovers: Small red, 2 lbs.; large red, 1 lb.; alsike, 3 lbs. Grasses: timothy, 4 lbs.; orchard grass, 3 lbs.; Kentucky blue grass, 2 lbs.; meadow fescue, 1 lb.; English rye-grass, 1 lb.; yellow oat grass, 1 lb. Total, 6 lbs. clover and 12 lbs. grasses. Orchard grass ripening early, should be sown with some reserve in meadows, but where pasture is the chief end, it is valuable.

Dairyman, above all others, should be most careful to sow mixed grasses, their value in producing milk abundantly and of a superior quality being universally acknowledged where they have been tried.

Please examine your address tag. The date thereon tells the time your subscription expired. Readers in arrears will please renew at once.

Seed Corn.

It is the usual practice of farmers, who take the pains to select their seed corn, to save the largest ears without much regard to the quality. It has been found by actual test that ears not so large but with straight, even rows, and corn deeply set in them, and well filled at the top and butt ends, give the best results. With grain it seems to be the same as with live-stock—overgrown specimens are not the best to re-produce from. The medium in size like the medium in situation, both in the animal and the vegetable kingdoms, seem to give best results. W. F. Brown, writing in the *Country Gentleman*, gives the medium length of ear as $3\frac{1}{2}$ inches, and thinks that by careful selection, using this kind of seed, it would be possible in corn-growing countries to produce 100 bushels shelled corn to the acre.

We cannot get by the idea that the medium in both the animal and vegetable kingdoms should be more the aim of the agriculturist. Overgrown specimens of the human species are not the most useful, neither in the age of Goliath nor at the present day. It is rather the perfection of what is medium that should be the producer's aim, and this gives wide scope for laudable ambition.

But this does not preclude the possibility of permanently raising the standard of what is medium. It must be done, however, very gradually. In such a case what is medium in our country might be below it in another, and vice versa, where smaller types are more commonly used in re-producing. If there is to be permanent advance then in general excellence, while the best types are used in producing it, they should lean to the larger rather than to the smaller specimens.

Farm Pupils.

Much has been said in the English press by writers from this side of the Atlantic of the grave impropriety attending the deportation to Canada of well born young men by firms and individuals making a business of this modified slave trade. It has been alleged that the practice is little short of kidnapping, that the most exaggerated reports are given of the blessings which await the young man on this side, and that as regards £. s. d. he is robbed in England by the professional tout who first bags him, and, secondly, by the farmer here to whom he is, so to speak, apprenticed. It is too much to be feared that there is a substratum of truth pervading these allegations. Much may be said of the unfitness of the young men for the work imposed on them, of their tender-foot ignorance of the rough life they are suddenly called upon to lead, and of their total want of skill to do any one thing well to which the farmer may put them. But this only serves to show, perhaps, that if neither the pupil nor the farmer is suited by the circumstances of the case, it is a business that should be better known by the breach than the observance of it. If there is any just cause for all the scandals in circulation, the system giving rise to them had better be abandoned. Those "at home" who send their supernumeraries to Canadian farmers are doubtless impressed with the notion that it is a good thing for the youngster to have a definite destination. He may be young and inexperienced, or might fall among worse thieves than the farmer, if he were left to drift about on his arrival till he found what he thought, or casual acquaintances might tell him, was a comfortable home, with a decent prospect of "learning farming." So much, therefore, can be said in favor of an organized system—that the lads are sure of a home of some sort on their arrival. Now what does our practical experience tell us of the

farmer offering the moral advantages of home life grafted on the tree of knowledge of agricultural practice? The farmer is no mere philanthropist. He goes into the bargain to make a profit by it on the arrival of the expatriated pupil. He says to himself and to the wife of his bosom, when they have retired to the only secluded bunk on the premises, that the youngster is green as grass, but he costs nothing, and may be there is work in him. He can split the wood, drive the cows up and back again between the house and pasture; go to the post for letters, feed the horse and by degrees learn to be as useful as the ordinary hired man, with the advantage of being almost or quite inexpensive in the matter of wages. The quid pro quo is to be the opportunity of learning farm pursuits. Now, a lawyer is not a worse lawyer that he does not and never did sweep out his own office. Manufacturers have made fortunes and risen to the top of their trades who were not apprenticed to the loom, bench, anvil or last. Practical knowledge is an excellent thing. Other things being equal, the man who can himself plough well will be the farmer most likely to have his ploughing done well by hired men. But it is by no means an essential element in any man's judgment of work that he should be able to do it himself. Still less does the argument apply to such labor as cleaning out stables and cow-steadings, turning a root-cutter or pulper, feeding a cutting-box, haying and harvesting, weeding and harrowing, running a horse-power, pumping water, holding a crosscut saw, or making cordwood. All these things and others innumerable of the same kind, some higher, some smaller "chores," are invariable accompaniments of farm life, and our youngster must be expected to serve his time at them, as the boy destined to be a wholesale grocer begins life clearing snow from the sidewalk and sanding the sugar, if we are to believe profane scoffers. The good-natured pupil does all these things as well as he can, improving as he goes on, submitting goodnaturedly to the chaff of those who do such work well because they know nothing else, and in the daily quickened ambition to do that which he has to do well, he soon becomes as good as some hired men; and if he has a head on his shoulders, is learning some of the real business of farming. That is, buying and selling to the best advantage. It is one thing to work a farm well, and another to have in addition the instincts of a trader. Without such instincts, a practical knowledge of farming, topped by the most complete education to be got at Guelph College, must only end in bankruptcy. And it is here that too many of the English farm pupils are destined to fail. They have been at public schools in England, associating with the sons of those born to leisure and pleasure, and never hearing a word of business. Their practice at out-door sports will have familiarized them somewhat with turnip fields and summer fallows, and have developed their muscle, though it won't save their hands being unmercifully blistered when they first tackle work on a Canadian farm. But their heads have had no such preparation: and their habits and bringing up have been totally at variance with the domestic ways of the log shanty in which they may find their Canadian home. They have much to learn and even more to unlearn. Straight from homes of culture and refinement, from couches of satin and mirrored walls, they come to share the bare necessities of life with simple folks, not of course the unlettered boors of the country villages they have known at home, but with our bone and sinew and our horny-handed sons of daily toil, who have no classical education to boast of, and who must be regarded as being in an entirely different social plane to their own. For what

have they come? To learn farming. With what end in view? There's the rub. Nine-tenths of them, it is safe to say, will drift into the towns and cities, and at the end of their apprenticeship renounce fork and shovel, axe and hoe, as only hideous dreams.

Here we are speaking of those whose parents will not have the money to buy them a farm and stock it. Those who will eventually have some money given to them are really the only ones who will do any good to themselves by coming to Canada as farm pupils, and the longer they defer starting on their own hook, the better. All experience has to be bought, and it is better for them to profit by a master's experience as long as possible. Unless one of these youngsters has most exceptional physical and mental endowments he will do little good as a farmer, even if he have money. Without money he is only qualifying himself for a third-rate day laborer's life. There will be exceptions, but as a rule it is simple cruelty to send out the soft sort of lad everywhere now to be seen on Canadian farms. A large number will rapidly degenerate and drift into the cemeteries through the demoralizing agency of cheap whiskey. Not a few will contract marriages that will forever establish a gulf between their old and new homes. Others will dawdle awhile over their self imposed tasks, half-hearted, and gaining no useful knowledge: finishing by becoming pests in the neighborhood. They have not backbone enough to fight and conquer, but will perish by the way. It is a dislike to mental effort, and to the restraint of desk or counter life, that has brought them out. They leave home because they have not the will or power to begin at the bottom and work their way up in some commercial establishment at home, and because they are unfit for professional life or have not the money with which to await the earning capacity that only comes with years of preparation. All these disinclinations and disabilities apply to a future in Canada—commercial, professional or agricultural. The man must have the right stuff in him or he will be a failure. All are not born to be bosses, and those of these English farm pupils who do not feel within themselves that they are in earnest, and will be successful in their avocation, had better at once abandon an occupation which will only qualify them to act as farm laborers. While here is yet time let them make an effort to obtain a position in some mercantile office, where the life will be more in accordance with their bringing-up, and where there is a future before them. And any honest farmer, with whom such an one may be quartered, will at once encourage him to follow our advice. For the farmer who would seek to profit by the youth's inexperience and helplessness we can have but the most unmitigated contempt.

Tile Manufacturers and Tiles.

There was a time when the makers of good things were prone to keep both the place and methods of their manufacture a profound secret. When the first copies of the good old Book were struck off by the printing press no one knew where the work was done, nor how, save the printer and his assistants. There was reason for this secrecy in those days of the "iron time," but we cannot by any process of reasoning see why the tile makers of to-day should be so desirous of keeping their whereabouts in the dark. Ever and anon we receive questions as to where tiles can be got, and after a good deal of inquiry are able to give the names of two makers for the information of subscribers, although our country, we cannot but believe, has a score of them. We have on hand at present the two following inquiries:

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—In several of your numbers for 1886 you have an excellent series of articles on underdraining, in which the prices of the different sizes of tiles are given, which is much less than we pay for them. Would like some information in regard them. You give the price of three inch tile at \$12; we have been paying \$22. They are made for 12 inches in length, but run nearly 13 inches. Are your tiles as long? Please answer early, as I am much interested, having put down many thousands of three inch tile during 1886. A SUBSCRIBER.

Centreville, Maryland, U. S.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—In your essay on draining, 1886, you say junction pipes and curved pipes for draining are now made in Canada. Will you kindly give me the address of the manufacturer and oblige,

THOS. R. MERRITT.

St. Catharines, Ont.

In answer to the first letter we would say that the prices we quoted were those given in 1885, since when the tendency has been downward rather than upward. The tiles are just about 12 inches long and the prices cited were for ordinary lots such as average farmers would want during the season. We do not see why they could not be put on board the cars for prices as low in wholesale lots.

In reply to the second letter we may state that after considerable inquiry we have ascertained that tiles are made by Wm. Talman, Beamsville, Ont., and E. C. Haak, Conestoga, Ont. The latter claims that he has the largest tile yards in Canada. We believe that junction tiles are made at both these places. We called the attention of the latter gentleman to the advisability of bringing his business before the public through means of advertising. He said that the local demand was greater than he could supply. If so, this means that in Ontario we have not a sufficiency of tile makers.

Beware of Wild Flax in Timothy Seed.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—As the season is coming on when the farmer wishes to procure grass seeds for spring sowing I would like through the medium of your paper to give a word of warning to intending purchasers.

There is very prevalent in this section of the country a weed called wild flax. The seeds are about the size of timothy seeds, a light red color and easily distinguished on close examination. It ripens in July or late June. I have never noticed it in spring crops; always in fall wheat or grass. Some parties save the timothy seed as it is threshed, and very often there is enough wild flax in a bushel to give a farmer a good start in raising weeds. One man of my acquaintance saved several barrels, which he said would do well enough to sell, but he would not sow it. Another party said he got the seed in town and would sell it there again, which he did. Now some farmer will buy that seed and hurt his farm for ten years, as it is harder to eradicate than Canada thistles, and if some farmers are dishonest and enemies of their country, it is time the public were warned. If a man cannot raise his own seed let him buy it from some good, reliable neighbor who has a clean farm, for bad seed is as bad for a country as scrub stock, and should be taxed.

Hoping you may find space in your valuable paper for this warning,
Binbrook, Feb. 3, 1887.

W. J. PATTERSON.

[The above letter has the right ring—ED.]

Grange Organization.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—Would you approve of granges here, where we labor under disadvantages, having to pay high prices for what we consume, and realizing but little for what we produce? Please favor us with your opinion in an early issue. A brief note also as to organization would, I think, be welcomed in this county. A. T. F.

Gransell, N. W. T.

We fail to see why, under the circumstances,

granges would not be advantageous, more especially in the regulation of prices paid for what is consumed. In older countries the strong competition regulates this, but not so in new settlements. An ordinary farmers' club with constitution drawn up as its members should desire, might effect the same end, and with machinery less elaborate than that of the grange. All particulars as to grange organization may be obtained from Henry Glendenning, Manilla, Ont., Secretary of the Dominion Grange.—ED.

The Dairy.

Cows that are encouraged to give a liberal supply of milk during the spring months will continue to do so all the season on moderate keep, but if they are allowed to fall away at this time they never give so much the same season again, however good the keep, as the habit they form at such a time seems to cling to them throughout the milk-giving period. This law will doubtless operate at other seasons of the year, but in the spring the mistake is more likely to be made, owing to the scarcity of feed. Evenness and continuity seems a law of growth which we cannot ignore. The best results cannot be obtained in any other way. So of the acquisition of knowledge. It is the faithful plodder who leaves his more brilliant competitor in the race. In dairying alternations of high and low feeding will never prove satisfactory. At all hazard, therefore, keep up a regular flow of milk. The variations should be very gradual, always on the descending scale.

Managing of Dairy Stock when Young.

When visiting Parkhill, the home of Mr. James Drummond, Petite Cote, near Montreal, last autumn, there was nothing about the place that we admired more in the stock line than the young stock of Ayrshires. This led to an inquiry on our part as to the method of feeding them, and Mr. Drummond consenting, we publish it for the general good.

Mr. Drummond does not favor forcing the females, as he thinks it militates against their milking qualities. Past experience has led him to this conclusion.

The calves are fed new milk for one week and then gradually changed to a diet of skim milk. By the time they are wholly on skim milk, or nearly so, they are fed in addition a little boiled flax-seed, and about four times the quantity of oatmeal, made from grinding kiln-dried oats without the hulls. This is made into a porridge, boiled half an hour and stirred into the milk, which is fed warm. They are kept in a comfortable stable in summer and fed hay in addition. The meal is of course increased in the milk as they grow older.

The first winter they get simply hay and a portion of roots. The second winter they get hay and straw, and towards spring some roots.

Mr. Drummond prefers having the calves dropped early in the spring, and the heifers usually come in at 2½ years. The first year they are in milk they are not allowed to go dry till near the time of calving again. Usually the cows are dry from one to two months.

What Ailed the Cows?

When attending the dairy association of the county of Huntingdon, P. Q., we were informed by Mr. P. Gardiner, New Dundee, that last winter he kept too head of cattle, young and old, housed in one stable. We cannot give the exact dimensions of the stable, but remember that our conclusion at the time was,

there was no overcrowding. The cattle stood on cedar block pavement, and the building was ventilated fairly well. The winter being very stormy, they were not let out much in January and February, only let loose to drink in a trough under cover, and at once tied up again. Toward spring a number of the milch cows at different times showed signs of paralysis in the hind parts, and those soon to come in were more affected than the others. In about three days after the first symptoms were discovered they became unable to rise. A number of them died, and this was true of others in the neighborhood similarly situated. The vets called in said the trouble arose from a prostration of the nervous system, but could give no relief after they became unable to rise alone.

We would like very much to know if dairymen in other sections can furnish any instances similar, and, if so, have they known any instances of recovery after the cows became unable to rise? We are equally curious to know the exciting cause. Some of us have been telling dairymen at farmers' institute meetings, that their cows should not be let out at all, unless occasionally for a few minutes in a warm day. It is just possible that this idea may be carried too far. Was lack of exercise the exciting cause in this case? If the trouble was only local we would be inclined to look upon it as caused by some peculiarity of stable construction or management confined to the locality, but if of wide range, it would arise from disobedience to some fundamental law of general management. Who will give us light?

Ayrshires as Dairy Cattle.

This paper was read at the meeting of Ayrshire breeders held in Toronto, 14th January, when the Ontario branch of the Dominion Ayrshire Importers' and Breeders' Association was formed:

At the last Provincial Exhibition, held at Guelph, a number of Ayrshire breeders met with a view to the organizing of an association for the purpose of protecting and promoting their interests in connection with this celebrated breed of dairy cattle. At that meeting I had the honor of being appointed provisional president, and it was there agreed on that we should again meet in Toronto some day in the last week of the year in order to consummate this incepted organization.

I had appointed Tuesday, the 28th of December, as being the most available day of that week. But it was subsequently announced that on the 28th the elections for the Legislature would take place, and by several breeders it was suggested to me that it would not be advisable to have both events come off during the same week, consequently I postponed the meeting for a time. But here we are again, and I will now bring before you several matters requiring deliberate consideration.

Since we last met we have learned that the Ayrshire breeders in the eastern part of this province, in conjunction with those of Quebec, have already formed an association called the Ayrshire Importers' and Breeders' Association of Canada, and here is a copy of its first publication, extracts from which will be read to you. It contains an invitation to all owners of Ayrshires in each province of Canada to organize provincial branch associations and to appoint a vice-president for each branch association to attend an annual meeting of the Dominion Association, to arrange the business of their respective branches.

This seems to me a very feasible scheme, while the forming of another Dominion Association would appear to be in opposition to the one already formed and would certainly lead to confusion. I have every reason to believe that the aforesaid association is formed on a sound basis, therefore I would take the liberty of suggesting that we, the Ayrshire breeders of western Ontario, do form ourselves into a branch association in connection with it, and I trust an arrangement can be made which will be mutually advantageous to all Ayrshire breeders in each of the provinces.

It is now high time that something be done in this direction. From an experience of 23 years in the

breeding and use of Ayrshire. I have become thoroughly convinced that from an economical point of view, for practical dairy purposes there is no breed at all to compare with the Ayrshires, and that notwithstanding all the speculative booming of other breeds of dairy cattle, I submit that there is no breed yet discovered that produces so large an amount of milk, butter and cheese at so little expense and with so little trouble. They are the hardest, the most industrious foragers and by far the most uniform in productiveness during the whole year, and that they are the nearest and trimmest of all breeds will scarcely be denied.

They are in fact, the most suitable for Canada pasturage and for the purpose for which they have been bred for the last century. When in Great Britain last summer I made special inquiry throughout the different counties as to the general opinion in regard to the suitability of the different breeds of cattle for dairy purposes and I could not find one single instance of a dairy kept by practical dairymen, when profit was the sole object, that the cows used were not either Ayrshires or Ayrshire grades. And let it be observed those British dairymen who have to pay high rents are generally shrewd enough to adopt the kind of cows most suitable that are available for their purpose.

All practical dairymen in Quebec province seem to have learned this fact, but there are still some in Ontario who argue that after the Ayrshire cow is used up for the dairy she is, on account of small size, nearly worthless for beefing purposes. This is an egregious error. There is no animal more easily fattened than an Ayrshire cow when not giving milk, and although beef is produced in smaller quantities it is produced at a less cost per pound and of better quality than on some large coarse boned animals. But a dairy cow is not by any means to be judged by the value of her carcass after she has served twelve years in the dairy. Her value must be calculated according to her productiveness during her lifetime.

Why have the Ayrshire men been so recalcitrant in bringing this notable breed more prominently before the public? It is certainly not that they are afraid of tests, for when fairly carried out they have invariably come off victorious. The cramming, for a short period, of an extra individual cow with a phenomenal stomach does not by any means prove the general productiveness of any breed. If breeds are to be judged by test, let it be a fair test of a given number of cows for a whole year's production under stated conditions. In such a case would there be any competitors against the Ayrshires? I think not. The cramming process is a very dangerous mode of testing, and I doubt whether there could be an Ayrshire breeder so incautious as to risk the experiment. Furthermore, if even a cow could be stuffed to produce four pounds of butter per day, it must be at a loss in the cost of extra feed; at least any profit can only be looked for in the dung heap. A fair test can only be carried out under ordinary circumstances, in which case the Ayrshires will prove to be *par excellence* the dairy cow for the Canadian farmer.

There is, however, in Canada at present a seeming tendency to breeding for fine symmetry, without due regard for milking properties. If so, it is a mistake. I am an admirer of the beautifully formed, fine boned animal, but I fear that if mere fancy is to be indulged in, it will be at the expense of the more valuable qualifications. If the Ayrshire cow is to maintain her true character she must be bred chiefly for productiveness. And this brings to my mind the consideration of improper judging at exhibitions.

This is one of the Ayrshire breeder's greatest grievances. I know from experience in show matters that there is always some difficulty in obtaining efficient judges, because the best judges are generally exhibitors. But some more satisfactory method of appointing judges should be adopted, even if they have to be brought from a greater distance at some expense. I believe that one expert is more likely to give general satisfaction than any number of men who are but partially acquainted with the breed. Almost every body knows something about the different breeds of cattle, but I have seen men acting as judges who could not distinguish one breed from another. A few years ago I acted as judge on Ayrshires in conjunction with four other judges, one of whom did not know what the escutcheon meant, but thought it was merely a new-fangled name for the scrotum of the bull; and yet this man was recommended by one of our county agricultural associations as a fit and proper person for the position.

It is surprising how many utterly unqualified persons

will accept appointments of this kind. These ignorant, presumptuous demagogues, when acting as judges on Ayrshires very frequently give decision according to the fineness of the head, horns and tail, ignoring the importance of the barrel and milk vessel; in fact, overlooking the capacity of the animal as a milker. And from such vagaries exhibitors turn away in disgust.

I submit that judges should be required to observe a scale of points duly authorized, and to record their decision on each point, so that exhibitors might know what they are exhibiting for and what they might expect.

I think we should have but one herd book, and I presume that is the opinion of all interested. There is but one herd book in Great Britain, one in the United States, and there should be but one in Canada. The amalgamation of the two herd books now published will be a matter of business for the several proposed branch associations, after they are formed. Then we can urge upon the Dominion Government the right we have to claim its support in our herd book enterprise, to which we are as well entitled as is the Shorthorn herd book. Yours respectfully,

D. NICOL, *Provisional Secretary.*

The Possibilities of the Dairyman.

THIS PAPER WAS READ BY THE EDITOR AT THE ANNUAL MEETING OF THE WESTERN DAIRYMAN'S ASSOCIATION, HELD IN WOODSTOCK, IN JANUARY, 1886.

(Concluded.)

We are in nowise anxious to bring to the front a breed that is adapted equally to the dairy and the shambles, and would whisper to our dairymen not to indulge in this fairy dream. The meat return of a worn-out dairy cow is so trifling compared with the net returns of the dairy career, that it seems to us a factor of but little moment, however lustily the champions of the dairy breeds may cry as to the value of the cows for milk, if they would leave the latter half unsaid—that is, that they are good for beef as well—they would save themselves numerous breaches of several of the commandments.

We would not, however, be misunderstood here. We do not value all dairy breeds alike, nor do we think as a whole that the cattle of no breed are equal to the established dairy breeds, which have been bred with one object in view during long decades, but as yet, in their purity, the females of these are too expensive to supplant with them whole dairies at a time. The introduction must be gradual.

Professor Arnold, the man whom we all delight to honor, and who, of all others, it may be, is most deserving of the royal robes and a ride on the king's horse, paid Canada a high compliment last summer, when he said: "It will be conceded that New York State cheese is not keeping pace with the improvement made by our Canadian neighbors." While we earnestly desire that the cheese made by our good neighbors across the line may improve endlessly, it is our hope at the same time that they may never again catch up to us in the art of cheese-making. It is very pleasant, indeed, to know that it is possible to pay back, instalment by instalment, the debt that we owe those genial brethren who were so unselfish in years gone by as to give us a knowledge of their then superior methods.

We fully believe that a yet grander future is before the dairy industry of Canada. In cheese-making we have made rapid progress, but our butter dairymen have mostly been napping. Wide sections of territory with their verdant meadows hiding the water-cresses by their luxuriance are yet unoccupied by the dairy. Whole counties even may be found without one single factory or creamery, so that for wide progression there is abundant room.

With the men of Britain calling loudly for Canadian cheese, and the valleys of our Provinces calling to our cheese instructors to unfurl the dairy banner in their midst, the possibilities of the future trade—who shall limit them?

But the expansion of this trade, it should be remembered, hangs on a single thread—that thread is *quality* of product. It is composed of an infinitesimal number of filaments, of which each patron of a dairy furnishes one. Let a proportion of them—not very large either—be inferior in texture and the thread snaps, and the large industry bursts asunder over the heads of those who have so patiently built it up, calamitous alike to the innocent and the guilty.

If our cheese dairymen are only true to themselves, they will still lead the van in cheese-making. If they are true to their neighbors, still in the dark in regard to the advantages of dairying, they will lend them lamps fed by the oil of past experience. If true to their country they will try and extend the work into every suitable locality. All that we have said in this paper is assuredly possible for dairymen, and splendid possibilities these are.

But, says one, you have told us nothing new in all that you have said. This was not our purpose at the outset. The great lack of the world is not so much light, as a lack of disposition to use it, and we suppose cheese-dairymen are no exception. During nineteen passing centuries the master spirits of each of these have been urging every generation of the living to walk in the light of the best guide-book the world ever saw. Nor have they during all that time added one tittle of what is new to this transcendent embodiment of truth. We, then, may surely be excused for adding nothing new in this, our paper in the line of dairying.

If the author of that wonderful letter—one that shall be read by millions yet unborn, offered as an apology, which a world has accepted, that he wrote to put them in "remembrance" of what they already knew, surely then it is a sufficient reason for our writing this paper, that we might stir up the minds of our Canadian dairymen by way of remembrance.

Poultry.

Poultry Keeping.

BY ARTHUR HARRINGTON, RUTHVEN, ONT.

We are often asked, "Which do you think is the best breed?" To this question we make reply that every breed has its peculiar good qualities, and to answer fully, we must know more about what you require of the fowls, eggs or flesh, summer layers or winter layers, and many other things. Our business consists principally in producing market eggs and poultry. We require a breed that feathers fast, that matures quickly, that brings the highest price in the market, a breed that never fails to produce eggs when they are wanted, viz., from December to May, and whose prolificness is beyond question. Three years ago we selected in the States a certain strain of Plymouth Rocks, combining the above useful qualities, and have never regretted our choice. Others prefer the Brahmas or Langshans, while there are still others who would not have anything on the place that did not answer to the name of Leghorn or Hamburg. Who can decide when all are satisfied. Choose the breed that suits you, carefully select your strain of that breed; give the fowls decent care, and in all probability you will find that you *have* the best breed, to *your* mind any way.

But whatever the breed, chicks are wanted, and the hatching season is almost here. Already large fanciers have numbers of orders on their books, and today (Feb. 11), we set the ball rolling for another year by placing eggs in our "Perfect Hatcher." Early chicks means to the fancier fully matured birds for the early shows, and to the market poultier big prices for broilers and eggs in abundance next winter.

All things considered, it pays to hatch early most breeds. One can nearly see the young fellows grow as they run here and there plucking the tender blades of grass in the comparatively cool months of April and May. Whoever saw a weakly lot of chicks in the early spring?

But this brings us to the conundrum, "How are we to get them?" Easy enough talking about having them; getting them is the trick." If you have no incubator—if you cannot borrow, beg or buy a setting hen or two, you will have to forego the pleasure of trying for a few early chicks, until things seem more propitious; and possibly you will be as well pleased.

February hatchings are very uncertain. If, however, you have secured a hen, prepare her a nest in some secluded warm place, as follows: line the box or barrel with paper, then place in earth (if it is to be had) to the depth of four inches, hollowed out a little in the centre, and over this strew a thin layer of well bruised straw. Now place in 8 or 9 eggs and set the box upon the ground; bank it up a little and place your hen on the nest.

(To be continued.)

A Few Useful Hints for Poultry Fan- clers.

BY THOMAS GAIN.

Make up your breeding pens this month. Do not omit a liberal supply of green stuff in the diet. Chickens are always healthier when they have plenty of sand, lime and gravel. Avoid an exclusive diet of corn; it will put on too much fat, and reduce the supply of eggs; vary the diet. Do not set eggs that have been chilled: they are useless for incubation. The best time to set a hen is at night, for she is more likely then to settle down quietly to work.

In buying stock always be sure you get the best; it costs no more to feed and house good birds than it does for dunghills. The best way to make a nest for setters is to take a large sod, cover it with loam mould, shape the nest in this, and cover with some clean broken straw. Two-year-old hens are the best to breed from. Cleanliness is one of the most important considerations in keeping poultry.

Now is the time to commence preparations for the fall shows. A few early hatched broods, well cared for, if of good stock, will give you prize-winners. If you have not had new blood in your flock for some time, buy a vigorous, well-marked cockerel now.

Scalded meal or shorts with a dash of mustard or pepper, fed warm, will help the egg-basket wonderfully. A little tincture of iron in the drinking water is a great benefit to the fowls. Fresh water every day is indispensable.

Bones constitute an important article of food for growing chicks and layers. The profits from your poultry depends very much upon the care the birds receive. Give your fowls plenty of exercise. Don't breed too many kinds.

Poultry Farming.

BY WM. B. COCKBURN, ABERFOYLE.

(Continued from February.)

Having selected your breed, the next step is "to proceed to business." The best season of the year to commence is early while spring is yet before you. Several courses might be pursued, but to get under full headway and secure an income by the next fall, and with a limited capital, you must study economy, and be your own judge as to what constitutes economy. To purchase enough good breeding fowls for your purpose would be difficult very early in the year, except at a greater outlay than you perhaps feel able to make. Let me suggest another plan. You can by looking over the advertisements in the STOCK JOURNAL probably find some breeder who keeps only thoroughbred poultry of the kind you have chosen, and who will doubtless sell you eggs at a very reasonable price, out of which you are certain to get some handsome chicks, so that if you wish you can gradually work into fancy stock.

I do not wish to anticipate the subject of incubation at this point; but if you have not much time to lose you should try to get out what chicks you can during April or May, to obtain good prices for early broilers, and secure laying pullets in the fall when eggs are

scarce and high, although if you decide on some quick maturing breed, they will do very well if hatched as late as June. Sometimes setting hens are scarce, but you can no doubt buy them from neighbors for a trifle, and after they have weaned their chicks can sell them again for two-thirds their cost or more, which will make your expense of hatching a small affair. Never set a hen where other fowls are laying, for you are sure to get them destroyed. A barrel sawed in the middle will give you two tubs; one will be of course, bottomless, but no worse on that account, and you cannot easily find anything better or cheaper or more readily procured to make nests in, as they allow ample breathing room for the hen after being securely covered up, as hens thus set should be, and taken off every day whether they wish or not, for a day or two, till they become used to their new quarters. After which, leave them pretty much to themselves.

Another very good way is to make a nest in a barrel on the ground in a sheltered locality, or in a shed or unused corner of the barn, and securely blocked to prevent rolling, having a coop in front to which (later in the season) the hen may have free access to obtain food and drink at pleasure. But in cold weather, especially if out of doors, a board cover will be required in front of barrel, and held in place by the coop, as a protection from cold and storm. Keep the hens on nest eggs until satisfied they mean business, before giving them valuable eggs.

It is a poor plan to set only one hen at once, as she will probably hatch too small a family to waste her time in raising them. If you set seven hens, for instance, and hatch sixty chicks—not a very bad return for early March or April—you can give the chicks to five hens, and place fresh eggs under the other two hens, renewing the nests a little, and by that time you may have found three or four more setting hens to set with them and so on. We would not keep a hen setting more than six weeks, nor give chicks to one that has set much more than three weeks. Feed setting hens nothing but whole grain and water. Aim at getting as many pullets as you want and raise as many more chicks as you require, for after deducting losses and crows, and doing some necessary culling in the fall, you will probably not have many if any over the number you sought to grow.

The Apiary.

Notes for March.

BY R. P. HOLTERMAN, BRANTFORD, ONT.

Towards the latter part of February, or at the latest March, bees in winter repositories should, if in a proper condition, commence brood raising. The temperature of such repositories should, if the bees do not raise it, be raised even as much as ten degrees, and under this condition, combined with a vigorous queen and sufficient stores and bees, young bees and brood will be secured in such quantities as to enable these latter to replace the old and rapidly becoming worn-out bees who have exhausted their energies in battling the difficulties accompanying the winter, and in perpetuating their kind; and to assist early brood-raising is no mean or diminutive step towards success in bee-keeping, for not only does it prevent heavy loss from what is commonly called "spring dwindling," but it means building up a colony rapidly, and so effectually that one properly treated with this object in view will often, by the time the first surplus honey can be produced, be in a position through numbers, to gather more than their average colonies would, and much more where the honey flow is early only; the

weak may have to build up on such a flow and become populous in time for its inmates to have no more to do for the remainder of the season. Hence often in the same localities so marked a difference in the success in bee-keeping.

Where colonies have been wintered outside, little can and little should be done at this season; bees should the previous fall have been carefully packed about with sawdust, chaff or such like. Colonies in such a position are less apt to suffer from spring dwindling than those which have been taken from repositories and placed on their summer stands. The former, too, should not have their packing removed until settled warm weather; and thus packed, they will build up as rapidly as circumstances will permit. Often a source of trouble to the bee-keeper, especially one not well posted practically, is the question, Have my bees sufficient stores? To this the only reply I can suggest is, examine them upon some warm, sunny day when they are able to fly, and if stores in combs are almost exhausted and the natural sources for food do not yet exist, the only expedient which should be resorted to is feeding sugar. There is a candy made of the best of granulated sugar so prepared that when warmed by the claws of bees it will soften and crumble, but not become moist. This is the best food, and should be placed above frames. If this is not obtainable a cake made by pouring melted sugar into a box made of a board frame with a board fastened to one side of it, and the whole lined with paper, and removing the board after the sugar hardens and the cake suspended in the hive, is excellent. If the bees have ample stores, they are often induced to remain at home, when to fly out would mean destruction.

Many recommend feeding at the entrance in very small quantities toward the latter part of March, and until ample stores are gathered from natural sources. The object of this is to stimulate brood-rearing, and, carefully done, the results may in that way no doubt be beneficial.

In all of these operations it must, however, be kept in view that we manipulate the combs as little as possible, and the bees are disturbed as rarely as possible, and when disturbed this must be done carefully. If there is reason to believe that the stores are ample and the colony is in a normal condition, leave them undisturbed. An expert can tell with a fair degree of accuracy if such be the case or not. If bees are seen carrying pollen, cleansing the bottom board of their hive, carrying out dead bees, and though not numerous display energy in carrying in stores when obtainable, we have many of the indications which go to show a prosperous colony, and one which may safely be left to its own resources.

I would again say, care must be taken to avoid all manipulation of the colony early in the season; in fact, avoid it at all times of the year.

In feeding never feed liquid food until the bees can leave their hives daily for flight, or it may cause excitement, and through confinement, dysentery, which, if it does not mean death, means debility, and an early death, when exposed to cold, which might otherwise be overcome. When, later, liquid food is fed it should be sugar syrup, not honey, unless it is also obtainable from natural sources, as it has a too stimulating and exciting effect. All feeding before honey and stores can be secured from natural sources should be condemned, and a colony in the fall should have sufficient stores to carry it through the winter and early spring. All feeding with syrup or sugar tends to giving the public thoughts of adulteration. When stimulative feeding is resorted to, the entrances should be carefully closed or contracted at night and during

cold days, this, once neglected, may result in chilling brood in distant parts of the hive, and the prosperity of a colony be very seriously affected for the season.

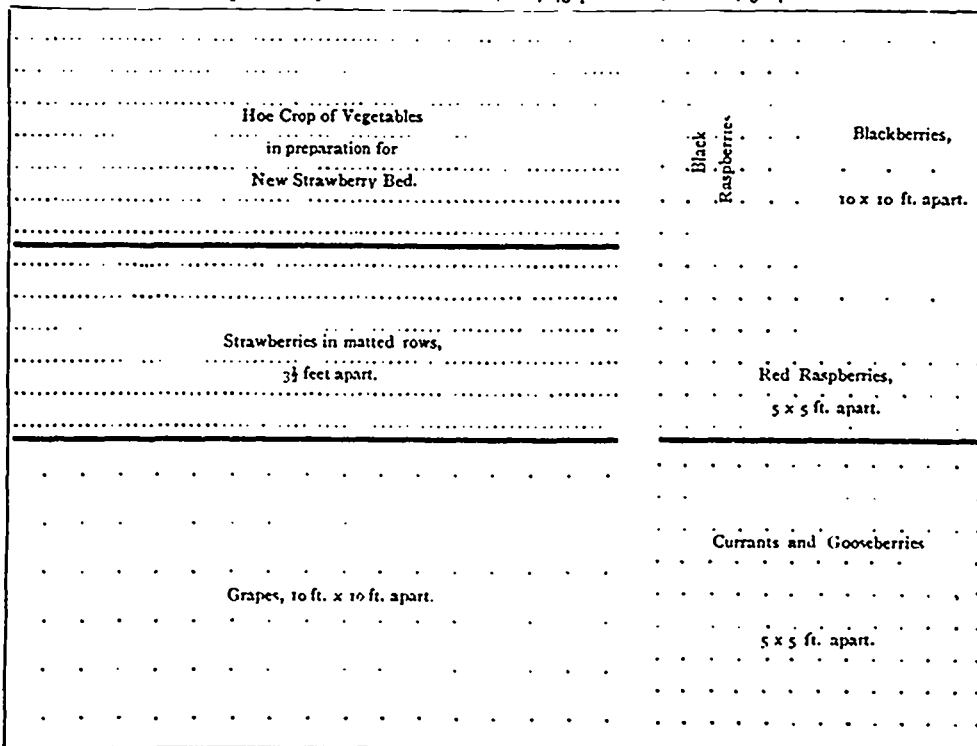
Horticultural.

FOR THE CANADIAN LIVE-STOCK AND FARM JOURNAL.
Plan of Fruit Garden for the Farm.

BY J. TWEEDLE, STONEY CREEK, ONT.

While the foremost business on the farm is no doubt the maintenance and care of its flocks and herds, in order to make the most and best returns therefrom, yet there are many things besides, that, if looked after, would add greatly to the comfort, health and happiness of the farmer and his family. Foremost amongst these is the fruit garden, which, it does seem to the professional fruit-grower, is sadly neglected, and, in many places, there is none at all. We ask ourselves the question, why this sad neglect of that which ought to contribute of its fruit to eat and its beauty to enjoy? And now we venture to ask of the farmer, and the majority of answers we get are to the effect, that the care of a garden would be too much trouble, or they do not understand the cultivation of small fruits; or the work is too "puttering;" or his land is not suitable. Now in nine cases out of ten all these objections could be removed with a little study, and we are sure it would pay any farmer to subscribe to one of the many horticultural journals now printed at such low rates, and in a short time gain a fair knowledge of the work of planting and caring for a garden consisting of the common varieties of small fruits adapted to our climate and location. With the above information, a fair to good soil, and an ordinary horse-hoe or corn-cultivator, and the hoe and spade, we are prepared to begin work. We should first try and plan the doing of the greatest possible amount of the hoeing and spading by means of the plough and cultivator, and thus do away with one great objection, viz., the amount of work necessary, if done by hand.

The following diagram will, we think, admit of the largest possible proportion of work to be done by the aid of a horse and the requisite implements.



From this plan it will be seen that nearly all the work of stirring the soil may be done with the horse, with but little turning when cultivating and ploughing. Of course any other shape or plan of laying out that will permit of cultivation of the currants, gooseberries, raspberries, red and black, and blackberries, both ways will do just as well. We only give the above as a pointer, to show how readily the work of cultivation can be accomplished. Often when finishing cultivating the corn or potatoes in the field, a short run through the garden with the horse-cultivator will do more good than a whole day of hoeing and digging.

Agricultural College; Bulletin VIII.

GRAPES.

J. HOYES PANTON, M. A., F. G. S., PROFESSOR OF NATURAL HISTORY AND GEOLOGY, ONTARIO AGRICULTURAL COLLEGE.

The College vineyard is situated in a field at the rear of the College. This location was chosen in 1881 as the best available at that time, and 440 vines were planted the same season, in lines twelve feet apart each way. In the following spring 210 vines were added, making a total of 650, and representing ninety-six varieties. Having had an experience of five years with this varied collection, we are enabled to give some results, which may prove both interesting and instructive to those who read them.

Our success may be a surprise and disappointment to some who can readily ripen grapes which fail to mature with us, but the results are what have been obtained at the College under conditions which are given, and when considered they become an important factor in accounting for failures among varieties that elsewhere in Ontario are prolific. The reader will therefore remember that these data have been collected from the College vineyard only.

1. CONDITIONS SURROUNDING THE VINES.

Location: Latitude north 43°-38'; height above sea level, 1,100 feet; above Lake Ontario, 858 feet.

Exposure. High and airy position, with southern aspect, but unduly exposed to the west.

Soil. Clay loam, with a somewhat springy bottom, and in need of more draining.

Meteorological: Mean annual temperature for 1880-86, 42.2°; mean summer, 57.1°; mean winter, 27.3°; highest temperature (1881), 98°; lowest (1884), 35°; average number of days rain fell per year, 72; rainfall (including snow), 24.7 inches; prevailing winds, S. W., 43 per cent.; N. W., 31 per cent.

2. MANAGEMENT.

In the third year (1883) two canes were grown from each vine and carefully tied up throughout the growing season to stakes, these canes being intended for permanent limbs from which the young and bearing wood was to grow. This mode of training seemed the best adapted for this section of the Province, where it is necessary to lay down the vines and cover for winter protection.

The next spring, posts were put between the vines, and four rows of fence wire (No. 8) strung from post to post, the lowest wire eighteen inches from the ground, the top five feet, and the two remaining, twenty-one inches. This arrangement forms an excellent trellis for the vines.

The ground between the rows has been thoroughly cultivated, kept clear of weeds, and manured with farmyard manure. This year some night soil was applied, but with no marked results.

About the end of October, or beginning of November, the vines are pruned by cutting back the canes which bore the fruit to the main arms, and leaving between each a cane of the present year's growth to bear next year. They are then laid down and covered with three or four inches of earth. During the summer pruning is also done by pinching the shoots bearing fruit back to the second joint beyond the fruit, and the young shoots, as soon as the wood is well formed, are kept back even with the top of the trellis by the same process.

The two main arms are trained in opposite directions and thus form the so-called laterals from which the bearing canes rise vertically, three or four on each lateral.

3. RESULTS.

Waverly, Rogers' 5, Purity, Dempsey's 18 and 25, Croton, Centennial, Louisiana, Concord, Chasselas, Triumphant and Herbemont have died and have not been replaced. Accident may have been as much the cause of failure as severity of climate.

Rogers' 31, Eldorado, Prentiss, Rochester, Black Eagle, Monroe, Beauty, Iona, Senasqua, Green's Golden, Autuchon and Telegraph are weak in appearance. This may have resulted from some being transplanted to another part of the vineyard in the second year.

Jessica, Faith, Rogers' 30, Canada, Dempsey 4, Walter, Amber, Cuyahoga, Transparent, Amber Queen, Alvey, Lady, Isabella, Advance, Salem, Creveling, Delaware, Rogers' 2 and 39, Echland, New Haven, Worden and Antionello are medium vines.

Naomi, Wilding, Brant, Jefferson, Barry, Pearl, Duchess, Una, Lady Washington, Eva, Janesville, Maxatawney, Ives' Seedling, Elvira, Black Hawk, Cottage, Vergennes, Pocklington, Early Dawn, Eumelan, Gaertner, Missouri, Riesling, Merrimac, Herbert, Brighton, Lindley, Martha, Hartford, Champion, Agawam, Moore's Early, Wilder, Clinton, Massasoit, Concord, Rogers' 41, 28 and 33, Uhlund, Mary Ann, Cornucopia, Othello, Vanango, Noah, Dracut's Amber, Cynthia and Norton are all vigorous vines.

The following notes made last fall at stated times will show the condition of these varieties when visited:

September 8th—Brant, Janesville, Champion, Moore, Early Dawn, coloring and ripe before the week ends; Wilder, commencing; Otello, freely colored but unequally. 14th—Lindley, Hartford, Wilder, Massasoit, just showing color; Telegraph, Ives' Seedling, Cottage, Israella, Eumelan, Barry and Concord apparently later than the preceding. 21st—Creveling and Concord about the same, and Cornucopia nearly so.

October 2d—The best were cut, viz: Lindley, Delaware, Moore, Salem, Massasoit, Wilder, Merrimac, Eumelan, Herbert and Concord. 7th—Clinton, Brighton, Agawam and Martha, ripe.

4. CONCLUSIONS.

1. Grape-vines in this locality must be well sheltered with warm exposure, and grown in a warm, well drained soil, or little fruit will be secured.

2. Our vines are vigorous and show much fruit, but it ripens very irregularly and late in the season.

3. The Concord, known as the grape for the million, scarcely ripens with us before well into October, and even then but irregularly.

4. A grape which does not ripen earlier than the Concord is of little use here.

5. Our earliest seems to be Moore's Early, Champion, Lady and Massasoit.

6. In a district at all suited for grapes we would recommend the following for flavor, hardiness and yield: *Black*—Wilder, Worden, Moore, Concord, Barry. *Red*—Delaware, Brighton, Lindley, Agawam. *White*—Niagara, Lady, Martha.

The Home.

For the CANADIAN LIVE-STOCK AND FARM JOURNAL.

"Gang Forward."

(Held over from January.)

One of the sights of Scotland's metropolis is its grand old cathedral, with its relics of centuries gone by and its wealth of stained glass, the production of the Royal Establishment of Glass Painting at Munich, the greatest of the continental schools. The architecture is said to be one of the finest specimens of the early Gothic style, while a peculiar interest attaches to the structure itself from its being one of the few ecclesiastical edifices that have come down to us in their original state. It was founded by St. Mungo, who was contemporary with St. Columba, and the two famous abbots are said to have had an interview on the banks of the Molendinar, then a romantic burn running past the site of the present cathedral. Part of the present edifice has been standing since 1197. Strange and interesting would be the story could its old walls speak. William Wallace met and overcame the forces of the English Percy by its side. In all probability Robert Bruce worshipped within its walls; his rival, Edward, certainly made offerings at the shrine of St. Mungo, as it was then called. John Knox, fearing not the face of man, made its arches ring with new and living truths, and to-day there stands on an eminence in the necropolis, just across the Molendinar burn, a Doric column of chaste and massive construction, surmounted by a statue of the staunch reformer, a testimony of his country's gratitude. The General Assembly of the Presbyterian Church of 1638 ratified the confession of faith, and confirmed the Covenant within it. After the battle of Dunbar, Cromwell with his soldiers went to the cathedral to hear sermons. The minister, with that admirable fearlessness characteristic of the early reformers, denounced the Independents, though they were at the same time his hearers, Cromwell, instead of shooting him on the spot, asked him to sup with him. The minister accepted the invitation, and Cromwell, with a shrewdness and humor not always accredited to him, closed the evening's entertainment with a prayer of several hours' duration. The trick succeeded admirably—the Scottish divines were satisfied and gave out that he was surely one of the "elect." Could any man pray like that and his "effectual calling" be doubted?

It is not its history or associations, however, which at the present time calls our attention. Let us note the "monumental pile," and with that respect which is due to the sacred edifice, look about us. In the nave there is much of interest. Rent and faded flags, telling of a nation's glory; golden deeds carved in marble, speaking of the heroism, the courage, the valor, and the patriotism of one and another of Scotland's heroes. On an old memorial tablet on which is carved the coat-of-arms of one of Scotland's proud families, we read beneath the crest the family motto in Scottish vernacular, "Gang Forward." What noble words! They bespeak

"The will to do, the soul to dare,"

and as sanguine youth enters upon another year with fond aspirations, bright hopes, and good resolutions, I know of no more fitting motto to carve upon the tablet of the future than just "Gang Forward." Young men, has the past year been one of blessing to you? Have nobler aims inspired you? Have you felt within you a truer type of manhood? Have you struggled against

"The low desire, the base design;
The strife for triumph more than truth;
The hardening of the heart that brings
Irreverence for the dreams of youth?"

If yes, in your strength, which is your glory, "Gang Forward"—press toward the mark for the prize of the high calling.

And you, my maidens, in all the glow of girlhood and early womanhood, have angel voices whispered to you of the fuller development of feminine virtues—amiability, industry, earnestness, thrift, and the crowning glory of woman, "chastity in thought, speech and behavior"? Has the thought come to you that a rightly-minded woman has within her the power to shape and mould character for eternity? Have you commenced to discover that you are thoughtless of others' comfort and regardless of others' feelings, selfish in things you never before dreamed of; envious at the prosperity of others; impatient where you might be patient, and frivolous where you might be earnest? If so, "Gang Forward," and may heaven bless your efforts, dear girls! I speak not idly, but sincerely.

And you, my brown-handed school boys and rosy-cheeked school-girls—you who are the pride of our homes and the hope of our Canada—you in whom we see the men and women of twenty years hence, what shall I say to you? Have wonderful thoughts flashed across those busy little brains: in your fun and frolic have you stopped to think that you, too, can be workers in the vineyard; have you wondered what little hands can do in the world's work. Have you resolved to study, not because teacher wishes you, not because your parents will be pleased, though that certainly is a commendable motive, but because by the acquirement—that's a long word, meaning *getting*—of knowledge you can be more useful in the world? Have you thought that sometimes you might be more gentle at school, and kinder to your brothers and sisters at home? Have you thought or commenced to think of the many, many hours that are passing away unimproved? If so, with all my heart I bid you "Gang Forward," and then you will have what we wish to one and all, A HAPPY NEW YEAR. J. R., Strabane.

Imagination.

We admire the imagination of the writer who placed in her story two white doves to cover the dark stain of the sad past. To eulogize him who could out of his own fertile imagination draw so deeply and so well, as to lose a Paradise and then build up a regained one, seems but repetition of words. Even more worthy of the praise and plaudits given him is that writer who from his lonely prison could trace so accurately and so well, the Christian's journey heavenward, even to the "swellings of Jordan."

But though thus accustomed to hear it admired by others, and even to admire it ourselves, do we give imagination its proper place—give it its value in our life-work? Whether the attaining or attainment of an object gives most satisfaction is an open question. The living and re-living again in imagination is that which gives the charm to the former, often so far beyond the pleasure the reality affords. All are possessed of imagination, though so limited to some that the door into the pleasure-ground of metaphor is almost closed; others again pluck boquets where they will, and their language is a primrose path. This feature varies with the country as well as the individual. Notice, for instance, the language Scott puts in the mouth of Helen Macgregor in speaking of her Lowland kinsman—"If the burn would acknowledge as part of itself the water withdrawn from it for menial uses on its banks."

To no authority can we refer that indulges so freely and so beautifully in metaphor and imagination than that Book which rises in so many ways above all others, whose heaven-crowned head is supreme, and stands alone in the realm of books.

True, an untrained imagination leads its possessor into a dreamland helpful to none, but detrimental to its own highest interests, leading from the actualities and practicalities of the present to a land of unrealities and falsities without partaking of either opium or lotus. But imagination, like music, can be cultivated,

and when we consider how much of life is lived therein, we realize how well worth the trouble is the training of it. The man who lives sixty years spends twenty of it in sleep; but who can tell how much the same man spends under the spell of a waking dream-land? There are dispositions whom habit has made to see but gloom ahead; but much of life, particularly in the young, is spent amid the golden light of a vivid imagination. What we imagine to-day we act to-morrow; and can we wonder that with a trained imagination we find the dreamers of yesterday leading in life's busy lines to-day. Let the plodder plod on, but if his eyes are never higher than his work, he is likely to be no higher at the end, but may even then stand above him whose undisciplined imagination dreams of lands and honor, fame and favor, but makes no effort to take the first step to lead him thither.

By a high ideal fixed early in life much can be accomplished. It need not be among the stars, but neither need it be at one's feet. A proper medium—high, yet not impossible; then with strength of mind and muscle to carry through the fight to the goal, leaving on life's page—success in its truest sense temporarily, and carried into the spiritual.

SOME estimable pastors are at a loss how to retain a hold upon the young people of the congregation. Without slavishly copying the method of Rev. Dr. Storrs, of Brooklyn, N. Y., they may gather some new ideas by observing his plan of dealing with the baptized youth of his church, as described in his fortieth anniversary sermon. "When the children have reached the age of seven years they are met by a service, arranged specially for them, to remind them that the church holds them in its remembrance and its affectionate hope, and that it desires to open before them, plainly and fully, the way of life. On the opening Sunday of each new year those who during the preceding year have passed from infancy into childhood are again assembled around the font at which they were baptized, and each receives from the hands of the pastor a copy of the Scriptures, in a beautiful and complete English edition, presented to it on behalf of the church. On the covers bears the inscription, 'The Church of the Pilgrims, to a child of the Covenant.' On the inside the name of the child is written, with the date of its birth, the date of its baptism, and the signature of the pastor. After the Bibles have been distributed, with a flower-token to every child, a prayer is offered, of thanksgiving for the continued life of those thus re-assembled, of renewed consecration of each of them to the Lord, with supplication for his blessing upon them, upon the households from which they come, and upon the Church to which they are bound by sacred ties, and with tender remembrance of those before whose tearful eyes the occasion brings up the vanished forms of children similarly consecrated as babes, and already gone to be with the saints."—*Presbyterian Review*.

Jottings.

The Live-Stock Association of Canada.—This association met in Toronto on the 24th February, and transacted much important business.

Seeds.—Please notice the seed advertisement of W. Rennie, Toronto, on page 454. Mr. Rennie is, as usual, prepared to do a very large spring trade.

Ontario Creamery Association.—The meeting of this association was held in Toronto, 24th and 25th inst. Until next issue we can only say that on the whole it was a successful one.

Insurance for Live Stock.—The Live Stock Insurance Co., now organizing in Toronto and to which reference was made in a former number of the JOURNAL, is applying to the Government for a charter.

Spring Stallion Show.—The Clydesdale Association of Canada propose holding their first spring stallion show in Toronto, on Wednesday, 16th March. (See advertisement.) All lovers of the draught horses should not fail to attend.

American Hereford Record.—It affords us very much pleasure to acknowledge the receipt of a complete set of the American Hereford Record. Our warm thanks are due to the association. The books will be further noticed in next issue.

Seeds.—The old established and reliable seed house of John A. Bruce & Co., Hamilton, Ont., place their advertisement in this issue of the JOURNAL, on page 454. Send for their illustrated pamphlet, free to all.

An Excellent Suggestion.—“If some more of our young farmers would contribute a few practical hints monthly to the JOURNAL, it might induce more of our young men to read, write and think a little more than they do.”—S. U. S. R. B. N. Bluevale, Ont.

The Ayrshire Canada Herd Record.—This work, reviewed in this paper in a former issue, is now held for sale by John Lovel & Son, Montreal. (See advertisement.) It has been compiled with much care, gives much valuable information about the breed, and contains a large number of pedigrees not to be found in any other book.

Waggons.—Mr. John A. Bain of the Bain Wagon Company, Woodstock, Ont., writes under date, 18th February: “We sold out every sleigh we made this year, and believe our advertisement in your valuable journal helped very much.” Readers will please notice the change of advertisement on another page, descriptive of their farm truck.

The Shorthorn Herd Book Standard Sustained.—We have only room to say now, that at the meeting of the Shorthorn breeders, held in Toronto on the 24th inst., the largest ever held in the Dominion, the present standard of the herd book was sustained by a majority sevenfold greater than the minority. This will surely calm the unsettled feeling that has prevailed of late in reference to the future of Shorthorns owing to the agitation of recent years.

Shorthorn Sales.—As stated in another column we consider the present a very good time to invest in Shorthorns. The number of sales advertised is unprecedentedly large, and yet we have no fear of overstocking the market for years yet, if ordinary farmers are only true to their own interests. The number of Shorthorns advertised for sale in the columns of the JOURNAL in February is 270, which would make but one beast and a little more for each of the electoral districts of the Dominion, as these number about 200.

Useful Inventions.—Mr. John M. Willard, of Morrisburg, the son of an Ontario farmer, has invented an implement for cleaning the coulter of the plough, which is operated by the ploughman at will. In burying weeds or other obstructions, it obviates the necessity of any delay through stoppages. He has also made to work very successfully, a machine operated on the wheelbarrow principle, which will clean the bugs off potatoes between every two rows, and collects them for destruction. All together it is a very ingenious contrivance.

Excluded Shorthorns.—The number of Shorthorns expunged from herd books, both Canada S. H. B. and B. A. H. B., is about 6,000 head out of about 30,000 head of both sexes that have been recorded. Of these about 2,200 were rejected or rather refused registration in the New Dominion Herd Book from the B. A. H. B. We feel safe in stating then, that the number of living animals expunged from both books, is a long way less than 1,000 head, but of course the progeny of these since January, 1886 will also be excluded.

Permanent Exhibition of Manufacturers.—This enterprise, 63-69 Front street west, Toronto, goes bravely on. A very large list of leading manufacturers have already taken space in the building, and rural visitors especially should not fail to call. Amongst the advantages of this exhibition, we may state that it will be a ready medium through which purchasers may be enabled to decide as to which article will best subserve their purpose. With a minimum outlay of time and expense, and that to the exhibitor, it cannot fail to prove a valuable advertising medium.

Horse Conventions.—At the meeting of the Huntingdon Dairy Association, a committee was appointed to arrange for a horse convention in connection with the spring show of horses, to be held in that county or at some more suitable time. Is there not a hint here that will prove valuable to those interested in this branch of agriculture? The horse interest is one of the most important in the country, and if it is wise to call in the aid of conventions to other branches of the great live-stock industry, it cannot be un-wise to do so in the case of the horse.

Union Amongst the Ayrshire Breeders.—As announced in the last number of the JOURNAL the Ayrshire men are seeking an amalgamation of their herd books, and we rejoice to see it so. We are glad to hear but one opinion expressed thus far amongst Ayrshire breeders as to the advisability of having but one herd book for Canada. We are very pleased

to learn from Mr. Wm. Rodden, of Plantagenet, who has done so much for the Ayrshire interest in Canada, that he is in favor of such union on an equitable basis, providing the integrity of a herd book of a high standard can be maintained.

The Celebrated Shire Stallion, Enterprise of Cannock.—From the Chicago Tribune we learn that the Galbraith Bros. of Janesville, Wis., have purchased the well-known Shire stallion Enterprise of Cannock, admitted to be the handsomest British work horse ever foaled. Enterprise won the Champion cup at the great draught horse show at Islington. He will be shipped in a few days and will be shown at Chicago and at other exhibitions. Since the purchase of the champion Clydesdale stallion Druid six years ago this is believed by competent judges to be the finest draught horse ever secured by American purchasers. The price paid is not named, but it is known to be a large one.

Central Experimental Farm, Ottawa.—We are in receipt of bulletin No. 1 from this station. It announces that the department for seed-testing is now ready for work. Every farmer in the Province may send samples of any seeds to this station of which he may desire to know the germinating power, and all are invited to do so. The samples sent should be a fair average of the whole seed from which it is taken. Of large seeds as grain, 4 oz. are required, and of small seeds as grasses, from 1/2 oz. to an oz. The larger seeds may be put into small cotton bags, each marked with the name of the seed, and these smaller bags enclosed in a larger canvas bag provided with a tag, on which the address may be written. The smaller seeds may be folded in stout paper. Each parcel marked, and the whole enclosed in a strong envelope. Packages and communications should be addressed “Experimental Farm, Ottawa, Canada.” All mail matter will be carried free to and from the Experimental Farm within the limits of the general postal regulations as to size and weight of packages. Anyone desiring to secure the Bulletins issued by this department, has only to send his name and address, stating the fact. The farmers will do well to give this matter their earnest attention.

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Stock Notes.

Parties forwarding stock notes for publication will please condense as much as possible. If written separate from other matter, it will save much labor in the office. No stock notes can be inserted that do not reach the office by the 3rd of the month preceding the issue for which they are intended.

Horses.

Mr. M. Carlyle, Dunbar, Ont., imported five pure-bred horses last August in addition to a number of others already in the stud. At the present time it consists of four pure-bred Clydes, one Suffolk, one Shire and one English blood.

Mr. W. Renne, Toronto, reports: “In addition to sales given last month, I have sold to David Shaw, Albion, the imported young stallion, Donald, vol. ix, foaled 2nd June, 1885, sire, Lord Erskine (1744); dam, Love Cecil (4377), by Lord Cecil (1197).”

Mr. J. G. Hall, of Gibbon, Nebraska, U. S. A., reports the winter there as very mild. Corn worth 18c. per bus., live hogs, \$4.50 per cwt.; good fat steers, \$4, and fat sheep, \$4 per cwt. Mr. Hall is a breeder of Cleveland Bay horses and other kinds of good stock.

Mr. Robert Ness, Howick, P. Q., reports that his horses are all doing well—never doing better than at present. The stallion Marathon, which won first at Sherbrooke—a half brother to Moss Rose—is looking exceptionally well. Mr. Ness has a number of stallions now fit for service, several of which are imported.

Mr. P. M. Intosh, of Cass Bridge, Ont., is now the owner of a pure Percheron mare, which came from the Oaklawn stud of W. H. Dunham, Ill., and of an imp. Clyde mare. He keeps a Shorthorn bull for grading purposes, and finds the cross for milk production a good one. Has done so for six years past. In 1886, his was the highest milk average from any one sending that year to the neighboring cheese factory.

Messrs. Dundas & Grandy, Yelverton, Ont., report the following sale: “To Mr. Levi Bowls, Springville, Ont., the very promising yearling colt, Brown Scout, vol. ix, one of their October importations. He was bred by Mr. A. Thompson, Gelston Lodge, Castle Douglas. He was got by the Kircubright premium horse, Scots Wha Hae (4006); dam, Lila, vol. ix, by Pride of Bourque (2332); grand dam, Sally Douglas (4186), by Merry Tom (536).”

Mr. John Fothergill, Burlington, Ont., has just purchased an English Cob stallion, 5 years old, a bay, 14 1/2 hands high, with action that will carry him a mile in three minutes. He was purchased in the county of Westmoreland, Eng., from Mr. Pearson. Mr. F. has a Clyde stallion, 5 years past; weight, about 2,200 lbs. compact, 17 hands high and very heavy bodied. His name is Coastguard, and he is a horse that is sure to be popular with the admirers of heavy draughts.

Mr. R. A. Brown, Cherry Grove, Ont., writes: “My stock are doing excellently. Feed in the section scarce, but I hope there will be no dearth. I had some parties call on me last week who pretend to be crack judges on horse matters. They concluded that I had the best filly of 1886 that they had seen either in Canada or the States. It is by Parone (2350); dam, Minnie Taylor, by Hickory, son of Royal George (97). Although it is but 9 1/2 months old, it is 15 hands high and shows a three minute gait already, and took first at Perth show last fall, competing against 13. [We have read several letters written to Mr. Brown by customers speaking highly of his Berkshire pigs.—Ed.]”

Mr. J. L. Patterson, Canton, Ont., is owner of two stallions, one of them six years old, an imported French coacher, Cheneau (3838), registered at the Government Stallion Depot of France, and imported by Powell Bros., Shadeland, in March, 1885, and has made two good seasons there. His colts have turned out well, having been awarded 1st, 2d and 3d prizes at Newcastle, in the carriage class of 12 entries, and 1st, 2d and 3d at Port Hope, in the same class. The other is a seven-year-old general purpose horse, Young Donald Dinnie by name, the winner of the first prize and silver medal at the Industrial, Toronto, in 1886. At the Industrial, Toronto, in 1883 and 1884, he was placed 2d in both cases, and 2d at the Provincial, Guelph, in 1883, and 2d at Provincial at Ottawa, 1884, being beaten only by St. Elmo; whenever shown he was awarded a prize. Out of 36 times on exhibition, he was awarded 34 firsts and two second prizes.

The Messrs. Galbraith Bros., Janesville, Wis., are doing a work of much importance to stockmen there. This place is situated 91 miles N. W. of Chicago, on the main line of the Chicago and N. W. Railway, and 120 miles from Rock Island, by the Chicago, Milwaukee and St. Paul Railway. The sale barns are right in the town of Janesville. Fifty years ago the late Alexander Galbraith, of Crox Cunningham, Killearn, Scotland, exhibited the Clydesdale stallion, Stirlingshire Champion (830), which carried off the highest honors at the first stallion show ever held in Glasgow. From that date onward, his name is associated with a large number of famous horses. In the above stud stood the world renowned Topman (886), whose death, in 1882, was regarded as a “national calamity.” The sons of this worthy stockman are following in his footsteps, breeding and importing British horses (Clyde and Shire) of the choicest specimens. As stated in last issue, the catalogue recently issued comprises no less than 115 head of these. (See advt.)

Mr. A. Somerville, Huntingdon, P. Q., has been breeding Clyde horses for some time, and with a very decided profit. Here was the home of Sir Colin, a very fine Clydesdale stallion, brought out by an association of farmers, of the county of Huntingdon in 1870. He was a bright dapple bay, with black points, and though brought to Canada before the age of herd books, possessed a splendid pedigree, and was entered in the Scottish Stud Book in 1884. He was a noted prize-winner in his day, before coming to Canada, and has left much good stock in and around Huntingdon. His sire was Superior, by the famous Broomfield Champion, and dam, Dandy, which produced a number of fine horses for Mr. John Burnet, Glenberrie, Scotland, amongst

WILLIAM REDMOND, MILLBROOK, CO. DURHAM,

IMPORTER AND BREEDER OF

DURHAM CATTLE

The herd now consists of forty head of Cruickshank strain, some imported, all registered in the new Dominion Herd Book. One imported bull, 2 years old, roan, for sale, from an imported cow, one all red from the same cow, 9 months, a grand calf, and three of the calves that got the herd prize at Toronto last fall, got by Challenge Campbell and bought from Wm. Watt. He took first prize at three of the leading fairs in the Dominion. Also some good heifers for sale, all with calf and several cows, some with calves at foot. The young bulls are a nice lot. They are from 12 to 15 months old and have made 100 pounds a month since they were calved.

PRICES TO SUIT THE TIMES.

Address WM. REDMOND, Millbrook, Ont.

FOR SALE OR EXCHANGE FOR HORSE KIND.

TROTTER BRED STALLION, FRANK BRANDY WINE, 6 years old, jet black, heavy mane and tail; stands 15 3/4, weighs 1000 pounds. Sire, Murray's Brandy Wine, winner of champion gold medal at Brooklyn, 1876, regarded by W. H. H. Murray the fastest stallion in the world to a road wagon, sold for \$10,000. Dam, Kate Drew, record 2 25, she by Hiram Drew, he by the Drew Horse.

FOR SALE.

HAMBLETONIAN LAMBERT STALLION, coming four yrs. old, weight 1075 lbs., stands 15 3/4, brown, heavy mane and tail; shows remarkable good trotting action; great walker. Sire, Pomeroy's Hambletonian, he by Gladiator; he by Edward Everett, he by Rysdyk's Hambletonian. Dam, record 2 30, by Daniel Lambert.

GRADE PERCHERON STALLION, coming 4 yrs. old, dark gray, heavy mane and tail, weighs 1,300 lbs.; stands 15 2 1/2; very stylish, short, compact horse.

GRADE PERCHERON STALLION, 3 yrs. old, gray; stands 15 3/4, weight 1200 lbs., very rangy and stylish, and a good one.

S. J. POMEROY, COMPTON, QUE.

CLYDESDALES and SHORTHORNS

TEN superior young bulls for sale, from nine to fourteen mos., the get of Hampton Hero and (imp.) Lord Lansdowne. Also the three year old imported stallions Lord Aberdeen and Bravery, and the Canadian bred yearling, Rory O More.

J. & W. B. WATT, Salem, Ont.

C. G. Charteris & Son,

BEACHWOOD FARM CHATHAM, ONT.

Pure SHORTHORN CATTLE

The splendid bulls Lord Byron (1881) and Crown Prince (1876), both recorded in D. S. H. B., are offered for sale, along with a number of good grade cattle. The former has been three years, the stock bull at Beachwood, and has left some fine stock. The latter, a dark red, calved Jan 26th 1884 got by Brilliant (1870) dam, Allie by Bedford (1871) has also proved himself a good and sure sire. 2 Miles from Chatham on the G. T. R.

Colonus Stock Farm, Shorthorn Cattle

of the highest breeding and individual merit, and

OXFORD DOWN SHEEP.

Young stock for sale of both sexes.

WM. MURRAY, CHESTERFIELD, ONT.

FOR SALE

The Imported Cruickshank Shorthorn Bull,

DUKE OF LAVENDER

He is well filled in front, broad, deep and low, broad in the back, a good handler and easily kept, also

FIVE BULL CALVES

of his get, and all will be sold very reasonable. The dam of one of these young bulls, Crimson Flower 2nd, is the dam of a bull shown by A. Johnston, Greenwood, at the Industrial Exhibition, Toronto, winning first prize, and afterwards sold to a United States breeder for \$500.

For further particulars come and see or write to DAVID BIRELL, Greenwood, Ont.

Stock Notes.

Mr D Brims Athelstone, P. Q., has been, for years, one of the foremost breeders of Shorthorns in the Province of Quebec. His herd are of a nice, neat type, and nearly all descended from the famous Strathallans of J. Miller & Sons, Brougham, Ont., the residue being of the Isabella family. The herd numbers about 30 head.

The catalogue of young bulls held for sale by Mr E. Jeffs, Bondhead, has reached us. The bulls are, all but one, got by British Statesman (42837), bred by S. Campbell, Kinellar, and imported by Mr. Jas. Russell, Richmond Hill. The catalogue also mentions Southdown sheep, Berkshire pigs, and Toulouse geese for sale.

Mr. J. C. Snell writes us that the Shorthorns at Willow Lodge are doing splendidly, and will make a very attractive offering for the public sale, on April 27th. Parties looking for show animals or good useful ones should not overlook this sale. The catalogue embraces a rich variety of pedigrees, and a very attractive array of interesting young animals.

Mr Louis N. Thibaudeau, Sunrise Farm, Little Courant, has bought a Shorthorn bull, Duke of Algoma, from Wm. Idle, of Green Bay. This, we are sorry to say, is the only Shorthorn bull in the municipality. The Shropshire ram, sold to Mr. Thibaudeau last fall, by H. H. Hurd, of Hamilton, has been sold to Mr. Idle, who has the only Shropshire on Manitoulin.

Mr Wm Redmond, Millbrook, Ont., is now the owner of 40 head of Shorthorn cattle, mostly of the Cruickshank strain, some imp. and all registered in the new D. H. B. Mr. R. offers a number of these for sale on another page. They are sired by Challenge, bought of the Messrs. J. & W. Watt, Salem. Mr. Redmond got the herd prize for his calves at the Toronto Industrial last fall.

Mr. R. McLennan, Lancaster, Ont., is possessed of some 16 head of pure Shorthorns, founded on the herd of the late Joseph Thompson, Whitby, the whole herd tracing to Myrtle, imp. by Nobleman (26687), a Kinellar bull. He has some young bulls for sale as advertised in this issue, an 1 from a fine sire, Starlight Duke 2d, a full brother to Mr. R. Sangster's stock bull. The sire of Starlight Duke 2d, is Butterfly's Duke - 233 -, and g. s. the great 4th Duke of Clarence (33597)

The stock of Mr Thos. Russell, of "Riverside Farm," Exeter, Ont., are doing very well. Although they looked well last winter, if anything, they are better this. A one-year heifer (if we remember right a 1 yr), by his present stock bull, is just perfection. She has, no doubt, a prize winning future before her, if no mishap comes on her. Mr Russell's calves are looking exceptionally well. Most of them are reds. He certainly has the art of breeding and feeding stock well learned.

Mr Henry Irinder, Simcoe, Ont., has a herd of about 20 Shorthorns. They rest on a foundation bought from S. Baker formerly of Woodhouse township, who was an importer in his day. Mr. I. purchased in 1875 a couple of cows, and in the same year from J. R. Pettit, Grimsby, the bull Crown Prince, by Lincoln. The next bull, Duke of Norfolk, came from the herd of W. Douglas, Caledonia, in 1881, and Duke of Cornwall in 1884, the latter a grandson of the 4th Duke of Clarence. Mr. I. has now some young bulls for disposal, red and red and white in color.

Mr. Wm. Murray, of Chesterfield, Ont., writes: "Our Shorthorns are wintering well, a calf coming now and then, and quite a good demand for well bred heifers." Mr. J. Idington, of Stratford, being here one day, took a fancy to a very beautiful Barrington heifer, and a Darlington, also a Verbena and her calf, and has them all away. He has also a couple of Waterloos, a Gwynne and some others of good families, with imp. 5th Duke of Holker (4687) at the head of his herd. There has been a good demand for Oxford Down sheep, have sold all we could spare, at good prices.

Mr. John Hope, of Bow Park, Brantford, Ont., has just sold at a high figure to Mr. Jas. McArthur, Princeton, Ont., Waterloo Duke 18th. This is one of the best young bulls ever bred at Bow Park, and Mr. McArthur is congratulated on having secured such a fine addition to his herd. He is a rich roan, sired by 4th Duke of Clarence, and from one of the best Waterloo cows at Bow Park, a daughter of the 38th Duke of Oxford. Through Mr. Hope we learn that the demand for well bred bulls was never better than at present. Enquiries coming from all parts of the continent. The white two-year-old heifer, Cantab, first at Toronto and the Provincial, has produced a beautiful roan heifer calf.

Mr. A. Gilmore, three miles from Huntingdon, P. Q., has been keeping Shorthorns since 1876. A two-year-old heifer was bought from F. J. D. Smith, Newtonbrook, county York, in 1876, which has since produced 7 heifer calves. The bull, Torrington, a grandson of Mr. W. F. Stone's Baron Berkly, now five years old, heads the herd. The herd now numbers 12 head, of which 9 are females and two bull calves, a roan and a red. All are descended from the first purchase. Last autumn Mr. Gilmore bought two Yorkshire pigs from J. Featherston, Credit, and two imported Oxford down ewes and a shearing ram from P. Arkell, Leeswater, Ont., and has now two pure Aberdeen-Angus Polls in Glasgow awaiting shipment.

The s of James Gardhouse & Sons came off on the 23d Feb. The day being fine there was a large number present. The following is a list of the animals sold: Red Gauntlet to Mr. Nelson, Scarborough; Victor, W. Porter, Lloydton, Robin Hood, R. Kellam, Coleraine, Sultan, W. Ward, Woodhill, General Middleton, T. McLellan, Weston; General Scott, I. Nixon, Caledon East; Triumph, J. White, Don, Gilpin, J. Wood, Toronto; Major, R. Rain, Brampton; Warrior, G. Veldeich, Newton Brook, Capt. Irwin, W. Manning, Shelburne; Britton, D. Rountree, Weston; Vanguard, W. Carter, Brampton; Red Rose, G. Garbett, Thistleton; Wallflower 17th, W. Lindsey, Caledon East, and to J. Newlove, Islington, one span of 3-year-old colts. Prices moderate.

HAMILTON CATTLE FOOD.



Nine years of trial has enabled us to guarantee the following results when fed to the different classes of general stock:

On Horses. - It speedily improves the farm tone, spirit and appearance, loosening the hide, and producing a fine, glossy appearance. Indigestion, and consequent scouring, never occur when our Food is being given.

On Cattle. It greatly accelerates the fattening process by securing the thorough digestion of the ordinary food consumed, and its complete assimilation. This is shown by the fine, glossy appearance of the animals, and their rapid increase in weight, and also in the absence of all offensive odors, the result of the passage of a large portion of the food undigested.

From cows newly calved, the quantity of milk is increased at least 20 per cent. Calves will thrive well on less milk when getting the Food. It may be fed to yard cattle in winter with great advantage, as salt is usually fed.

On Sheep. - Its effects are very marked, either in producing flesh or increasing the flow of milk for lambs. Sheep thus kept in good heart have more and better wool.

On Pigs. - Its results are truly wonderful. When fed regularly and without stint they will fatten in one-third less time.

On Fowls. - When fed regularly the increase in the product of eggs, especially in the winter season, is surprising. There is also less tendency to disease.

Many leading stockmen now purchase by the hundred lbs., and in all the provinces, finding it pays them to do so.

This food contains no antimony, arsenic, copperas, or poisonous ingredient, but as there are many cheap preparations in the market, and sold under the name of our food, purchasers should see that our Trade Mark and Silver Medal are printed on every bag, and be sure it was MANUFACTURED IN HAMILTON, ONT.

For sale by leading merchants in every town and village in the Dominion in quantities of from 5 pounds to 100 pounds, at 4 to 6 per pound, according to quantity purchased. \$4 to per cwt. Special quotations in large lots. If you fail in getting the genuine article, write to THORLEY HORSE AND CATTLE FOOD CO., HAMILTON, ONT.

OAKLANDS 'JERSEY' STOCK FARM

(All registered in the American Jersey Cattle Club Herd Register.)



Cows with well-authenticated test of from 14 lbs. to 24 lbs. 13 oz. in one week, and from 81 lbs. to 106 lbs. 12 1/2 oz. in 31 days are in this herd. Young bulls (registered in the above herd book) for sale from \$100 to \$500 each.

A herdsman always on hand to show visitors the stock, and the stock-loving public are always welcome.

no-y VALANCEY E. FULLER, Hamilton, Ont.

100 PURE-BRED ABERDEEN-ANGUS CATTLE.



MOSSOM BOYD & CO., BIG ISLAND STOCK FARM, BOBCAYGEON, ONTARIO, CANADA.

Fricas, Prides, Windsor, Victorias, Sybils, Kinnochtry Bluebells, Westtown Roses, Ballindalloch Coquettes, and Lady Fonnys, and animals of other good families, both male and female, for sale.

Bobcaygeon is in the County of Victoria, 10 miles east of Toronto and 20 miles east of Lindsay, and is reached from Toronto by the Midland Railway, a branch of the G. T. R., via Lindsay, with which the boat makes close connection. Telegraph and Post Office, Bobcaygeon.

ATTRACTIVE PUBLIC SALE

OF HIGH-CLASS

SHORT HORNS

On Thursday, April 7th, 1887.

I will sell at public auction, without reserve, at my farm, "WILLOW LODGE," 2 miles from Edmonton, C. P. R., 4 miles from Brampton, on G. T. R. and C. P. R., 20 miles west of Toronto,

40 HEAD OF FIRST-CLASS SHORTHORN CATTLE

32 COWS AND HEIFERS and 8 YOUNG BULLS

Of the popular Scotch families, including SEVEN YOUNG IMPORTED COWS, from the celebrated herd of Sylvester Campbell, Kinellar, Aberdeenshire, Scotland, and their produce by IMPORTED CRUICKSHANK and KINELLAR BULLS. Most of the cows will be sold with calves at foot, which will go with their dams, and there will be about 20 Cows and Heifers in calf to the

IMPORTED CRUICKSHANK BULL COUNT OF THE EMPIRE (51037)

This magnificent young bull will also be sold; and the sale will include a number of extra good YOUNG BULLS, from 12 to 24 months old. These cattle are all of the short-legged, thick-fleshed, early maturing sort, which the times demand, and I am confident are the best lot offered at public sale in Canada for many years, quite a number of them good enough for show animals in first-class company anywhere.

I will also sell at the same time and place 10 HEAD OF HIGH-GRADE JERSEY COWS IN MILK, HEIFERS IN CALF, HEIFER CALVES, all bred from extra milk and butter stock.

TERMS—7 Months' Credit on Approved Notes, or discount at the rate of 8 per cent. per annum for cash. Catalogues will be ready by 1st March, and will be sent on application to

J. C. SNELL, EDMONTON, ONT.

JOHN SMITH, Auctioneer, Brampton, Ont.

IMPORTANT AUCTION SALE.

Dispersion of the Hillhurst Herd of Shorthorns.

The undersigned, whose lease of extensive pasturage is about expiring, will sell at public auction, without reserve, at

HILLHURST FARM, HILLHURST, P. Q.,

On THURSDAY, APRIL 28, 1887

HIS ENTIRE HERD OF

HIGH-CLASS SHORTHORN CATTLE

Consisting of about forty five (45) head of Scotch and Booth-topped families, including Four Imported Cows, bred by S. Campbell, Kinellar, Aberdeenshire, with produce by the prize bull Lord Aberdeen 70552 (see illustration in JOURNAL for February), bred at Kinellar, and Heir Apparent (51380), bought of W. Duthie, Co., Aberdeenshire, which are among the five bulls to be offered. The Cows and heifers old enough will all be in calf to the above named bulls or with calves at foot.

SALE TO BEGIN AT 1 P. M.

TERMS—Seven months' credit on approved notes. Catalogues ready March 15th, and will be sent on application to

M. H. COCHRANE, HILLHURST, P. Q.

Important Unreserved AUCTION SALE

Shorthorn Cattle

On THURSDAY, MARCH 17th, 1887

AT HILLSIDE
(2 MILES SOUTH OF PARIS)

20 Head of Cows, Heifers and young Bulls. 20
All registered in the Dominion Herd Book.

Sale to commence at one o'clock.

TERMS—NINE MONTHS' CREDIT.

For further particulars and catalogue, address

JAMES GEDDIE,
Paris, Ont.

[HILLSIDE is but three miles from John D. Pettit's farm, and as sale is on the day following Mr. Pettit's, intending purchasers will have a good opportunity of visiting both.—Ed.]

"HOLSTEIN CATTLE."

A HISTORY of the breed, with milk and butter records, description of beef qualities, and also illustrations of the most noted animals, compiled by the undersigned. Price 50 cents. Stock bought and sold on commission. Address,
DUDLEY MILLER, Oswego, N.Y.

HOLSTEINS

BY AUCTION.

THE WYTON STOCK-BREEDERS' ASSOCIATION

WILL SELL AT AUCTION

ON MARCH 31, 1887 AT THE WESTERN HOTEL

463 RICHMOND STREET, LONDON, ONT.

12 BULLS ranging from 10 months to 3 years old; all of which have been bred by us, and from very choice milking strains. Also two or three

COWS AND HEIFERS

These animals are all registered—registry guaranteed—and will be sold without reserve, the animal going to the highest bidder. For further particulars and catalogues, address,

THE WYTON STOCK-BREEDERS' ASSOCIATION,

WYTON, ONT.

Feb-2

Closing Out Sale!



—OF—
SHORTHORNS
—AND—
CLYDESDALES.

MR. JOHN D. HOWDEN, of Columbus, Ont., will sell by Public Auction, at his farm, near Columbus,

On Tuesday, 15th day of March, 1887

The whole of his Shorthorn Cattle and Clydesdale Mares and Fillies The sale will include the following very valuable stock:

- 25 Pure-bred Shorthorn Cows and Heifers, including seven imported animals.
- 5 Pure-bred Young Bulls, fit for service, including one imported yearling bull.
- 30 head of the highest standard grade Shorthorn Cows and Heifers, many of which were formerly eligible for record in the herd book.
- 15 Clydesdale Mares and Fillies, some of which are recorded in the Clydesdale Stud Book.
- 1 First-class Stallion, rising 3 years old.

FOUR SHETLAND PONIES

two rising 5 years old and two rising 1 year old.

80 GOOD COTSWOLD EWES.

A number of First-class CARRIAGE MARES and FILLIES.

The Shorthorns are all recorded in the new Dominion Shorthorn Herd Book, and certificates will be furnished to purchasers.

THE FARM is within 2 1/2 miles of Myrtle Station, C. P. R. R., and about 4 miles from Brooklin, on the Midland Division of the G. T. R. R. Teams will be at both stations the morning of sale.

No Reserve, as I have rented my farm.

TERMS, EIGHT MONTHS' CREDIT.

For further information, address

JNO. D. HOWDEN,

WHITBY, ONT.

AUCTION SALE

OF THOROUGHBRED

JERSEY CATTLE

A. J. O. C. REGISTERED.

IMPORTED SOUTHDOWN SHEEP

Thoroughbred Berkshire Pigs

Canadian-Bred Clydesdale Mares

FARMING IMPLEMENTS, ETC.

AT EGLINTON, two miles north of Toronto, on Yonge Street,

ON MARCH 16th, 1887.

The subscriber, having sold his farm, will sell, without any reserve:

- 4 Jersey Cows, A. J. C. C. Register, 3 to 7 years old.
- 5 Jersey Heifers, A. J. C. C. Register.
- 1 Jersey Bull, A. J. C. C. Register.
- 2 Jersey Cows, thoroughbred, but not registered.
- 2 Half-bred Jersey Heifers.
- 7 Southdown Sheep, imported by E. & A. Stanford.
- 5 Southdown Ewe Lambs, from above.
- 3 Southdown Ram Lambs, from above.
- 3 Clydesdale Mares, 9 years old.
- 1 Clydesdale Filly, under 2 years, registered.
- 1 Clydesdale Filly, under 1 year. "
- 1 Registered Berkshire Sow, under 3 years old.
- 3 Registered Berkshire Sows, about 1 year old.
- 7 Young Pigs, farrowed 23rd Dec., 1886.

The registered Jerseys were shown at the Toronto, Guelph, and Hamilton Fairs, 1886, and won 18 prizes. They are a choice lot, and were gathered together regardless of cost.

The Southdown Sheep were imported by the well-known firm of Messrs. E. & A. Stanford, Markham. Most of the ewes will drop lambs before the day of sale, and they also will be sold.

The Clydesdale Mares have three and four crosses, the latter is in foal to the imported stallion Macarthur (3815).

The Berkshires are from Snell's stock, and are a good lot.

This sale will give a rare opportunity for those wishing to purchase, as all the stock is in first-class condition, and will be sold to the highest bidder.

Lunch will be provided at noon. Live stock will be sold immediately after.

Eight months' credit will be given. Catalogues will be sent and other information given on application to

A. JEFFREY,

180 Bloor Street West, Toronto.

UNRESERVED SALE

—OF—

FARM STOCK

On Tuesday, 15th March, 1887,

Consisting of 28 high-grade cows, heifers and steers. 4 extra colts, rising 2 and 3 years old, from such imported draft sires as Berry Hero, Sir Thomas, and Sir Walter Scott. One driving mare, 7 years old. 23 well-bred long-wooled ewes, in lamb to a pedigreed Lincoln ram; 11 ewe lambs, by the same. One Berkshire brood sow in pig; also six well-bred young pigs. The above are well worthy the attention of breeders, dairy-men, and all lovers of good stock.

TERMS—10 months' credit, without interest.

DUGALD McPHERSON,

GLANWORTH P. O.

Lot 20, Con. 8, Westminster.

Feb-2

UNRESERVED

AUCTION SALE

—OF—

AYRSHIRE CATTLE, CLYDESDALE HORSES

AND AGRICULTURAL IMPLEMENTS

On WEDNESDAY, 23d MARCH

At St. Laurent, Montreal, P.Q.

The undersigned, having decided to retire from farming, will sell by auction his entire stock and farm implements, without reserve, consisting of

20 head of Superior Ayrshire Cattle, 18 of which are cows and heifers, and many of them prize takers.

The CLYDESDALE mare Belle, 5 years old, registered No. 30 Can.; one yearling filly, registered, dam Belle, sire Up To Time 2490, G. B. J.; the Clydesdale mare Jessie; 3 superior fillies, dam Jessie by Up To Time; 1 team heavy draft horses; 1 roadster mare, with foal by Quito; 1 saddle horse; also a large assortment of first-class Agricultural Implements, all in good order.

TERMS—7 months' credit on furnishing approved notes.

The farm is three miles west of Mile End depot, C. P. R. Teams will meet the morning trains on day of sale.

Sale to begin at 10 o'clock. Live stock at 1 p.m.

ANDREW SCOTT, ST. LAURENT, MONTREAL, P. Q.

MESSRS. COWAN AND PATTESON

—WILL HAVE A—

JOINT SALE

—OF—

SHORTHORN COWS, HEIFERS AND BULLS

From the Clochmohr and Eastwood Herds, mostly topped with fashionably bred Bates sires.

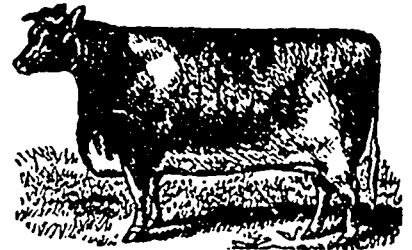
At Galt, on Thursday, March 24,

When forty animals of individual excellence and good families will be offered.

TERMS - Six months' credit on approved security, or six per cent. per annum discount for cash.

Catalogues can be obtained from JAMES COWAN & SONS, Clochmohr, Galt; from T. C. PATTESON, Postmaster, Toronto, or from the Auctioneer, JOHN SMITH, Brampton.

ARTHUR JOHNSTON, Greenwood, Ont., Can.



18 Aberdeenshire Shorthorn Bulls

(VERY FINE)

and heifers landed at Greenwood on Dec. 18. Twelve imported and six home-bred bulls for sale, besides cows and heifers, imported and home-bred. Send for Catalogues. I have also imported Clydesdale stallions and mares for sale. Claremont Station on the C. P. R., and Pickering, on the G. T. R. Come and see me.

MESSRS. J. & R. HUNTER, ALMA, ONT.



Importers and Breeders of

SHORTHORN CATTLE.

Clydesdale Horses and Shropshire Down Sheep. A good selection of young bulls, from 4 to 20 months old, including the pure Booth Commander-in-Chief—the others are mostly Booth blood—are now offered for sale.

TERMS REASONABLE.

12 Young Bulls, 12 FOR SALE.



We are offering perhaps the best lot of young bulls we ever had, several now fit for service.

Amongst the number are some choice show bulls. All are of good colors, well grown, on straight legs, and carry a lot of natural flesh.

PRICES

TO SUIT ALL.

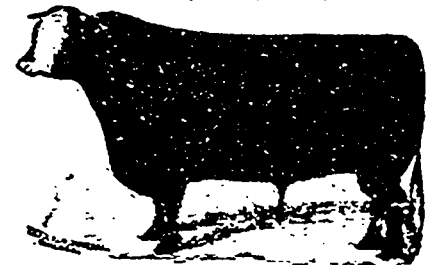
Parties meaning business will find no difficulty in making a purchase.

A few YOUNG COWS also to spare.

RICHARD GIBSON,

Belvoir Farm, Delaware, Ont.

MESSRS. H. & I. GROFF, Elmira, Ont., Can.,



Importers and Breeders of

SHORTHORN CATTLE.

The highly-bred Booth Bull Lord Monrath—2708—, is at the head of the herd. Lord Monrath was bred by Sir Hugh Aylmer, of West Dereham Abbey, Stokeferry, Norfolk, Eng. The Mantilins, Lady Day, Roan Duchess and Princess strain. Young stock always on hand for sale. Correspondence solicited.

IMPORTANT AUCTION SALE

—OF—

Shorthorn Cattle

Having leased my farm for a term of years, I will sell on

WEDNESDAY, MARCH 16th,

—1887—

35 head of Cows, Heifers and Bulls. Certificates of registration in the Dominion Herd Book will be given on day of sale.

TERMS OF SALE—Ten months credit on approved notes. Lunch at 12 o'clock. Sale promptly at 1 o'clock. Catalogues after 1st Feb., 1887.

For further particulars, address, J.A.3 JNO. D. PETTIT, Paris, Ont.

UNRESERVED AUCTION SALE

—OF—

SHORTHORN and other CATTLE

On Wednesday, March 16, 1887,

At "The Elms," one mile from Owen Sound, consisting of

SIX SHORTHORN BULLS

and one SHORTHORN COW. Dominion Herd Book pedigrees will be given to purchasers at time of sale.

Three Galloway Grade Bulls calved in 1885. Two yearling steers, three steers, calved 1887, two heifers, calved 1887. These eight are sired by the silver medal Galloway bull Closeburn.

One Shorthorn cow, Canadian herd book, one red poll cow; one Shorthorn grade cow, 7 crosses. One yoke working oxen. The cows are all in calf.

Also for sale, by private contract, thirteen head of pedigreed Galloways—4 bulls and 9 females; and six head of cattle, feeding for a June market.

Lunch at noon. Sale to commence at one.

TERMS—Approved notes, payable 1st January 1888, at 5 per cent discount for cash.

For further particulars, send catalogue address.

WM. KOUGH, Owen Sound.

MORETON LODGE HERDS

—FOR SALE—

56 - BULLS - 56

-39-

-17-

Herefords



Shorthorns

Ft for Servico Season 1887.

Viz. SHORTHORNS—one 3-yr.-old, two 2-yr.-old, ten yearlings, and four calves, 9 to 11 months.

HEREFORDS—two 4-yr.-old, six 2-yr.-old, 19 yearlings, and 12 calves rising 1 year old.

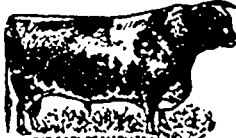
Animals and Pedigrees first-class. Parties wishing to buy will find no difficulty in making a purchase at reasonable figures.

fe-2 F. W. STONE, 42 Gordon St. Guelph, Ont., Canada.

MESSRS. GREEN BROS. have decided to offer

FOR SALE

Their grand IMPORTED Shorthorn Bull



IMPORTED Shorthorn Bull Their grand

EARL OF MAR (47815)

Winner of gold medal and several first prizes at Provincial and Industrial exhibitions, to make room for a new importation. The Earl of Mar is sure, good tempered, and active as a yearling.

Also several young BULL CALVES, fit for service, got by the Earl of Mar out of imported cows.

GREEN BROS., Innerkip, Oxford Co., Ont.

RUGBY FARM



J. S. WILLIAMS, Knowlton, P. Q.,

—BREEDER OF—

Shorthorn Cattle and Berkshire Hogs

Herd headed by the Bates bull Duke of Rugby, and bred with strict reference to individual merit and milking qualities. Animals recorded in both American and B. A. herd books.

My Berkshires are of the choicest breeding—large size and grand individuals. For prices and other information, address as above. Aug-7

JOHN DRYDEN.



BROOKLIN, ONT.

BREEDER AND IMPORTER OF

Shorthorns, Clydesdales, and Shropshire Sheep.

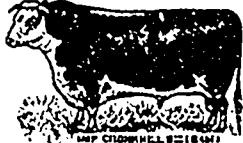
Last importation of bulls and heifers arrived in Dec., 1885. Send for Catalogue.

HEREFORDS

Messrs. GREEN BROS. offer

-FOR SALE-

The whole of their
Hereford
Herd
Imported
Stock Bull
 including their



CRONKHILL 8th (\$461)

Winner of silver medals at both the Industrial and Provincial exhibitions, and imported cows. Will sell very cheap to an immediate purchaser taking the lot, as they intend devoting their entire attention to Shorthorns.

Fine Young Berkshire Pigs for Sale.

GREEN BROS., Innerkip, Oxford Co., Ont.

POINT CARDINAL HERDS.



HEREFORDS

Selected with great care from the celebrated herds in England. At the head of the herd stands the imported Marlow bull Rambler 6th (6630) 13514.

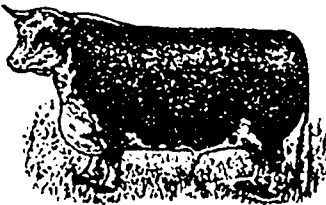
SHORTHORNS

Heifers and bulls for sale, mostly sired by imported Duke of Hazelcote 6th, 65797.

Also a number of fine Hereford grade heifers and young bulls.

G. F. BENSON, Cardinal, Ont.

THE TUSHINGHAM HEREFORDS

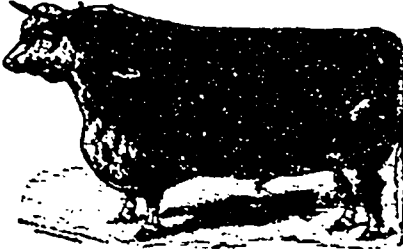


THIS herd, grounded on selections from the best blood in England, is remarkable for the number and uniformity of the good calves that it has produced during the three years of its existence, owing in a great measure to the excellence of the stock bull Tushingham (\$127), by Charity 3rd (6350), by The Grove 3rd (5051). This bull is now offered for sale, with several youngbulls of his get.

J. W. M. VERNON,

Tushingham House, Waterville, P. Q. WATERVILLE is on the mainline of G. T. R., not far from the United States boundary.

LOWLANDS HERD



A CHOICE LOT OF

YOUNG HEREFORD BULLS FOR SALE.

All eligible for or already entered in the "American Hereford Record". Amongst the sires of my herd are Auctioneer, Careful, Hayden Grove, Dowton Boy, King Pippin, and Cassio. Also a fine lot of imported

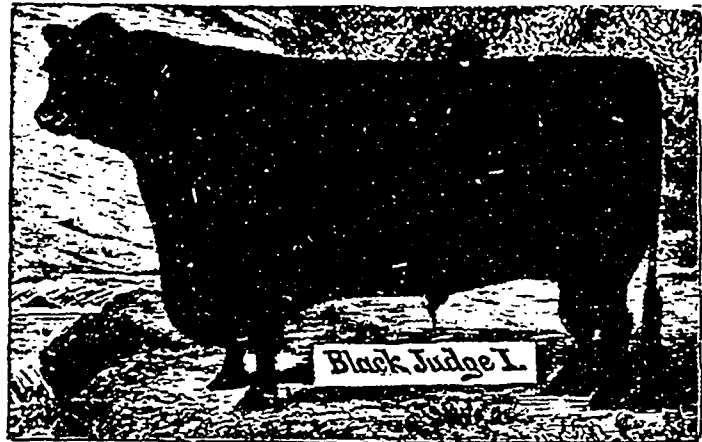
Welsh and Shetland Ponies for Sale.

E. W. JUDAH.

"Lowlands," HILLMURST, P. Q.

CANADIAN HOME OF THE ABERDEEN ANGUS-POLL

UNCONQUERABLE



BLACK JUDGE [1] IMPORTED

First Prize Winner Toronto Industrial, 1883—1884—1885—1886. Grand Dominion and Provincial Medal and Diploma 1885. First, Medal and Diploma, best bull any age, Toronto Industrial 1885—1886. Service Fee, \$100.

KINNOUL PARK STOCK FARM, NEW LOWELL, ONTARIO, HAY & PATON, Proprietors.

J. G. DAVIDSON, Manager.

WE beg to call the attention of our patrons and friends to the above splendid cut of our Champion Bull Black Judge [1], with his unapproachable record underneath. We have also much pleasure in saying that we have again taken all the leading Prizes and Honors at CANADA'S GREAT FAIR, of this year. Not once, since 1882, have we missed taking the coveted Medal and Diploma for the best herd of Aberdeen-Angus Polls, and the Medal and Diploma for best bull of any age have gone to Kinnoul Park no less than FIVE TIMES IN SUCCESSION. For four years running we have secured the first premium for cows; twice being first, second and third; once (in 1884) against a ring of fourteen of the best animals ever shown together in Canada, comprising choice herds from Messrs. J. H. Pope, Mossom Boyd, Geary Bros. and H. Walker & Sons, etc. We have confidence in asking intending purchasers to inspect our stock and prices before investing. We have some choicely bred Bulls and Bull calves which we will sell at prices ranging from \$100 to \$500, ACCORDING TO BREEDING AND QUALITY, and we shall have pleasure in sending to any address our Illustrated Descriptive Catalogues.

KEILLOR LODGE STOCK FARM, THE GEARY BROS. CO'Y, Proprietors.

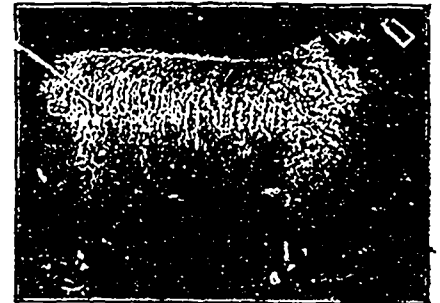


IMPORTERS AND BREEDERS OF POLLED ABERDEEN-ANGUS CATTLE AND ENGLISH SHIRE HORSES.

Young Stock, Imported and Home-bred, for sale

The Geary Bros. Co'y, Bothwell, Ont.

BLI BRO STOCK FARM, GEARY BROS., PROPRIETORS.



IMPORTERS AND BREEDERS OF Polled Aberdeen-Angus Cattle, Lincoln and Shropshire Down Sheep. Young stock, imported & home-bred, for sale.

GEARY BROS., London, Ontario.

HEREFORDS FOR SALE.



30 Imported Yearling Hereford Heifers

Eligible for entry in American Herd Book, all of which have been bred during the past season. Will be sold from \$250 per head up.

ALSO A FEW CHOICE YEARLING BULLS

R. H. POPE, EASTVIEW, COOMBSHIRE, P. Q.

FEEDING ANIMALS. By Prof. E. W. STEWART.

THIS is a practical work upon the science of feeding in all its details, giving practical rations for all classes of farm animals. It is not only the best book upon this subject, but it is the only book giving careful details of rations and food values as applied to the feeding of all classes of stock. It will pay any body having a single horse or cow, or who feeds a few pigs or sheep, to buy it and study it carefully. No farmer can afford to be without it. Price, \$2, post paid, from this office, or will be sent to any person forwarding us four new subscribers to the JOURNAL for 1887.

Address,

STOCK JOURNAL CO., Hamilton, Ont.

THE SCIENCE OF FEEDING.

TREATED in a thorough and practical manner, by Prof. E. W. STEWART, in his newly-published work on "FEEDING ANIMALS."

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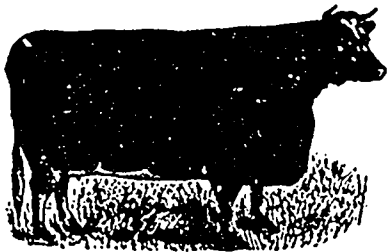
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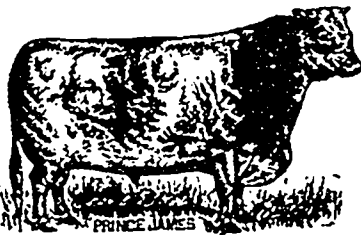


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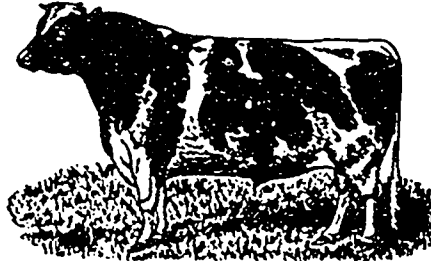
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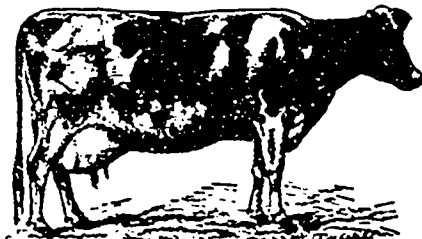
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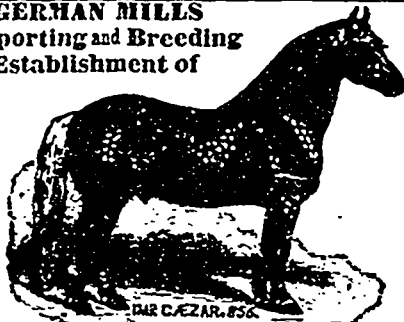
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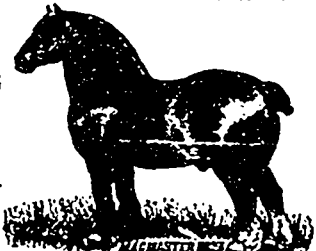
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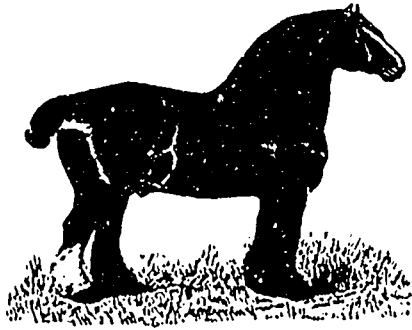
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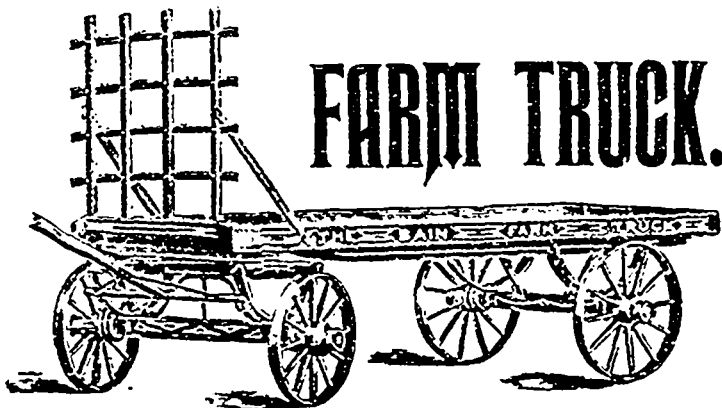
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