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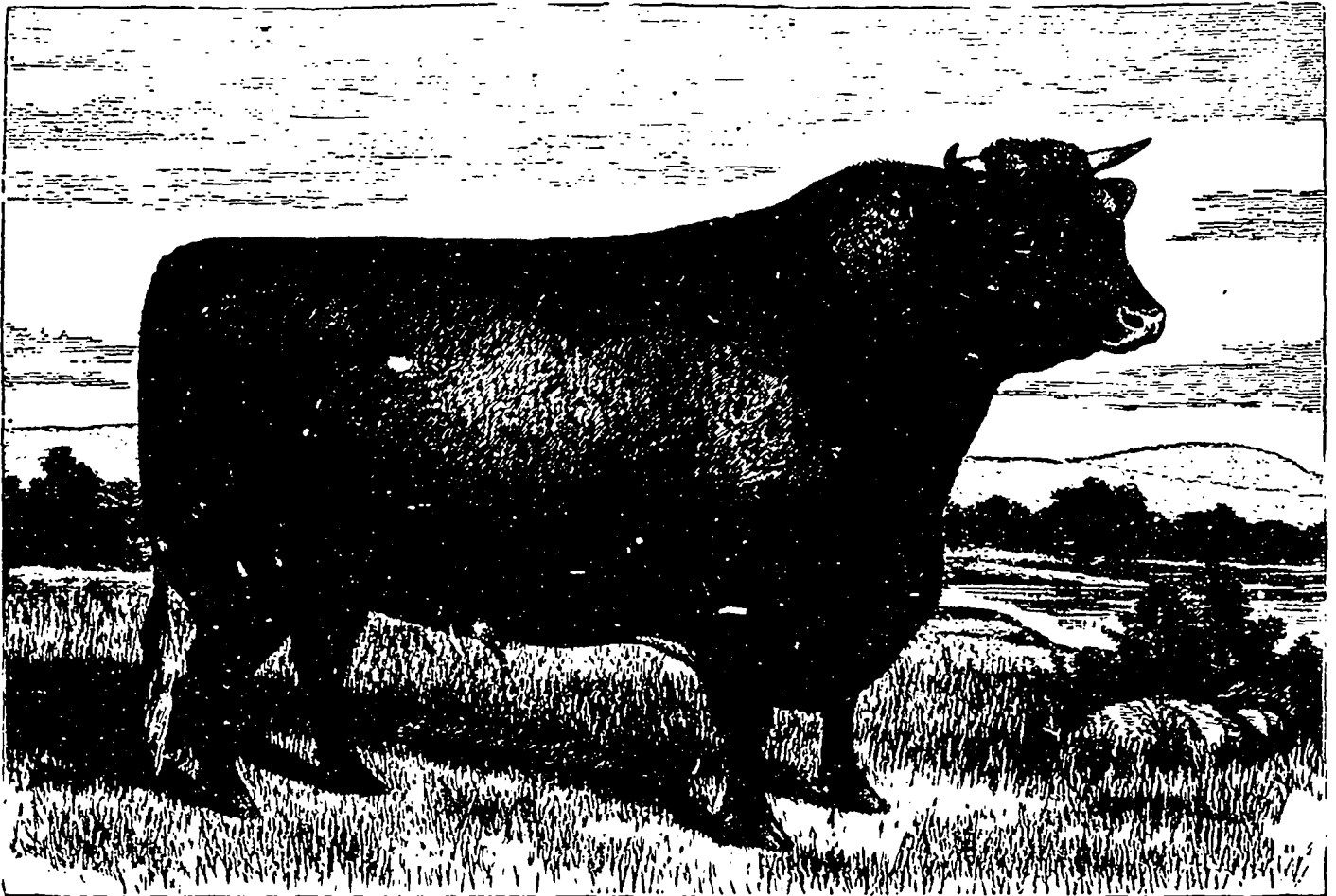
THE CANADIAN LIVE-STOCK AND FARM JOURNAL

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

VOL. IV.

HAMILTON, CANADA, FEBRUARY, 1887.

No. 2



THE SHORTHORN BULL LORD ABERDEEN 70552.

Imported by and the property of the Hon. M. H. Cochrane, Hillhurst, P. Q.

The Shorthorn Bull, Lord Aberdeen, 70552.

This grand specimen of a Scotch Shorthorn bull was bred by Mr. S. Campbell, Kinellar, Aberdeenshire, Scotland, and imported in dam by the Hon. M. H. Cochrane, Hillhurst, P. Q., in whose Shorthorn herd he has rendered most substantial service as a sire. He was calved May 12, 1881. His sire was Gladstone (43286), and dam Rose Drop by Novelist (34929). The second, third and fourth dams are Rosebuds of Kinellar, and British Prince (33226), Duke (28342), and Gladstone (26256), are the corresponding sires.

Lord Aberdeen, 70552, is red in color, with all the width and depth of breast, loin and quarter characteristic of the Cruikshank cattle. As shown in the sketch he stands evenly on short limbs, and possesses a wealth of flesh and mellowness of skin denoting the best of feeding qualities. And all these characteristics are well brought out in his descendants. In the show rings of Quebec, the only place ever exhibited, he has been an easy winner, carrying first prize and diploma for best Shorthorn bull of any age at the Eastern Townships Exhibition, Sherbrooke, 1885, and also at the Dominion Exhibition, same place, 1886.

This bull, along with the imported Shorthorn bull Heir Apparent (51380), also a red, bought of W. Duthie, Collynie, and bred at Turriff, 1884, will be offered for sale by auction in Toronto, some time in April next. At the same time and place Mr. Cochrane will sell by auction some 15 Shorthorn cows (5 imported), in calf to the two aforementioned bulls, 7 two-year-old heifers, also in calf, 10 yearling heifers, nine heifer calves, and two young bulls. Thirteen of the females are of Aberdeenshire blood, and with the others Booth predominates.

Full particulars of the sale and relating to the animals to be sold will be given in the next issue, and catalogues of sale may be had on application.

It is almost unnecessary to say a word in reference to the breeding establishment at Hillhurst, which has long since been world-renowned. Shorthorns have been bred there since 1864, and the averages obtained at the various draft sales made since, in England, the United States, and Canada, have scarcely ever been equalled.

The present herd are mainly descended from the cows Princess Adelaide, bred at Bellywater, Ireland; Red Bess, bred at West Dereham Abbey, Norfolk, England; Dairymaid, bred at Howes, Scotland, and

an importation from the Kinellar herds in 1881. Along with them came Beatrice, bred by her Majesty, and the cows Airdrie's Lady Jocelyn, Bessie and Fairy Rose, from Mr. Masfen's, at Pendeford, England.

The Springtide.

Never before in the life of the JOURNAL has there been such a rush of matter as at the present time. Although we have added four additional pages to the reading columns this month, a very large amount of interesting and useful correspondence had still to be held over, nor could room be found for sundry notices that we would fain have made.

The number of advertisements of pure bred stock submitted for sale this month is unusually large, and as it is offered by reliable and painstaking breeders we would recommend our readers to give the advertising columns a full and careful perusal.

We trust those interested will not forget the annual meeting of the Dominion Shorthorn Breeders' Association in Toronto on the 24th; the union meeting of the students at the Ontario Agricultural College on the 24th and 25th, and the meeting of the Ontario Creamery Association in Toronto, the date to be given elsewhere in this number.

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, FEBRUARY, 1887.

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

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 the extraordinary clubbing rates on another page.

BREEDING horses for work in our towns and cities is a profitable work, if judiciously carried on. But those engaged in it should bear in mind that to suit they must have plenty of *size*. Too many of our Canadian bred draught horses have not enough of size to suit the town drayman. They may answer very well for heavy work on the farm, but not so for the town. In Britain nearly twice the amount can be obtained for a dray horse of the right size than one will bring equally well built in every other respect, only a little under size. When not sufficiently large both legs and body give way under the immense strain put upon them in drawing enormous loads. It will not cost much more to rear the horse just suitable than the one a little too small.

ALTHOUGH we have written a good deal on the wisdom of keeping young stock pushing well ahead from the first, we return to the subject again, and its importance will justify us in doing so. There are so many who look well after their calves, and then allow them to stand still or progress very slowly during the succeeding years of their growth. It should not be so; they should be kept going on—not necessarily high fed, but so fed that they do well all the while. Indeed, we have no patience with that system of feeding cattle which allows of feed lying uneaten in the

mangers. Stock of all kinds should only be fed what they will eat up clean, when the food is wholesome. This is the plan adopted by Mr. Handy, of Greenhead, who has won more prizes on Shorthorns at the Royal Show of England than any other man living. Enough is enough, and why should any one wish to give more?

IN caring for pigs in winter much attention should be shown to keeping them well supplied with a liberal supply of dry bedding. When a number of them lie together the bedding soon gets damp, which in very cold weather is very prejudicial to them. When the fresh supply is put in, the old should be removed. Attention to this matter, simple as it is, will prevent many cases of stiffening and rheumatism so common with pigs confined in winter. Most persons are of the opinion that all that is necessary is to throw in fresh bedding on the top of the old, but this is a mistake. It may add warmth but does not reduce the dampness which is so hurtful. The more severe the weather, the closer the attention that should be given to this matter.

It should be borne in mind by those caring for young pigs in cold weather that they will not do well in a damp place, even though it is not cold. They should have plenty of room as well as dry quarters into which the sunlight can have free access. For the first five or six weeks of their existence their main dependence is the milk of the dam, which should be liberally fed with milk-producing food. When weaned they should get skim milk and wheat middlings, which may be gradually changed to swill and middlings. A mixed diet will be found advantageous, or a change occasionally. Pigs should be liberally fed in the winter season. In summer they get a large portion of their livelihood themselves if they can have access to a pasture, more especially one containing much clover. Contrary to common practice, pigs should be kept clean, and well supplied with litter.

WHAT shall be done with the worn-out horses on the farm is a question worthy of consideration. It is the practice of some to turn them off at a low price to some one who has only money enough to buy half feed for them. Their latter end is one of much suffering. This method of disposing of them is cruel if the seller is conscious of the manner of man he is dealing with, and should not be practiced. Another mode is to feed them in lieu of what they have done after they become unfit for service, putting them, as it were, upon a pension. This is certainly humane, but not very necessary in a country where some are crying for bread, as the cost of keeping an old horse a year would make a magnificent poor rate. A third method is to send them to a solitary place by the hand of a trusty messenger with a rifle, and there in a few moments put them beyond the reach of suffering. In some parts the carcass is utilized in the arts. In such a case they might be sold when it is known that they come to an end by a sudden and almost painless death. It is cruelty that is unjustifiable, to sell an old horse to any one who is likely to abuse and maltreat it, and should never be done, neither for the sake of gold nor for any other sake.

ON the first day of January, 1881, the inferior grades of beef brought 54d. per pound in the London market, and on the first day of January, 1886, 26d. On the first day of January, 1881, prime lots of beef brought 58d. in the same market, and on the first day of Jan., 1886, 44d. per lb. In the one case the falling off is 28d. per lb., or more than one half, and in the other

14d. per lb., or not quite one-fourth. These facts carry their own moral. As business widens in any line and the number of producers is greatly multiplied, those who produce the best article only compete with a limited number, and therefore always get a fair price, while those who are content with producing an inferior article are wholly at the mercy of the competition of the market, and in times of great plenty they must submit to a great fall in prices. Persons who uniformly produce a good quality of butter never want for a market and fair price. So is it with those who always produce a good quality of beef. It requires more skill to produce good butter and beef than to produce a good quality of grain, therefore the growers of the two former will meet with less opposition than those who grow the latter, if of prime quality. Our country is pre-eminently adapted to the growing of beef and butter. Let us produce them only of prime quality.

Prices for Pure Bred Stock.

Because pure-breds in some of the breeds do not bring prices as formerly, some are proposing certain methods to be adopted for lessening their numbers, with the expectation that this would lead to the payment of better prices. A view so unpatriotic is utterly unworthy of being entertained by men calling themselves breeders, and we shall fondly hope that such a view has not yet obtained a footing within our borders. From an article in the *Breeders' Gazette* from the able pen of William Warfield, we learn, that like pleuro-pneumonia (we don't know which is the greater plague of the two), it has got a footing in the United States. One of the citizens of that great country has been found indulging the hope that pleuro-pneumonia or some such scourge would cut off half the pure Shorthorns in the States, in the hope that the other half would bring better prices. Men who give expression to such views are fitter subjects for quarantine than the diseased cattle, and if any such dwell in our midst they will be shunned by those who know it, as plague infected regions by an affrighted populace.

Others, in the hope of filling their coffers with tarnished gold, propose that some standard color shall be adopted in place of the old-time colors, red, white and roan. They advocate the red as a standard, and with a heartlessness and an unreasonableness that is without excuse, would have all the admirers of the roan bow down and worship this great image of their setting up.

Others, again, would make certain family strains the corner-stones of a new Shorthorn structure, making individual merit the basis of selection, forgetting that the standard of individual merit to-day may be very different from what it will be twenty years hence, and that merit in families of bovines, like merit in families of the human race, rises and falls as surely as the ebb and flow of the tide, if not with the same regularity. Like the centres of commerce, the centres of merit are continually shifting, and so it will be down to the end of time.

We need not concern ourselves particularly about the prospective prices of pure-bred stock. The demand and the supply will regulate this just as it regulates all other branches of business, and as the number of breeders increases, there will be less danger of monopoly, so that to the purchaser the sky will become clearer and clearer as the years roll on. The prices in such a case will no doubt gradually fall more and more in the direction of the normal level, but this normal level will in all probability rise with the general improvement of the stock that must take place by

the universal diffusion of pure blood. A high grade Shorthorn to-day brings a much better price than a scrub, not so much that it is a high grade Shorthorn as that it is *intrinsically* better than the scrub. This means, then, a gradual lowering of the prices for the average breeder. But the breeders of to-day need not feel concerned, for the number of the unimproved is so out of all proportion to the number of the improved, that many years must elapse before that happy era shall arrive when the latter shall be in excess of the former. Very probably before that day of sunshine comes the present generation shall have passed away, and it has been the experience of the world in all past ages, that each generation can manage its own material affairs better than the preceding can manage them in prospective.

Shall very high prices, then, soon become a thing of the past in the rearing of pure-breds? Comparatively speaking they will, but in the case of some, fancy prices will always be obtained. Mr. Handy, the distinguished English breeder, obtains better prices for his Shorthorns to-day than most of the breeders of England, and just because he has proved it to the people of England and of other countries that he has produced better cattle. Physicians and other professional men have a rate of charges to which they usually adhere, yet some of them, more distinguished, will charge more for the very same kind of assistance as others, and just because they are more distinguished. Now this has gone on through all past ages, although there have been physicians from the beginning. So with the prices obtained for pure-breds. There will always be a sort of standard price, and that standard will vary from time to time, and there will always be some Mr. Handleys and some Mr. Fullers, although not many, who will obtain much better prices.

We have no sympathy with those who rejoice in any legislation that lessens for the time being the number of registered animals of any breed, because it may temporarily raise the price. Any one who harbors such a thought is nursing a moral leprosy that will feed upon his manhood. This is very different from sustaining such a course, in the hope that it may advance the best interests of the breed as such.

In the prosecution of any pursuit it is the good that will accrue to the largest number that should be sought, rather than the enrichment of the few. If they by their superior tact and skill distance their fellows, rather than complain we should feel proud that we have such men in our midst, and rather rejoice with them in their success.

It is always a safe rule for those who have live-stock which they are anxious to sell, to bow to present prices, and make the best of the situation, as stock, unlike many kinds of produce, are very expensive to hold over.

Reaching the "Laggards."

In referring to one means of reaching the very numerous class who will not open their eyes to the advantages of good stock, "Farmer John," in his very excellent letter in another column, uses the following language:

"I have in my mind's eye just now, some ten or a dozen of this pagan class. I intend to send them, at my expense, the CANADIAN LIVE-STOCK AND FARM JOURNAL for six months out of the twelve. There will be made from five to seven converts . . . The sale of one extra animal a year will more than pay for the outlay."

"Farmer John" has here given expression in his own happy way to a *truism* that we could never have uttered ourselves, lest modesty should be outraged. One of the class of visitors, such as he interrogated at Bow Park, can never be reached, unless in some

such way. He will keep the windows of the temple of his mind closed till some kind neighbor opens the shutters and lets in some rays of light. It would be lost labor to ask this man to take a farm paper by any one unless a neighbor in whom he had confidence. The only other way to reach him is to send it to him for a time *free*. In such a case, though he still refuse to open his eyes to the light, it may not be thus with his boy. The latter may become interested, and thus another will be enrolled on the side of progress. The diffusion of minute rays of light gradually warm the atmosphere, and the constant working of moral forces in the world so react upon the mass of evil which it permeates that it becomes less and less in those latter and better days. Just so if there is to be a great reform in agricultural methods, it must be brought about gradually through the influence direct or indirect of the progressive upon their neighbors.

An Outlet for our Barley.

Professor J. W. Robertson, of the Ontario Agricultural College, Guelph, gave the following as a winter ration for average sized dairy cows in milk, at the cheese convention of the Eastern Dairymen, held in Brockville on Jan. 6-8 of the present year: 2 lbs. bran, 2 lbs. oil cake or cotton cake, 5 lbs. barley and oats, 7 lbs. clover hay, and 30 lbs. mangolds, daily. The barley and oats were to be ground and fed in equal proportions, and the meal and bran should be fed in three feeds. Assuming that the number of cows in Ontario is 700,000, which is under rather than over the number, and that this ration were fed to them for but six months in the year, they would consume no less than nearly 7,000,000 bushels of barley during that time. This is nearly one-half the whole amount grown in the province. Farmers are sometimes found asking the question, "What will be done with our barley in coming days?" There is no ground for anxiety here. Like the Danes, let us convert it into milk, and it will prove a most blessed disposal of it. True, the cows would not consume it all, but with ground oats it is a good food for calves, and a little for a change is good for fowls. With the number of cows constantly increasing, and the acreage of barley constantly decreasing, we need have no anxiety as to what will become of our barley. We ought to thank those Danes for what they have taught us. They have long held the butter market in England amongst foreign exporters, and it is pleasing to know that a part of the food ration from which this butter is produced is barley.

The Beef Breeds of Cattle.

BY R. C. AULD, DRXTER, MICH.

(Copyrighted.)

(Continued from December.)

THE NORFOLK AND SUFFOLK POLLS OR RED POLLS.

This is a remarkably interesting race of cattle. The writer has always believed that of British cattle they were among the first to be imported to this country, and this seems to be confirmed from various sources. L. F. Allen's "American Cattle" is of this opinion.

It is well known that from the earliest times there have been "domestic herds" of the ancient white polled cattle in East Anglia, and that it is from these that the Norfolks sprung. That fact indicates that the Norfolks are a very ancient race. Low, in his Domesticated Animals controverts the assertion that it was the Galloway that originated the Norfolk. He says, "They have as much the characteristics of a distinct bovine breed as the Galloway itself."

Doubtless, there were in the early times introductions of Polled Scots into Norfolk, of which the Galloway seems to have been one. But put a red Norfolk alongside a Galloway and no one in the world would jump to the conclusion that there was any likeness. I there is a resemblance between the Norfolk's best sorts and any other polled breed, it is to the old Aberdeen-Angus—the difference being the larger size of the latter. Take photographs, wood cuts or lithographs of the two breeds where color is not apparent and no one could distinguish them, but they could easily distinguish the Galloway and Norfolk from this test.

"Sigma," in the *National Live-Stock Journal*, in alluding to the antiquity of the Norfolk breed, says that they (the Norfolks) were "universally polled at a time when the Galloways were certainly not universally polled"—that indeed the latter "have been proved to be the youngest polled race in Britain."

There is a certain species of evidence on this matter which is conclusive on these points, but this is not the place to allude further to this; we may only trust that it will be given in a more suitable place.

Camden two or three centuries ago described the country of these cattle "as a fat and fertile soil, . . . in every place most rich and goodly corn fields, with pastures as battable for grazing and feeding of cattle. And great store of cheeses are there made," which found their way into "all parts of England, many into Germany, France and Spain, also as Pantalem, Phistian writeth, who stucke not to compare these of ours for color and taste both with those of Placentia." Speed also in 1676 made similar averments. The earlier accounts of the county state them to have been "universally polled;" and Arthur Young describes their character fully, as do Culley, Lawrence, and others, writing in 1764 and 1805. "The character which indicates a disposition to arrive at early maturity, and secrete fat, have been disregarded, while those that indicate a disposition in the female to produce abundant milk, have been alone valued." They were, according to the earliest account, subject to the most careless treatment, and supported on the coarsest fare—yet they were not surpassed by any in the power of yielding milk. The color of the old race was dun, and we would remark in this that their color would seem to have been the common original color of the aboriginal cattle in Britain. Red came to be the result of fancy.

In the *Agricultural Gazette*, No. 503, published August 20th, 1883, were given, by favor of Mr. G. Gooderham, the portraits of his two remarkable red Suffolk cows, Wild Rose, and Wild Rose of Kilburn. The former was reported to give on grass, without cake, 54 pints in a day for four months together; and it was asserted that 20 pints of her milk, on grass, gave 1 pound of butter. The milk of Shorthorns, at the prize farm reported in the journal of the Royal Agricultural Society of England in 1883, is stated to have yielded at the same rate, of 1 pound of butter to 20 pints of milk. Mr. Austin's cows are stated to have each 4 pounds of cake per day, and that 15 1-10 pints yield 1 pound of butter. The record of Mr. Austin's herd is certainly noteworthy, both for the amount yielded and the percentage of butter.

As this is an essay on "beef" breeds we do not go further into the subject of the milk properties of the polls, but go on to consider their beef qualities. In the agricultural shows, indeed, it has been as beef cattle that they have mostly appeared. In a breed so highly developed in the milky way as they are, they are the only one of which this can be said. At Paris, in 1878, they were the only other polled breed

that appeared beside the Aberdeen-Angus. They were literally overshadowed on that, as they are on every occasion, by the champion blacks from Aberdeen and Banffshires. But they were so good that they were erected into a separate class and made an excellent show. They were exhibited by J. J. Colman, M. P., of Carrow House—of "Colman's Mustard" fame, that is now penetrating America. Than Mr. Garret Taylor, Mr. Colman's factor, the Norfolk men could not have a better man to take them in hand, and his exhibits at the famous Norwich and Smithfield shows of Norfolk polls is highly creditable to the breed. They are improving year by year as beef, and for this purpose they seem even better than the Sussex. That they get all justice in the feeding line may be seen by the fact that Mr. Colman is a successful exhibitor of Polled Aberdeen, and Aberdeenshire cross stock at the Smithfield and other English shows, being champion with an ox of the latter description in 1880.

The red polls are now a breed that takes its place with others in this country. There are herds in many States and they are well appreciated. Gen. L. F. Ross, perhaps, deserves to be honored above others in his endeavors to demonstrate the good qualities of the breed. He owns several of the Rose family and he has besides the best—though it is not "large"—herd in America, as proved by his excellent exhibit at Chicago fair last fall.

Acknowledgment is gratefully made of the courtesy of Mr. Henry F. Euren, editor of the Red Polled Herd Book, Norwich, England, for the first volume of the herd book containing a history of the breed; a novel system of registry is given therein well worth the study of breeders; also to Gen. L. F. Ross, Iowa City, Ia., for much interesting information. Parties in this country desiring to establish herds of this combined beef and milk machine, should put themselves in communication with the latter, who has reared the best herd in America.

OTHER ENGLISH BEEF BREEDS.

The only other English beef breeds not yet mentioned are the Longhorn and the Welsh. These breeds are very interesting historically—from both an antiquarian and scientific point of view. We need not refer to the former, as, though a worthy attempt has been made to resuscitate them, yet it may be said they are, practically, extinct. We shall make reference alone to

THE WELSH CATTLE.

There has lately been landed at Littleton, Mass., a shipment of Welsh cattle, by J. B. Warren, of Larchwood, Ia. This is the first shipment of Welsh cattle since quarantine opened to the port of Boston. The number, twelve three-year-old heifers, and one two-year-old bull. They were bought in Wales, of Col. Platt, of Anglesey. The colonel is one of the largest breeders of this kind of stock in Wales. The stock is especially adapted for milk purposes. The owner takes these cattle at the expiration of quarantine direct to his stock farm for his own breeding purposes, and not for sale.

Col. Platt is one of the oldest breeders of Welsh cattle, and has been a regular exhibitor at Birmingham and Smithfield stock shows, where his large oxen have been a feature of the show. From a publication, "Notes on Black Cattle," by the Colonel, we extract the following as to what a Welsh "runt" ought to be: "He should have short legs, straight and fine in the bone, with long yellowish horns, black points turning upwards, broad level back and forehead, with black eyes, large and expressive, nostrils wide, strong

muscular neck, large wide dewlaps projecting forward, expansive chest and broad shoulders, joints not projecting, the ribs well sprung, likened by one well-known authority to an opened umbrella; with loins broad and strong, and haunches not too wide, small round bones, tail long and neatly set on, with thick, black, wavy hair, and a mellow touch; the appendages of the bulls and udders of the cows should be white; the Anglesey cattle are the most prized, being heavier and retaining their old characteristics in the quality desired.

The Pembroke cattle are very similar to the Anglesey. The Pembrokes belong to the *Bos Urus* species.

In 1747 from Anglesey alone at least 10,000 head were annually exported to England at a value of £76,260. It is now estimated that 50,000 are sent across from the whole of Wales into England. One prize bullock slaughtered at Christmas, 1881, made 70 per cent. of its live weight, two others 68 per cent. In 1882 one scaled 67 lbs. to the 100. In 1883 two Welsh steers not fed for show weighed 1,568 lbs. alive, carcasses 1040 lbs., or over 60 per cent.

"As milkers," Col. Platt says, "the pure Welsh are hard to beat. Rev. Mr. Davis, in his book on the Agriculture of North Wales, published in 1810, mentions a Welsh cow which gave from 1st of May to 30th of October, 4,026 quarts of milk, which produced 358 lbs. (avoii.) of butter, being nearly equal to two pounds per day and 22 quarts of milk per day for 183 days consecutively. He further quotes a dairy of Mr. Wynniss, of Ryton, from an average of 95 milch kine profit, he makes one year with another 1,472 tons of cheese. At the late London Dairy Show a pedigree Welsh cow belonging to Captain Ross, St. Albans, in addition to winning the first prize in her class, and the Lord Mayor's champion prize for the best cow and heifer, other than pure bred Shorthorns, Jerseys, and Guerneys, won the first prize for the best milking cow. Her quantity of milk was just over 20 quarts and yielded 26 per cent of cream."

That well-informed, graceful writer, "Colonus," of the *National Live-Stock Journal*, has given much information about Welsh kine in that journal. In the April number, in writing of the milking faculty of the Welsh kine: "The small, black Welsh breed, which for centuries had their business in the producing of milk, butter and cheese. Such are the Montgomeryshire cattle."

The Ontario Fat Stock Show.

This exhibition of fat stock, during the four years of its existence, has not been an unqualified success. When we speak thus we do not refer to the numbers and character of the exhibit, for in these respects the show has been well sustained, but as to the meagre attendance from amongst the farmers. This is due to several influences which act adversely, most of which it is quite possible to remedy.

First, the *locality* has not been the best for securing a good attendance. Some important commercial centre would answer much better, for there people continually come and go, and such a centre has always an advantage in railway facilities. Farmers especially will not care to go to such a place simply for the show's sake, when they have to wait at intermediate stations for railway connexions.

Second, the *building* has never been the most suitable in which it has been held. There is usually an undue amount of cold. This was not the case last year, but it was owing rather to favorable weather than to the suitability of the heating apparatus. It would therefore be almost a necessity to have a build-

ing for the purpose, and this would necessitate permanent location.

Third, the *newness* of the institution doubtless acts adversely. Its importance is not yet come to be fully recognized. When it comes to be generally understood that our fat stock shows carry home the lesson that one pound of beef costs twice as much to produce it after the age of three years as before that period, and that from not heeding this lesson thousands and thousands of dollars are lost to the country annually, the necessity of sustaining them in full vigor will surely become generally recognized.

All this points in the direction of centralizing and permanently locating the show, and where can a more suitable center be found than Toronto. Guelph and Woodstock deserve much praise for the spirit they have shown in sustaining these exhibitions, but this does not alter the statement that Toronto is a much better place for holding them. True, Toronto did no honor to herself in the little countenance she gave to the first exhibition of fat stock that was held there, but surely she has repented ere this, and will now be willing to make amends.

The time has surely come when there may be a grand gathering of farmers at Toronto during the holding of the Fat Stock Show. We have now our Shorthorn, Ayrshire and Clydesdale Associations, and should have half a dozen more of these stock associations, and what more suitable occasion for holding the annual meetings than at such a time? Why, too, could not the show of Clydesdale stallions be held then better than in the spring, as now contemplated? It would be an economical as well as a fine social arrangement. The show could be taken in by all the representatives of these different associations without any expense for travelling, and they might bear away with them its useful lessons without any greater cost than that of the entrance fee. This would necessarily bring a large influx of visitors into the city at one time, who would, as a matter of course, leave it none the poorer for their visit.

What, then, is Toronto prepared to do by way of providing suitable accommodation? Would it not be well for a committee of the Shorthorn breeders along with one from the Agriculture and Arts Association to wait upon the aldermen and see? If they persist in refusing all assistance, then the show cannot come to Toronto; some other suitable center will have to be chosen. But we expect better things of the rulers of this metropolitan city. We are persuaded that they will not look upon an industry which sends over the sea 600,000 cattle annually as of so little importance as not to merit encouragement from them. Nor would it be amiss to see what the Ontario Legislature may be willing to do. If the building was only forthcoming the Association could more easily manage the rest. We hope, therefore, that before another season for holding the show shall arrive, the necessary provision shall have been made for receiving it. What fine material this would make for a leader in the *Globe* and *Mail*, and how much it would tend to please their many thousands of country readers!

A great work is yet to be accomplished by the Ontario Fat Stock Show. How many of our farmers know as yet what weights the different breeds of sheep should make per day the first or the second year, and how many of them have any approximate idea of the comparative daily gains of pigs? These, and a score of other lessons are to be yet sent home to them very largely through the medium of the Fat Stock Show.

The prize list hitherto has been very meagre at this show, and as a matter of necessity. The Agriculture and Arts Association apportions an amount—all it can

spare—and the balance is made up by donations. It is to this latter source that we are to look still further for material aid. See what splendid donations the American stock associations hold out to the successful exhibitors of their favorites; and why should not we do the same according to our ability? Our Shorthorn breeders at their coming annual convention should not fail to move in the direction thus pointed out; and when we have associations of the other beef breeds, as we hope some day to have, they may do likewise.

If the show is permanently located in Toronto the beef to be sold would, much of it, be just where it is wanted. The butchers of the Queen City so handsomely accommodated in this way, would surely be willing to do each his part to make the show a success.

Our Scotch Letter.

(From our Aberdeenshire Correspondent.)

SMITHFIELD SHOW.

From Birmingham last month I sent you a few hurried notes on the annual exhibition of fat stock held in Bingley Hall, and I will now, as briefly as possible, describe some of the features of the great Smithfield Show, which was opened in the Agricultural Hall, London, on Monday, 6th Dec. The number of entries was smaller than usual, the aggregate of cattle, sheep and pigs being 491, as compared with 553 in 1885, and 535 in 1884, but as contrasted with the show of 1883 there was an increase of 12. The sum offered for competition was £3,466, and the inducements thus given to feeders to put their best foot foremost were sufficient to draw out a very fine collection of animals from every part of England and Scotland (Ireland contributes nothing to these annual boodle tournaments); but the feature of the exhibition was the good all round useful lot of cattle to be seen rather than any exceptional merit among the champion exhibits. There was not, on one hand, anything comparable to the "pure native Canadian cow," of the "Scrubbers" type, or, take the other extreme, to Mr. Stephenson's heifer *Luxury*, which won the championship here last year. Our Scotch feeders made a fair fight, but I have often seen them better prepared than they were this year, and the "blue ribbon" remains in English hands. In my last communication I pointed to the possibility of the Birmingham decisions being in some cases reversed, and commented on the fact that the Hereford men fought for the championship there with, as it were, one of their hands tied behind their backs. I pointed out that I thought the three-year-old Hereford steer belonging to Mr. Frederick Platt, of Bamby Manor, which was beaten in the competition for the special prize given the best Hereford, by Mr. A. P. Turner's three-year-old heifer *Kathleen*, was the finest animal of his breed in the hall, if not indeed the best specimen of all the breeds. Being beaten by the above-mentioned heifer in the preliminary contest he could not compete for the Elkington challenge plate of 100gs. which it will be remembered was awarded to a magnificent blue polled steer, a cross between a Shorthorn bull and an Aberdeen-Angus cow, belonging to Mr. O. Wallis, Bradley Hall. At London, Mr. Platt's steer headed his own class, and beat Mr. Turner's heifer, clearing the way for the final tussle, out of which he emerged the victor and won the champion plate of 100gs. This, I believe, was the first time, in the history of the Smithfield Club that a Hereford was champion, but the winning ox was a right good butcher's beast (a little narrow perhaps), with a wealth and evenness of flesh about him that told powerfully against his opponents. A better "hearted" ox I have seldom seen, and there were few faults you could find in him. At 3 years, 6 months and 3 days old he scaled 21 cwt., live weight.

Among the exhibits from Scotland were several particularly good oxen in the Shorthorn classes, of Sittyton blood, which gave a good account of themselves, and though, in an English contemporary of yours, a writer shows his preference for the English type, I am still inclined to think that the Scotch Shorthorns which were exhibited at London were the stamp of beast that would most readily catch the butcher's eye in any of our markets. They were shown by Mr. James Bruce, of Inverquhomery, Aberdeenshire, who was first in the class for steers between two and three years old in a ring of eleven,

with a grand roan of splendid substance, good shape and symmetry, but hardly rib enough; and second in the class for aged steers in which it may be mentioned he was beaten by an exhibit of his own breeding, which was purchased at the London show of 1885 for Mr. John Cridland, Great Malvern.

The two-year-old ox has come back to Aberdeenshire for another year's feeding, and I am pretty confident by that time he will take a lot of beating. Mr. Colman, M. P., won in a good class of Shorthorn heifers, with a remarkably good red, bred by Mr. Stratton; an Aberdeenshire-bred heifer, the property of Mr. George Bruce, Aberdeen, being second. Mr. Colman's exhibit was declared the winner of the special prize given to the owner of the best Shorthorn. She was a neat, grandly ribbed, well fleshed heifer, with middling ends upon her, but very true in symmetry. I have never seen the Aberdeenshire Shorthorn appear to more advantage than at this great exhibition this year. There were five of them in the hall and each were decorated with a rosette—a fact which, when you remember the rather cold and inhospitable climate in which they are reared, speaks volumes, as the phrase goes, for the quality of that strain of cattle with which the leading herds in Aberdeenshire are identified.

There was an admirable show of Polled Aberdeen-Angus cattle, and of cross-bred cattle, and among these classes Scotch animals were pre-eminently successful. Mr. Wallis' blue ox, which was champion at Birmingham, the product, as I have said, of a Shorthorn and Polled cross, was in his place and won the class prize and the cross-bred special without much difficulty. Even for the championship he was not without his backers, but before he got that length he was bowled over in the competition for the £50 cup, given to the exhibitor of the best steer, which fell to Mr. Platt's Hereford ox, the reserve for it being Mr. Cridland's Aberdeenshire-bred roan Shorthorn steer, which was first here in his class, but only second at Birmingham. The cross-bred ox was perhaps hardly dealt with. It was generally admitted that he should have been, at least, reserve to the Hereford all through. He was a very remarkable example of the cross between the Shorthorn and the Poll, having a grand cover of flesh, excellent quarters and great quality, considering his big proportions, for he turned the scale at 19 cwt., 2 qrs. and 14 lbs., for 2 years, 9 months and 2 weeks of age.

Mr. George Wilken, Waterside of Forbes, was the most successful exhibitor of one-year-old cross-bred steers, his exhibit being quite a wonderful black poll, scaling over 13 cwt. at 1 year, 11 months and 2 weeks old, which has been taken home for another year's feeding. His owner refused an offer of £100 for him. The Queen was also a prominent competitor in the cross-bred and Polled Aberdeen classes.

In the sections for pure-bred Aberdeens I have seen fully more quality, and in the young classes more promise of future usefulness; but the heifers—9 in number—were as a whole reckoned to be the best class in the show. Mr. Wm. McCombie, of Easter Skene, held his place with his champion Scot heifer at Birmingham, and for quality of meat there was certainly nothing finer in the show, but she wanted substance to enable her to compete successfully among the "plums" of the exhibition. She was bred by exhibitor and is descended from a family called Grizzles, which have a reputation hardly second to any in the fat stock show yard. The Earl of Strathmore and Mr. C. Stephenson, Newcastle, were also in the running with their Birmingham exhibits, while two fresh heifers made their appearance from the Altyre and Ballindaloch herds respectively, but they were rather undersized, though their quality was of the very best description. Mr. Wilken, Mr. Stephenson, Mr. Wallis, The Queen, Mr. Eggington, Hull, and Mr. W. B. Greenfield, exhibited several fine Polled bullocks of certainly great merit, but the quality was not better (scarcely so good) as I have sometimes seen it. Mr. McCombie's heifer won a special prize as the best Scot, and so good was she, as far as she went, that she forced herself into the reserve place as the best heifer in the hall, the prize itself falling, it should have been mentioned, to Mr. Colman's Shorthorn heifer. Mr. McCombie's exhibit was afterwards sold to a London butcher for £75, and a Polled bullock belonging to the Queen brought £120. Except, however, for anything fancy, exhibitors found a slow selling market compared with the state of things which existed about half a score of years ago. Beef in 1883, however, was selling readily in Aberdeen at 95/- per

cwt., and to-day it is not worth more than 62/- for the best quality.

The London Christmas market was one of the most unfortunate on record for our Scotch feeders, who had exceptionally large interest in that event this year. A finer lot of cattle never left the north of Scotland than those consigned to London for this great market. The small prices current during the autumn and a capital turnip crop induced feeders to keep on their stock for the market, in the expectation of a good demand; but a large proportion of the animals were not sold, and some of them were taken back to Scotland and sold in Glasgow. Some of the largest consigners inform me that the loss upon the cattle sent to the London Christmas market this season from Aberdeenshire is hardly anything under £3 a head, which is a serious matter for several of them who had lots of from 40 to nearly 200 on sale.

Seldom has the new year been ushered in amid so many signs of depression in agriculture. Farmers are now almost despairing of relief reaching them in time to save them from financial ruin. I need scarcely say that the proposal to exclude cattle from this country being imported into America has caused a good deal of uneasiness among breeders here, whose best market for several years for their young stock has been Canada and the United States. Pleuro-pneumonia is at last giving way in Scotland, and the authorities hope to extirpate it wholly before the grazing season again comes round. Wishing for the LIVE-STOCK JOURNAL and its readers a prosperous new year,

I am yours, etc.,

QUIDAM.

Jan. 3d, 1887.

Roadster Horses at Sherbrooke Exhibition.

BY E. P. BALL, V. S., ROCK ISLAND, P. Q.

[Although this paper is late for the topic, we gladly give it a place and hope to hear soon again from the writer.—Ed.]

It would appear that the roadster stallions do not come up to the standard of height required at the late Dominion Exhibition at Sherbrooke—stallions four years old and over, 15 hands 3 in.

This stipulation undoubtedly kept many desirable horses at home, while by some owners it was apparently thought that this requirement would not be enforced. When this class was called into the ring, six horses appeared and the measuring began, the horses standing in the mud and were measured with a piece of board and an umbrella for a square. The result was, that after a long delay and almost a row, four of them were sent to the stables, leaving only two to compete.

Of these the elegant brown horse, John T. Phelps jr., owned by N. T. Dussault, Sherbrooke, carried everything before him, winning 1st and medal. This horse is by Almont, and out of Sue Monday; record, 2:26, and able to beat it now. He stands 16.1, and weighs 1,200 lbs. He is standard by performance, and showed some very promising colts, several winning the red in their respective classes. This horse, although blind, is a fine roadster and very fast.

The 2d went to a good brown horse belonging to H. D. Moore.

Among those rejected on account of height, was a superb black horse, owned by G. Thomas, Richmond, P. Q., falling short $\frac{1}{4}$ of an inch. In fact, it took the judges some time to decide whether or not he was 15.3. This horse is standard bred, and registered as Black Lambert, 2198, under rule 6. He was sired by Addison Lambert, record, 2:27, by the great Daniel Lambert, he by Ethan Allen. Black Lambert's dam, Lady Alice, record, 2:41, at 4 years old, was by Ashland, he by Mambrino Chief 2d; dam, Young Loughland Maid, record, 2:27, by Ethan Allen. It will be seen that this is the purest bred Morgan horse in Canada, being an in-bred Morgan, with only one out cross through Mambrino Chief. He is a fine rangy black, long neck, good in all points; tail well carried and sweeping the ground; clean, smooth legs, plenty bone and muscle, excellent feet. He is very stylish and has a fine way of going; if developed for speed, he should be fast. This horse showed some very promising colts, one and two years, and a number were prize winners. Two yearling stallions of his get, were reported during the exhibition at large prices.

The grey stallion Cyclone, owned by Mr. H. F. Pierce, of Stanstead, P. Q., was perhaps the most at-

tractive animal on the grounds. He is a perfect beauty; stands 15.1, and can trot close to 2:30. He is a Grey Eagle, is of superb style and action, and at once captivates all who see him. He won the stallion race on the grounds, and was much admired.

Armenius, another in the rejected list, is a beautiful bay, Hambletonian horse, owned by Mr John Shuter, Lennoxville, P. Q. He is well bred, hand some, has a strong resolute way of going, and can trot quite fast. He has been used for breeding only, and never properly developed for speed. He won second in the stallion race. His colts are fine colors, with good style and action.

THREE-YEAR OLD ROADSTER STALLIONS.

Black colt, owned by C. C. Cleveland, Danville, Que., was universally admired. He is a Hambletonian, by Pomeroy's D.M., a well bred Knox; he is very showy, and deserved the red ticket in his class; 2d Chas. Nadin, he was a fine, large and promising colt; 3d Geo. Owens.

Before we leave this class, I feel it my duty to mention a colt, George B., exhibited by Mr. S. J. Pomeroy; although not in condition, he deserves mention. He is a rich mahogany bay, white ankles behind, very heavy mane; tail well carried and sweeping the ground; extra good in all points, with a fine way of moving, he certainly bids fair to make a fast one. Sired by a son of Edward Everett; dam said to be a Lambert. In my mind he deserved a place among the winners.

TWO YEAR OLD STALLIONS.

First, Mr. Dussault; a beautiful bay colt, sired by John T. Phelps, upheaded, symmetrical, with very fine action. 2d, Geo. Noel; 3d, Geo. Fuller. Among the others were a very good black and a fine gray, which, I was told, were sired by Black Lambert, and were certainly animals of rare excellence.

ONE-YEAR-OLD STALLIONS

This class mustered strong. I believe it was the largest class of the horse kind—probably 15 or more competitors—and it would have been hard to find a stronger class, most of them being good ones. After a long deliberation the red went to a fine, tall, rangy bay, black points, that had the best head and neck it has been my fortune to see. He was a fine colt all round. Sired by Black Lambert, and owned by W. L. Ball, Richmond, Que. 2d went to a fine brown colt in the pink of condition, owned by H. E. Taylor, Cookshire, Que.; 3d went to a good brown, by Black Lambert, owned by Norman Nicholson, Richmond, Que. Among the rest there were really some fine youngsters which will be heard from another year.

THREE-YEAR-OLD FILLIES.

1st, Dawes & Co., Lachine; 2d, N. T. Dussault; 3d, John McCarty.

TWO-YEAR-OLD FILLIES.

1st, John McCarty; 2d, N. T. Dussault; 3d, Dawes & Co.

ONE-YEAR-OLD FILLIES.

1st, C. L. McDougall; 2d, Geo. Fuller; 3d, H. D. Moore.

BROOD MARE WITH FOAL AT HER SIDE.

1st, S. A. Duffort; 2d, C. Ayer; 3d, N. T. Dussault.

FOALS OF EIGHTY-SIX.

1st, S. A. Duffort; 2d, T. L. Page; 3d, J. H. Keazer.

MARES, ANY AGE.

1st, S. A. Duffort, gentlemen's drivers under 15-2. Pairs—1st, S. L. Clough came to the front with a beautiful pair of dark bay geldings, very stylish, fine action and quite fast; without doubt were the handsomest pair on the grounds. 2d, George T. Cooper, with a good business pair of black geldings, well matched and good movers. Gentlemen's drivers under 15-2, single. 1st, S. L. Clough, with a very handsome stylish, light bay gelding, good action and very attractive in every respect. 2d, J. F. Leonard, with his little chestnut trotting mare Spot. Perhaps she may be a trotter, but in my mind she does not come up to the standard of a gent's driver. 3d, A. P. Ball, with his fine Hambletonian and Morgan mare, Mary L; very handsome, stylish, and fine action, and attracts attention wherever seen.

"I like the LIVE-STOCK JOURNAL well, I think it is a No. 1 live paper, and should be in the family of every one that believes in scrub stock of any kind."—Capt. Jack Whittaker, Stone Bank, Wisconsin

In-and-In-Breeding.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

In reading an account of Mr. Fuller's Canada John Bull, page 119 (vol. for 1886), I notice a strange instance of in-breeding; at least, it appears so to me. Would you give your readers your opinion on in-breeding? What I want to know is—I have, for instance, a thoroughbred Shorthorn bull, also a thoroughbred cow. Is there a good chance of getting strong, thrifty calves by putting heifers from my other cows to her calf, it being a bull, and a half-brother to heifers? or, how does it work for sire to go to his own calves? This I am anxious to know, as a bull that I bought lately has thrown ten heifer calves from ten cows, all stamped like himself, which is A1.

By replying to this you will oblige many in this neighborhood.

W. M. CHAMPION.

Rose Lawn Farm, Reaburn, Man.

ANSWER BY VALANCEY E. FULLER, OF OAKLANDS FARM, HAMILTON.

The question asked by Mr. W. M. Champion is one which has caused a great deal of debate, and which has both advocates and opponents among breeders of cattle, and I wish the answering of this important question had fallen to an older, more experienced breeder, and one better qualified to answer it than I am.

I think the greatest prejudice against it exists among Shorthorn breeders, and the warmest advocates of the system among Jersey breeders.

Price, twenty years ago, a most successful breeder of Herefords, advocated in-breeding. The Bates, Booths, Sir C. Knightly Bakewell and others practiced it; and Mr. Bates always, I am informed, coupled the best animals, regardless of consanguinity, looking to individual merit as the great desideratum.

It is asserted by the Shorthorn opponents of in-and-in-breeding, that such a course, if persisted in, produces barrenness. Is it not probable that this result is attained in the Shorthorns by allowing individuals of either sex to get in such a state of obesity as to induce fatty degeneration, and cause a lack of fecundity?

Jersey breeders know from experience that high feeding among our Jersey stock causes many cows to breed with irregularity, and that upon reducing their feed and pursuing a course of treatment, with the object of cooling the blood, they become pregnant. We have purchased Jersey cows who have been barren from two to three years; on confining them to the stable, putting them on the lightest and simplest of diet, and administering salts to them freely, we have with little difficulty in every case succeeded in breeding calves from them. My own limited experience in this respect would cause me to attribute barrenness to "too fatty degeneration," rather than to in-breeding.

Dr. John S. Linsley, in his work on "Jersey Cattle in America," in refuting the charge of barrenness through in-breeding, copying from the *London Live-Stock Journal*, says: "The first thought to one reader at least on turning over the new volume of the 'Shorthorn Herd Book' was, 'What a lot of twins there are by Booth bulls.' There are not now existing in the kingdom any cattle reared from closer affinity than those at Warlaby; yet at Warlaby there was in 1883 one pair of twins and a triple birth; at Killerby there was one pair of twins; at Mr. St. John Acker's, two pairs; at Lord Polworth's, one pair; another pair at Mr. Talbot Crosby's; another pair at R. R. Webstead's; while at the Duke of Northumberland's, Mr. Willis', of Carperly, and at Mr. T. Pears', whose herd, although not of Booth origin, are very closely allied, by recent sires, to that strain of blood, there were in each case no less than three pair of twins in one season, etc., etc. These incidents go far to show that under proper superintendence Shorthorns may yet be very closely bred for concentration of blood and still remain fecund, etc.

And again, "For in the lot of cows and heifers of which these herds are composed, and which probably altogether do not exceed 250 animals, no less than seventeen, or nearly seven per cent., produced more than one at a birth in 1883.

IN-AND-IN-BREEDING OF JERSEY CATTLE.

The Island of Jersey being but eleven miles in length and five and one-half in width, and its cattle having for over 200 years been protected by a prohibitory law from coming in contact with other cattle, the whole foundation of Jersey breeding is in-and-in-breeding.

Mr. Philip Dauncey, of England, bred Jersey stock for forty years, by coupling half-brother and sister, and only occasionally using an out-cross from the Island of Jersey. Pope, Mr. Dauncey's first bull, was purchased in 1826; later he bought Fortune, and Fowler in 1856. From the combined blood of these three bulls was the bull Rioter 2nd, whose name is famous in the United States, and from them was the bull Stoke Pogis, who was produced by crossing sire and daughter. Stoke Pogis was crossed on Marjoram, descended from animals of Mr. Dauncey's breeding, and produced Stoke Pogis 3d, sire of Mary Anne of St. Lambert, and of a list of daughters who are possessed of more robust constitution as a whole than any family of Jerseys, and who have proved themselves the greatest butter and milk giving family of all Jerseys. Stoke Pogis above referred to had twenty-nine crosses of Fortune (two crosses in five generations, nine in six generations, thirteen in seven generations, and five in eight generations), and thirty-eight crosses of Pope, all within eleven generations—a most remarkable instance of in-breeding. Stoke Pogis above referred to was bred to an in-bred descendent of Pope, Fortune and Fowler and produced Matilda, and she gave 16, 153 lbs of milk in twelve months, and 21 lbs, 8½ oz. of butter in seven days, by official test, Matilda has sixty-three crosses of Pope and forty-two crosses of Fortune, all in eleven generations. I believe this to be the most remarkable case of in-breeding in the world; and yet this is one of the grandest Jersey cows in the world.

Another instance of in-and-in-breeding in Jerseys is found in the cow Jersey Belle of Scituate, who I think, had she been properly handled, had but few equals and no superior. Her sire was a bull, Victor—his sire and dam were full brother and sister in blood without an out-cross, and the dam of Jersey Belle of Scituate was a daughter of Victor—so that the sire of this great cow was not only crossed on his own daughter, but this very sire was out of a full brother and sister in blood. If in-and-in-breeding would produce any weakness of constitution or impairing of stamina it might be looked for here. On the contrary, this cow was of great constitution, a deep milker, and tested on two quarts of wheat bran and pasture in summer, in winter two quarts of bran and common hay, 705 lbs. of butter in a year, and at nine years old 25 lbs. 3 oz. of butter in seven days.

Marius was another celebrated Jersey bull from sire crossed on daughter. St. Helier, whose stock stand to-day in the U. S. market, next in point of price to the St. Lambert family (Stoke Pogis 3rd—Victor Hugo) was not only himself an inbred bull, but his best progeny was produced by crossing on to his daughters and his granddaughters, and bringing together grandson and granddaughter, bred on the above formula together.

Mercury, who, next to Stoke Pogis 3rd, probably has more tested daughters to her credit than any other Jersey bull, was the result of a cross of full sister and brother together.

The motto of the breeder is, that "Like produces like or the likeness of an ancestor." If the properties contained in a bull are such as we desire to perpetuate, and he is possessed of no apparent weakness and a very robust constitution, then I would advise in-and-in-breeding to him, for by that means we will most surely intensify and fix in his inbred descendants his goodness or greatness; if on the other hand he is possessed of certain weaknesses, these bad qualities will be intensified and made worse.

Mr. Champion speaks of Canada's John Bull being a double grandson and great-grandson of Stoke Pogis 3rd. His dam was by Stoke Pogis 3rd out of an own daughter of Stoke Pogis 3rd, and yet made 24 lbs. 14 oz. of butter in 7 days without forcing. I bred Canada's John Bull to his own dam, and the coupling resulted in a bull calf, a grandson, a treble great-grandson, and great-great-grandson of Stoke Pogis 3rd, or 1 cross in one remove, 4 crosses within 2 removes, and 5 crosses within 3 removes. This calf was one of the largest, most vigorous and promising calves we ever had at Oaklands, so much so that I retained him at Oaklands for my own herd, notwithstanding a tempting offer of \$5000. At six months and 15 days of age he weighed 605 lbs. The only two male ancestors he has are Stoke Pogis 3rd and Victor Hugo.

Canada's John Bull is a bull of rare constitution and vigor. Stoke Pogis 3rd I knew to be possessed of the same desirable quality, otherwise I should have hesitated to breed them so closely, and every breeder attempting the system of in-and-in-breeding must look

carefully to the stamina possessed by the common ancestor he wishes his herd to partake of.

The only case among Jerseys where I have known any ill effects of in-breeding is in the case of St. Helier 45, mentioned above, but judging from his photograph, I should judge him to have been a bull rather lacking in constitution; and if such be the case, it was to be expected that his in-bred descendants would have that defect more clearly developed, just as they have in an eminent degree his great milking and butter qualities, which he doubtless inherited, fixed as a type in them. In-and-in-breeding I believe to be the only way by which a type can be so fixed that it can with certainty be transmitted.

This may be transmitted by coupling animals of like breeding, or by coupling with a "good nick" or congenial blood, not related, and which will prove congenial blood can only be ascertained by experience; but among Jerseys at least, the best "nick" of a blood not related to the in-bred bull, has been attained when a female of another family closely in-bred has been brought in contact with a closely in-bred bull.

To revert again to the breeders' motto, "like produces like, or the likeness of an ancestor," and assuming that a breeder has a very desirable ancestor, the more any animal is in-and-in-bred to that desirable ancestor, the less are the chances of producing the likeness of an undesirable ancestor.

For my part I would not use in my herd a bull unless each of his ancestors for at least four to five generations back possessed all the desirable qualities I sought to have inculcated in my stock; but if he, as in the case of Canada's John Bull, or his son, Oakland's John Bull, possessed as they do 62½ and 68¾ per cent. of the blood of one animal in-and-in-bred on both sire and dam's side, I should naturally anticipate that the blood of this ancestor would predominate and be the controlling influence in his progeny. The result of the calves by Canada's John Bull show that at least in outward conformation he has inherited a power to fix his own likeness and strength of constitution on his get, and Canada's John Bull possessed of a controlling blood, (Stoke Pogis 3rd,) in his veins, and the sire and dam of Stoke Pogis 3rd being the result of in-and-in-breeding from 1826, I think he may be taken as a sample of an in-and-in-bred bull.

At some future time I will give some examples of bringing together two in-bred families, not in any way related for generations back, which though not in one sense a demonstration of the theory of in-and-in-breeding, at the same time demonstrates the fixed character which in-and-in-breeding stamps.

Amongst Our Friends.

"I think your JOURNAL superior to all others. I could not do without it."—J. W. Tackebury, Dealtown, Ont.

"I, for one, pronounce it one of the best Stock Journals that I ever saw."—T. A. Bixby, South Haven, Mich., U. S. A.

"This is the first year I have taken your JOURNAL, and I would not be without it for double the price."—J. M. Walsh, South Doura, Ont.

"I am highly pleased with the JOURNAL, as a farm paper."—M. Cameron, Latone, Ont.

"I have found your paper the past year very interesting, and of far more value than any other Canadian paper I have seen."—Wesley J. Garlock, Howell, Mich.

"I appreciate the very high moral tone of the JOURNAL, as well as its excellence as an advertising medium, and it is with pride and pleasure I show it to my friends."—J. W. Bartlett, Lambeth, Ont.

"I am very much pleased with your JOURNAL. I deem it well worth the attention of every farmer, and I consider it will amply repay all those who take the trouble to study its columns."—Dr. Geo. Breton, Bethany, Ont.

"Your JOURNAL is most valuable to the farmers, especially to stock raisers." Peter Grant, Byng, Ont.

"The longer I am a reader of the JOURNAL the better I like it. It is well worth more than the subscription price."—Duncan Robertson, Blantyre, Ont.

"We feel we could not get along without your JOURNAL, and think every farmer should take it. Breeder or no breeder, he should take it for its agricultural notes if not for stock. Your JOURNAL is more looked for than any other paper."—John Cousin & Sons, Buena Vista Farm, Harriston, Ont.

What I Saw in Ontario.

DEAR JOURNAL: Here I am, at home again, and not sorry for it, after my trip through Ontario. My! what a country you have got! No wonder you folk are better off than we are. Your land as a rule not only looks good, but seems easily worked, and then your farmers to a great extent have hitched on to the car of progress, and see the benefit of improved stock and the consequences that follow better system. Still you are not without your old fossils, that nothing will move in a right direction but an earthquake, who stick to old habits; but time will cure all that. It is a consoling fact that such laggards have to die; that change will come whether they will or no.

I called at Bow Park, and the manager being away, I, in company with two or three other visitors, was shown over the premises by the obliging and painstaking herdsman—Mr. Smith, I think the gentleman's name is—who spared no trouble in showing all the large herd of magnificent Shorthorns, and it was no small job to go over them all; but he did it without a murmur. I have an idea how tiresome it is to answer questions and give away your time, when possibly you have pressing work waiting on you; but Mr. Smith showed no sign of annoyance, and patiently worked us through the lot; and it was to me the great event of my life to see so many high-bred animals together, housed so well and so cleanly kept. I could have carried away all the dirt adhering to the whole herd in my hat, so clean were they all—a credit to all who have to do with them. No confusion at Bow Park: everything goes quietly and smoothly. Where there is such order, there must be the best of management. But just one word about my companions. Two of them I noticed at once were men of the county, I should judge, and wishing to gather what information I could, I made a point of asking them more questions than I would under different circumstances. One told me that he lived three miles from Bow Park. I remarked to him that he was fortunately situated. What opportunities he had to obtain the services of such choice animals as Bow Park afforded. Imagine my surprise when he told me that this was his first visit to the Park, and that he had been 25 years on the farm he now resided on Great Scott! to think, in this age of telephone, dynamite and railroads, that a farmer could live within three miles of such a farm and its belongings, and not visit it, is just wonderful.

Do you know, you have a great work before you, to gather into the fold of agricultural improvement the pagan unbelievers in such improvement, and there must be thousands of them yet scattered through even progressive Ontario. Now, it is to the interest of each and every breeder who advertises in the JOURNAL—and those who don't, but should—that these pagan scrub-careless fellows should be converted to the true believer of modern improvement in stock raising, that they can realize more from the produce of a well-bred animal at three years than a scrub at ten years, or five. How is this to be done? Not by spontaneous combustion. These laggards are not going to brush up of their own accord. We, the breeders, must assist to put the facts that will convince them in their hands, free. I will tell you how. I have in my mind's eye just now some ten or a dozen of this pagan class. Well, I intend to send them at my expense the CANADIAN LIVE-STOCK AND FARM JOURNAL for six months. Out of the twelve there will be made from five to seven converts. In six months they will have become sufficiently interested in what is going on about them that they will keep on getting converted, and, brother breeder, in the near future, if some one of them does not become a customer of mine, he will of yours. The sale of one extra animal a year will more than pay for the outlay. Think the idea over, breeders, and decide whether or no it will be wise for us to turn missionaries as well as breeders. I think it will pay 100 per cent. on the investment, besides the good it will do, and in consequence I shall try it. Will you?

At Guelph, I saw the Agricultural College; had a hearty hand shake for the first time with the editor of the C. L. S. J., and visited the Fat Cattle Show. I was disappointed with the show of cattle at the Farm, but perhaps I expected too much; but I do think if there is one place in Canada where stock should be kept clean as a new pin, the Agricultural College Farm is the place.

The Fat Cattle Show was good, and I never saw such cattle. The sheep were just immense; weights that took my breath away almost; seemed to pass

without any unusual comment by the exhibitors. One fellow, weighing 390—I think I could make a pretty good thing exhibiting him here in Nova Scotia as a wonder—was passed on to his pen, without a word of praise; and, in fact, I think he was beaten by a Leicester, not nearly so heavy, afterwards. Then the pigs—in fact I have been talking of nothing else since I got back, so much so, that my neighbors begin to moove off when they see me coming, so full have I filled them with the wonders I saw when away—both in horses, cattle, sheep and pigs.

No, I did not forget Oaklands. Who, that owns a Jersey, would? Oaklands has become the Jerseyman's Mecca, and Mary Anne of St. Lambert, the shrine. 250 thoroughbreds, headed by Canada's John Bull—who can find such another herd in the world? I found them in good, comfortable, healthy stables; everything as clean about them as a good wife's kitchen. I am glad I saw them, and every man who is interested in the dairy trade, whether owning one cow or fifty, can find much to both interest and instruct him at Oaklands. Besides Jerseys, you can see a few good horses at Oaklands, and, if Mr. John Norton would own up to it and acknowledge the corn, much as he loves the Jersey, he has a soft spot left in his heart for a good horse. A 3-year-old bay stallion (I did not get his name) is a darling—weighs 19 cwt., a beautiful bay, with the open, free action of a trotter. The 5-year-old Shire horse seems a likely fellow, while the standard-bred trotting stallion was a beauty, perhaps a shade on the small side, but perfect in make, or what we call here in Nova Scotia "a big, little horse." Then the Dorset sheep, with their second crop of lambs this year, were fine looking, and the lambs were good. Altogether I was delighted with my visit to Mr. Norton and Oaklands.

I am making this letter too long, although I have a lot more to say of what I saw in your country, and how I saw it that I will hold for another letter sometime, if you think the matter sufficiently interesting. So wishing you, Mr. Editor, and all my brother farmers who happen to read this harangue of mine, A Merry Christmas and A Happy New Year, I again subscribe myself,

FARMER JOHN.

Brookside Farm, Dec. 23rd, 1886.

Feeding Colts—Norfolk Polls.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—I should like to find out the proper way to feed my colt. He is of the heavy draft stock, weighs 600 lbs., and is nearly seven months old. My object of course is to have rapid growth in bone, with a fair amount of flesh, but at the same time I do not want the colt to get knocked up in the legs and feet, as the saying is.

My neighbors have advised me not to feed grain, as it will hurt the colt's feet or legs, but to do something like this: Good hay and water, with a few carrots once in a while, and a bran mash once or twice a week to keep the bowels open and to prevent the skin from becoming hide-bound. I will tell you the way I feed, and would then like to know which method is the nearest right. I give as near as may be 6½ lbs. meadow hay (no clover in it), 5 lbs. grain and 9 lbs. roots. The hay is cut and slightly moistened; the grain is ground, and the roots are pulped. The whole is then mixed well together and is fed in two feeds, night and morning, after standing a few hours. In addition to this, I give about 1½ lbs. hay at noon. Plenty of good water is supplied, and he lives in a large box stall at night when the weather is too bad for him to be out. The grain consists of a mixture of ½ peas, ¼ black barley and ¼ rye, all ground together. The roots consists of turnips, mangolds and potatoes. The hay is not as good as I should like it. It would suit me better if it was about one-half clover. You see by the above, that the colt not only gets a variety in its food, but that the food is prepared in the best way and is moderately concentrated.

I know some farmers that would tell me that it will not pay to feed grain to colts even if it did not tend to affect the legs, but I do not agree with any one that makes such statements. I am strongly inclined to think that a colt cannot eat enough hay to obtain the required nourishment for rapid growth. I think that an all-hay ration is far more apt to produce a pot-belly and hide-bound skin, than is part hay and part grain, prepared in the way I have described, and that the way I feed will keep the bowels in just as good, if not better order, than will an occasional feed of carrots and

bran. However, I am not certain about this, and would be pleased to hear from you or some of your many readers through the columns of your JOURNAL.

I should like to write something and also to see something written of the breed of cattle called "Polled Norfolk," or as some call them "Red Polls." They are, I think, one of the coming breeds of cattle; they are, to start with, hardy and tough. I do not mean that they are like the beautiful "scrub" that you so truly described in your December issue, a what will we call it, "something" that will do just as well under the windy side of a straw stack with a frozen grass and straw ration as it will do in a good warm barn with plenty of the best of feed; but I mean that they will do as well as any breed with the poorest conditions, and when well housed, and well fed, that they will respond with the greatest satisfaction.

The government of New Brunswick imported some four or five years ago, a bull and three cows of this breed from the old country, together with some Shorthorns, Polled Angus and Ayrshires. All New Brunswickers are well pleased with them, and I could name men from Ontario—reliable judges—that were very favorably impressed with the "Red Polls." The superintendent of the New Brunswick Stock Farm has more than one season reported that the Polled Norfolks were the best milkers of all the stock on the farm, better than the Ayrshires—that is, they milk a much longer season. They give perhaps hardly as much milk in the flush, but their longer duration more than brings up their average.

This breed is said to be small and slow to mature, but neither of these points can be put down against it, when the following is considered: By the word "small" it is meant that the individuals of the breed do not attain a large size, compared with the Shorthorns, Polled Angus, Holsteins, etc. Now, I hold that if individuals of the Red Polled breed grow just as fast for two and a half or three years, as individuals of another breed, say the Polled Angus, and attain just as heavy weight, and have as small proportion of offal, with the very best quality flesh, the Reds are quite equal to the Blacks as regards beefing qualities. In these days of good feeding and rapid maturing, we do not want to hold heaves longer than three years, for if we do we lose money instead of making it, and this brings out our argument, for, although the Blacks, Shorthorns or Holsteins may be heavier in four or five years than the Reds, it would be hard to prove that the former will out-strip the latter in a shorter period of growth of two and a half or three years, and as it pays better to sell beef at the end of the short period than at the end of the long period, we will not have to consider the growth of animals of either breed after they are three years old. The next thing is to prove that the Reds do grow as fast for three years as do the Blacks. I might say in this connection that I have neither seen, heard nor read of animals of this breed that grew slowly when young. I have a heifer two years and nine months old, that calved last spring, she weighs over 1190 lbs. This heifer has never been forced in the least—quite the contrary. She milks first rate for a two-year-old, and is very vigorous. She handles splendidly, first rate appetite, milks easy and clean, kind disposition and fine bone, and in every way indicates a small proportion of offal, if she were fat (being now in good growing condition). I also have a Shorthorn heifer that is one month older, but cannot be compared with the Red Poll in any way, except that she is slightly broader, and, although the Shorthorn did not calve until five months after the Polled heifer, she is 200 lbs. lighter. Both animals have had exactly the same treatment from birth.

They each have a heifer calf. The Shorthorn calf has been sucking for nearly four months and is sucking yet; it is a little heavier for its age than the Polled Norfolk calf, but does not handle nearly so well; while the latter only sucked one day after birth, and at four months was not getting any milk whatever. I might say that my Polls are no exception, but that they are holding their own all over the Province.

The cross from the bull on the native stock are very fine milkers, and appear—what few I have seen of them—to be good beefers also. The bull is very prepotent. The Polled Norfolk Ayrshire cross is good at the pail.

I have not seen much written about the Red Polls in this country's papers, but the English papers are continually reporting good for them. The Americans are establishing or have established an association for the support of the Polled Norfolks, and a herd

book for their registration, and I think it high time that we Canadians were following suit.

I read in a paper, the other day, a report of one of England's fat stock shows; it said that a Polled Norfolk—Shorthorn cross—was one of the finest animals there.

Much more might be said of this breed, but I will leave it for some others of its admirers to back me up in its praise.

H. B. HALL.

Rothsay, Kings Co., N. B., Dec. 28, '86.

[The only objection I see in the above management is the quantity of roots. I think one-third of the amount allowed would be ample. F. C. GRENDSIDE.]

The Ayrshires of Parkhill.

Journeying landward from the heart of Montreal on St. Denis street, the traveller finds himself after a while in a little village of diminutive houses called Petite Cote, which is of course, as its name indicates, inhabited by a French speaking population. The way reminds one in its windings of an antiquated road cut in the forest in primeval days, and it may be that it was originally just such a highway, hewn out by the first settlers some decades subsequent to the time when "the Commodore Jacques Cartier" to the Westward sailed away." Nearing an old toll-gate—relic of a semi-barbarous age—one journeys through a country honeycombed by quarries, from which the materials of construction of this commercial city have been very largely drawn, some still being worked, some deserted and dry, and others filled with water, giving to the place a dreary aspect, so that one is prone to get relief by gazing on the soft and savage beauties of the magnificent Mount Royal on the left.

Two miles and a half down this antiquated highway brings one to a corner farm, or one nearly so, where the attractive and extensive buildings, and the miles of beautiful stone fence soon tell him who is used to seeing good farms that if he wishes to have his taste gratified in this respect, here he must tarry for a while. This farm, which is called Parkhill, is owned by Mr. James Drummond, whose post office is Petite Cote, and who for many years has been known both far and near as one of the most successful breeders of Ayrshire cattle in either of the Provinces.

We had met Mr. Drummond before at the exhibitions, but never at Parkhill. We thought ourselves fortunate, therefore, in finding the owner at home and in being favored with a view of this truly magnificent farm in October days, while the dyer had been busy at work painting every leaf on every tree of the farm.

This farm was shunned by the early settlers owing to the quantities of stone that lay hidden on its bosom and buried beneath its surface. Although it required a good deal of Anglo-Saxon pluck to grapple with these obstacles, with a view to their removal, Mr. Drummond undertook the work, and right royally he has conquered. In 1869 this farm took the silver medal for the best managed farm in Hochelaga county, and silver cups for the same in 1871 and 1879. As early as 1846 and 47 it carried this award for the district of Montreal, and in every competition since, when allowed to enter.

Parkhill consists of 300 acres of fine gravelly loam which never gets hard, and seldom gets too wet, owing to the porous nature of the sub-soil which rests on a limestone bed. It lies on both sides of the highway and is divided into tiers of fields containing 11, 22, and 33 acres respectively. Lines of soft maple trees are planted every half acre in distance, which serve the triple purposes of shade, measure and adornment. The whole of this farm is fenced with fossil limestones, in the production of which nature has

been very prodigal in some past era of the unexhumed history of this island. These fences are three feet wide at the bottom and about fifteen inches at the top, and have a cope-stone above which gives it even a handsome appearance, it is so well built—even and straight and strong. We never saw ranges so long of fossil stones before. The gate posts are all huge oblong stones, which are not likely soon to decay.

The out-buildings of this farm cover an acre, including the space in the yard inside. They enclose the square exactly, and have a good deal of basement room for cellars, for holding both potatoes and roots. They are very good of the kind indeed, but lack somewhat in convenience of arrangement, as compared with more modern buildings.

Water is brought from a well 600 yards away and lower than the buildings, and is forced by a windmill into a tank in one of the barns, whence it runs to a trough in the yard, to a tank in the horse stable, to one in the dwelling house, and indeed wherever required. The overflow from the spring whence the water is drawn is conducted by pipes lying on the surface of the ground to troughs as required, the constancy of the stream running through them entirely preventing freezing. It may be said, therefore, that the waters of this one stream practically water the whole farm, and throughout all the days of the year. How immeasurably wide the gap between this system and that of allowing it to turn a piece of ground into a morass without accomplishing any corresponding good.

We noticed a milk register and a pair of balances in the stable, where an exact record of the milk product of every cow is kept, with a view to facilitate the sifting process, instead of doing this in a hap-hazard way. Anyone, therefore, buying a cow of Mr. Drummond need not be at a loss to know her performance in the dairy.

Mr. Drummond has been breeding Ayrshires pure for about twenty years. The foundation came from Mr. Logan, owning the farm on which Mr. Thomas Irving now dwells, whose doings in the Ayrshire line were briefly sketched in the December number of the JOURNAL. The first cow bought was Christy (2423), red and white, imported by Mr. James Hutchison. A good deal of the stock in the present herd has sprung from Jennie and Maggie, two sisters, from the dam Logan's Lassie (2424), imported by the late James Logan. They were sired by Garibaldi (25). In 1870 Mr. Drummond imported Lady Neilston 493 (4403), Medora 492, and the bull Duke of Athole 575 (2044).

Another importation was made in 1884, when Maggie (3627), three years old, Viola 3d and Lily of Hardiston (2922), were brought out. The former was sired by Pretender 194, from the dam Gipsy Queen (677), and the latter by Young Baron (420).

The first bull, Garibaldi, was sired by Prince (1862), and out of the dam Cherry (1721). The second, Geordie (26), calved 1867, was out of the dam Maggie (380). The third, Duke of Athole, imported in dam, was one of the most useful bulls of the herd. The fourth was Nelson (995), a son of the Duke of Athole, and out of the dam Lady Neilson (493). The fifth was Lorne (2227), dam, Lady (1282). The present stock bull is Promotion (848), a first prize winner at Sherbrooke both in 1885 and 1886. He was bred by Mr. Robert Sandilands, South Cumberland, Lesmahagow, and imported by Mr. Drummond. His sire is Heather Bob (270). He is of large size, a dark brown and white in color, and has done a great deal of good in the Parkhill herd.

This herd numbers about sixty head, of which thirty are milking cows; the balance, heifers and

heifer calves with a few young bull calves. This, we believe, the largest herd of pure Ayrshires in Canada.

We had often heard of the good size and fine milking qualities of the Parkhill Ayrshires. The reputation for size, and we may add uniformity, is well sustained, and that for superior milking qualities is certainly confirmed in the fact that Mr. Drummond has won in every milking contest in which he has competed, except at Sherbrooke in 1886, when he lost by a hair's breadth, the prize going to his neighbor, Mr. Thomas Brown. The medals for best four milch cows in the Dominion were carried by Mr. Drummond at Ottawa in 1883, and also previously on the occasion of the visit of her royal highness the Princess Louise.

One thing that pleased us very much with this herd was seeing the cattle at home looking about as well as those sent to the shows. They were all good, and oftentimes, we are told, individuals of them have made 18 lbs of butter per week on grass only. The very small teats of Ayrshires—the great worry of the milk-maids—are almost entirely bred out of these cows; their teats were nearly as large in some instances as those of Shorthorns.

The cream product from this herd is all used (so far as it can be spared) by the great hotel of Montreal, the Windsor.

The very air about this home breathes of fulness and content. The order maintained ranks high; the freeness of the soil and its responsiveness to the needs of the husbandman make it almost a farmers' paradise, and the superiority of the Ayrshire herd makes it a center of interest for dairymen. Before closing this sketch we may express the desire that as long as Mount Beloeil with its beautifully pyramidal shaped head looks down upon it from beyond the St. Lawrence, and Mount Royal does likewise from this side the river, so long may Parkhill contain a herd of Ayrshires as good as the present, and so long may it be as well tilled and cared for as it is by its present owner.

Why Not Show Geldings?

At this season, before the exhibition committees have prepared a prize list, we would ask the question standing at the head of this article. Complaint is made that though one chief object of an exhibition from a business point of view is to bring buyers and sellers together, geldings under four years of age are not admissible, though especially in the heavier classes early maturity for work may be a boasted feature of the breed. The prize list need not be increased in cost to the management by the addition of prizes for two and three year old geldings shown in the halter, because the class now devoted to general purpose stallions really ought to be abolished. General purpose horses, mares and geldings are what are chiefly wanted; but on all hands it is admitted that these should be got by a pure bred horse of some definite breed. Yet our committees still admit mongrel sires in their show yards. After banishing grade bulls and rams, they stultify themselves sorely by being less exclusive in the case of the noblest animal of them all. Let us have prizes for geldings, and everybody will agree that it is a better application of the money.

Dominion Ayrshire Breeders' Association.

At a meeting of Ayrshire breeders, held in Guelph last September, it was agreed to hold a meeting for the purpose of forming an association sometime in January, 1887. Mr. David Nicol, of Catarqui, was appointed president provisionally. In accordance with this a meeting was held at the Walker House, Toron-

to on 14th January last. The severe snow storm prevented as large an attendance as would otherwise have been.

Mr. Nicol explained the object of the meeting in a letter which ably dealt with matters of the greatest importance to Ayrshire breeders. He stated that the breeders in the eastern part of Canada had already organized, and it was now high time the western breeders should do something.

It had been suggested at the meeting of the other Association that a branch Association be formed in the different provinces, each one to send a vice-president and delegates to an annual meeting, where business affecting the branches would be transacted. Mr. Nicol favored the scheme and hoped something could be done. It would be very inadvisable to have two Associations with two herd books, so there should be amalgamation and one herd book for the Dominion.

Mr. Nicol then spoke at considerable length of the injustice done Ayrshires at exhibitions through incompetent judging. He hoped this could be obviated in future by the employment of experts, even if they had to be brought from a distance. He closed with an eulogium of this breed of cattle, unapproachable for dairy purposes. Next came the election of officers.

Mr. Nicol declined on account of want of time to act as president, so Mr. James McCormick, Rockton, was elected unanimously.

Mr. Thos. Guy, Oshawa, vice-president; Henry Wade, Toronto, sec.-treasurer.

The annual subscription fee was fixed at \$3, and members were to be charged 50c. each registration; non-members 75c., and a certificate 25c. additional in each case. The following committee was appointed to meet the delegates from the Quebec association:

Jas. McCormick, Rockton; Thos. Guy, Oshawa; Chas. Drury, M.P.P., Crown Hill; D. Nicol, Catarqui; Jos. Yuill, Carleton Place, and Henry Wade, Toronto. The president, Jas. McCormick, Rockton, and the vice-president, Thos. Guy, were appointed as delegates to the Industrial Exhibition board.

Annual Meeting of the Clydesdale Association of Canada.

This meeting was held at the Albion Hotel, Toronto, on Thursday, Dec. 30th, 1886. The president, Mr. D. McCrae in the chair.

The following members were present: Messrs. Smith, vice-president, Moore, Jackson, Rennie, Doherty, Snell, Carstairs, Stanford, Beith, Ormsby, Duff, Taylor, Geddis, McDermott, Hurd, Annan, Scott, Graham, Muir, W. L. Taylor, Brandon and H. Wade, secretary.

The minutes of the last meeting were read and adopted. The secretary read the constitution, which after some discussion was adopted in the form in which it is printed in Vol. I of the Stud Book.

The president then addressed the meeting, and spoke of the great number of good animals imported by Canadians this year, and expressed the hope that the quality of new importations would be as good. He was very sorry so many of them were afterwards sold to buyers from the United States. He also deplored the importation of horses with unregistered pedigrees, as it was generally found impossible to trace them when owners wished to have them recorded in Canadian Book. It was a rule of the Association to accept only such animals for registration as were already on record in Scotch Stud Book, or were certified to be eligible by the secretary.

He had been highly complimented while in Chicago recently on the good appearance and excellence of the first volume. It was a book of great value to the breeder, and he hoped any errors found in the book

would be promptly communicated to the secretary, Mr. Wade, in order that they might be corrected in the forthcoming volume of the Stud Book.

It was the intention to continue the appendix containing the pedigrees of all crosses appearing in the pedigrees of imported animals. This had met with considerable favor, as breeders did not need to consult the Scotch Stud Book to trace the pedigrees of their importations.

He hoped something would be done to relieve the great inconvenience and loss sustained by delays in transporting valuable stock.

At the meeting in Guelph last September the subject of holding a spring stallion show was broached, and it remained for this meeting to come to some definite conclusion about it. It had been discussed already at the directors' meeting in the morning, and Toronto was thought to be the best place for the show.

The death during the year of two of the officers of the Association—Henry Jeffrey, Whitby, and Henry Parker, Woodstock, was next feelingly spoken of. The secretary had been instructed to place on record the feeling of deep grief felt by the members at their loss.

The report of sec.-treasurer was next read, which showed the receipts for the year to have been \$348, and the expenditure, \$248, thus leaving a balance of \$100 to the credit of the Association. As the Association had no present use for this money it was decided to collect no annual fees from the old members for the year 1887, unless it should be found necessary to raise more funds, when a small assessment would be found sufficient.

A letter from Mr. Mills, secretary of the American Clydesdale Association, was read by the secretary, offering on behalf of his Association, two medals of suitable design, for the best recorded stallion and mare bred in Ontario, to be competed for at the Provincial Fair of 1887.

After a lengthy discussion, in which nearly every man present took part, it was decided to hold a Spring Stallion Show, after the model of the Glasgow fair, some time next March, before the 15th, in the city of Toronto.

The following officers for 1887 were elected: David McCrae, Guelph, president; Wm. Smith, Columbus, vice-president for Ontario; Hon. J. H. Pope, Compton, Que., vice-president for Quebec; Robt. Ness, Howick, Que., and R. Conroy, Aylmer, Que., provisional directors; John E. Smith, Brandon, Man., vice-president for Manitoba; Prof. Lawson, Halifax, N.S., vice-president for Nova Scotia; A. C. Bell, New Glasgow, N. S., and J. E. Fairweather, Hampton, N. B., provisional directors; Donald Ferguson, Charlottetown, P. E. I., vice-president for Prince Edward Island. And the following directors: Robt. Graham, Claremont, Ont.; Jas. Beith, Bowmanville, Ont.; Wm. Rennie, Toronto, Ont.; H. H. Hurd, Hamilton, Ont.; John Jackson, Grahamsville, Ont.; Robt. Taylor, Harwich, Ont.; John McMillan, Constance, Ont. Messrs. W. L. Taylor and J. C. Snell were elected auditors.

The meeting then adjourned.

HENRY WADE,
Secretary.

Meeting of the Executive Committee, Dominion Shorthorn Association.

This meeting was held in the offices of the Agriculture and Arts Association on Friday, Jan. 7th. The following members were present: Messrs. Dryden, Snell, Fothergill, Gordon, Davidson, Green, Shipley,

Linton, Shaw, Russell, Patteson, Cowan, Johnston, and Rae.

The Executive had been called particularly to meet a committee composed of Messrs. Laidlaw, McQueen, Pettit, and Donaldson, appointed at a meeting held in Guelph last December, for the purpose of requesting the Association to alter its standard so as to admit pedigrees that traced to animals already recorded in the British American Herd Book, that were not known to be false or spurious.

The members of this committee were then heard in the matter, but there was a lack of unanimity of opinion amongst them, so they failed to make any particular advance, some wanting the change for one reason and some for another.

It was then explained in reference to the resolution passed in Guelph that it would be unconstitutional to change the standard without proper notice. The Association, wishing to act fairly by all parties, advised the following notice of motion, which, after some hesitation, Mr. McQueen signed on behalf of the others: *To Henry Wade, Secretary:*

I hereby give notice that at the next general annual Meeting of the Dominion Shorthorn Association it is my intention to introduce a resolution having for its object a re-consideration of the present standard for registration of the Association.

(Signed) ROBERT MCQUEEN.

The annual meeting will be held in St Lawrence Hall, on Thursday, 24th February next, at 11 o'clock a. m.

The Clydesdale Horse.

BY D. M'CRAB, GUELPH.

(First paper.)

In proceeding to write a short history of that breed of modern draught horses known as the "Clydesdale," it will not be amiss to go back to the earliest records we can find relating to the general history of the horse. These matters do not specially relate to the Clydesdale breed, nor are they the property of any one breed, but are to be considered as of interest to all, and as tending to throw side lights on many points of interest in every breed. The horse is the most stately and beautiful of our domestic animals, one that has become a willing and useful servant to man. We do not know when he first yielded his will to that of man, and became subject to human control. Let us trace up what we can of the

ANCIENT HISTORY OF THE HORSE.

The Bible gives us an account of one of the sons of Adam becoming a keeper of sheep, and very early in the same record is the account of the first herding of cattle; but no mention is made of the horse in antediluvian times. It is altogether likely, however, that in those days he was brought into subjection. After the deluge those saved in the ark would be used by the descendants of Noah and taken by their owners to the new homes when the first exodus was made from the lands of the Euphrates valley. The wandering chiefs of the times of the patriarchs do not seem to have had horses, at least none are mentioned in the Bible record; Abraham was rich in sheep and cattle, in camels and asses, but he had no horses. So with his son Isaac. When, however, Jacob and his family came into contact with the civilization of Egypt (about B. C. 1702) we find horses mentioned (Genesis xlvii, 17). It may be, as the Egyptian had at this time many draught horses, used in their war chariots, that the wagons sent by Joseph for his father Jacob (Genesis xlv, 19) were drawn by horses. Job mentions the horse, (xxxix, 18), and draws a very vivid picture of his might and his bravery in war. The date is not beyond dispute and it may be that the

times are about the same, though many claim that Job lived before the days of Abraham. The chariot horses of Egypt may be considered as the first draught horses of which we have any historical record. From this it has been argued that the Egyptians were the first to break and use the horse. Of this there is no proof. At this early date they were used largely both for drawing the war chariots and as cavalry. This we know not only from the Bible, but also from the traditions and records of many ancient nations. In the legends of the Hindoos the horse plays a prominent part. In the Assyrian, the Babylonian, and the Persian Empires he has a place. In many sculptures of those lands the horse may be seen, sometimes harnessed to the chariots of their warriors and kings, two or more yoked abreast; at other times being led or ridden in their scenes of war or triumph. Coming down to later times we find the Greeks making horse-racing with chariots a leading feature in their Olympic games (B. C. 1450); and the Greek historians tell of nations of excellent horsemen, which the Greeks themselves never were, who dwelt beyond Asia Minor. Probably the fables of the Centaurs arose from the superior horsemanship of some of the tribes of the plains of Scythia, so proficient that horse and man seemed but one.

WILD HORSES.

No account of the early history of the horse would be complete without a notice of the wild horse. Some writers claim that all our domestic breeds are the descendants of these wild horses, herds of which were at one time or another found in most temperate parts of the old world, but are now confined to the steppes of Asia and some of the sandy districts of Africa. Others hold that all these wild horses are descended from animals escaped from the control of man, and finding a congenial climate and abundant pasture have, during the lapse of years, become what we call the wild horse. This latter opinion has force given to it by the well known fact that we have a similar state of things at present on this continent. When America was discovered by Columbus, the natives had no horses. There were none on the continent. Now, after the lapse of only a few centuries, we find large troops of wild horses on the pampas of South America, and some of the Indian tribes in contact with these horses have become the most proficient horsemen in the world. In 1535 the city of Buenos Ayres was suddenly abandoned by the Spaniards. They left behind them, turned loose, five horses and seven mares, which had come from Andalusia. These soon multiplied and gave rise to those immense herds which roam over the plains of La Plata. In their habits they much resemble the wild horses of Asia. They usually go in little bands, but sometimes congregate in thousands, which seem to act under recognized leaders. They are not very fleet, but have amazing powers of endurance. They are not difficult to tame, and when properly broken make useful, hardy animals. They are not equal in appearance to the horses of Andalusia, from whence they sprung. Their heads have grown larger, ears longer, limbs more muscular, and in general form not nearly as handsome as their domestic brethren. They have gradually become almost uniform in color, as is the tendency amongst all wild animals. They are a chestnut brown. In Asia the wild horses are usually a brownish dun, approaching a dirty cream color. They are more uniform in color than the Americans, are much wilder, harder to tame when caught, fear man more and are in the habit of putting out sentinels to warn of danger. These differences all may arise from their being a much longer time free and

being more hunted and harrassed than those of South America. The Asiatics have long shaggy hair, thick bushy manes, big hoofs and long ears. They are far inferior both in beauty and fineness of form to the domestic horses of the same region. In the vicinity of the sea of Azoph are wild horses said to be the descendants of Russian horses turned adrift at the siege of that place in 1697, for want of forage. As might be expected, the color of these horses is not so uniform as that of the older wild breeds. Africa has many wild horses, chiefly in the north. In the days of the Roman ascendancy they were brought to Rome and used in the shows of the amphitheatre. In former times wild horses were numerous in the forests of Europe. Heroditus mentions their existence in Thrace; Varro in Spain. Polish nobles kept them in parks as late as the 16th century. Hector Boece (1570) mentions them as being found in Scotland in his day. This brings us to consider

EARLY BRITISH HORSES.

When Julius Caesar landed on the shores of Kent (B. C. 54), he found the natives with many horses, which they used both for mounting their cavalry and for drawing their war chariots. At his landing the Britons urged their horses into the sea and attacked his legions before they could reach the shore. He frequently speaks of the daring cavalry and destructive chariots armed with scythes attached to their axles by which he was opposed. One of the defeated chiefs disbanded most of his army and retained only about 4,000 chariots, with which he harassed the flanks and cut off the stragglers of the Roman army. Tacitus in describing the last great battle which Agricola fought with the Caledonians, near the passes of the Grampians, says that the space between the armies was filled by the cavalry and charioteers of the Britons, rushing to and fro with loud noise. It is quite evident that the horses in Britain must have been very numerous at this time, and have been of good size and considerable strength to pull the heavy, clumsy chariots over the rough ground of these times. The early Britons were members of the great Celtic family which, coming from the cradle of the race in the East, had by successive emigrations spread over Europe and peopled the islands of the West. They moved in whole tribes, with their families, goods, cattle, horses, and all their belongings—they were nations on the march. This explains how they fought with chariots and horses exactly as did their relations in the East, and their horses would be of the same types as those of the land from which they came, modified and probably improved by the change of climate and of food in their new home. From the accounts that Caesar gives they must have been a powerful, active and useful breed. The Roman generals thought them the best of the day, for they took many of them to the continent for the use of their cavalry there and write of them in high terms. It is probable that, after the Romans left, for many years there was not much change. The Saxons, who followed the Celts, do not seem to have been such ardent horsemen as their predecessors. An export trade to the continent seems to have been still carried on. Athelstane (930) prohibited exportation because he found it was taking away the best of the animals. He had his agents go to the best markets on the continent and purchase stallions for the improvement of the breed in England. The Normans were ardent horsemen. William I. had with him a numerous cavalry and to them he mainly owed his victory at Hastings. After this horse breeding flourished. The first account we have of the horse being used in agriculture is from the Bayeux tapestry (1066). King John of England imported at one time 100 stallions from

Flanders. Edward II. brought horses from Lombardy; Edward III. from Hainault and Spain. The age of chivalry, of knights clothed in heavy armor, required a heavy strong horse to carry weight, and much attention was devoted to breeding horses for this purpose, with strong bone and good action. The sovereigns of England again enacted laws stopping all export; even Scotland was not permitted to buy any English horses, while they sent to Turkey, Naples, and Spain, for the animals that were likely to improve their horses for war purposes. Henry VIII. passed laws intended to keep up the size and weight of English horses. At this time they are described as being strong and sturdy, fit for draught; the heavy cart horse form being the prevailing one.

Herdsmen.

A correspondent inquires as to the probable salary a herdsman may expect to receive, who is properly equipped for his business.

We answer from \$200 and board up to \$3,000, according to his proved worth, the responsibility of his situation and the material strength of his employer. There is a wide field here for the ambitious young man who is determined to excel in the keeping of stock.

Ordinarily salaries will remain in the neighborhood of the first mentioned sum, but where the herdsman proves himself equal to his work he will be able to do better. We are speaking, it will be remembered, not simply of the feeder of cattle, but of the herdsman whose field is wider than that of the feeder. There is no want more felt at the present time on the farm than that of good, reliable, painstaking and competent herdsman.

A Suggestion.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—I like the JOURNAL well, but I would like it better if you would come down among us common farmers and talk to us a little more about common things. I think it is all right enough to talk to the big breeders about high class cattle, but a great many of us have not yet got them, although we are working fast in that direction. I think this would still more popularize the JOURNAL. Now, Mr. Editor, I hope you will take no offence, as I do not mean to give any, and I am glad to see the JOURNAL prosper.

Muirkirk, Ont.

[We are glad indeed to receive suggestions from any of our subscribers, and when we consider them wise, as in the present instance, we shall try and govern ourselves accordingly. Our object is to do the greatest amount of good to the largest possible number, and we wish to be serviceable to every reader. If we are not, we are not fulfilling our mission. Our first suggestion to all who have common stock is to use only pedigreed sires—good individually—and feed well, and our word for it, it will soon cease to be common. Common and inferior stock could be eradicated in a score of years in the Dominion, if our suggestion were universally acted on.—Ed.]

A Line from "North Oaks."

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—We are having sharp, bright winter weather, 45° below zero last week, and 20° below for the past two weeks. No wind and lots of sun; all cattle outside, except the youngest calves. They are six hours every day in yards or lots. We spread them a load of corn fodder to pick over. When they come in have cut March hay, pulped roots, bran and a few ground oats.

We are wintering at North Oaks, 280 head of cattle, 150 sheep, 55 horses, 200 hogs, 10 deer, 2 elk and one buffalo. I see most of the stock papers of America. Only a few of them rank with the JOURNAL.

JOHN GIBSON.

North Oaks, Minnesota, Jan. 10, 1887.

Extraordinary Clubbing Offer for 1887.

1. A club of two subscribers for \$1.75, providing one of them is a new subscriber—i. e., an old subscriber can renew his subscription for 1887 for 75c., by sending one new subscriber with \$1.

2. A club of three subscribers for \$2.50, providing two of them are new subscribers—i. e., an old subscriber can renew his subscription for 1887 for 50c., by sending two new subscribers with \$2.

3. A club of four subscribers for \$3, providing three of them are new subscribers—i. e., an old subscriber, by sending three new subscribers with \$3, will get his own JOURNAL free for 1887.

4. "Horse Breeding," by J. H. Saunders, price \$2, or "Feeding Animals," by Prof. E. W. Stewart, \$2, (as adv'd in JOURNAL), will be sent, postage free, to any person sending us four new subscribers and \$4 for 1887.

5. "Allen's Shorthorn History," by Hon. L. F. Allen, price \$3 (as adv'd in JOURNAL), will be sent, postage free, to any person sending us \$5 with five new subscribers for 1887.

6. "The Breeds of Live Stock," by J. H. Saunders, price \$3 (as adv'd in JOURNAL), will be sent, postage free, to any person sending \$6 and six new subscribers for 1887.

7. "The Farmers' Veterinary Adviser," by Prof. Jas. Law, price \$3 (as adv'd in JOURNAL), will be mailed, postage free, to any person sending us \$5 and five new subscribers for 1887.

8. A club of five (old or new), \$4.

9. A club of ten (old or new), \$7.50.

The first seven of these are extraordinary clubbing rates, and we hope our old readers will take advantage of them. The books offered are reliable, and the best works to be had on these respective subjects. Farmers wishing any of these, could easily get up a club at many meetings of Farmers' Clubs, Institutes, etc. etc., held throughout the winter.

Fair Play for the Oxford Downs.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—Don't you think that the Oxford Down sheep should have a full class at the fall fairs, as well as other breeds of sheep? I believe they are just as good a sheep as is to be found, and I believe they are fast coming into favor. You will have seen that at some of the fall fairs only two prizes in a class were given them, and at the late Western Exhibition, London, there was no class for either the Oxford or the Merino. There was strong competition at the last Industrial Exhibition in Oxfords, and there would have been at the other exhibitions if prizes had been offered equal to those given to several of the other breeds. A BREEDER.

[We see no good reason for giving the Oxford Downs a second place in any of the prize lists of the leading shows. They may not be so numerous yet as some of the other breeds, but they are, as the writer of the above states, fast coming into favor. Without a doubt they have a good deal of merit, and therefore the breeding of them should be encouraged. The quality, too, of many of those shown last year in Ontario was just splendid, which is an additional reason as to why they should be countenanced by directors of our exhibitions.—Ed.]

Exhibition Catalogues.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—I have just received a copy of an *Official Prize List*, published by the Directors of the Toronto Industrial, and scattered free of charge. This brings before the public what I have long felt is a much needed reform in our leading exhibitions. The managers have shown unlimited enterprise in some directions, but in others they have been content to travel in the same well worn ruts. One of your correspondents brought this forward in a recent issue, but it will do no harm to repeat it. Our friends in the old country are certainly far in advance of us in making their annual exhibits interesting and instructive to strangers. I suppose the majority of those visiting these exhibitions are specially interested in some particular departments, but if a stranger enters on the grounds of, say our Toronto Industrial, desiring to examine any special department, he is bewildered at the extent of the exhibit, with no visible chance of discovering

just where he must go to find what he wants. He travels about with the crowd, making constant inquiries, oftentimes fruitless and misleading, until by dint of persevering effort he discovers the desired department. All this is avoided in an old country show. On entering the ground, you at once confront the seller of a *catalogue*, containing not merely the entries in detail, but a *plan of the grounds* and the exhibits; almost every one makes the purchase. Without any enquiry, an entire stranger in the place may proceed by the aid of his catalogue exactly to the exhibit he desires to examine. Suppose he wishes to meet the sheep department, he may proceed at once to the spot. On arriving he finds some particular specimens which please him, and he wishes correct information as to owner, pedigree, etc. Every separate exhibit is numbered. The catalogue is opened and the number found, and without asking a question, the stranger obtains accurate and reliable knowledge. Now, he turns to the ring of horses or Shorthorns. If he wishes to know the owner or pedigree of any animal he looks at, he may at once do so. A number is worn in a conspicuous place on every one, and he needs only to turn again to his catalogue. If he desires to know which one gets the coveted prize he looks on the board in the centre of the ring, where the numbers are distinctly placed on a sign post, and by reference to his catalogue, he learns the owner, etc. No questions need be asked, no insolence given; and yet the fullest information is obtained. How different at one of our exhibitions! You are an interested spectator around the exhibition ring, anxious to know how the awards are given. You are anxiously watching but in an unguarded moment your attention is taken by conversation; the tickets are given, and you are no wiser or otherwise, for all your pains. But I need not enlarge. Half the interest of the exhibit is destroyed because one cannot obtain any knowledge of ownership, etc. Now a step farther. On entering the second day, an opportunity is not only afforded to purchase a catalogue, but an official prize list as far as the awards have been given is presented for sale. This is when it is needed and when any mistakes can be at once rectified. I can see very little benefit in publishing it three months after the show.

Now, Mr. Editor, who will take this advanced step? It will necessitate the closing of the entries some time earlier, so as to give ample time for the preparation of the catalogue, which, if prepared in proper form, would return in sales much of the cost of preparation. The official list could be as easily prepared as it always has been for the newspapers. In conclusion, let me say that whoever may inaugurate this system in Canada, will confer not merely a great benefit on the public, but will do a great deal to popularise their exhibition. "Where there is a will, there is a way."

JOHN DRYDEN.

Brooklin, Ont.

A Prolific Shrop.

SIR,—I lately became aware of an incident that deserves chronicling, I think. Mr. Wm. Shier, of Sunderland, possesses an imp. Shropshire ewe that had twin lambs in March, following suit with the same in November. The next March she was barren, but had a single lamb last November. That I saw at his farm alive and kicking on the 14th January. I caught the ram lamb twins born in November, 1885, and as I expected found that they had shed no teeth yet, and had not two permanent front nippers. This is a very important fact. At a recent Toronto show I undertook to assert that a ram lamb adjudged first prize was a shearling, because in September the two permanent incisors were plainly visible. In England the fact is established by legal decision that the presence of the incisors changes a lamb to a sheep. It would be well if the managers of our fairs gave this direction to the judges. Meantime Mr. Shier's two rams are living witnesses of the improbability of the prize ram in question having been under a year old, even supposing the improbable fact of birth in November, which is so unusual in this breed that few of your readers will ever have known a similar case.

Yours, etc.,

THOS. C. PATTESON.

"I have been a reader of the JOURNAL for a year, and am much pleased with it. It would be hard to estimate the amount of good that it is doing and likely to do in future years for Canada. I only wish there were a greater number of readers of it down here, in this grand, but badly neglected Province."—H. B. Hall, Roxbury, N. B.

Why the Herd Book Standard should be Lowered.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—I have read your report and comments on the Guelph meeting of Shorthorn Breeders, re the Herd Book standard, with interest.

The thanks of every farmer in the land are due Prof. Brown, for the national stand taken by him on that occasion.

You intimate that you are open to conviction that the standard has been placed too high, and have a sympathy for those whose valuable cattle have been thrown out of the book.

Now, sir, we do not so much ask your sympathy, as we ask that you use your vast power and influence through your journal in the interest of right and justice.

It is neither right nor just that one section of the Shorthorn breeders should control the right of record to the exclusion and manifest injury of their brother breeders, and especially with government aid.

You give four, I consider, very minor reasons, why the pedigree standard should not be lowered.

1st. "Because you are under the conviction that it would act injuriously against a greater number of breeders." Many breeders contend that registered animals are not more valuable now than when all were eligible. If so, the only injury they would receive would be that a number of the best of those now unregistered would take the place of inferior animals now registered, which would be a national gain. Shorthorns had become so numerous that the mere fact that an animal was registered in the Canadian Herd Book did not enhance its value. But given a good animal, its value increased according to the pedigree. That was as it should be. The wholesale slaughter of about one-half the Shorthorns from a *pedigree* standpoint has necessitated the use of a number of inferior registered animals. Therefore, I contend that every reasonably pure animal should have the right of entry if his owner deemed him worthy. If not worthy, the knife would be more freely used, and the *scrubs*, no matter what their pedigree, would soon drop out of the race.

Your second reason, "that it would necessitate" a revision of a large part of the work done, is entirely beside the question.

3rd, "Because a number of registered animals have changed hands" can have very little weight with you. In these transactions both parties knew all the facts. On the other hand, when you were advocating raising the pedigree standard, you must have been aware that you were aiding in the injury of many breeders and farmers who had bought these animals under the impression that their pedigrees were right, and after breeding from them for years wake up to the fact that they have been duped, and in many instances by those who are now so strongly in favor of a high pedigree standard, or, it may be, *by those now caught in their own trap*.

4th. Neither should the injury done many of our breeders be continued, because the standard has been changed so often.

How do you justify the acceptance of animals, or rather pedigrees, from a herd book with a standard of four crosses without accepting their standard? I am aware that in many parts of England the unregistered Shorthorns are practically pure bred. That is very well so far as it goes; but, sir, when we consider the number of breeds on that small island, and the fact that a great deal of crossing is done for beefing purposes, it is natural to suspect that some of the best of these have been kept for breeding purposes. The fact is, "distance lends enchantment to the view," and English herdsmen use more time, means and experience in the perfecting of their pets.

A number of members of the Dominion Shorthorn Association are also members of the Canadian Clydesdale Association. I would like to ask any one of them by that course of reasoning they infer, that the fourth cross of a pure Clyde on our Canadian mares is worthy of record, while no amount of crossing of pure Shorthorns on Canadian cows is so?

An apt quotation illustrates this whole question nicely: "Where self the wavering balance shakes, it's rarely right adjusted." Self has had a heavy hand on the balance; but, sir, I believe if the farmers and breeders who have been wronged stand firm and pull together, we shall yet get justice.

R. J. PHIN.

Hespeler, Jan. 17, 1887.

Mr. Phin, in his evidently sincere and well put letter, does not seem to put much store upon our "sympathy" in this matter. We are fully aware that it would be much more acceptable to the aggrieved did we fall in with their views of redress, and sustain it with tongue and pen. We know that it is the commonly accepted view that sympathy, to be of any value, must bring material relief. This is a low view of what we deem one of the handsomest traits of humanity. We remember well the occasion of two men travelling along the railway track with us for about three miles one day, on a branch of the G. T. R., while undergoing tiresome labors. Their sole object was to manifest their sympathy, in the absence of any other way of showing it; and although we have quite forgotten the names of the men, and lost all trace of them, the remembrance of that sympathetic act, although it did not shorten the road one step, will never be obliterated on this side the shores of time, and not at all likely on the other. The highest exhibition of sympathy the world ever saw has been spurned by millions of the race, but this in no case proves it unreal. But if the expression of sympathy is not desired by those who have in the meantime lost money with ourselves by the action of the Dominion Shorthorn association, we can easily refrain from expressing it, the only form in which we have seen our way clear to show it as yet. The moment the JOURNAL shall cease to use its "influence in the interest of right and justice," we hope that it shall die.

We admit that it is not right nor just that one section of the Shorthorn breeders should control the record to the "exclusion and manifest injury of brother breeders," where this is the *design* of the action. But has this been the aim of those men who fixed the standard of the present for the registration of Shorthorns? We have heard the expression of this repeatedly, but have waited thus far in vain for the sustaining evidence. Associations are to be governed by majorities, and where matters pertaining to their welfare become so confused that reformatory measures are absolutely necessary, the action of those majorities must be final, and where those reformatory measures cannot be made without hurting some of the members that good may result to the larger number, then the members thus injured should consider carefully before they give vent to complaint, whether the action of the association was not *right and just* in principle, in view of its reference to the good of the largest number.

But few Shorthorn breeders to-day will be found willing to defend the old four cross standard of the C. S. H. B. What was to be done? Either the standard was to be raised or not. If not raised, the whole Shorthorn community must suffer, but if raised a majority will be benefited, but a minority will in the meantime suffer. But because such will be the result, would it be wise to withhold such action? We say it would be unjust to the majority. Governments recognize this *principle* in legislative enactments. We behold it in the imposition of almost every form of tariff, and in chaining the drink traffic. Now the later removal of pedigrees by the association was the same in principle as the earlier, and if the former can be defended, so can the latter. When individuals become members of an association, it is with the understanding that so long as they remain members they shall be bound by the action of the association. When not satisfied with it they have, first, the right of attempting to carry counter-action; second, the right of protest, and third, the right of withdrawal.

We do not agree with Mr. Phin when he says the "wholesale slaughter of about one half the Shorthorns from a pedigree standpoint has necessitated the

use of inferior bulls." Good pedigreed bulls for grading purposes, weighing from 1000 lbs upwards, can be got for \$100 and less, to-day—about twice the value of butchers' meat. When parties become unwilling to pay such prices relatively, they are sure to content themselves with inferior sires, such as they ought not to use.

Mr. Phin's second paragraph is well put, although it is not altogether "beside" the question, as we see it. His third has already been answered in our previous remarks, and so, virtually, the fourth.

The idea of fixing upon some definite number of crosses as the hinging point of admission to registry of the offspring of our Canadian cattle from pedigreed Shorthorn bulls sounds well, and is sure to meet with a good deal of favor from its apparent reasonableness, and we have never said that we will not support it; but we will not do so at the present time, nor till reasons additional are presented than those we have heard; but we will not advocate it *now*. We believe the fewer complications introduced at the present time the better, till the agitated Shorthorn sea becomes calm. Two things should be considered by those who advocate the admittance of high graded Canadian cattle; the first is, would they bring remunerative prices? Would not the offspring of those tracing all the way to imported on both sides bring much better prices? And the second, would it not take longer to build up a herd in that way than to start upon an imported foundation, or on one tracing to imported? and would it not on this account be more expensive?

We have thus answered the portions of Mr. Phin's letter relating to our remarks of last number. Those portions of it relating to the action of the Clydesdale breeders and to the *motives* of members in the action they have taken, we leave to those interested to defend.

The annual meeting of the Dominion Shorthorn Breeders' Association will be held in the St. Lawrence Hall, Toronto, on Thursday, 24th February, and there we hope to meet with every Shorthorn breeder in the country. Discussion, the most full, free and deliberate, should be given to every feature of the present difficulties, even though this should require two days instead of one. We hope every one who has a complaint will make it known, and that it will receive careful attention; and we shall expect that everything shall be done in the most dignified and respectful way, every member seeking the good of the whole rather than the securing of some temporary gain, regardless of general results.

Encouraging from the Land of the Far Away.

We give below the substance of two letters from sources 3,000 miles apart and more, and these are but samples of what we are happy to say that we are continually receiving:

GENTS. I consider your JOURNAL indispensable. I have saved ten times its cost this year by the articles that appeared in swine in the two previous numbers, and I see a valuable one on the same subject this month. I think every person at all interested in agriculture should take your JOURNAL, as I am sure the many hints contained in every number would be of much service to any one.

JOHN WHITE.

Halifax, Dec. 17, 1886.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—You may depend on me to subscribe for the JOURNAL as long as I have a dollar in this world. It is a pity that farmers don't better appreciate a paper worth twenty times its cost to them. I hope the farmers of Canada will take a pride in keeping it up.

L. O. LEMIEUX.

Brandon, 10th Jan., 1887.

Liability of Railway Corporations.

In the Divisional Court or Court of Queen's Bench, in the case of Hurd vs. the Grand Trunk Railway, the Court held that the case was one for the jury, that it went fairly to them, and they could not say that the jury was wrong. The Chief Justice said that though the plaintiff had been, in his opinion, guilty of great negligence in not taking the necessary precaution not to allow the horse to escape on the track, the crucial point was the blowing of the whistle and the starting of the train when the horses were about abreast of the locomotive, and as the engine-driver chose to take the chances, and the jury having found against him, that they could not disturb the finding. Justice Armour said he had grave doubts as to the horses being trespassers. He said, no doubt they had no right to be on the track; but it was necessary in this case to take a broad, common sense view of the surrounding circumstances, and one was the fact that the defendants had cut the plaintiff's farm in two. That it was unreasonable to cast the burden on the farmers through whose properties railway companies forced their roads to keep extra hands, in order that they might keep their stock from straying on to the railway track every time they had occasion to go from one part of their farms to another. It might be serious to some to do so; and therefore, although the horses had no legal right to be on the defendant's track, yet they were not, in his judgment, what is termed in law trespassers.

Our readers will remember that in the May number of the JOURNAL of 1886, page 121, the particulars of the trial at the Wentworth assizes in this case were given, resulting in a verdict in favor of Mr. Hurd. As then stated, the horses were being driven across the G. T. R. at "Oakwood," from one part of the farm to another, when a freight train came up and frightened them so that they sped off down the track, and several of them were severely injured in trying to cross the trestle work of a bridge. The company then appealed to the Court of Queen's Bench, with the result of the above-mentioned deliverance. The G. T. R. is now appealing to the Court of Appeal, and we anxiously await the decision. It is one of immense importance to farmers living along lines of railway. Mr. Hurd has shown great spirit in thus fighting a powerful corporation alone, and we sincerely hope that the final decision will be quite in accord with those already given.

Pedigree Weeding.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—Having noticed with considerable interest the discussion that is now going on about the Shorthorn Herd Book, I would like to say a few words in defence of the breeders of Shorthorns in this county, as well as in self defence. There are in the county of Missisquoi some six or seven small breeders of Shorthorns, and this weeding snuffs us nearly all out. There is no doubt that it is a good thing for the large breeders, but it is death to most of the beginners of pure bred Shorthorns, and I am one of those. I have two females that were recorded in the C. and B. A. Herd Books, but cannot get them entered in the Dominion Herd Book. One of the females has produced a very fine bull calf from one of Richard Gibson's bulls, owned by J. S. Williams, of Rugby Farm, Knowlton, P. Q. Mr. Williams sent in the pedigree of the calf, but could not get it recorded in the Dominion Herd Book. Mr. W. paid \$1,000 for the sire of this calf, and his dam is recorded in the Canadian and also the B. A. Herd Book, and is a good cow. Now if such stock cannot be recorded, I for one will have to give up, and be satisfied with grades and scrubs.

Cowansville, P. Q.

J. M. F.

Red Polled Cattle.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—Since I wrote you in reference to the Red Polls of Norfolk I have received from the editor of the R. P. Herd Book in England, a book in reference to the breed. I hope to see them brought more prominently before the Canadian public through your admirable journal, which I read with so much pleasure and interest. I am informed that the Government Stock Farm in New Brunswick has some of this breed.

I think that you will agree with me when I say that the Red Polls are not to be despised, although such a modern breed, comparatively. When more advertised they are likely to take a more prominent place in the front rank as a general purpose breed. They are hardy and easily fed; prepotent, combining beefing and milking qualities. Though some are large and others smaller milkers, the milk is rich. I have seen the famous Polled bull Davyson 3d. The prints that are shown of him do not give me the right idea of him. To my recollection he was much deeper, but old age may have changed him. In the colored illustrations sent me by the editor of the R. P. H. B., as representing Mr. Colman's herd (the noted mustard manufacturer), Falstaff, although in his teens, is well shaped and truly represents the breed.

The late owner of Davyson 3d, Mr. Leonard Palmer, (son of Mr. Foster Palmer, whose death led to the sale of their herd), told me that butchers readily give sixpence per stone more for this breed, they gave so good a return of dead weight. I think this climate would suit them, as it does not differ very much from that of the eastern counties of England. Perhaps we have here less rain and our winters are rather more severe.

I was pleased to see a piece on Suffolk sheep in your last number. I have always lived amongst them and can vouch for the correctness of the statements.

A. G. GOODACRE

Antigonish Harbor, N. S.

Large Daily Gains of Shorthorns.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—We were glad to see in the last JOURNAL that a son of our Shorthorn bull Prince Albert took the "Shattock cup" at the late Fat Stock Show at Guelph, and that for 768 days this steer made a daily gain of 2.16 lbs per day. To show that this is not an exceptional gain for Prince Albert's stock we note the following: Yearling bull Brideman 11th at age 845 days, weighed 2245 lbs, a daily gain of 2.65 lbs. He took 3d prize at Provincial in 1885. Valasso 6th at age 715 days weighed 1650 lbs, a daily gain of 2.30 lbs. He took 2d prize at Provincial in 1885. Heifer calf 11th Maid of Sylvan at age 333 days weighed 925 lbs, a daily gain of 2.45 lbs. She took 1st prize at Toronto, Guelph and London in 1886; full sister to Brideman 11th. Heifer calf, 4th Leanore of Elmdale aged 299 days weighed 824 lbs, a daily gain of 2.69 lbs. She took 2d prize at Toronto and London. Yearling heifer 8th Maid of Sylvan at age 670 days weighed 1311 lbs, a daily gain of 1.95 lbs. She took 3d prize at Toronto and Guelph and 1st at London. Other instances might be mentioned nearly as good as these, if space would permit.

We were very loth to part with Prince Albert, but some time ago we offered him to Smith Bros., of Inverkip, and only just now they made up their minds to take him. We felt in honor bound to let them have him, but would much rather have kept him to have graced our coming sale on the 8th of March. As a getter of grade stock as well as pure breeds he is something wonderful. The owners of several of his steer calves have refused \$25 for them at six months of age, for beef.

THOS NICHOLSON & SONS.

Sylvan, Jan. 17th.

The Shorthorn Herdbook Standard.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—I see by the JOURNAL that there has been a committee appointed to tone down the Shorthorn Herd Book. Has the formation of the new book hurt the country very much? As it is now done, let it stand, and not have it to do over again in some future day. Those gentlemen professed to know what they were doing, so let them cry along with others,

IN THE COLD.

Railway Uncourtesy.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—I was very much pleased with the article in November number of the JOURNAL showing the way exhibitors were used at the Provincial Exhibition, held at Guelph last September. Such usage might pass in some barbarous country, but it will not do here. I am of the opinion that the railway officials left themselves open to an action for cruelty to animals, to say nothing about the cruelty to men.

Carleton Place, Ont.

JOSEPH YUILL.

[The farmers should never submit to unfair treatment, much less to that which is inhumane. They possess in themselves a power that could smash railway corporations into fragments, if they only with one voice decided to use it. Their generosity in bearing affront has become proverbial, but a conscience-sunken conductor, who is putrid with bribes, along with his employers, may and should be taught that patience has its limits.—ED.]

Retain the Present Herd Book Standard.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—Since the meeting of Shorthorn breeders held at Guelph on the 8th of December, I find that by my name being there as one of those who called that meeting I have been placed by a great many in a different position from what I intended. When my signature was asked all the other names on the list were already down, and after the object of the meeting was explained I complied with the request, as I wanted to hear a full discussion on the Herd Book question. Although we have four cattle excluded by the regulations of the D. S. H. Herd Book, yet we are opposed to any modification of the standard, believing that if the standard was lowered, in a very few years all interested would regret it. It is very much to be regretted that the revising committee did not look sharper when they took in hand the getting up of the B. A. Herd Book, as by their neglect—shall we call it—so much bad feeling has been raised, so much time and money wasted, and so many people have become disgusted, having bought and sold on the strength of the B. A. Herd Book, and when they thought they were in possession of a nice herd of Shorthorns, found that they were left. We hope that the work now going on in connexion with the Dominion Herd Book will be so complete that confidence can be placed in it, and that there will be a guarantee given that this is the last change that will be made.

WM. B. WATT.

Salem, Ont., Jan. 20th.

Readjusting the Shorthorn Herd Book Standard.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—In the January No. of the JOURNAL the Herd Book question has again been brought up through a meeting of representative breeders from different parts of Canada, at Guelph on the 8th of Dec. At this meeting, which was well attended, a committee was appointed to represent the meeting at the next annual meeting of the convention of the Dominion Shorthorn Herd Book Association. A meeting of this committee was called for the next day, when the following motion was carried unanimously:

"That the Dominion Shorthorn breeders be hereby requested by this committee to modify the present standard of the Association so as to read thus: The animal must trace on the side of the sire and the dam to recorded imported English Shorthorns, or to pedigrees not false or spurious, already of record in the British American Herd Book."

We cannot see anything in this modification that can be objected to by the Dominion Association, or any member of it. If through some misunderstanding of the standards of other Associations the members of the Dominion placed the standard higher than necessary, we do not think there would be anything unmanly in a body so composed reconsidering their standard. We do not suppose any one for a moment thought the standard would be infallible. The representatives to parliament make laws and repeal them, and still we do not grow alarmed for the safety of our country (except on the eve of an election). Very few churches lay claim to infallibility, though aiming in

that direction. At nearly every presbytery meeting, and nearly every conference, some newer *ism* is propounded, and still the world continues to revolve on its axis. Who would claim the inhabitants are less civilized or more bigoted than they were a few hundred years ago? Would it then be supposed that at a few meetings of a new Herd Book Association, where members had to travel long distances to meet, and in many instances who can say but some of our leading breeders were unable to attend, — can it, then, be wondered at, that at the end of a year slight changes could be suggested that would be an advantage to the whole body, and if made advisedly, will tend to strengthen rather than weaken the Association.

The JOURNAL, though willing the matter should be discussed, "opposes any changes now because of the changeful nature of the Shorthorn measure in recent years. At one time it was a yard, then a foot, then a yard, and now a yard and a quarter." Is it not now just a quarter of a yard too much? Does not that quarter, in excess of what is required to make the record perfect, exclude animals as good individually, and as pure in breeding as any now registered? If so we fail to see why any objection should come from any quarter, especially the press. We fail to see why the Association should object to the modification asked for, especially when no one will be wronged (only in prospective), and many will be righted whose every surplus dollar had been invested in Shorthorns, rejected through no fault of the owners. Why should the extra work caused to the revising committee outweigh the moral obligation to do right? We take it that any advantage taken by any member of the Association of the position they hold, in keeping out stock eligible by every right to entry, is wrong. We do not believe that a wrong done by a body or an association is any the less objectionable. Any person who has stock eligible by every right and is refused the slight concession asked would be justified in taking any lawful means of protecting his interests. We think the moral responsibility of the Dominion Shorthorn Herd Book Association (which now represents the former associations) is in a certain degree responsible, and should do all that is reasonable to meet the owners of rejected stock, and not only help trace out, but make any reasonable concession that will still leave the standard equal to that of other similar recognized associations.

MANITOBAN.

Brandon, Jan. 15, 1887.

Veterinary.

Precautionary Hints to Stockowners.

BY F. C. GRENSIDE, V. S., GUELPH.

(Continued from January.)

As winter goes on, the weather becoming more severe and stormy, the man-of-all-works on the farm has more time to pay attention to the comfort of his stock; so that it is a fitting time to draw attention to some more irrational practices, most noticeable and important at this time of year. The man who observes the treatment of live-stock in this country must be struck with the course pursued by so many of allowing their cattle to remain out standing around the yard, with their backs arched, looking the picture of misery, for hours at a time in some cases. Some people recommend such treatment as having a tendency to what they term hardening of stock, or rendering them insusceptible to the action of extreme cold. If they were allowed to remain out altogether, they would doubtless acquire to a large extent this ability; but being housed during the night, a portion of the morning, and afternoon; and, in many cases being subjected to a pretty high temperature while in doors, the result it may be of warm buildings, or the presence of a number of animals, or both; the change of temperature often of twenty or thirty degrees, thus, abruptly experienced, and the exposure to a degree of cold unfavorable to thrifty condition, is a source of much loss. There is no doubt that letting cattle out once a day is beneficial, and even necessary, especially to growing and breeding stock, but if the weather is

at all cold, and as soon as they are done frisking, and moving about, and begin to manifest a sign of chilliness, they are doing no good, and should be at once housed. A temperature of sixty degrees Fah. is, no doubt, about the most favorable to encourage thrift. Much lower than that produces an undue waste of the heat forming elements of the food; and much higher, so as to cause sweating, has the same effect; as the evaporation of the sweat robs the body of its heat. Continuous dampness of the coat has an injurious effect upon an animal's health and vigor.

In the best arranged stables of the present day, troughs are placed in front of the cattle, so that they can drink at any time. There is no doubt, that this plan is most conducive to health, condition and comfort. Drinking at long intervals, especially when much water is taken at a draught, is not favorable to digestion, in fact, acute indigestion often manifests itself from this cause. Many cattle, when water is inconveniently situated, necessitating their walking through the cold winds to get at it; and finding it very cold and chilling to drink under such circumstances, will often endure thirst for a couple of days before they will satisfy the natural demands of the system for it. The experiment of giving luke-warm water to cattle has been tried, and with the very best results. It is found that they soon become accustomed to it, and drink it with evident relish, and that the production of flesh and milk is encouraged, and that food is economized by the plan. One is apt to judge from one's own feelings, that it would be insipid and unpalatable, but practical tests show that animals do well upon it. It certainly is more wholesome than very cold water, and if cattle will drink it at all, they will be inclined to consume all their systems demand. All fluids consumed have to be raised to the temperature of the blood, and the colder they are the greater is the expenditure of food in thus raising them.

Where there are troughs in a stable and the water is allowed to stand in them it becomes raised in temperature to some extent, which is, no doubt, beneficial, and is as much heating as can be carried out, in most cases, especially in large herds. From the experience of some Americans, however, which has shown marked profit, from giving water at a temperature of 60° Fah., it would seem that it would pay to make some systematic effort to heat the water for stock, especially for fattening cattle and dairy cows.

In the case of horses the same remarks will apply, and when they have become heated from violent or prolonged exertion they can be given tepid water with impunity, and in this way suffering avoided from thirst. The old fashioned and good plan of allowing a pail of thin, warm, oatmeal gruel to a jaded horse is a most humane and beneficial one, and is just a following out of the principle here suggested.

When on the subject of conserving animal heat, it is opportune to speak of the blanketing of horses, as a means to this end. The major portion of the bodily heat is lost by radiation. Nature's provision to prevent this taking place, unduly, when the surrounding air is cold, is the coat of hair; but it is insufficient to accomplish this satisfactorily in most cases, so that there is a loss of condition and a waste of food.

If a horse is left uncovered, the coat becomes heavier and will conduct less heat from the body, so long as it remains dry, but if such an animal is exerted it rapidly sweats, and the heavier the coat the more profusely it does so. Now the evaporation of water from the surface of the body extracts much heat, and robs the body in proportion to the extent to which it takes place, so that a heavy coat to a horse subjected to anything like heating work is a drawback, rather

than a benefit. This explains why clipping is found beneficial, under such circumstances, as blankets liberally used as soon as exertion is over, on a dry skin, more than compensates for the loss of the coat. If blanketing is carefully and judiciously carried out in the early fall, it, to a large extent, reduces the growth of hair, and renders clipping in a great many cases unnecessary, even in driving horses. This course followed out during the cold months of the winter is the only plan of maintaining a horse's good appearance and vigorous condition.

Epilepsy in Pigs.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—Some disease has come over my young pigs, and I will feel obliged if you will give us light on the subject. They are near three months old—pure-bred Berkshires—and have up till within a week ago, made rapid growth. They have a pen 10 x 30 ft., and 14 of them are in this pen. The bedding is changed whenever it shows signs of dampness, and the sleeping place is warm, but well aired.

About a week ago I observed one in coming to the trough fell over, and lie awhile struggling. When it recovered in from five to ten minutes, it would try to eat again, but did not succeed well, showing strangling sensations when the attempt was made. Every now and then since, this pig has acted similarly, and several others have gone likewise. The feed they were getting was milk and boiled peas, but now they get shorts, scalded in hot water. I learn that others in the neighborhood are dying. Hoping that you can help us and the country at the same time.

GEO. H. RILEY.

Winona, 5th January, 1887.

ANSWER BY F. C. GRENSIDE, V. S., GUELPH.

Your pigs are evidently suffering from epilepsy. Both young dogs and pigs are subject to it, and it is usually attributed to either irritation of the mouth from teething, or to irritation of the bowels or stomach from indigestion. It could hardly be the result of the former cause, in pigs of three months old, as no active change is taking place in their mouths at this period of their lives.

I would recommend giving the peas crushed and unboiled, mixed with the milk; and the withholding of everything but milk, when nervous symptoms present themselves.

The Farm.

WE ask of all our friends who think that the JOURNAL is doing a good work and deserving of support to show it to their neighbors, and to send us at least one new subscriber along with their own renewal. Officers and members of farmers' clubs can also render material service in this direction. Sample copies sent free to those wishing to aid in the work.

It may not be generally known that the yield of most kinds of grain is heavier after a crop of potatoes than after one of roots. Our attention was called to this fact over and over again when making the tour of the prize farms last summer, and it is an item worth remembering, for the value of any crop does not depend on the exact return which it produces itself. Its effects upon the soil are to be considered, and upon the crops that are to follow, and this should have no small weight with us in determining what we shall grow. A crop that produces a rich return in itself and that is likely to be followed by heavy crops, is certainly preferable to one which though valuable in itself is sure to be followed by only a moderate return.

It should not be forgotten that peas and oats and vetches sown in the proportions of one bushel of the first and third each to two of the second, makes the best feed for early soiling purposes that we can obtain

in this country. Most persons favor sowing them thickly, and some prefer broadcasting to drilling them to induce a thicker growth. The above mentioned quantities will be ample for an acre. These make not only excellent food for soiling, but if not wanted for that purpose they are equally good as winter feed, and may be cut with the mower and raked with the horse-rake as hay. An acre or two on every small farm will be of inestimable service in the dairy during the months of July and August, while the corn crop is coming on; and several acres should be sown where the herds are large. There is nothing like turning off a large amount of good feed from a small portion of land. We can then afford to rest our pastures and allow them to gather strength for future supplies as well as for self-protection against the drought of summer as well as the frost of winter.

PEOPLE are often found who speak lightly of the value of agricultural shows. They look upon them as of doubtful utility, and as places that make great inroads on the time of the farmer at a season when it is very valuable. This latter allegation is too true, but if the benefits which exhibitions bestow upon the country overshadow the drawbacks, then we cannot afford to dispense with them. It is worthy of note that all the agricultural societies of Britain have found their most useful work to consist in the holding of exhibitions, although in several instances, it was not for this purpose at all that they were called into being. Not only have our autumn shows proved a great stimulus to agriculture in its every phase, but also the spring shows and the fat stock shows as well. While it is true that we may very easily get too many of them, it is equally true we cannot do without them. Our part, then, is to support liberally those that are deserving, and to discountenance such as are doing a lot of harm along with some good. We want shows that will do a lot of good and but little harm, or, better still, no harm at all.

Students' Union at the Ontario Agricultural College.

This annual gathering will be held at the college, Guelph, on Feb. 24th and 25th, 1887. Prof. James, James Cheeseman, Editor *Canadian Dairyman*, Wm. Stover, A. O. A. C., Wm. Ballantyne, A. O. A. C., R. P. Holterman, A. O. A. C., A. Lehman, A. O. A. C., and other gentlemen will read papers. Reports upon experiments with barnyard manure, gypsum, super-phosphates, salt and no manure upon wheat, barley and roots will be given by members of the union.

All persons interested in the progress of agriculture are cordially invited to attend and take part in the proceedings. Reduced rates, one and one-third fare, can be secured by writing to the corresponding secretary, R. P. Holterman, Branford. The college will furnish dinner and tea to those attending the Union on February 24th and 25th. The Wellington Hotel will give meals and beds at a very moderate rate to those in attendance.

We hope that many of our farmers will take a day or two and go to Guelph, if for no other reason than to satisfy themselves as to what is being accomplished. The fruits of this institution are apparent in many ways. We see them, for good or ill, in the character of the farming done, we see them in the reports that are sent out from year to year, and more latterly the different bulletins that are sent to the press. We see them, too, in the futures of the students. But there is no place where they are more apparent than in these annual gatherings of the students and ex-students. This is a form

of harvest that can only be seen at this one time, and we urge upon our farmers to come and see for themselves. Especially do we urge upon those who are opposed to the college on principle to come and see.

If this band of young men will not bear the test of the most careful scrutiny on such occasions, they are unworthy of the institution which has done so much to shape their respective destinies. We need scarcely add that on this score we have no fears. We say then, once more, come to Guelph and see. It is worth going a good way for the pleasure of friendly greeting which the Professors are sure to give, if for no higher reason.

Selecting Seed Grain.

The season is already upon us when seed grain should be selected, and put in a state of readiness to go to the field on short notice. The seasons of growth in this country are short, and like the business men thereof, seem always in a hurry. Spring time, like some capricious maiden, keeps back her smiles for long, and then showers them upon us like an avalanche. In our confusion when not just ready, we scarcely know what to do first. The result is that nothing is done just right, and many important things are not done at all. This at any season is unfortunate, but peculiarly so in spring, as when a crop is not rightly put in, or when seed not properly prepared is used, the harvest is either not forthcoming at all or deficient in quality.

The farmers, then, who are sufficiently alive to their own best interests will be up and doing from to-day and onward, that when the season arrives they may be fully prepared for it. If the seed is all on hand and not well cleaned, this should be done before April comes with her fitful moods which eventually dissolve the last remnants of winter. Every particle should be properly cleaned and in the bags where the granary is proof against rats and mice, as every moment of springtime is of great value. Where there is the slightest suspicion that the seed has not been properly matured, or has been injured by heating in the bin, it should not be sown, as, if so, the results will not prove satisfactory. Seed may sprout and yet the growth ensuing be sickly, and anything but encouraging, so that testing by planting is not always sufficient.

When the seed has to be purchased, March rather than April and May, unless in the case of potatoes, which are liable to freeze, is the month for securing it. The seedsman has more of leisure at such a time, and is sure to have a sufficient stock of the cereals on hand. It is very vexatious to drive to the seed warehouse when the ground is in course of preparation for sowing, to be told that the stock is exhausted and a fresh supply cannot be had for a few days.

Be chary about investing largely in new varieties. It is always safest to try them at first upon a small scale. Though they may have done well in some parts, it is no guarantee that they will in your section. While it is important that they should be tested in your neighborhood, this may be done as well upon a moderate as on a large scale, and with very much less risk. But in any case if new introductions are to be tested, they had better be purchased in March, when there is a supply on hand, than in May, when there is a scramble for them.

Seed vendors who may chance to come your way with their wonderful varieties for which they have the exclusive right, allow to pass on. Do not give them a meal or their horses provender unless they pay full tale, for usually, if not always, they are a race of vagabonds, whose principal business is to entrap the unwary farmer.

Some kinds of seed may not be in stock in March,

as corn for fodder, turnip seed, etc., but even so they should be purchased before wanted for sowing, that the former especially may be tested by planting. Although we have already said that germination is not a sufficient guarantee as to the full vitality of a seed, in the case of seed corn which is usually imported, it is the only guarantee that we have, which is of course much better than no guarantee at all. The loss arising from sowing corn for the above purpose that will not grow is always great, but less so than the vexation, and the realization that rape seed has been sown instead of turnips is far from pleasant.

These mistakes may all be avoided by exercising timely forethought. No mistakes upon the farm bear fruits so bitter as those arising from sowing imperfect seed, owing to the intimate and inseparable relation of the seed time to the harvest. The wise farmer, then, will guard well this important safeguard.

Agricultural Colleges.

The strong statement was made some time ago in the *Country Gentleman*, that the obliteration of agricultural colleges "would not have any particularly remarkable effect upon the country." A writer in the same periodical in commenting upon this sweeping statement characterizes it as "absolutely false." As proof of its falsity, he says:

"I should like to ask, where have our best botanists, entomologists, horticulturists and agriculturists been educated, and where are they doing the most good? Most of them were educated at an agricultural college, and if they are not now spreading their knowledge by teaching in the same, or some other similar institution, they are employing it to the permanent improvement of the country."

The logic in the above quotation is certainly good. The debt that agriculture owes to science is very great, and where would science in agriculture find a home were it not for our agricultural colleges? The immediate effects of their obliteration would not be felt so markedly as would those more remote, for the present generation would still be the recipients of all the light that science had thrown upon their calling in the past. With the nurseries of science in agriculture locked up, progress in its different departments would be retarded, and the country thus blind to its own interests would be forced to look around on other countries passing them in the march of advance. Facts are stubborn things and we all should be glad that they are, for to them we can always tether reasons and truths with a chain that no refiner's fire can melt, and no gale of theory or blank assertion can snap asunder.

Will those who oppose our agricultural colleges please tell us what we can erect in their place that will do a similar work at a cost no greater? It would be suicidal to the best interests of agricultural advancement to obliterate them, and no opponent of these has shown to the world what would better do the work that they are doing. Then until this much is shown, it would be a huge mistake to think of doing without their help.

We make another quotation from this excellent article. It is the closing paragraph. The writer says:

"To all young men who may read this article, I say: Go to an agricultural college if you want to become intelligent and successful farmers. Go! and thus raise the level of farming as an occupation. Go! that you may afterwards, if you do not make more money, better enjoy what you do make. If there is any enjoyment at all, it comes in knowing the causes and reasons for the various phenomena constantly occurring about you. You will better understand nature's laws, and so be made more able to solve the many perplexing problems, which you now have to call experts to solve. If you are dead in earnest about farming,

an education will never lead you from it. Then let us, who are young and preparing to battle with life's work, educate ourselves just as much as our means will allow, that we may be better farmers, better citizens, better respected by the multitudes who depend upon us for their welfare. There are many flourishing agricultural colleges in this country that are doing an inestimable amount of good for those engaged in farming and kindred occupations, and to you who are the right age, and have the means, my advice is to spend a year at one of these colleges, with your eyes open, and see for yourselves whether or not there is any value in a four years' course at an agricultural college."

There is not the slightest danger that a young man properly trained at home, and who is "dead in earnest" about farming, will lose his first love by going to an agricultural college and become so enamored with any other avocation as to take it up. The large proportion of students who leave those colleges for other pursuits does not affect this statement in the least, as the major portion of these come not from the farm in the first place.

We need not shut our eyes to what must be patent to all reflective farmers, that our agricultural colleges will not do the work for which they are designed till they are first filled mainly by recruits from the farm. Students may come from other avocations and may be stars in their respective college courses, but in nearly every case they will prove dead failures when they take up the work of practical farming, and mainly because they have not been inured to those habits of physical endurance, which are so necessary a factor in successful farming in this country.

It is otherwise with those who leave the farm for other callings. They take with them a physical stamina that propels them on, and the groundwork of success thus furnished them is invaluable in the whole of the future, but in the other case, the lack of those staying powers of the flesh is a hindrance that is not easily overcome. The days are at hand, we believe, when farmers will look upon these colleges in their true light, when they will look upon a term at an agricultural college as one of the best gifts they can bestow upon a son who intends making farming his future life-work, and if agricultural colleges fail to prove a source of blessing and of great material gain to the farming community, it is because they are not properly conducted, not because they are not required.

A Curious Fallacy.

BY AN OCCASIONAL CONTRIBUTOR.

For purposes of my own, I made a tour through the County of Oxford last fall, avoiding trains, and doing most of my driving in company with well-to-do, thrifty farmers, who knew what they were talking about. The conversation I had with one of them has especially remained in my memory, as the truth of my deductions from it has been verified in Oxford and in many another county that I have since visited. Passing a farm lying between the Great Western and Credit Valley railroads, in a desirable and accessible district therefore, we spoke thus:

Visitor—And what now is the value of land in this township, without regard to buildings—say, with no buildings, fences that require almost immediate renewal, rolling, dry land, clear of stumps, and varying from clay loam to sandy loam; soil, in fact, neither too light nor too stiff?

Farmer—We are passing just such a place now. This 200 acre lot has only a wretched cabin on it. The north half is cleared as you see, but the rear half is in mixed bush. It was all offered to me not long since at \$6,000, which the owner explained was putting the cleared front at \$40 an acre, and the rear half at \$20.

It is on this extraordinary but prevalent delusion that I would write a line. The idea that bush land is not worth as much as cleared land must be a survival of notions entertained when all the country was bush, and when clearing it was a costly labor necessary before the land could be rated at any value at all. But now surely the calculation should run—100 acres worth, when cleared, \$40 per acre. cost of clearing, 50 per cent. of the gross value of the wood taken off, which may be put at \$50, though that is really low valuation in the case of a reasonably fair bush. Thus we have the owner's estimate rudely upset, and the fact appears, that if the front half of his lot was worth \$40, the back half was worth \$65; or, in other words, there was an error of calculation amounting to \$4,500. supposing that he was right, as circumstances proved him to be, respecting the cleared land. Circumstances have also since proved me correct as to the bush land. This amazing fallacy is, however, almost universally prevalent, and if a word on the subject in the CANADIAN LIVE-STOCK AND FARM JOURNAL assists in dispelling it, some of your readers may be in a position to profit by the extra intelligence shown from being on your subscription list. Granting that cordwood, beech and maple, will not exceed \$5, because at any higher price it comes into competition with coal, we must admit that in country towns dry cordwood will readily sell for \$5. It cost 75c a cord to make it, and if the town be within six miles, a man and team can make two journeys, a further cost per cord of \$1.50. At this rate, \$2.75 is the net value of the wood standing in the tree. Brick kilns, grist mills and other industries require inferior cordwood, as ash, elm, hemlock, etc., and will pay \$2.50 for it; the value of this in the tree may be put at \$1.50, regard being had to the lower charge for making it; and with respect to the soft wood it must be remembered that what is devoted to cordwood is generally but the lops and tops of trees, of which the logs go to the nearest mill, where the mill-man, after charge for sawing, gives a net value considerably more than the equivalent bulk in cordwood would fetch. In fact, I may as well state that in the case of the Oxford bush, after all expense of manufacture was deducted, the cordwood, logs and posts yielded by the 100 acres realized much more than the \$25 net per acre, that I have above assumed to be the average value of a culled bush. Again, if the owner's teams and men accomplish the job, their labor is well sold. From any point of view that may be taken, there is to-day a value to bush in the older counties that is not appreciated. If play be given to the imagination and the bush left to stand, as so much money at compound interest in a bank, possibly better may come of it than of its immediate conversion into arable land, or rough pasture till the stumps are rotten enough to knock out. This is an open question. It is common enough for half informed persons to lament the wholesale destruction of bush; but everybody knows his own business best, and must be governed by his own circumstances and requirements. It is evident that cordwood, as such, will not rise above \$5; therefore, where that price can be got now, it would seem well to cut and sell it, and bring the land into profitable cultivation. This being the case the remainder of the trees must go too. Maple logs, both hard and soft, will come into demand for flooring, and beach, being convertible into kitchen utensils, and what is known as wooden ware, is coming into use; still, neither one nor the other are merchantable timber of a very high class, as they are both only available for indoor purposes. Where the land is low, elm and ash are generally abundant, and these logs are every day

increasing in value. Where anything but clear pine was scored twenty years ago, we now see black ash boards outside and elm boards inside, the latter, in fact, being used for partitioning off stalls, and any inside boarding up or boarding-off, where the nail holds are close enough together to prevent the warping, which is this wood's principal fault. Elm, too, is used for overhead sleepers in barn building. Hemlock trees, which thirty years ago were felled for their bark and left to rot on the ground, are now utilized for both outside and inside work on the farm (pine logs in most districts being now but a memory), and owing to new and ever-increasing railroad facilities, it is a curious fact that the bark brings little more than it did thirty years ago. The same is true of cedar, which but for the enormous tracts reached by the feeders of the principal railroads would now in the front counties have been the most costly wood on the list. The Oxford bush had on it also stray specimens of birch, red and yellow, both used for furniture, besides an occasional cherry tree, enough bass logs to make no end of buggy boxes, organ cases, crates, etc., and at the edge of a swamp had grown up some poplars—"white trash" as it was thought to be a few years since—but which, sawed in four feet lengths, now goes to the paper mills at five dollars a cord, delivered at any station. But I do not propose to weary your readers with details; suffice it to say, by way of conclusion, that rough wooded lands in the older counties, although long since robbed of their stateliest monarchs by the lumbering vandals, who have been driven to more distant wildernesses, are of more actual value than the same land denuded of stumps, fairly fenced, and under ordinary cultivation.

Farm Prizes.—Group No. 1.

SECOND TOUR OF INSPECTION.

1. Prizes will be awarded by the Agriculture and Arts Association of Ontario for the best managed farms in Group No. 1, comprising the following Electoral District Societies, viz.,

Niagara, Welland, Lincoln, Haldimand, Monck, Wentworth North, Wentworth South, Brant North, Brant South, Norfolk North, Norfolk South, Waterloo North, Waterloo South, Halton.

2. Any farmer desiring to compete shall make his application in writing to the Secretary of the Agricultural Society of his District on or before 1st May of each year, upon which said Society may call a meeting for the purpose of deciding which of the applicants shall be returned to this Association; but no Society shall return more than three competitors.

3. The full name and address of the selected applicants, attested by the Secretary and President of the Agricultural Society, to be sent to the Secretary of this Association on or before the 15th May annually.

4. There shall be two judges appointed by this Association from outside the District being examined, who shall be paid their actual travelling expenses. In case of a dispute between the judges, the President of this Association shall be called upon to act as referee.

5. The judges shall keep a detail of marks awarded to each farm visited. They shall award to the best managed farm in each Electoral District a bronze medal, where three farms have competed, and instead thereof to the best managed farm in the group a gold medal, and to the second best farm a silver medal.

6. In addition to any other points that may be thought desirable by the judges, the following shall be taken into consideration in estimating what is "the best managed farm:"

(1.) The competing farm to be not less than one hundred acres, two-thirds of which must be under cultivation.

(2.) The nature of the farming, whether mixed, dairy, or any other mode, to be the most suitable under conditions affected by local circumstances.

(3.) The proper position of the buildings in relation to the whole farm.

(4.) The attention paid to preservation of timber, and shelter by planting of trees.

(5.) The condition of any private roads.

(6.) The character, sufficiency and condition of fences, and the manner in which the farm is subdivided into fields.

(7.) Improvements by removal of obstacles to cultivation, including drainage.

(8.) General condition of buildings, including dwelling house, and their adaptability to the wants of the farm and family.

(9.) The management, character, suitability, condition, and number of live stock kept.

(10.) The number, condition, and suitability of implements and machinery.

(11.) State of the garden and orchard.

(12.) Management of farm yard manure.

(13.) The cultivation of crops, to embrace manuring, clearing, produce per acre in relation to management, and character of soil and climate.

(14.) General order, economy and water supply.

(15.) Cost of production and relative profits.

7. The examination by the judges to be not later than 25th of May, and to be finished in September.

8. The report of the judges to be submitted to the Board, and forwarded to the Commissioner of Agriculture.

We notice that no provision has been made in the regulations guiding this second tour of inspection, for debarring those from competing who won the gold medal in the former competition. We do not know whether this is an oversight on the part of the Council, or if it is intentional. Although good reasons may be assigned for either view, it seems to us that allowing the gold medal farms to compete again in anything but a sweepstakes contest will have the effect of lessening the number of entries.

Agricultural Education.

FOURTH ANNUAL EXAMINATION.

The Council of the Agriculture and Arts Association of Ontario, in accordance with the scheme of annual examination in subjects having a direct bearing upon practical agriculture, already inaugurated, have to announce that the fourth of these examinations will be held at the same time, at the same places, and subject to the same rules, regulations and supervision as the High School intermediate examinations of July, 1887, and of the place and date of which notice will be given through the local press.

The examination papers therefore will be prepared by persons appointed by the Council, subject to revision by a special committee appointed for that purpose. Every precaution will be taken during their preparation, printing and distribution to keep a knowledge of their contents from intending candidates until they are placed before them by those in whose presence the examination is conducted, and the candidates' answers returned to the examiners appointed by the Council of the Association, who will be kept in ignorance of the names of the candidates whose papers they are examining.

Intending candidates are required to send in their names, with a statement as to whether they have ever attended any agricultural school or college in Canada or elsewhere, and also of the place at which they desire to present themselves for examination, to the Secretary of the Association at Toronto, before the 1st of May, 1887.

Only second and third class certificates will be issued, and for these the following course of reading is required:

COURSE OF READING FOR THIRD CLASS CERTIFICATES.

1. Different kinds of soils; their properties; variations in their composition, texture, and condition; essential differences between good and poor soils. Substances found in plants; and sources whence they are obtained. Exhaustion of land; causes; how prevented; best modes of restoring exhausted lands. Necessity for manure; production and waste of farm yard manure; use of artificial manures; lime, salt, gypsum, bone dust, and mineral superphosphates as manures.

2. Tillage Operations.—Ploughing, harrowing, rolling, etc.; respective advantages and disadvantages of deep and shallow, fall and spring ploughing; subsoiling; fallowing; drainage, where necessary and

how done; effects of thorough tillage on lands; times and methods of sowing; after cultivation; harvesting.

3. The crops which each kind of soil is best adapted to produce; succession or rotation of crops; importance and necessity of rotation; rotation suitable to different soils and climates in Ontario; good courses of cropping; bad courses of cropping.

4. Live Stock.—Best kinds of stock for various farms and localities; summer and winter management; economy of good management; general rules for guidance in breeding; conditions and circumstances favorable to cattle farming, sheep farming, dairy farming, and mixed husbandry.

5. Food.—Chemical elements and compounds found in the most important kinds of feed and fodder which can be successfully grown in Ontario; different materials necessary for growth, maintenance of heat, and laying on flesh; feeding and fattening of animals.

COURSE OF READING FOR SECOND CLASS CERTIFICATES.

1. The Plant.—Relations of the mineral, vegetable and animal kingdoms to each other; nature and sources of plant food; composition of the most important crops grown in Ontario; period of highest nutritive value; chemical changes in the ripening of fruit, grain and fodder crops; influence of climate on perfection of growth.

2. The Soil.—Physical and chemical properties of soils; classification of soils as determined by these properties; comparative fertility of different varieties of soil; active and dormant ingredients of soils; best means of converting dormant into active.

Chemical and physical conditions affecting the barrenness and fertility of soils; causes of unproductiveness; power of different soils to hold manure; influence of frost, aspect, elevation and climate on the productiveness of soils.

3. Manures.—Production, management and application of farm yard manure; conditions which influence its quality; comparative values of cattle, sheep and horse manures; green crop manuring; composts.

Properties and uses of artificial manure; plaster, salt, bone dust, and mineral superphosphates as manures; circumstances under which each should and should not be used; times and modes of application; how to avoid the waste of such manures in the soil; their action on seeds and young plants; favorable and unfavorable action of different stages in the growth of crops; action of nitrates and ammoniacal manures on cereals, roots, and grasses; special action of salt when used alone, and also in connection with other manures.

Night soil and animal manures; combinations of manures for certain purposes; manures which impoverish the soil; quantities of manures to be used on various soils with different crops; general principles regulating the selection of manures.

4. Tillage Operations.—Deep and shallow ploughing, fall and spring ploughing, subsoiling, rolling, fallowing, etc.; advantages and disadvantages of each; preparation of land for different crops, as fall wheat, spring wheat, barley, oats, peas and maize; differences in cultivation of light and heavy soils.

5. Seed and Sowing.—Quality of seed; importance of using clean and pure seed; effect of age on the character of the crop; its rapidity of growth and liability to disease; quantity of seed per acre; methods and depth of sowing; change of seed, why necessary.

6. Roots.—Cultivation of roots and tubers—turnips, mangolds, carrots, beets and potatoes.

7. Green Fodders.—Oats and peas, tares, lucern, sainfoin, prickly comfrey, clover, etc.; their comparative values; the management most appropriate for each; management of pastures.

8. Rotation of Crops.—Crops which each kind of soil is adapted to produce; succession or rotation of crops; importance and necessity of rotation; principles underlying it; rotations suitable to different soils, climates and systems of farming in Ontario; their effects on the land.

9. Drainage.—Principles of drainage; effects on soil and subsoil; laying out and construction of drains.

10.—Exhausted Lands.—Causes of exhaustion; how avoided; best means of restoring and enriching impoverished lands.

11. Breeding of Animals.—Principles for guidance in stock breeding; reproductive powers; how strengthened or weakened; pedigree influence—how intensified or reduced; loss of size in pedigree stock; how to control good or bad qualities; maintenance of constitutional vigor; common causes of barrenness in

male and female; special aptitude of certain breeds for different conditions of soil and climate; principles which regulate special peculiarities, such as early maturity, rapid production of flesh, production of milk, growth of wool, etc.

Horses.—Most valuable breeds of horses for this Province; the leading characteristics of each; type of horse required for farm work; breeding, feeding and general management; common diseases and their treatment.

Cattle.—Characteristic points—merits and demerits of Shorthorns, Herefords, Polled Angus, Ayrshires, Jerseys, Devons, Galloways and Holsteins; in-and-in breeding; cross breeding; breeding in the line; results of each system; grade cattle; milch cows—points of a good milk cow; general management; economy of good management; conditions affecting quantity and quality of milk. Common diseases and remedies.

Sheep.—Characteristics of different breeds; long-wooled, medium-wooled, and short-wooled sheep; crosses between different breeds compared; influence of breed, climate, food, soil, and shelter on the quantity and quality of wool—evenness, lustre, yield, fineness of fibre, felting power, etc.; feeding; winter and summer management; management of ewes, before during and after lambing season; rearing of lambs.

Swine.—Characteristics of the most important breeds of pigs; management of sows and stores.

12. Food and Feeding.—Composition and properties of the most important varieties of feed and fodder available to the Ontario farmer; classification of foods; chemical results in the use of different foods; "heat-producing" and "flesh-forming" ingredients in food; best methods of combining these in feeding, so as to secure desired results; points to be observed in order to obtain the full value of natural and artificial foods; increase of value by preparation of food; shelter and warmth as a means of economising food; "good and bad systems of feeding."

13.—Diseases of Crops.—When plants are most liable to disease; causes of diseases; chlorosis; fungoid diseases, as bunt, rust, and mildew; remedies.

14. Orchards.—Planting, cultivation, pruning, grafting, etc.; best varieties of fruit trees for different soils and climates of Ontario; diseases and insect pests.

15. Forestry.—Planting and cultivation of forest trees, shades and ornamental trees, etc.

16. Entomology.—Common insects injurious to vegetation, their habits, and the best means of checking and preventing their ravages.

Besides the certificates already mentioned, the following money prizes will be paid by the Association, viz.,

1st. To the three candidates for second class certificates obtaining the greatest number of marks, \$25, \$20, and \$15, respectively.

2nd. To the three candidates for second class certificates who have never attended any agricultural school or college in Canada or elsewhere, obtaining the highest number of marks, \$25, \$20, and \$15, respectively.

3rd. To the four candidates for third class certificates who have never attended any agricultural school or college in Canada or elsewhere, obtaining the highest number of marks, \$30, \$25, \$20, and \$15, respectively.

As the object of the Association is to promote the development of a taste for reading and the acquisition of valuable information on the subjects mentioned in the syllabus, the examination papers will not be based on any particular book or books, nor are text books on any of the subjects prescribed. They, however, for the convenience of candidates, subjoin the following lists of books of reference which contain a few of the works that may be studied with advantage, and from which a selection can easily be made which will meet their present requirements, List No. 1 is for all candidates, and No. 2 for those intending to write for second class certificates.

1. *First Principles of Agriculture* (Tanner); *Hand-book of Agriculture*, embracing soils, manures, rotation of crops and live stock (Wrightson); *Canadian Farmer's Manual of Agriculture* (Whitcomb); *Soil of the Farm* (Sir J. B. Lawes and others); *Catechism of Agricultural Chemistry and Geology* (Johnston)—new edition, by Cameron.

2. *New American Farm Book* (Allen); *Talks on Manures* (Harris); *Chemistry of the Farm* (Warington); *Elements of Agricultural Chemistry and Geology* (Johnston and Cameron); *Stock Breeding* (Miles)

The Complete Grasier (Youatt and Burn); *American Cattle* (Allen); *Feeding of Animals* (Stewart); *The Shepherd's Own Book* (Youatt, Skinner and Randall); *Treatise on the Pig* (Harris); *Veterinary Adviser* (Law); *Insects Injurious to Vegetation* (Harris); *Insects Injurious to Fruit* (Saunders).

Of these works they would be disposed to recommend especially *The Chemistry of the Farm* (Warington); *The Soil of the Farm* (Sir J. B. Lawes); *Stock Breeding* (Miles); and *Feeding of Animals* (Stewart); and for beginners, *The Catechism of Agricultural Chemistry* (Johnston).

Every farmer in Canada whose son has a predilection for study should encourage him to prepare for these examinations. He cannot go over the above course of study without being greatly benefitted, even though not successful the first time in obtaining a certificate. No one should be discouraged by the formidable nature of the undertaking, for before earnest application every mountain in it will soon become a plain. If intending candidates do not deem it prudent to go up to the first examination they should to the second, and the commencement of the preparation therefor should not be deferred till to-morrow. The true pleasure which the acquisition of so much useful knowledge is sure to bring along with it, should of itself be a sufficient incentive. Further particulars may be obtained from H. Wade, Secretary of the Agricultural and Arts Association Toronto.

Inquiries and Answers.

MATERIAL FOR STABLE FLOORS.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—Being about to build a new barn, and undecided as to the sort of stable floor to put in, would you give the probable cost of flooring a stable, say 30 x 70 ft., with Portland cement? Do you consider it the best floor? How do you like three inch rock elm or cedar bedded in mortar to prevent soaking, and water-lime for the passages?

SUBSCRIBER.

The cost of a cement floor of the dimensions indicated would be about \$120 for water-lime, Portland cement, and the wages of masons. This would not include sand, small stones or coarse gravel, and other labor, but it includes a ledge of stones to form a drop dressed on the top. It would take 35 barrels of water-lime and 10 barrels of Portland cement, to give a three inch coat of the former and a ¼ inch coat of the latter. A floor of cedar or rock elm bedded in mortar will do well as long as it lasts, but will give out in time. Water-lime, too, will break up somewhat after a while. The cement floor, if properly made, is really a very durable floor, but it is only a mason now and then who knows how to construct them properly. We prefer the cement floor.

ALSIKE CLOVER.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—Would you be so kind as to answer the following questions: 1. Where could alsike clover be obtained? 2. Is it an annual or a perennial seed? 3. What time in the year should it be sown? 4. What quantity should be sown per acre? 5. To what soil is it best adapted? 6. How much seed will it yield per acre? 7. Is the straw any good for feed? A. HUFF.

Chatham, Ont., Jan. 11.

1. From almost any seedsmen of prominence in any of our towns. W. Rennie, Toronto; John A. Bruce & Co., Hamilton; John S. Pearce, London, will certainly have it in any quantity that farmers may want.

2. It is an annual in the production of seed—that is, it will produce seed every year after sowing it as long as it lives, but usually it is not well to take seed from it more than twice. The best yield of seed is got from the first cutting.

3. It should be sown the same time as other clover seed, and in much the same way.

4. As to the quantity per acre much depends on what it is sown for. If sown for seed production, from six to eight lbs. should be sown per acre, and no admixture of anything else. If timothy is sown along with it the seed is not easily separated. If sown for hay it should be sown with timothy and red clover, about equal parts of each; and the same for pasture, adding other grasses if desired.

5. It is best adapted to a damp soil. It will flourish in low lands where the red clover will not, but it will grow on almost any sort of soil.

6. It yields from one to four bushels of seed per acre, usually about two and one-half bushels.

7. The straw is as useful for feed as that of any other clover and more so, because it is finer. Of course the straw of any kind of clover is not of much account as to its feeding value, owing to the large amount of woody fibre which it contains and which is indigestible, but in case of emergency it may be used.

Alsike clover is one of those useful exotics that has come to stay. It seems to adapt itself to almost all the conditions of our climate and soil. We promise our readers more regarding it shortly.

WOOD ASHES AS FERTILIZERS.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—I will be pleased to learn through the JOURNAL your opinion as to the advisability of teaming hardwood ashes twelve miles, paying 4½ cents per bus. for them and putting them on a nice mellow clay loam soil, and in what quantity should they be applied. The land is a farm that I have recently purchased and which has been occupied by one man for fully 30 years, and has been badly worked, and consequently requires some renovating.

S. DYMENT.

Barrie, Ont.

Mr. Dymont does not say if the ashes are leached or unleached, which very materially affects the case. If unleached we would not hesitate to draw them in our own case, providing the road was such that a full load might be drawn. If only half a load could be brought at once, then it might be money out of pocket. We believe that a farmer would be safe in giving up to ten cents per bus. for unleached ashes that can be got at his door. They are most excellent applied on land intended for or in meadow, the good effects of one application being visible for several years. They may be applied as heavy as 500 bus. to the acre, but 150 bus. will make a fairly heavy dressing. Leached ashes will well repay the handling where they can be got for little, and convenient.

The Dairy.

It has been stated over and over again by experienced men that it is easily possible to double the milk product of the average dairy cow. Prof. James Robertson, of the Experimental Farm, informs us that ten cows—ordinary Shorthorn grades—at the Experimental Farm during four months, less four days, commencing 24th May, averaged 3400 lbs. of milk. And good authorities, men who have spent a good part of a life-time successfully in producing milk, give it as their opinion that an average of 5000 lbs. per cow per season is easily attainable by giving proper attention to feeding, breeding and shelter. With possibilities so grand in reach, how can the dairymen be content? Why do they not arise and go forward?

The Western Dairymen's Association.

We regret very much that we were quite unable to attend the annual meeting of this Association, which convened in Ingersoll, on the 12th, 13th and 14th of January, and the report of it that we had

arranged for had not come to hand for some reason unknown to us at the date of our going to press. We understand, however, that it was a very successful meeting, and hope to give a digest of some of the papers read there in future issues. We could easily compile from the reports of the daily press, but these are often inaccurate, and information given on any agricultural subject that is not accurate is usually misleading.

Butter Dairying.

We shall fondly hope that the country is at last becoming fully aroused to the importance of this branch of the dairy industry. The tocsin of alarm, lest we should miss forever the splendid opportunities of establishing a flourishing trade in butter with the mother country, has been fully sounded, and at its echo the country is astir. The opening created for our butter in the exhibit sent over by the Government to the Indian and Colonial Exhibition, under the judicious care of Prof. J. W. Robertson, is a wide one, and it would be a woeful blunder not to follow up the advantage by the improvement of every means within our reach that may enable us to do so. There need be no fear that in the extension of the butter trade the cheese industry will be encroached upon. There is yet a vast amount of room unoccupied with either industry, and the extension of the former will, in a way, react favorably upon the extension of the latter in the keeping up of a large supply of dairy cows.

But it is not enough that a disposition is manifested by numbers of our farmers to go into the production of creamery butter, and it is not enough that creamery associations are extensively organized throughout the Province, nor is it enough that there be a plentiful diffusion of literature on the subject, scattered throughout the country. Something more is required, and that something is, we believe, *the appointment of competent instructors*, each to take in charge a number of the creameries, and exercise an oversight over the quality of the product made.

This plan has been adopted in its essence by the cheese dairymen, and after having given it the trial of a number of years, they are so convinced of its advantages that they are petitioning Government to subsidize them, that they will be enabled so to multiply the number of instructors, that every factory in the Province shall be properly supervised.

One great advantage of this supervision is, that it secures uniformity of product. Without this, the reputation of the country as to the quality of its make is sure to suffer, and as a consequence, what is really good is affected in price and readiness of sale by what is not so good or positively bad. The cheese dairymen have conceived the grand idea of having the *whole* of the make good, and we are quite sure that the Government will give them all reasonable aid in so laudable and enterprising.

Now, what the cheese dairymen are seeking to obtain after years of experience, butter dairymen should try and obtain at the very outset. The industry is really in its beginnings, and it is of vast importance that it should be rightly begun. No doubt aid will be required from the same source whence the cheese dairymen get theirs—Government—and we do not see why, when sought, that it should be denied.

The Government is now giving \$3,000 annually to encourage the cheese industry, and more than that sum additional is being sought. As long as this money is well applied, it should not be grudged. The revenue to this Province alone from the dairy industry sums up millions, and we feel safe in saying that this would not have been without the dairymen's associations,

and that these would not have been sustained without the grant. Where, then, we ask, has any money been expended of late years by the Ontario Legislature that has brought in so handsome a return?

The Eastern Dairymen's Association.

This association met in convention in Brockville, on 5th January, D. Derbyshire, President, in the chair.

In his opening address, the President adverted to the splendid exhibit made by Canada at the Indian and Colonial Exhibition, and the very favorable impression which this had made upon the British public. He gave much credit to Messrs. T. Ballentyne, M. P., Stratford; D. M. McPherson, Lancaster, and Prof. J. W. Robertson, of the Ontario Agricultural College, for the strenuous efforts which they had put forth to attain this end. In the course of his admirable address he laid much stress on the necessity which existed for a more careful weeding of inferior dairy stock, and the exercising of greater care in breeding better stock of this class. He also dwelt on the necessity of employing only the best cheese-makers, and gave it as his opinion that every ten factories in any district should have over them a competent instructor. This suggestion was well backed up in the discussion which followed.

Hon. H. Lewis, of Frankfort, New York, then read a paper on butter making, and the reports of the instructors, Messrs. Jas. Whitton and H. Bissell, were then read and adopted.

In the evening, Mr. A. Blue, of the Bureau of Industries, read a statistical paper, in which he made it clear that although the cheese producing qualities of the milk in the Eastern district were higher than in the West, the cheese made in the West brought a higher average in the English market.

January 6th. An address of welcome was tendered the convention by the Mayor and Aldermen of Brockville.

Professor J. W. Robertson, of the Ontario Agricultural College, resumed the subject of last evening. He spoke of the loss entailed on Canada in the British markets by lack of uniformity in product. Cheese makers should keep an official report of the details of make every day to promote uniformity. It should be the aim of makers to produce an article that would not dry out too soon. A good *rind* on a cheese costing the dairyman nothing here, put 4s. a hundred weight on the price in London. The surface of the cheese should be *oiled* immediately before boxing. *Cheese boxes* are often inferior; 20 per cent. of the boxes arriving in Britain are damaged. He would like to have cheese buyers to pass a resolution to buy no boxes not *properly* made. The wooden band of the cheese should be twice as thick.

Lessons for butter makers. Canadian butter makers have been using starchy butter-clothes, the effect of which is to give the outside of the butter a taste. He was not sure if cloth of the right kind was manufactured in Canada, but it could be got in Britain.

The inside of the tub used in shipping butter should be lined with cloth, which can be got for 3 cents per tub. When shipped in tinned tubs, the tin should be free from all breakages of surface, or rust from the tin would affect the butter. White ash tubs were second in favor. These should be uniform in size. English importers favor a firkin holding 100 lbs.—the size in favor with the English buyers, as Danish butter, much sought for in England, has been kept in such firkins. The hoops of firkins should be half-round, and of wood, as iron hoops rust and spoil the appearance of the firkins. He would recommend these packages for creameries. Dairymen should only

use the finest of salt, even though they should pay *five* prices for it. A salt should be used that will dissolve in one hour, and no dairyman should use salt that will not dissolve in 10 hours. One oz. to the pound is enough; this should be the outside limit. Butter should not be shipped made during the summer months after June. Butter dairying should gradually turn largely into winter manufacture, and could be stored for shipment at the proper time. If butter is properly preserved it will not be at its best for six months.

A paper on "The production and handling of milk" was read by Mr. P. McFarlane, of Huntingdon, P. Q. A cow producing but 2,500 lbs. of milk per year does not pay her keep. Cows might be so kept that the product could be double in three years. Cows should have food plenty, pure water, and access at all times to salt. The profit from suitable dairy cows may easily be doubled. He dwelt also on the methods of handling milk properly, and deplored the prejudice that existed amongst farmers to receiving light on the dairy and other matters.

Mr. W. W. Lynch, of Danville, P. Q., read a paper on "Pedigree and performance." Pedigree has no value unless associated with performance. Pedigree was based on performance, and Mr. Lynch traced the steps in registry, which led to the establishment of permanent herd books. Farmers should keep a farm herd book in any case, whatever his particular line of business; and he recommended that the records be kept on one plan, and dwelt upon the advisability of weighing carefully the milk obtained every day.

Mr. H. Wade, Secretary of the Agricultural and Arts Association, read a paper on "Stock raising and pedigree"—tracing the origin and progress of different breeds and families. He did not approve of cross-breeding in dairy stock, although it had done well with the beef breeds of cattle, and with sheep. His own experience had been against it. He then sketched the origin of the Shorthorns and other herd books, and gave many useful facts relating to the early importations; and sketched the work of the Shorthorn breeders in Canada. The officers for the ensuing year were then elected as below:

President, D. M. McPherson, Lancaster; 1st Vice-President, D. Vanderwater, Chatterton; 2d Vice-President, Jas. Bissell, Algonquin; Directors, Wm. Eager, South Mountain; Edward Kidd, North Gore; F. H. McCrae, Brockville; Jas. Haggarty, W. Huntingdon; Platt Hinman, Grafton, and H. Wade, Toronto.

The President elect favored in his address the asking an increased grant from the Legislature to enable the Association to send out additional instructors.

Mr. J. McDonald, Morrisburg, then read a paper on "Butter making." He dwelt on facilities for the expansion of the dairy interest. He enlarged on the wide field in Canada for Canadian dairy butter in Britain, if the quality were right, as it would supplant oleomargarine, so extensively used in that country.

Mr. Shaw followed with a paper on dairy barns. Professor Robertson, in the course of a most excellent address on the dairy, dwelt mostly on the care of dairy stock. He gave as a suitable food ration for an average sized cow, 2 lbs. bran, 2 lbs. oil cake or cotton, 5 lbs. barley and oats, 7 lbs. clover hay and 30 lbs. mangolds, daily. He gave much prominence to the salting of the cows regularly, and stated, as a result of experiments made at the college, that cows salted regularly gave more milk, and that the milk kept sweet much longer. He believed they should have more than what they will lick of rock salt. At-

tention here would increase the milk flow, perhaps 450 lbs. in the season. Cheese-makers should not use home-made rennet; better use the extract prepared. Curd should be cut very small, horizontally first and then perpendicularly. Rough handling of the curd is detrimental.

A delegation was appointed, to ask of the Government an additional grant to enable the Association the more thoroughly to carry on its work. This delegation included in its number the President and ex-President of the Association. In the evening a banquet was given by the Directors, to the strangers and others, which was largely attended, and in every respect a success.

The discussions were kept up on Friday the 7th, and were very profitable. Altogether the meeting was a pleasant and useful one.

Agricultural and Arts Association.

At the Fat Stock Show in Guelph last December, the Council offered prizes for the three best reports of the show, made by students of the Agricultural College. The result is as follows:

1st prize, Clydesdale Stud Book, Vol. I., Mr. Elmer Lick; 2d, Ayrshire Herd Book, Vol. I., Mr. F. J. Sleightholm; 3d, Gallop-way Herd Book, Vol. I., J. G. Scrugham.

The Eastern Dairymen's Association have granted \$200 towards the prize list for the Provincial Show at Ottawa this year. It is to be distributed over the dairy department.

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.

(Continued from January.)

In turning out neck-yokes a careless workman may make nineteen good ones to one that is slighted, but not so with the careless cheese-maker. If his ignorance or inattention spoils one cheese, he spoils them all for the day. In view of these facts no factory can afford to employ an inefficient cheese-maker at any price.

This feature of cheese-making is assuming an alarming aspect. We have been told by men foremost in the business, what many of you doubtless know, that formerly farmers' sons, young men of promise, were anxious to learn cheese-making, but now they are as anxious not to learn it. This omen is most portentous, and cannot but bring mischief. If death is not in the pot, disaster is in embryo, and should at once be taken out.

We read that once in the world's history, the anvil of every smith was taken out of a certain country, from the fear that they would make good swords, and again, that all the artisans and skilled workmen were removed from the same, with a view of crippling its resources, but in both instances it was the work of foes. We never before heard of the men of any craft banishing the best of their workmen through inadequate wages, especially when a standard product could not be produced without the assistance of this class. Dairymen of Ontario, it is a suicidal act, and we ask you to stay the knife before it is too late. It is possible for every dairyman to employ good workmen, if sufficiently paid for their labor. Money will assuredly command skill.

Do not tell me that the business will not afford it, for the moment any business will not afford to pay for competent workmen, it is in the last agonies of dissolution, which we cannot believe is the case with this, one of our country's fairest industries.

In some sections there is a special reason for this state of things—less so in the west than in the east. The people have unduly multiplied factories, which of course has greatly increased the expense of manning them. A cheese-maker taking charge of a factory at only one-half its capacity will cost the same as though it made its full quota, and so of other departments of the work, so that while it is a matter of congratulation that cheese factories have, like the

children of the east, spread themselves over so many counties, it is unfortunate that between some of them, the number of Canadian miles is not sufficient. We do not regard this, however, as being so serious, as shrunken dividends quicker than anything else brings men back to their true equilibrium.

(2). It is possible for every dairyman ultimately to possess *the ever increasing standard of a dairy cow*. The progress made in this direction is surprisingly slow, when compared with advances made in almost every other line of dairying. And yet, if we except the quality of the product, the standard of the dairy cow is the most important feature by far. So much so, that it may be said to underlie all profitable dairying.

Our dairymen deserve great credit for the perfection to which its working machinery has been brought, and yet the most important machine of all, the dairy cow, is still in a most wofully crude state, not yet wrought up to half her possible capacity. If even now the yield to her owner be a profit, what will not that profit be to dairymen who are not content with anything less than 5,000 pounds of milk per season from each cow, instead of 2,692 pounds, the average at present—less than it was in 1882.

Nearly 40,000 stanchions had to be made in Ontario dairies last season to accommodate the increased number of cows, which swells the grand total to 750,000 head, and yet the deplorably low standard of only 2,692 pounds per cow for the season, has been reached—a state of affairs very surprising indeed when we consider the extent of the interests at stake.

The battle of the dairy breeds still rages fiercer, and rage it will in coming time. As to which is the best dairy cow, will form a fruitful subject of controversy in the future, as in the past. But, while the champions of the different breeds are wasting their ammunition in cross-firing to but little purpose it may be, the dairyman alive to his own interests will be handling the breed he has in hand to the best possible advantage. We cannot map out the whole ground which he will go over in this paper, but will indicate some of the leading paths.

He will be scrupulously careful as to the bull which he uses—that is, where the offspring is to be raised, none other will suffice than one from a dam, a large milker, whether with or without breeding. He will adhere to a line of breeding definite in its aim. Instead of trying to get a Guernsey-Jersey-Ayrshire-Holstein-Short-horn cow, he will rather aim at getting a grade of *one* of these, higher and higher in gradation every time, but in one line. Even if his cow is a scrub, he will aim at getting a consistent one, fine enough to go into a scrub register. Experimenting in producing cross-bred dairy cows is a luxury too expensive, and too hazardous for the ordinary dairyman to engage in. The calf that he gets, while he will take every care of it, he will not force it on too fast, lest an undue tendency to fleshiness be developed, which may militate against the future milk product, or in other words, he will remember that the treatment best suited to the production of a model dairy animal is quite different from that which will produce a model beef. He will keep breeding and selecting from the best, or purchase from some one thus engaged, and as the years roll on he will have an ever-improving herd of dairy cows.

These are possibilities within the reach of all, but time is required for their realisation.

The thought often forces itself on our minds, and we cannot put it away, that when the echoes of the battle-cry of the breed shall wax fainter and fainter, and when their respective advocates shall have shaken hands each, over the undoubted merits of the other, that the truth, which in substance we have enumerated, shall rise emblazoned on the banner, emerging from the smoke, which shall proclaim an eternal truce, or in other words, it will be found that a greater difference consists in the way the different dairy breeds are handled, than in the dairy merits of the breeds themselves.

(Concluded next month.)

Poultry.

Remembering the Poultry.

Mr. Wm. Robinson, of Stayner, has prepared a pond for the use of his aquatics that love the water. A boat is kept on the pond, which is useful when the feathered sailors are disposed to be contrary and will not come away as required. We need not add that

the ducks and geese of this farm are a success. It will pay to take care of geese and ducks by providing them with natural conditions, on the principle that it will pay to keep Clyde horses in circumstances favorable to their development. It was very amusing to see them sport on their active element, after having enjoyed a meal. Their very joyousness could not but be favorable to development.

Poultry Association of Ontario.

The annual show of this Association was held in the City Hall, London, Ont., on the 11th, 12th, 13th and 14th of January, and was in every respect a success. There were over 1000 birds on exhibition and the quality was unusually good in almost all classes. Brown Leghorns brought out the best show ever made in Canada and perhaps on the continent. Wyandottes were large in numbers and fine in quality, the pullet that won 1st scoring 94 points; she was owned by a Dundas gentleman, whose name we did not learn. The 1st prize cockerel scored the same and was owned by J. W. Bartlett, Lambeth. The 1st prize cock and hen were not so good. There were 11 cockerels on exhibition and about as many pullets, and were decidedly the best exhibit ever seen in Canada of these birds. We are pleased to see these birds becoming so popular, as they are of great value as a general purpose fowl and also very handsome. No class or section in the show could be called a failure, but those referred to were exceptionally fine.

Mr. Sharp Butterfield, of Sandwich, and Mr. L. G. Jarvis, of Port Stanley, officiated as judges. These gentlemen have acted as judges for some years at this show. Last season Mr. Butterfield was presented with an ebony gold-headed cane, and this year Mr. Jarvis was the recipient of a fine gold watch and chain, in token of the esteem in which they are held by the exhibitors and fanciers who patronize the show.

At the annual meeting of the Association it was decided to hold the next show in London. Mr. Allan Bogue, president, was re-elected, also secretary Garner and treasurer Moore.

Poultry Farming.

BY W. B. COCKBURN, ABERFOYLE, ONT.

(First Paper.)

Let us, then, call the question settled, at least for the present, that poultry farming, if carried on in the most successful way, leads to unlimited success.

First, then, we say keep only *one* breed, unless you can keep them on different farms. On this point my mind is more firmly settled than on any other connected with poultry keeping. It requires considerable room to successfully and profitably keep more than one kind of each variety of pure bred stock—to keep them separate, as they must be kept. My poultry have the exclusive run of thirty acres, adjoining which is an abandoned farm of several hundred acres, [but few keepers of poultry can enjoy this privilege—ED.] and yet I consider myself too cramped for a second breed.

Unlimited range is not essential to the greatest production of eggs, but is absolutely necessary for breeding fowls if you are to attain the highest success in numerous and vigorous chickens, and usually where several breeds are kept this necessary range is either diminished or the flocks are so scattered as to render it too laborious and expensive to give them the best care. Our oldest and most successful breeders base their success on this one truth, and breed their several varieties, or rather have them bred on different farms.

Where three hundred or four hundred fowls are to be kept on a few acres, and the revenue is to come from market eggs and poultry only, and where thoroughbred stock is desired, it is very unwise to keep more than one breed. The expense of building and maintaining several fences is much. The probability of the varieties becoming mixed even then is to be thought of. Where two or more choice breeds have mingled but for an hour, I would not give much for their purity afterwards.

The chief difficulty I find in answering the second point, *which breed is the best*, is this. If I name one, I indirectly say that a dozen or twenty other kinds carefully bred all over the country are not so good, which seems discourteous to my brother breeders. I can only say that after several years of careful experimenting, and noting results, I have selected the Plymouth Rocks as the best adapted to my requirements. But you must select the bird, however, which suits you best. You must raise your own pullets or buy somebody's leavings, which would be a fatal mistake. Whatever breed you select make sure it is of a good laying strain of that breed; a strain which has been carefully bred for years with this particular quality in view. As this idea is the corner stone of success I desire to impress its importance on the minds of those who may read this paper. We purchase a heifer whose mother was a large milker and came from a family of deep milkers, because we suppose she will inherit those qualities, and usually we are not disappointed. We pay a large fee for the service of a stallion because we expect the colt will inherit the valuable qualities of its sire; but no less certain is it that a carefully bred strain of prolific laying fowls will transmit this quality to their offspring.

The successful breeder who makes market eggs his specialty, breeds year after year from his earliest and best laying fowls, and by persisting in this course, establishes a strain of layers far superior to the general average of ordinary flocks of the same breed. For laying purposes as well as for those of early maturity, I would much prefer a flock less perfectly penciled, but bred with an eye to laying qualities, to one with a much higher score but of whose pedigree I knew nothing.

I do not wish to undervalue the "points of excellence" in fowls. I am constantly striving to perfect my poultry in this respect also, but at the same time I try carefully to combine every useful quality, that the breeds may be of some other value than simply to look at.

The Apiary.

Seventh Annual Meeting of the Ontario Bee-Keepers' Association.

HELD IN THE CITY HALL, TORONTO, JAN. 5.

There were about 60 members present before the close of the convention. This meeting was the first held since the incorporation of the association, and the return of the delegates from the Colonial Exhibition.

The president, Mr. S. T. Pettit, of Belmont, was in the chair. In his address he stated that the events of the year 1886 truly mark an epoch in the progress of our association. It has merged from its chrysalis state to enjoy its higher and better, its full-fledged legal existence. "Through the generous assistance given by the members of this association, your commissioners succeeded in putting on exhibition at the Colonial, the largest, and perhaps the finest display of honey ever made in the world.

"The English people of all classes received your com-

missioners with marked attention, and treated us with the greatest kindness and courtesy. Our brother bee-keepers over in the mother country gave us a right royal reception, and vied with each other in making us feel happy and at home during our stay with them. In order to hold and extend the vantage ground in England, a much larger quantity of honey must be produced in the future than in the past. Extracted honey is most used. The supply must be sure and constant, and of the very best and brightest quality, and only that quality sent. No sugar should be fed either for winter feed or stimulating brood-rearing, as ever so little getting with the honey and sent to England or the Continent, would be a sad and calamitous blight upon our future prospects there. I would recommend urgently the tiering-up system, so that the bees may have ample room for storing, while ripening and capping their honey. The greatest weight of evidence goes to show that bees can and do ripen honey better than man. No one claims that the artificially cured article is superior to the natural, while many of the most prominent bee-keepers in the world vigorously contend that the bees are away ahead in that line of business. We are all perfectly safe in trusting the bees to continue the work at which they have been so eminently successful in all ages of the past. The difference in the amount will not be so very great. I believe the keeping quality will be greater, the grain finer and smoother, the clearness and brightness increased, and the flavor superior, if the bees finish the work. This statement is made with all due respect to those who, through defect of the power of taste, think differently."

Members present passed a vote of thanks to the president for his address.

The foul brood question next came up. Briefly, foul brood is a disease not affecting the bee, but affects the larvæ, which dies in the cell, and the particular disease mentioned is contagious, and if proper steps are not taken to prevent its spread, will endanger the existence of the colony, and through contagion, that of colonies in the vicinity.

This disease has had an existence for ages, but with our present advanced method of bee-keeping, the danger of its spread has also been increased, and in consequence the association appointed a committee to wait upon the Ontario Legislature, to ask for an act to assist in preventing the spread, and to stamp out this contagious disease.

Mr. S. Corneil, of Lindsay, stated that until an apiarian department was established at the Ontario Agricultural College, which was much needed, he would move that a committee be appointed to wait upon the commissioner of agriculture, to ask the Government to pay the expenses of a scientific lecturer on bee-keeping, to give a course of lectures to bee-keepers.

Mr. Corneil then stated he had in view Mr. Frank Chesshire, of England, who, he thought, could be induced to come out for his expenses.

Several objected on the grounds that that gentleman would be too deep for the average bee-keeper.

Mr. Corneil was then asked if he would not embody a request that an apiarian department be established at the college. To this, however, he objected.

The motion to engage a lecturer was then rejected, some being of the opinion it would be of no practical value; others, it would bring on too many bee-keepers; others, they were not warranted in asking the Government to make such an outlay at present.

The evening session was set aside as a mark of honor to the commissioners who visited England with the Ontario honey: Messrs. S. T. Pettit, of Belmont; S.

Corneil, of Lindsay; R. McKnight, of Owen Sound; D. A. Jones, Beeton.

Mr. Pettit gave a very interesting account of the quality of honey from other colonies, all of which he had examined very carefully. He stated there was only one sample, one from New Zealand, which could even suggest itself as a rival, and it could never be produced in large quantities, and Canadian honey was ahead of it. He made no comparison with British honey; it was good, and some preferred it to Canadian. If bee-keepers in Ontario would be careful to send only the best and clearest honey to the old country, and worked harmoniously, by degrees their honey would extend its market in Britain and Germany, and they would have a ready market for all they could produce. He condemned strongly sending any dark grades, as it would give other countries an opportunity of palming such grades—of which they could produce much—off as Canadian, and probably injure their market for all grades. If they send their light only, no country could imitate them.

Mr. Corneil gave an interesting and instructive account of his mission. A mistake had been made in sending too large packages of comb and extracted honey. 1lb. packages went well; they had sold much in 4 oz. packages. A crate with 2, 4, 6 or 12 sections of honey, was better than 18 and 24, and as much of the comb as possible should be displayed.

Mr. McKnight related in a pleasing manner some of their efforts to popularise honey. Several tons had been distributed in spoonfuls to visitors as samples. Their honey had reached the Queen's table, that of the Prince of Wales, and many others of prominence. He made bold to say had they been there at the opening of the exhibition instead of its close, they could have sold all the honey produced in Ontario this year in their building.

January 7, 9 A. M.

The hive question came up. Messrs. Pettit, Hall, Emigh and others took part. The general impression was that a hive, from 8½ to 9 inches depth of comb would be the proper thing, with one or more supers for taking the surplus honey, would be the best hive. A few liked a deeper equally well, none a shallower.

The advisability of using perforated metal was discussed. All were in favor of its use as being a great help in taking comb and extracted honey, especially the latter.

The election of officers resulted as follows: Mr. S. T. Pettit, Belmont, re-elected President; Mr. J. B. Hall, Woodstock, Vice-President, with a director from each of the various agricultural districts, who re-elected Mr. W. Couse, of Meadowvale, Sec.-Treas., for the coming year.

R. F. HOLTERMANN.

Brantford, Ont.

Horticultural.

The Price of Experience.

Knowledge gained by *experience* is certainly the most valuable, but it is frequently obtained at an exorbitant price. We should not forget in its acquisition, that the experience of others is of quite as much value as our own when properly attested, and in this way we are often spared the trying ordeal of obtaining it through direct personal effort. By duly heeding this matter, we may save ourselves many a trying ordeal, and the humiliation of many a painful mistake.

In this we see the importance of keeping a record of experience that is useful, and of giving access to it to all who are likely to receive benefit by being thus favored. We are thus furnished with one of the most

powerful reasons for the manufacture and circulation of farm literature, for in its essence it consists but of the records of the experience of the past.

It is humiliating sometimes to tell our experience, especially when the results have been very adverse, and when they might have been very different had we but catered from the experiences of others in laying our agricultural plans. But when the rehearsal is likely to prove serviceable to anyone, we should not hesitate. To do so would be cowardly and might be unkind to our neighbor, hence our reasons for giving our dear bought experience to the readers of the JOURNAL in the attempt to grow apples.

In walking across ten acres of low lying black loam one day, several years ago, in the company of a nurseryman whom we still respect very highly, he stopped in the centre of the field, and sinking the toe of his boot into the pleasant soil, he said, "This would make a fine place in which to plant an apple orchard." This was a dangerous thing to say to a young man owning such a piece of land, in the prime of life, who, from an early day had loved to work with trees, and who was without not a little impulsive.

The next autumn found the ten acres planted with apple orchard; mostly fine young Baldwins, of splendid quality. What was our surprise the next spring to find at leafing time that the leaves did not appear, although the buds were large, indeed bloated in their dimensions. A few of them finally leafed out in a sickly way, but they did but little good.

Next fall came around and found most of the trees dead, but the following spring they were replanted, and five acres more along with them, of similarly situated ground. These made some growth, but did not look just right in the leaf, and the following spring found most of them dead. Nothing daunted we set to work the same season and replanted, changing the varieties, thinking that by planting Spys and King of Tompkins Co., that they would grow, as we had observed that these had done better than the other varieties. We worked away with these two latter varieties for two or three years, but at length was fairly *beaten*, and had to give up the contest. The sickly survivors were flung out with an indignation not much short of anger, and now a flourishing flock of imported Shropshire Down ewes nourish their young from the vigorous growths of alsike clover that grow in the one place, and a herd of Shorthorns in winter feed upon the mangolds that grow in the other. We have learned something in reference to the value of *adaptation* in farming since we first planted those apple trees.

Now we would not have our readers indulge in the thought that those trees had been improperly treated, and therefore the cause of failure. We can furnish incontrovertible evidence to the contrary. Every tree in each of the plantings was set in by our own hand; partly because we loved the work, and partly from the fear that other hands might not do it properly. Simultaneously we set out two other orchards, five acres and twelve acres respectively, and they have done so well that they are the admiration of the people in the entire neighborhood.

No, we were trying to do in our simplicity what could not be done. Soil such as we possessed did not possess the requisite materials for growing apple wood, and if the trees could have been grown they would not have produced fruit worth anything. It would have been small, smoky, insipid, imperfect.

We would not have it understood that apples cannot be grown on black loam under any conditions, but we would have it known that they do not usually flourish on such a soil; hence the difficulty of growing them in all prairie countries. If the loam were

gritty and rested upon a porous sub-soil it would be different, but in our case it was the deposit washed out of purely clay soils, and rested upon what in winter is a damp sub soil.

If any of the readers of the JOURNAL have their orchards planted in such a soil and are wondering why they do not flourish better, they need not look farther for the reason. They will find the trees dark in the color of the bark and mossy, and when a limb is broken it will be found dark in the heart. The fruitage of such trees will never be found vigorous, and they themselves will present that unthrifty appearance which does not fail to cast a shadow over the orchardist's heart.

This mistake we try to look upon in a charitable light, yet we confess it is not altogether easy to defend. In those days Canadian farm literature on these subjects was less abundant than now. We had no Agricultural College then, nor had we any farmers' institutes. While it may have been pardonable in a young rustic in those dark days, before there was much of a shaking amongst the dry bones of old time practice, it would not be so now. If a student of the Ontario Agricultural College were to commit such a blunder, he would deserve imprisonment. If a farmer who attends a farmers' institute, or has the opportunity of attending one, should do so, he should be ostracised; and so of the reader of an agricultural paper. And yet we find thousands of farmers who tell us book farming is of little or no use.

One article such as this we have just penned would, twenty years ago, have saved us just enough to pay for an agricultural paper for five hundred years.

Jottings.

Acme Pulverizing Harrow.—A prominent practical agricultural writer says of this implement: "Its various qualities fit it for easy, rapid and efficient preparation of land and in cheaply working the broad fields of a large farm into 'as fine a condition as a garden.'" See adv't on page 426.

Permanent Exhibition of Manufactures.—A permanent exhibition of manufactures is in process of arrangement in Toronto. The object is to afford facilities to manufacturers to have their wares open to inspection at some commercial centre all the year round. The conception is a grand one. A more extended notice will be given.

Advertising in the Journal.—"I find your JOURNAL a valuable medium for advertising, as I have received a large number of enquiries from all parts of the Dominion, and all refer to my card in your JOURNAL. The demand has been greater than what I could supply."—W. Whitelaw, Guelph.

Turpentine.—Its uses are very various on the farm, and any farmer who has young pine on his land can easily obtain it in large quantities. Bore a hole in the trees in the month of August and it will exude freely, whence it can be easily gathered. Any sired auger will answer, but it is better to be somewhat larger, to facilitate gathering. Our attention was called to this matter while walking through a pine bush on Maple Grove Farm, belonging to Mr. Wm. Robinson, near Stayner, and we note it for the benefit of our readers, who may not have known this method of obtaining it.

Correction. EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.—SIR, Allow me to correct your report on sweepstakes ewe at the Ontario Fat Stock Show, held at Guelph, 8th and 9th December last. You give her breed as Cotswold, which is not the case, she is of the Lincoln breed, and only two years old, and weighs, to-day, 357 lbs. Was 20 lbs. heavier than any ewe or wether. At the fat stock show, she obtained the first in her class, and first in sweepstakes for best ewe of any age or breed, competing against imported Cotswolds, imported Shropshires, imported Southdowns and several other breeds raised in Canada.—Wm. WALKER, Ilderton, Ont.

Dairy Inventions.—Dr. De Laval, born May 9, 1845, in Orsa Parish, Dalcarlia, Sweden, stands at the head of inventors of dairy implements at the present time. He has recently invented two different kinds of hand machines for use in the dairies of ordinary farmers. One of these making 6500 revolutions in a minute, is said to be easily turned by a woman and separates 200 lbs of cream per hour, costing about \$250, delivered in this country. The other, with the same speed of cylinder, separates about 410 lbs per hour, but is more costly than the former. The LACTOCHE, another of his recent inventions for testing the quality of milk, simply, accurately and readily, has met with a good deal of favor where it has been tried. Mr. De Laval still buses himself with inventions in the line of dairy improvement.

Ontario Creamery Association.—The first annual meeting of this association, will be held in the Temperance Hall, Toronto, on Thursday and Friday February 24 and 25. The following are some of the papers that will be read and discussed. How best to secure the patronage of the farmers, to the creamery, etc., by M. Moyer. The proper handling of

the milk on the farm, by Valancey E. Fuller. Centrifugal system of butter making and winter and summer dairying compared, by John Sprague. The future of the foreign markets for Canadian butter, by Prof. J. W. Robertson. Best mode of cooling milk for raising cream, by Geo. Browning. The points of a dairy cow and how to feed, by D. Derbyshire. There will also be papers by American experts. Those who contemplate starting creameries, or desire information relating to butter dairying by way of lectures' instruction, etc., may secure the services of such experienced men as John Sprague, Belleville; D. Derbyshire, Brockville; M. Moyer, Georgetown, and Geo. Browning, Walkerton.

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Forthcoming Public Sales.

The Wyton Stock Breeders Association offer 12 Holstein Freisian bulls and some cows and heifers by auction. Sale in London, Ont., 31st March, 1887. More particulars next issue. See adv't on another page.

A Jeffrey, 130 Bloor street, Toronto, having sold his farm, offers by auction his entire stock of Jersey cattle, Southdown sheep, Berkshire pigs, and Clydesdales, along with all farming implements, etc. See adv't on another page for particulars. The Jerseys were successful in the show rings of 1886 in Toronto, Guelph and Hamilton. The sheep were imported by the well known firm of E. & A. Stanford; the Berkshires, of the Snell stock. The Clydesdales are Canadian bred, with 3 and 4 crosses. This sale should be well attended, as we think it a good opportunity for those desirous of purchasing choice stock.

John D. Howden, of C. Lumbus, Ont., having rented his farm, offers for sale, 15th March, 1887, the whole of his stock, comprising 25 pure bred Shorthorn cows and heifers, 5 pure-bred bulls, 30 high standard grades, 15 Clydesdale mares and fillies, 1 stallion, 4 Shetland ponies, 30 Cotswold ewes and a number carriage mares and fillies. See adv't on page 421 of this issue. Read Mr. Clark Playter's adv't on page 421, to take place 3d of March, 1887 when he will offer by auction 24 Shorthorn cattle, 20 pure bred Cotswold sheep, and six heavy draft geldings and mares.

On 15th March, 1887, Dugald McPherson will sell by auction 28 high grade cows, heifers and steers, 4 draft colts, 2 well-bred long wool ewes, ewe lambs, Berkshire pigs, etc. See advertisement in this issue.

James Gardhouse & Son offer some fine young Shorthorn bulls by auction on 23rd February. Their adv't appears on p. 420 of this issue. Auction sale of Thos. Nicholson & Son takes place on 8th of

March, 1887, when 25 head of choice Shorthorn cattle are offered to the highest bidder. Their stock bull Prince Albert was sold between the time of their sending adv't to us and the issuing of the JOURNAL for January. See adv't. John B. Conboy, Bellefontaine, Ont., has an auction sale, 2nd March, 1887. See adv't, page 420.

Stock Notes.

Horses.

Messrs. W. H. & C. H. McNish, of Lyn, Ont., have purchased a pair of Clyde fillies. One from John Davidson, Balsam, and the other from Mr. Ballsome, of the same place.

The illustrated catalogue of Galbraith Brothers' Clydesdale and English Shire horses to hand. It is a handsome work of some 81 pages, and is profusely illustrated with horses from their own stud. In the next issue we shall try and find room for a brief sketch of this grand stud in our notes column. It is owned by Galbraith Bros., and is located at Janesville, Wlconsin, U. S. A. The catalogue comprises no less than 115 head of Clyde and Shire horses and mares and 50 Shetland ponies. A list of six pages is appended with names of horses imported since 1881, of which fully two-thirds have been prize winners, either in Europe or America. (See advertisement.)

Mr. Wm Rennie, seedsman, Toronto, reports the following sale of imported Clydesdale horses from his farm in Markham: "To Wm Mulock, M. P., Newmarket, Ont., Viola, foaled 1st May, 1884; sire, Springhill Hornley (2479); dam, Lumloch Bell (2688); sire of dam, Lucks All (510). Also sold to Mr. M. J. Bella, foaled 1884; sire, Sunbeam (1834); dam, Nancy; sire of dam, Lord Clyde (177). To Chas. Nelson, Madison Wis., U. S., Wattie, vol ix, foaled 25th May, 1885; sire, Maclean (2091); dam, Bell of Ascog (813); sire of dam, Surprise (815). Sold to Henry King, Priceville, Ont., Dandy Boy, vol ix, foaled May 1884; sire, Harold (2854); dam, Darling (2877); sire of dam, Old Times (599). He adds, "The balance of my imported Clydesdales (eleven in number), are doing nicely."

Shorthorns.

Messrs. W. & C. W. Carroll, Norwich, Ont., are the owners of two Shorthorn cows in calf and a bull, all registered in the new D. S. H. B.

We understand the Shorthorn bull, Sir Edward, owned by Mr. John Johnson, Port Hawkesbury, N. S., is doing well. His calves are of a high order.

Mr. Jas. S. Smith, Maple Lodge, Ont., reports: "Our stock are doing well; have a lot of fine young calves. We have four young bulls on hand yet for sale. Good ones."

Mr. F. W. Stone, Mereton Lodge, Guelph, has just sold to Mr. James Cowan, west end, of the same place, the finely bred Bates bull, Baron Craggs 6th, to head his herd. He is a very promising animal.

Mr. James Carswell, of Renfrew, President of the Agricultural Society of South Renfrew, has a nice herd of 7 head of Shorthorn cows, and quite a number of young ones. They are grounded on stock from the "Willow Lodge" herd of J. C. Snell.

Mr. W. J. Biggins, Clinton, Ont., writes: "The Messrs. J. & W. B. Watt, Salem, Ont., have purchased from me, Matchless of Elmhurst 3d, and Matchless of Elmhurst 10th. Matchless of Elmhurst 3d, is from the same cow as Matchless of Kinellar ad, which Mr. Watt purchased from me with some other Matchlesses 6 years ago, and which was one of the most successful prize winners in Canada."

Mr. Joseph Magill, Janetville, Ont., has sold one bull and three heifers (Shorthorns), to Mr. John McHugh, Cresco, Iowa. They were all sired by Mr. Magill's imported bull, Prince Bishop, bought from Mr. Jas. I. Davidson, Balsam, Ont., and sired by Mr. A. Cruikshank's famous bull, Dumbleane (47792). In 1886 these calves won 1st and 2d at Bethany; 1st and 2d at Peterboro, and two seconds at Linday.

Mr. Peter Toles, Mr. Brydges, has sold to Philip Hansford, Strathroy, Ont., the Shorthorn bull calf, Lord Lorne, sired by Lord Chamberlain, and from the dam, Lady Lorne, which is a noted milker. Mr. Toles writes the imp. bull Invincible, bought from John Miller & Sons, Brougham, is proving himself a grand bull, and a sure and impressive sire. He is out of the dam, Jessamine 3d, and by Mr. Cruikshank's famous bull Vermont (47193).

Mr. Heber Rawlings, of Ravenswood, Ont., has just purchased from Mr. Arthur Johnston, of Greenwood, Ont., the young bull Minister Eclipse, to place at the head of his Shorthorn herd, which numbers 21 head, of which 13 are females, and all are entered in the new Dominion herd book. Mr. R. has 8 young bulls, sired by Clarence—2480—bred at Bow Park. The cow Lady Stanley has a very fine pair of twins (bulls), and another of the herd, Queen of the Fashions, has produced twins, also a bull calf and a heifer. All are doing well.

Mr. David Milne, Ethel, Ont., began breeding Shorthorns in 1882 with two heifers, purchased from Mr. Henry Reed, of Glanford, Ont.; and in 1882-3, he purchased from J. & W. Watt, Salem, the famous young bull, Lord Lovell (10164); also the two cows, Maid of Avon and Lady Jane, and about a year ago he purchased five head from the herds of John Miller & Sons, Brougham, Ont., and Arthur Johnston and David Birrel, of Greenwood, Ont. The herd, after selling 12 head, now numbers 31 head, with seven cows yet to come in, among which is four good young bulls and two imp. yearling bulls. Stock done well this winter.

Mr. J. E. Brethour, Burford, Ont., has lately purchased a pure white steer calf, bred from the Messrs. Green Bros., Earl of Mar, for feeding purposes. The whites, so unpopular in the United States, furnish more prize-winning feeders in proportion to their numbers than any other class of Shorthorns, and is it not feeding qualities that are most sought in breeding them? Mr. B. informs us that his stock, this winter, are doing very well, and that the demand for pure-breds is very good indeed.

Advertising Rates.

The rate for single insertion is 18c. per line, Nonpareil (22 lines make one inch); for three insertions, 15c. per line each insertion; for six insertions, 12c. per line each insertion; for one year, 10c. per line each insertion. Cards in Breeders' Directory, not more than five lines, \$1.50 per line per annum. No advertisement inserted for less than 75 cents.
Copy for advertisement should reach us before the 25th of each month (earlier if possible). If later, it may be in time for insertion, but often too late for proper classification. Advertisers not known at office will remit cash in advance. Further information will be given if desired.

STOCK FOR SALE.

IMPORTED PERCHERON STALLION, 7 years old, for sale fe-2 For particulars, address C. S. SMITH, Tiltonburg, Ont.

FOR SALE—A few good and splendidly pedigreed pure-bred Berkshire Pigs. **THOMAS SHAW**, Woodburn P. O.

CLYDEs a specialty. 4 registered brood mares. Stock for sale. **R. C. Brandon & Co.**, Peardale Farm, Cannington, Ont.

DAVID MILNE, Eitel P. O. and Station, Ont., breeder of Scotch Shorthorns. Young bulls and fema'es for sale. Imp Red Knight at head of herd.

FOR SALE—One good Shorthorn Bull Calf, by Imported Waterloo Warden (47222). Price moderate. **THOS SHAW**, Woodburn P.O., Co. Wentworth.

FOR SALE—PUREBRED PERCHERON STALLION, successful prize winner at Toronto, Hamilton, and wherever shown. For terms, etc., apply to fe-1 **J. E. or J. H. HARRISON**, Milton, Ont.

FOR SALE—Two Shorthorn Bulls, one 11 months, the other one year. Also, a few Heifers, first-class animals. Prices reasonable. Address, **ANDREW GILMORE**, Huntingdon, Quebec. fe-3

FOR SALE—SHORTHORN BULL CALF, twelve months old; color, dark roan. Registered in Dominion Herd Book. Sired by (Imp.) Barron (52434). Apply to **JOHN CURRIE**, Everton, Ont.

FOR SALE—Six choice young SHORTHORN BULLS, and a number of very fine young Heifers, from seven to fifteen months old, all registered in Dominion Herd Book. Prices reasonable. Come and see us, or write for particulars. **GRAHAM BROS.**, Belvedere Stock Farm, Ailsa Craig, Ont. fe-3

FOR SALE. 5 first class young SHORTHORN BULLS, from imported stock; cheap. Send for catalogue and prices. fe-4 **EDWARD JEFFS**, Bond Head, Ont.

FOR SALE, TWO SHORTHORN BULLS, one and two years old, first class animals with good pedigree. a-3 **JAMES MILNE**, White P.O., Ont.

12 CHOICE Shorthorn Bulls and **20 Cows** and Heifers for sale, all registered in D. S. H. Book. Price reasonable. Address, **PETER ARKELL**, Teeswater, Ont.

FOR SALE Five choice DEVON BULLS and two COWS, and also recorded Berkshire Pigs of both sexes. **W. J. RUDD**, Arkell P. O., near Guelph, Ont. ja-2

For Sale—Two Imp. Shire Stallions.

One a prize winner at the Provincial Show. Will be sold cheap to make room for a fresh importation. Also **CARRIAGE STALLION**, inbred Royal George and Imp. Lapidist; good bone and action. Come and see these horses before buying elsewhere. Correspondence promptly attended to.

ORMSBY & CHAPMAN, Ontario Lodge, Oakville, Ont.

FOR SALE

12 varieties of Poultry. Mammoth Bronze Turkeys, Toulouse and Brown China Geese a specialty. One Cleveland Bay Stallion, imported in August, 1886. Also, Abyssinia Oats for seed—48 lbs. measured bushel. I sowed 17 lbs, they grew 21 bushel. Send 3 cent stamp for particulars, to **MAJOR THOS. HOPKINSON**, Myrtle P. O., Ont. fe-3

Shorthorn Bull Calf For Sale.

A first-class animal. **THOMAS SHAW**, Woodburn, Ont., Co. Wentworth.

Two Choice Bulls For Sale Very Cheap

Sired by Prince James (95); one 23 mos old, weight about 1500 lbs., not registered; the other eight mos old, registered in B.A. Herd Book. **J. S. FREEMAN**, Freeman P. O. jan-3

FOR SALE.

6 YOUNG SHORTHORN BULLS, from 10 up to 20 months old, sired by Prince James, all registered in Dominion Shorthorn Herd Book. ja-2 **THOMAS ALTON**, Appleby T.O., Ont.

FOR SALE.

SHORTHORN COWS, HEIFERS and BULL CALVES, mostly of the imp. Sym and Mara strains, the latter from the herd of the late R. A. Alexander, of Kentucky, all registered in the new Dominion Herd-book. Southdown sheep and lambs also for sale from stock imported from the flock of Henry Webb, Esq. **JOHN MILLER**, Markham P.O., Ont.

Markham Station, on the Midland R.R. and Green River on the C.P.R. sep-6

We may add that we saw the carcass of Mr. Brethour's Cherry Bounce, in the market of our city, at Christmas time, and that it cut up remarkably well.

Mr. John Isaac, Homantou, On., informs us that, although having made a large number of sales during the past year, he has still on hand, twenty head of very choice Shorthorns; most of which are imported from that well-known herd of S. Campbell, Kinellar, Aberdeenshire, Scotland. Mr. Isaac had arranged to have fifteen more head imported last fall, but owing to the breaking out of pleuro-pneumonia, he was forced to postpone their importation. Although Mr. Isaac has been engaged in breeding and importing for upwards of twenty years, he says he has never had so great a demand for his stock as during the past year, nor has he ever had his stock in better condition than they are at present.

Mr. Wm. Wilson, Brampton, Ont., is the fortunate owner of a well furnished and grandly pedigreed Cruickshank bull, purchased from James I. Davidson, Balsam, Ont. His name is Endymion, a roan in color, he was bred at Sittytou, and was calved in March, 1886. He is of the Duchesse of Gloster tribe, straight for six generations and all bred at Sittytou, going back to R. Colling's Magdalena of the 6th generation. He was sired by Dumbiane (47792), and from the grand sire, Lord of the Isles (40218); the fifth sire being the famous Champion of England (47356). He and all the succeeding sires were bred at Sittytou. Lord of the Isles, a blackish Bull, bred at Sittytou, was sired by Scotland's Pride (45100), a winner in a strong ring of yearlings, at the Highland Society's Show in 1867, and own brother to the show bull, Pride of the Isles.

Mr. J. S. Williams, Rugby Farm, sends the following: "I take pleasure in reporting sales of forty-two Berkshires, at from ten to thirty dollars each, and ten Shorthorns at an average of ninety-eight dollars each, since the first of October, 1886, which shows there is a demand for improved stock at moderate prices. The following is a list of some of the purchasers: To Mr. A. Ball, Stanstead, one pair pigs; Mr. Geo. Layfield, Gould, P. Q., the boar, Senator; G. G. Stevens, Waterloo, Que., two cows, one heifer calf and pair pigs; O. S. Joslyn, Wainfield, Vt., one yearling bull; C. H. Joslyn, Brownington, Vt., one cow and one yearling bull; C. S. Wilson, Derby, Vt., one cow and one pair pigs; G. J. Gross, East Coventry, Vt., one cow; B. C. Boden, East Coventry, Vt., one cow and one sow in farrow; Chas. Thibeault, Ottawa, Ont., one sow and one young boar; James R. Booth, one pair pigs; Mr. Sawyer, Sutton, one bull calf, etc.

Messrs. Sharman & Sharman, Souris, Manitoba, write under date of Dec. 29: "We have done very well at the fairs this fall for new beginners. It is now only a little over two years since we brought up our first lot of Shorthorns. At the Provincial at St. Boniface, we took the red tickets on Shorthorn cow, heifer two years old, heifer calf, bull, two years old, and also on Berkshire boar and sow, under one year; second at the same place on aged bull, cow, three years old and on bull calf; also third on bull calf and second on herd of bull and four females. At Carberry we took six firsts, and at Brandon nine firsts, two seconds and two diplomas, one for best bull, the other for best heifer on the ground; and for herd, we secured the gold medal, given by Russell & Cooper. At Souris, with stock not shown at any of the other fairs, we took ten firsts and two seconds. We find a growing demand for this class of stock. Our crop of calves, sired by Prince James 2d, are a particularly fine lot." They conclude by wishing the JOURNAL a well earned increase in circulation.

Mr. H. H. Spencer, of Brooklin, Ont., sends the following list of sales since last report: "A very choice red bull calf sold to Mr. James Leask, of Greenbank, which took the first prize in a strong competition at the South Ontario Exhibition, also first prize at township show, held at Oshawa. He is sired by the noted Cruickshank bull, Vensgarth (47192); dam, Isabella 3d, vol. iii, B. A. S. H. B. To J. C. Snell, of Edmonton, the sweepstakes yearling red bull, Glamias, which made so good a beginning in the show-ring, taking 1st prize at township union show, held at Whitley in April, 1886; 2d at South Ontario Co. Show, held at Whitley in September, also first in his class, and the sweepstakes for the best bull of any age, at the Ontario Central Exhibition, held at Port Perry. This bull is also a good stock getter. He was got by the Cruickshank bull, Lord Glamias (48192); dam, Isabella 3d. In Berkshires, eight in number, have been sold since I last wrote, an extra choice young boar, having been sold to Mr. Jos. Ward, of Balsam. In Shropshires, all are doing well and looking well. Having disposed of my Southdown flock, I intend to pay strict attention to my Shropshires, breeding from nothing but the very best of ewes, and only the choicest of rams."

Mr. J. C. Snell, Edmonton, Ont., whose announcement of a public sale of Shorthorns, on April 7th, appears in our advertising columns, writes us as follows: "Having let the contract to Mr. W. H. Worden, of Manchester, Ont., to pull down my barns and build greater, I cannot without great inconvenience handle my stock the coming summer; being also short of grass land. I have resolved to sell my Shorthorns as announced, without reserve, feeling confident that I have the sort of cattle the people want, and that an appreciative public will not see them sacrificed. It is not often that as many as seven young imported cows and their immediate descendants are offered in one sale, and the probability is, that such another offering will not be made for some years, in view of the present quarantine regulations, and as these are all of the blocky, thick-fleshed, good breeding sort, which the present times demand, I think I am justified in expecting a fairly good sale. The country needs just such stock, and, thanks to the influence of the JOURNAL amongst other things, the conviction is rapidly growing that the *scow* must go, and one of the ambitions of my life has been to have a hand in crowding them out and filling their places with a class of stock which will make vastly better returns for the space they occupy and the food they consume."

Mr. J. W. Bartlett, of Lambeth, Ont., writes:—"Shorthorns in Westminster are in the ascendancy. Besides the grand herd of Cruickshank cattle owned by Frank Shore & Bros., White Oak, there are several small herds, some of which are of great merit. Prominent among these are the herds of D. B. Burch, J. P., and Mr. Andrew Routledge, of Lambeth. Mr. Burch

Improved Yorkshire Pigs For Sale.

Imported pedigreed Boars, ready for service, from the best herd in England. Every pig sold registered in English Herd Book free of charge. Prices as low as in England.

ORMSBY & CHAPMAN, Ontario Lodge, Oakville, Ont.

ENGLISH PEDIGREED STOCK.

Shire Horses, Hereford Cattle, Shropshire Sheep, Berkshire Pigs and Cooley Dogs are bred and can be supplied by **T. S. MINTON**, Montford, Shropshire R. S. O., England.

FOR SALE

THREE SHORTHORN BULLS, from 9 to 13 mos. old, got by Starlight Duke and, eligible for entry in the new herd book. Also **ONE CANADIAN BRED CLYDESDALE STALLION**, rising 5 yrs. old, a sure foal getter and a good sire. Will be sold cheap. **RODERICK McLENNAN**, Lancaster P. O., Ont. fe-2

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 3rd, 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. ja-3

Clydesdale Stallions For Sale.

FOUR Pure-bred Clydesdales, coming four years old; all prize winners; imported by undersigned; for sale at reasonable prices. Pedigrees on application.

fe-2 **ISAAC PICKERING**, Forest, Ont.

FOR SALE

The Clydesdale Stallion **PORTLAND**, imported by Jeffrey Bros., 6 years old, sound, and sure stock-getter. Will be sold cheap to close a partnership. For particulars apply to fe-1 **T. GUY**, Cahawa, Ont.

For Sale—Two Jersey Bulls.

Registered in the A. J. C. C. Also some **GRADE HEIFERS** in calf to Jersey Bull; ages from one to four years, and from 4 to 8 bred. Apply to **SAMUEL SNOKE**, Canning, near Paris, Ont. fe-3

SHORTHORNS FOR SALE.

Young Bull; color, red; fit for service. Also two Heifers and a young Cow; two of the above carrying calf to Orpheus 19, bred at Bow Park. All choice animals. Will be sold reasonable. The cattle are registered in Dominion Herd Book. **WILLIAM DAWSON & SON**, Railway Station and Post Office, Colling Bay; 8 miles from Kingston, on Bath Road.

THOMAS McKAY, Breeder of Shorthorn Cattle and Clydesdale Horses, **DRUMBO P. O., OXFORD CO., ONT.**

has for sale a number of choice young bulls and heifers, also one Clydesdale Stallion (Canadian bred), rising 3 years; color, bay; weight, 1700 lbs. fe-3

FOR SALE

Four Young Shorthorn Bulls Sired by the celebrated Cruickshank bull Glencairn.

GLENCAIRN is a well furnished bull, has been two years in service in my herd, and the uniformly good character of his calves stamp him as a good stock-getter. He was sired by Victor Regale (47205), and traces through 14 generations on the sire's side to Palmtree (480). His dam is imported Clementine by Good Hope (44884), of the famous Clementines of Sittytou. **JOHN I. HOBSON**, Mosborough, Ont.

CLEVELAND BAY STALLION

FOR SALE

KING FAIRFIELD, three years old, sound, gentle and sure; took first prize at the Industrial last year, and at this and all local shows sire and dam were each awarded the diploma at the Industrial, at the age of three years. This is a rare opportunity to buy both style and breeding. **W. C. BROWN**, breeder of Cleveland Bays, Meadowvale P. O., Ont. Farm, 1/2 mile from Meadowvale station, on C. P. R. ja-3

EGGS FOR HATCHING—Plymouth Rocks, first class. **THOS. SHAW**, Woodburn P.O., Ont.

FOR SALE
4 SHORTHORN BULLS
 12 to 21 months old, sired by 16th Seraph All registered in Dominion Shorthorn Herd Book
JAMES G. PETTIT & SON, Burgessville P. O. and Station, Co. Oxford, Ont.

ARTHUR JOHNSTON,
 of GREENWOOD, ONT., offers
FOR SALE 16 IMPORTED HEIFERS and YOUNG COWS and about the same number of home bred young things, as well as a few young imp. and home bred Bulls.
 He also offers at reasonable prices a number of imported yearling and two year-old CLYDEDALE STALLIONS and FILLIES.

STALLIONS FOR SALE.
 An Imported Recorded Clyde and a Cleveland Bay. Pedigree and other information sent free on application to
THOMAS TAYLOR, HARVILL P. O., ONT.

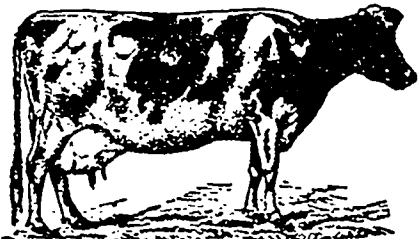
THE BREEDS OF LIVE-STOCK.
 BY J. H. SANDERS, CHICAGO.
 An exhaustive treatise on the general principles of breeding, with comprehensive descriptions of all the breeds of horses, cattle, sheep and swine known in this country, illustrated with 135 of the finest engravings of live-stock ever executed. The whole forming one of the most attractive and instructive books upon live-stock ever issued in America. It is a work that every stock breeder will be proud to have on his table, and one that cannot fail to interest and instruct any person who takes the slightest interest in the subject. Front of the name may quickly learn the distinguishing characteristics of all the various breeds, and its beautiful engravings will prove a constant source of pleasure and instruction to all. Four hundred and eighty large octavo pages, printed on the very finest plate paper, elegantly and strongly bound, in cloth, \$3. half morocco, marbled edges \$4. full morocco gilt edges, \$5. It may be obtained, in cloth free as a premium for a club of six new subscribers to THE CANADIAN LIVE-STOCK AND FARM JOURNAL, at \$1 each. Address:

THE STOCK JOURNAL CO., Hamilton, Ont.
ALTON HALL STOCK FARM.
 H. SORBY, Proprietor.



IMPORTERS AND BREEDERS OF
GALLOWAY CATTLE
 AND PLYMOUTH ROCK FOWLS.
 Galloway Bulls, Cows and Heifers for sale,
 H. SORBY, Proprietor,
 (near Guelph.) Courcock, Ont.

The Manor Stock and Dairy Farm



HOME of the imported Holstein Friesian bull MARS ELLIS No. 621, Vol. 1, H F H B, selected in 1874 Holland by special request and whose 3 calves secured first prizes at the Dominion Exhibition, held at Sherbrooke, Que., Sept. 1st, 1884.
 Parties wishing to secure bull calves or yearlings from such a grand individual, and out of nothing but imported Holstein Friesian cows, will find it to their advantage to write to
B. N. RITCHIE,
 Ste. Anne la Perade, C. P. R., near Quebec.
 No Reserve. All stock for sale, and in A. condition.

SITUATION WANTED by an Englishman, married without family, as farm manager. Breeder of Hereford cattle and Shropshire Sheep in England, also farmed extensively, and stands cultivating all kinds of soil. First-class reference. Apply **HEREFORD,** Angus, Ont.

has, during the last eighteen months secured a fine herd, numbering in all twelve head besides two fine Waterloo cows now in quarantine at Point Levis. He has two fine Constance calves and five cows of the same also four other choice cows of different families, and one calf. Mr. Burch has lost no less than four head in the two years he has been breeding, two of which were poisoned, but how it is not well known. Mr. Gibson's Wild Eyes bull is at the head of the herd. We look for good results from this herd, as Mr. Burch cultivates two hundred acres of choice land, and is in all respects a progressive farmer, and possessed of sufficient capital to overcome any transient drawbacks that may overtake him. Mr. Routledge is the best example we have ever met with of what may be done without heavy expenditure. Some years ago he bought from Colonel O Malley, of Wardsville, the fine cow Florentia 24th, and now has from her progeny five head besides herself, three of which are sired by Mr. Gibson's Oxford Duke and the remainder of Kirklevington origin. Florentia 24th comes of grand stock, being by Lord Wiley, dam, Florentia 22nd, by 14th Duke of Thorndale, who was sold in his eighth year for \$17,000.

Mr. Arthur Johnston, of Greenwood, Ont., reports the sales to Mr. Heber Rawlings, of Ravenswood, Ont., of the young bull, Minister Eclipse; sired by the imported Dutchie bred bull, imported Eclipse (49526), and out of the imp. Campbell bred cow, Minerva, by the Cruikshank bull, Luminary (34715). Minerva won third prize as a three-year-old cow, at the Royal Northern Society's Show, at Aberdeen in 1882. Eclipse won second prize at the same Society's Show, at Aberdeen in 1884, as a two-year-old bull, being beaten only by the famous Field Marshall recently sent by Her Majesty the Queen. To Mr. John Lee, of Highgate, Ont., he sold the very promising bull calf, Grand Master, also sired by Eclipse (49526), and out of the grand old cow, Rosedale 5th, of the best Kinellar sort; sired by Scotsman 3d - 102 - , a son of the imported first prize Provincial bull, Scotsman 2d (35484), and out of the imported Highland Society prize heifer, Princess 2d, by Lord St. Leonard (2992). Rosedale 5th is one of the very best females in Greenwood herd, and has produced some of the best things bred there. Grand Master is an exceedingly good calf and will make a first-class bull. To Messrs. Thomas Nicholson & Sons, of Sylvan, Ont., Mr. Johnston reports the sale of the grand yearling bull, Warrior, with four top-crosses of the very best Sittytton blood, on a Miss Ramsden foundation. To Mr. Simon Shaver, of Lunenburg, the red yearling bull, Duke of Orange, by the imported Sittytton bull, Duke of Lancaster, and of the Syme family. To Mr. John Weir, of West Flamboro, a fine, fleshy young bull, Grand Star; sired by Eclipse (49526) and out of Stamford 9th, by Scotsman 3d - 102 - , grand dam, imported Stamford 6th, by McDuff (26773). This young bull is out of the same cow as the extra good yearling heifer shown by the Messrs. Watt in 1883, winning first prize at the Industrial show at Toronto, and the Provincial show at Guelph, as well as at other important shows. To Mr. Edward Norton & Sons, of Claremont, he sold the imported two-year-old stallion, Dollar Chief (4335), winner of the third prize at the Sterling Summer Show, on June 11th, 1886. To Mr. Wm. Gardner, of Ashburn, Ont., the pure-bred Clydesdale yearling filly, Bell 3d; sired by imported Sea Pilot (3177), and out of imported Bell 2d, by Prince Edward of Wales (1255). Mr. Johnston adds, "Inquires for pure-bred stock of the best quality are quite as good as I have ever known them at this season of the year; and they nearly all refer to your excellent paper as the source of their information."

Galloways.
 Mr. Wm. Kough, of Owen Sound, Ont., is making a favorable impression with his Galloways as beefers. At the Christmas Fat Stock Show, held at Owen Sound in December, the sweetest prize given by the butchers for the best quality of beef, and for killing qualities, was awarded to Mr. Kough for a Galloway grade heifer, 19 mos. old, and weighing 1010 lbs. On Dec. 16th, 1886, he sold this heifer and another 18 mos. to Mr. R. B. Wilkinson, of the same place, which dressed 74 and 71 1/2 lbs to the 100 lbs. Although competing with heifers and cows nearly three years old, the great prize of the show went as above. It will be remembered that Galloway beef brings more per pound in the London market than that from Shorthorns; that a Galloway took 1st prize at New Orleans in 1885, and at Kansas City in 1885-6 on the block.

Herefords.
 From Mr. F. A. Fleming, of the Park, Weston, Ont., we learn with regret that the magnificent young Hereford bull Baron Wilton, succumbed to a disease that the veterinary in attendance called acute indigestion. On the 27th December he refused to eat anything, although hitherto fed regularly, and his appetite had been good up to that time. Dr. Smith, of the Toronto Veterinary School, was called out but nothing could be done to save him. A post-mortem revealed the bowels and stomach inflamed. Baron Wilton at Toronto and Guelph took two firsts and a silver medal; the latter in Toronto when 8 mos. old. The medal was offered for the best Hereford bull any age. Mr. Fleming imported the dam in the spring of 1885, and had her served by the famous Lord Wilton (1710) before leaving England. The dam Senora (21861), is by Morton (14931). Several good offers had been refused for Baron Wilton, including one from Mr. Benson, of Cardinal, to head his herd, and another from Mr. T. F. Sotham, of Pontiac, Mich., a son of the first importer of Herefords to America on the ground that Mr. Fleming considered him the most suitable animal to retain in his herd as the stock bull. We are glad to learn that the other animals of this herd are all doing well, calves to come all through the winter, and those already to hand strong and vigorous.

Mr. R. J. Mackie, of Springdale Farm, Ottawa, Ont., has not only been very successful in the show ring at the exhibitions last fall, but has also made a number of sales since, which have nearly all been effected by exhibiting his stock at the large exhibitions, and has sent the Herefords into a number of new counties in Canada. Mr. H. Rawlings, of Ravenswood, Ont., has purchased eight head, with Sir Wilton 2671, at the head of them. Sir Wilton is by Conqueror 10275, the 50 guinea bull at the Experimental Farm, The Farm, Freda 1277, by Charity 3d, by that noted bull The Grove 3d. This is a very fine bull and will make his mark some day. He is got by the best bull on both sides that can be found - Lord Wilton and Grove 3d. Graceful Lady 12439 by Bonnie Lad 3d. Graceful Lady 3d 22579, by Cecil 12469, and a pair of twins by Cecil 12469.

Dominion Shorthorn Breeders' Association
THE FIRST ANNUAL MEETING of the Association will be held in
Toronto, on Thursday, Feb. 24th Next.
 Due notice of hour and place of holding will be given by circular, to which will be attached one-and-one-third fare railway certificates.
HENRY WADE, Sec.

Clydesdale Association of Canada.
 The Association proposes holding its first annual **SPRING STALLION SHOW** AT **TORONTO**, on **WEDNESDAY, MARCH 16th NEXT**. Liberal premiums will be offered for the following three classes:
 1st - Stallions foaled previous to 1st Jan., 1884 - 5 prizes.
 2nd - Stallions foaled in 1884 - 5 prizes.
 3rd - Stallions foaled in 1885 - 4 prizes.
 Entries to be made by 1st March in order that a catalogue of exhibits may be made.
 N.B. - Further particulars will be sent by circular on application to the Secretary.
D. M. CRAE, President. **H. WADE, Secretary.**
WM SMITH, Vice-President.

The Ontario Creamery Association
 Will hold its **FIRST ANNUAL CONVENTION** in the **Temperance Hall, Toronto,**
 On **THURSDAY and FRIDAY, 24th and 25th FEBRUARY**
 When papers and addresses on the various departments of the Association's work will be given by V. E. Fuller, John Sprague, Prof. J. W. Robertson, Geo. Browning, D. Derbyshire, and several experts in Dairying from the United States. Discussions to follow each paper.
 A cordial invitation is extended to the general public.
 fe-1 **J. HANNAH, President.** **M. MOYER, Secretary.**

Agricultural Educational Scheme.
 The Fourth Annual Examination will take place in
 ---JULY, 1887---
 Farmers' sons wishing to avail themselves of this beneficial examination can get circulars giving the course of reading by applying to
HENRY WADE,
 Sec'y Agriculture and Arts Assoc'n,
 ja-2 **TORONTO.**

DOMINION SHORTHORN BREEDERS' ASSOCIATION.
NOTICE OF MOTION.
 To **HENRY WADE, ESQ., Secretary:**
 I hereby give notice that at the next general annual meeting of the Dominion Shorthorn Association it is my intention to introduce a resolution, having for its object a re-consideration of the present standard for registration of the Association.
 (Signed) **ROBERT McQUEEN.**
 N.B. - The annual meeting will be held in Toronto, on Thursday, 24th February next.



NOTICE TO CONTRACTORS.

SEALED TENDERS, addressed to the **MINISTER OF MILITIA AND DEFENCE, OTTAWA,** and endorsed "Tender for Drill Shed, Hamilton," will be received at Ottawa, until **MONDAY, the 7th day of FEBRUARY** next, inclusively, for the several works required in erecting this Drill Shed.
 Plans and Specifications can be seen at Caretaker's House, Drill Shed property, James Street, Hamilton, Ont., on and after Wednesday, the 26th day of January.
 Each tender must be accompanied by an accepted bank cheque made payable to the order of the Minister of Militia and Defence, equal to five per cent. of the amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so. If the tender be not accepted the cheque will be returned.

C. EUG. PANET,
 Colonel,
 Deputy Minister of Militia and Defence.
 Department of Militia and Defence,
 Ottawa, January 17th, 1887.

BACK VOLUMES OF THE JOURNAL.
WE HAVE A FEW BOUND AND UNBOUND VOLUMES OF THE JOURNAL for the years 1884 and 1885. Price per volume unbound \$1. bound, \$1.60, post-paid.
 Address **STOCK JOURNAL CO.,** (Hamilton, Ont.)

(8385) dam of the twins, also Graceful Lady 18430. Mina, a twin by Cecil; dam, Myrtle Blossom, imp.; and Victo. 17th 26253, a young heifer from old Victoria that won the silver medal at the Centennial, and got by Cecil, that won the silver medal at the Provincial at Guelph, 1886. Also Delilah 18495, an imp. 3-year-old heifer and a very fine one. Mr. Rawlings has the foundation of a very fine herd of Herefords. He has made a good selection and we will likely hear from them at the shows. Mr. Albin Rawlings, Forest, Ont., purchased a young bull, Vennor 22871, by Cecil 18469. Vennor won 3d prize at Toronto and Guelph, September, '86, and is bred from the Victoria family on side of dam. Mr. S. D. Wellwood, Wingham, Ont., purchased the bull calf Bismark 27299, by Cecil. His dam is also one of the Victoria family, and he is a very fine calf. Mr. John W. Farmer, St. Helens, Ont., purchased yearling bull General Grant 20676, by Cecil. This bull won 3d prize at Toronto and Guelph last fall and will make a fine animal. Mr. John L. Rundle, Hampton, Ont., purchased yearling heifer Viola 2d, dam, Victoria 5th, sire, Sir William 6693, also Ben-thall Beauty 18494, a young imp. cow got by England's Glory 8714.

Ayrshires.

Mr. Geo. Hill, of Delaware, reports having sold his Ayrshire bull, General Grant, to Mr. Thos. Guy, of Oshawa, who never fails to secure a good animal when the opportunity presents itself. This bull, bought from Mr. Hill, carried off the highest honors in his class, at Toronto and Guelph shows in 1886.

Mr. Jas. Youill, Carleton Place, Ont., writes:—"I have lately effected the following sales: 1 yearling Ayrshire bull to John Longstaff, Tallock, Ont.; 4 heifer calves to W. H. & C. H. McNish, Lyn, Ont.; 4 Shropshire sheep, 2 rams and 2 ewes to J. S. Smith, Miss.; 1 Leicester ram to Thos. Boal, White Lake, Ont.; 1 Leicester ram lamb to A. McTavish, Beckwith; and 1 Leicester ram lamb to Thos. Esdale, Middleville, Ont.

As will be noticed from our advertising columns, the address of Mr. I. G. Nankin, of the Shade Park Stock Farm, is changed from Merivale to Ottawa, Ont., he having purchased another large, magnificent farm, 10 which most of the Shade Park herds and flocks have already been removed. Mr. Nankin claims that this new farm and location furnishes him with probably the best facilities for stock breeding, shipping, etc., in Canada, being only one mile from post office, express office, freight depot, steam boat wharf, and one mile from Dominion Exp'l Farm. The Ottawa river runs alongside of his farm and several springs run through it, furnishing a water supply in every field. In addition to stock breeding Mr. Nankin intends establishing a city dairy, supplied by his magnificent herd of Ayrshires.

Our readers will find in this number an advertisement by the publishers of the herd book of the Ayrshire Importers and Breeders' Association of Canada. The association has so far 54 members, nine of whom are in Ontario, several in Eastern Canada, and a few in the United States whose herds were commenced from Canadian importations and breeding. The president, Mr. Wm. Rodden, of Plantagenet, Ont., has spared no pains to make the book a very valuable one. It contains much information, with full and reliable pedigrees. The organization of the association is claimed to be such as to admit of affiliating connections in every province of the Dominion; the foundation is created and a book published that admits of a strong union of Ayrshire men in all Canada having pure bred stock, and who approve of the test of qualified pedigree to secure entry therein.

Jerseys.

Mr. S. Dymont, of Barre, Ont., has taken up farming in addition to his other duties, and is establishing a herd of Jersey cattle. We wish him abundant success.

Holsteins.

The imported Holstein bull, Macbeth, bought originally from the Messrs. Lord, Cook & Son, Aultsville, Ont., and now in possession of Messrs. John Airth and G. McIntyre, of Renfrew, is giving much satisfaction. The calves have Holstein markings in a marked degree.

Mr. D. M. Fuller, Cavanville, Quebec, writes: "We have just sold a grade Holstein bull calf, nine months old, which weighs 800 lbs. I find the Holstein grades good feeders and very growthy. [Facts like the above are the best advertisement of a breed.—Ed.]

Sheep and Pigs.

Mr. T. A. Bixby, South Haven, Mich., writes that his Shrops have done nicely this season. Of 37 lambs raised, had 14 pairs of twins.

W. Dorsey, Summerville, Ont., writes: "We have sold a lot of Suffolk and Poland China pigs, and have a number more to sell, from two months old and up."

Messrs. W. Dawson & Son, Collins Bay, Ont., have succeeded thus far well in breeding pure-bred stock, and also in the showing. The Southdown sheep, which the firm are breeding have taken the leading prizes in the section, and the diploma at Kingston for four successive years. They have bred them for 15 years, and as it is with all who have taken pains with good stock have found them to pay well. (See Adv't.)

Mr. T. C. Patteson informs us that he has purchased from Mr. W. Shier, of Sunderland, his whole flock of imported and home-bred Shropshire ewes. They are chiefly of the famous Farmer strain, and were brought out for the Millers, by Mr. Simon Beattie. Mr. Patteson made their acquaintance at Mr. W. Heron's sale, two years ago, and has found the sort so hardy and profitable that he decided to buy all he could, and will probably send to Ludlow, Shropshire, for some more.

Mr. Tredway, of Port Union, has recently added to his flock of Southdowns some imported ewes and the ram (Sussex Prince), bred by Messrs. E. & A. Stanford, of Sussex, England. He now claims that for a small flock, it is all that can be desired. He has lately sold to T. Adams, Owen Sound, two shear rams; J. H. Cheep, West Hill, one extra shearing ram; W. Westney, Woburn, one ram lamb; John Graham, Range Hill, one ram

lamb; F. Atreed, Malvern, one ram lamb; S. Ecardt, Unionville, for the Manitoba market, four ewes, J. Murton, Highland Creek, one ram lamb, one ewe lamb and three ewes; J. H. Hollowell, Highland Creek, one pair ewes, one pair ewe lambs; all at fair prices. He was quite successful at the fairs last fall, showing at South Ontario and Scarboro, and although competing at Scarboro with Messrs. Stanford's imported sheep, carried 3 reds, 6 blues and one yellow ticket.

On the 10th January, in company with Mr. R. Hurter, formerly of Alma, Ont., but now of Carrington, Dakota, we visited Woodside, the home of the Southdowns of Mr. John Jackson, Abingdon, Ont. The flock now numbers over 60 head, and they are in very fine shape. It would not be easy to find a cull in them although Mr. Jackson has sold some 60 head within the last six months. The breeding ewes number 37 head, of which 20 less than 20 are imported. Eight or nine rams are on hand of different ages, of which Beau Brummel, with his broad back, heavy breast and massive shoulders, still takes the lead. The crop of ewe lambs held over, 18 in number, is just grand. Mr. Jackson's Southdowns number 7 head. The new windmill and tank, which he has erected, works just splendidly. It was put in position by himself, and is very complete. It is surely turning to good account the winds of the heavens when we commission them to do a large share of our work.

MORETON LODGE HERDS

—FOR SALE—
56 - BULLS - 56

—39—  —17—
Herefords **Shorthorns**

Fit for Service Season 1887.
Viz: SHORTHORNS—one 3-yr.-old, two 2-yr.-old, ten yearlings, and four calves, 9 to 12 months.
HEREFORDS—two 4-yr.-old, six 2-yr.-olds, 9 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-t F. W. STONE, 42 Gordon St. Guelph, Ont., Canada.

Shorthorns and Southdown Sheep
—FOR SALE—



A CHOICE LOT of young Cows and Heifers, in calf by the young Cruikshank bull Crimson Lavender—3493—bred by Arthur Johnston, Greenwood, Ont., and some heifers and bull calves also from above bull and No. 1. All the above cattle eligible in the new herd book. Also a fine lot of yearling ewes and ewe lambs and yearling rams and ram lambs, and some older ewes, all bred from imported stock. Do not miss the chance if you want a ram, some ewes or some Shorthorns. Come and see us or write. Visitors welcome.

SETH HEACOCK,
Oakland Farm, Kettleby P. O.
Aurora Station, N. & N. W. R., 30 miles north of Toronto, shipping station.

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.

Parties writing to advertisers will please mention the JOURNAL.

BOW PARK HERD
OF

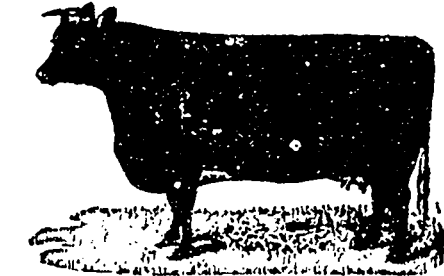


PURE-BRED SHORTHORNS

Have at all times a number of both sexes for sale. Catalogue of young bulls recently issued.
ADDRESS, JOHN HOPE, Manager,
Bow Park, Brantford, Ont.

FRANK R. SHORE & BROS.

R. R. STATION, LONDON. P. O., WHITE OAK.



—BREEDERS OF—
SHORTHORNS AND SHROPSHIRE

Have a grand lot of bull calves sired by our imp. Cruikshank bull Vermillion (50587), and a very choice lot of heifers, now in calf to Vermillion also shearing rams and ram lambs from imp. sire and dams. Prices moderate. Terms easy.

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.

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



Importers and Breeders of
SHORTHORN CATTLE.

The highly-bred Booth bull Lord Monrath—2998—, is at the head of the herd. Lord Monrath was bred by Sir Hugh Aylmer, of West Dereham Abbey, Stokeferry, Norfolk, Eng. The Mantilia, Lady Day, Roan Duchess and Princess strain. Young stock always on hand for sale. Correspondence solicited.

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

IMPORTANT AUCTION SALE OF SHORTHORN CATTLE

On Wednesday, February 23rd, 1887

At **ROSDALE FARM**, 2 miles east of Malton Station, G. T. R. 13 young Bulls, together with a few Cows and Heifers, all registered in the Dominion Herd Book. Also will be offered

—TWO SPAN OF YOUNG HORSES—

three and four years old, and one entire colt rising one year old. Sale to commence at one o'clock.

TERMS—Eleven months' credit on approved joint notes. For further particulars and catalogues, address

JAMES GARHOUSE & SONS, Hightfield P. O., Ont.

UNRESERVED SALE

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

fc-2

EDGEMOUNT

Third Annual Sale

12 head of Bulls and Females, registered in D. H. B., 15 head of Grades, 1 Percheron entire colt, 1 good mare, 1600 lbs.

Sale will be held at **Mr. Jex's Stables, South Market St., Brantford,**

ON WEDNESDAY, FEBRUARY 15th, 1887, at 1 P. M.

Catalogues on application to

GEO. BALLAUBRY, Jr., Brantford, Ont.

B. HUNNE, Auctioneer.

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,

ja-3 **JNO D. PETTIT, Paris, Ont.**

UNRESERVED AUCTION SALE

OF 25 HEAD OF

SHORTHORN CATTLE

TO BE HELD

ON MARCH 8, 1887,

On Lot 18, Con. 17, West Williams, Co. Middlesex, 4 1/2 miles South-west of Parkhill Station, consisting of Bull Calves, Cows and Heifers. The calves and heifers are the get of the celebrated prize bull **Prince Albert**, whose stock has taken more prizes at the Provincial and other leading shows than the stock of any other bull in the Province the last two years. The cows are also in calf to him. They are all registered in D. S. H. H. B. They are a grand, heavy-fleshed lot of cattle. Every animal offered will be sold to the highest bidder.

TERMS—\$30 and under, cash; over that amount, 9 months' credit. Catalogues sent on application.

THOS. NICHOLSON & SON, SYLVAN P. O., ONT.

Important Unreserved AUCTION SALE

—OF—

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,

ja-3 **LUNCH AT NOON. 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.]

IMPORTANT

AUCTION SALE

—OF—

SHORTHORN CATTLE

On **Wednesday, March 2,**
AT MAPLE GROVE FARM,

3 miles from Erin and 2 1/2 miles from Credit Forks Stations, C. P. R., consisting of

28 BULLS, COWS AND HEIFERS.

Sale to commence at one o'clock. TERMS—Nine months' credit on approved notes.

P. S.—Teams will meet trains at stations.

For further particulars and catalogue, address,

JOHN B. CONBOY, Belfountain, Ont.

ATTRACTIVE PUBLIC SALE

OF HIGH-CLASS

S.H.O.R.T.H.O.R.N.S.

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

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.

TERMS—7 Months' Credit on Approved Joint Notes. Catalogues will be ready by 1st March, and will be sent on application to

J. C. SNELL, EDMONTON, ONT.

AUCTION SALE
OF THOROUGHBRED
JERSEY CATTLE
A. J. O. O. 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 in foal to the imported stallion Macanthur (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. J. JEFFREY,
130 Bloor Street West, Toronto.

Closing Out Sale!



—OF—
SHORTHORNS
—AND—
CLYDESDALES.

MR. JOEN 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,
WHITEY, ONT.

AUCTION SALE

—OF—
Pure-Bred Stock

The subscriber, having rented his farm, will sell by auction the entire stock thereof, without any reserve.

ON THURSDAY, MARCH 3rd, 1887

CATTLE—The SHORTHORNS number 24 head, of which 19 are cows and heifers, 4 are young bulls, and at the head is the pure Booth bull Royal Booth. The cows and heifers are nearly all in calf to this bull, and they are all registered in the Dominion Shorthorn Herd Book.

SHEEP—The Sheep comprise 20 head of pure Cotswold Ewes, in lamb.

HORSES—Six heavy draught mares and geldings of good quality will be sold.

TERMS—Ten months' credit on furnishing approved notes.

THE FARM is four miles east of Newmarket, on the N. & N. W. R. R. Teams will meet the morning trains on day of sale. Lunch at noon. Sale to commence at 1 p.m. Catalogues mailed on application.

CLARK PLAYER,
PINE ORCHARD P. O., ONT.

MESSRS. COWAN AND PATTESON
—WILL HAVE A—

JOINT SALE

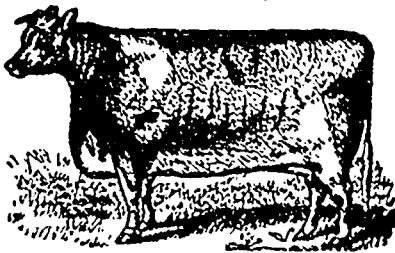
—OF—
SHORTHORN COWS, HEIFERS and BULLS

AT GALT
ON THURSDAY, MARCH 24th,

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

TERMS: Six months' credit on approved security.
Catalogues can be obtained from J. L. COWAN, Clochmoit Galt; or from T. C. PATTESON, Postmaster, Toronto, after 15th February.

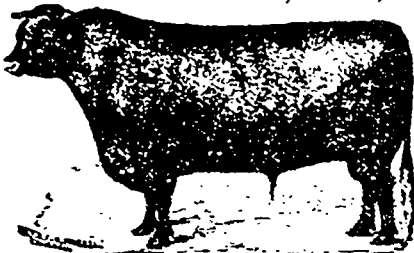
ARTHUR JOHNSTON,
Greenwood, Ont., Can.



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 18 months old including the pure Booth Commander in Chief. The others are mostly Booth blood—are now offered for sale.

TERMS REASONABLE.

C. G. Charteris & Son,
Beachwood Farm, Chatham, Ont.

Pure SHORTHORN CATTLE

The splendid bull Lord Byron (8221) registered in N. D. S. H. H. B., 3 years the stock bull at Beachwood, for sale; also 4 steers, 3 years; 4 steers, 2 years, and 4 heifers, 2 years, all high grade Shorthorns, to be sold as stockers. 2 Miles from Chatham, on the G. T. R. Visitors met at station. nov 12

Durhams for Sale.

I have for sale a number of Durham cattle, females of all ages, imported and home bred, all in calf to the imp. Duthie bull Royal Victor. Also two good bull calves, a red and roan. The red is a very fine animal, sired by Baron Bravith (46385), dam by Bredalbane (28073), both Cruikshank bulls. Come and see them, or send for prices and pedigrees. Farm, one mile east of town station,

HUGH THOMSON,
"Drawer D," St. Mary's P.O., 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 R. 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

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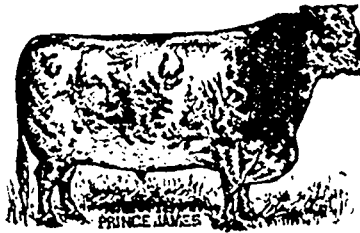


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LEICESTERS and
BERKSHIRES**

The choicely bred bull BARON CONSTANCK 5th—2189—and Lally Barrington bull DUKE OF COLONUS at the head of herd. A grand lot of young bulls on hand.

Prices right. Come and see us. JAS. S. SMITH, Maple Lodge P. O., Ont.

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The highly bred Shorthorn bull, winner of 3 silver medals, 8 diplomas, and 20 first prizes at the leading exhibitions in Ontario, at head of herd. A selection of choice young bulls and heifers, sired by Prince James, for sale. Visitors welcome. Correspondence invited.

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Glenburn, Maccan Station, I. C. R., Nova Scotia,



—BREEDER OF—

ABERDEEN-ANGUS POLLS

All stock registered in the A. A. Herd Book.

Imported Erica bull Marksman at head of herd. Animals of the Pontethen, Lucy, Matilda, Daisy and Ballindalloch families for sale, both male and female, at reasonable figures. Correspondence solicited. sep 6

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HOLSTEIN FRIESIANS
IN CANADA.

OUR HERD WAS AWARDED

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- Gold Medal, Ottawa, 1884.
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- Silver Medal Toronto, 1884.
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Shorthorn Cattle

of the highest breeding and individual merit, and

OXFORD DOWN SHEEP.

Young stock for sale of both sexes.

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TROTTER BRED STALLION, FRANK BRANDY WINE, 6 years old; jet black; heavy mane and tail; stands 15.3; 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.

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HAMBLETONIAN LAMBERT STALLION, coming four yrs. old; weight 2075 lbs.; stands 15.3; 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 5 yrs. old; dark gray, heavy mane and tail; weighs 1,300 lbs.; stands 15.25; very stylish, short, compact horse.

GRADE PERCHERON STALLION, 3 yrs. old; gray; stands 15.3; weight 1200 lbs.; very rangy and stylish, and a good one.

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Herd headed by the noted prize-winner Prairie Aggie Prince, H. F. H. B. No. 2, first prize at the Industrial and Provincial in 1884, dam, Prairie Flower, 5 yr. old butter record of 20 lbs. 1 oz. unsalted butter per week. This herd has been crowned with more honors in the show-ring than any other herd in Canada. Selections made from the finest herds and most noted milk and butter producing families in America. Every animal selected for its individual merit—symmetry, size and weight a special object. Our motto, "QUALITY." Stock for sale. Visitors welcome. Correspondence solicited.

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Of Large Size, and from Choice
Milking Strains.

The herd numbers 65 head, and for three years in
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best milkers. The imported bull PROMOTION
(3212) at head of herd.

Young Stock on hand at all times
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(All registered in the American Jersey Cattle Club
Herd Register.)



Cows with —JL-authenticated test of from 14 lbs. to 24 lbs.
13oz. in one week, and from 81 lbs. to 106 lbs. 12½ oz. in 31
days are in this herd. Young bulls (registered in the above herd
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A herdsman always on hand to show visitors the stock,
and the stock-loving public are always welcome.

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100 PURE-BRED ABERDEEN-ANGUS CATTLE



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Ericas, Prides, Windsor, Victorias, Sybils, Kinnochtry Blue-
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female, for sale.

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Correspondence solicited.

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TWO SHORTHORN BULLS for sale, one two
years old, color roan. The other ten months
old, color red. Both registered in the D. S. H. H. B.
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30

Imported Yearling Hereford Heifers

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Will be sold from \$250 per head up.

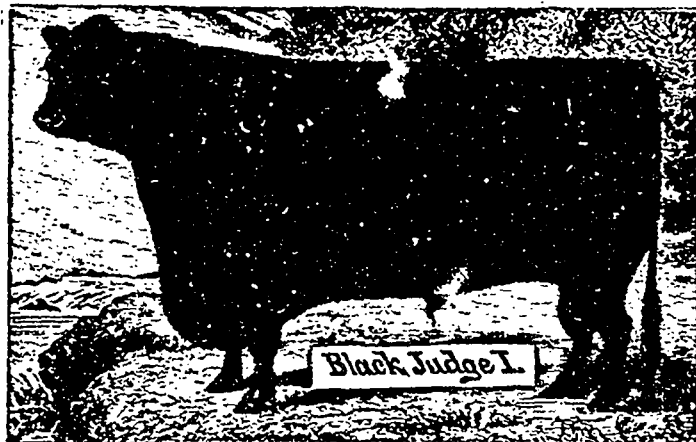
ALSO A FEW CHOICE YEARLING BULLS

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First Prize Winner Toronto Industrial, 1883—1884—1885—1886. Grand Dominion and Provincial Medal
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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
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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
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We have confidence in asking intending purchasers to inspect our stock and prices before investing. We have some choicely
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HEREFORD,
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SHORTHORN

—AND—
JERSEY CATTLE.



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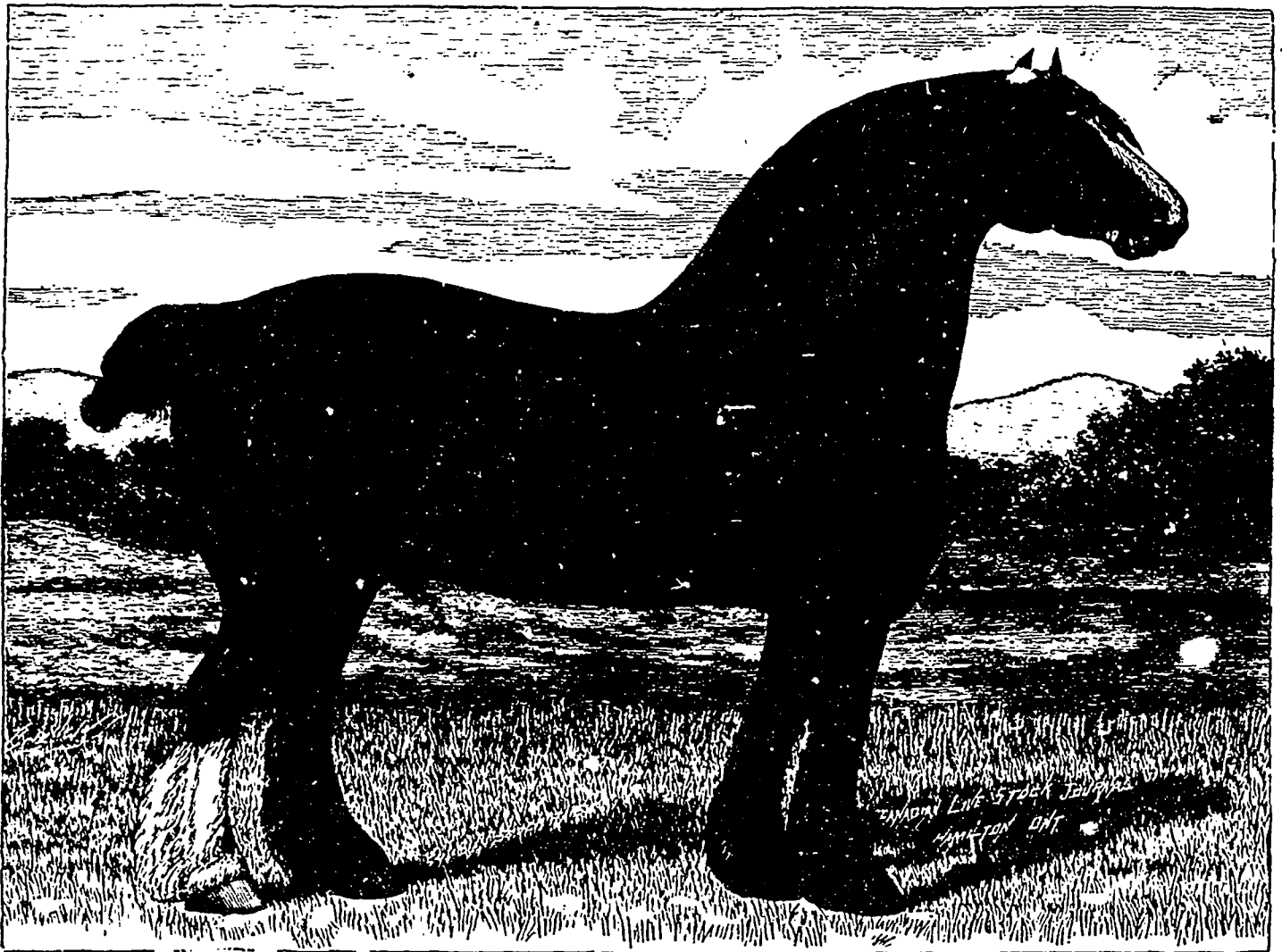


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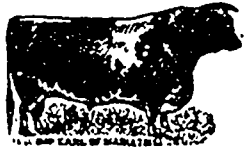
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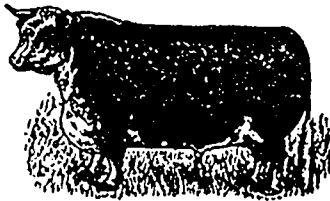
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THIS herd, grounded on selections from the best blood in England, is remarkable for the number and uniformity of the good calves that it has produced during the three years of its existence, owing in a great measure to the excellence of the stock bull Tushingham (8127), by Charity 3rd (6359), by The Grove 3rd (5051). This bull is now offered for sale, with several young bulls of his get.

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

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

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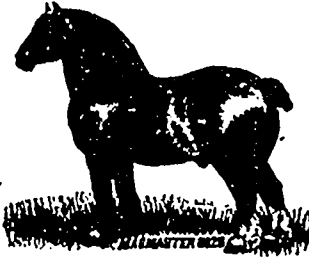
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STALLIONS AND MARES.

We have constantly on hand and

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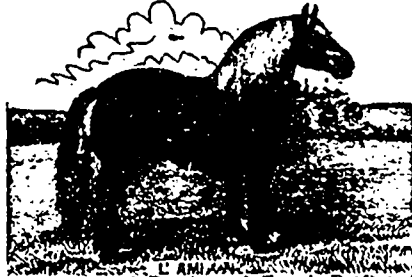


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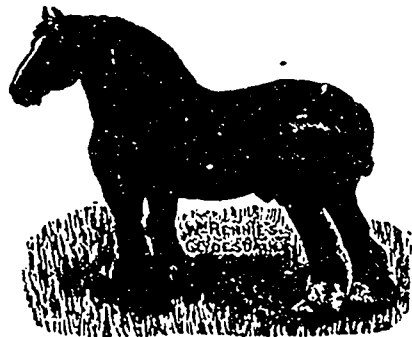
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Correspondence solicited, and visitors always welcome

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Importers and Breeders of French Draft and French Coach Horses. We have now over 75 head of imported French Draft Stallions and Mares on hand. Our importations this year have been selected from the best breeding district in France. Our stock is all recorded in France and in the National Register of French Draft Horses in America. Our French Coach Horses are the best that could be found in France. We will be pleased to show our Stock to visitors. Correspondence invited and promptly answered. DEGEN BROS.



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At reasonable Prices, considering Quality and Pedigree.

Mostly one and two years old. Male and female. Several of them prize winners. All registered in Clydesdale Stud Book of Great Britain. Inspection solicited.

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Shorthorn Cattle and Berkshire Pigs. Young Stock for sale. Terms reasonable.

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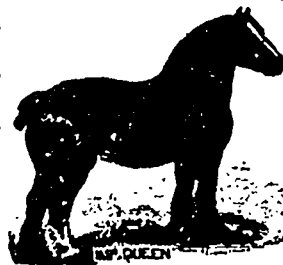
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GUELPH, ONT.

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Sixteen imported Clydes on hand, nearly all of them prize winners in Scotland, and of which four are stallions. The above are

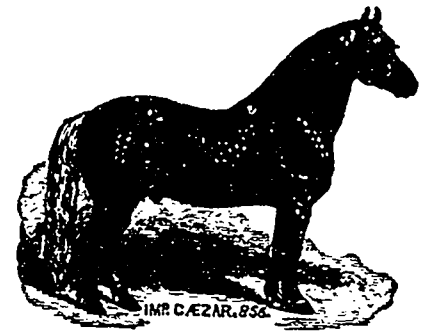


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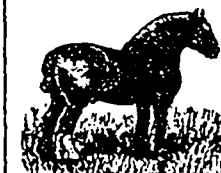
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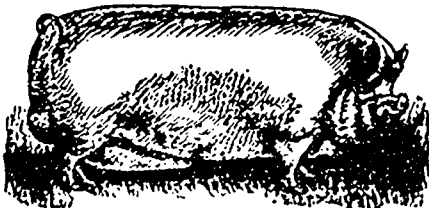
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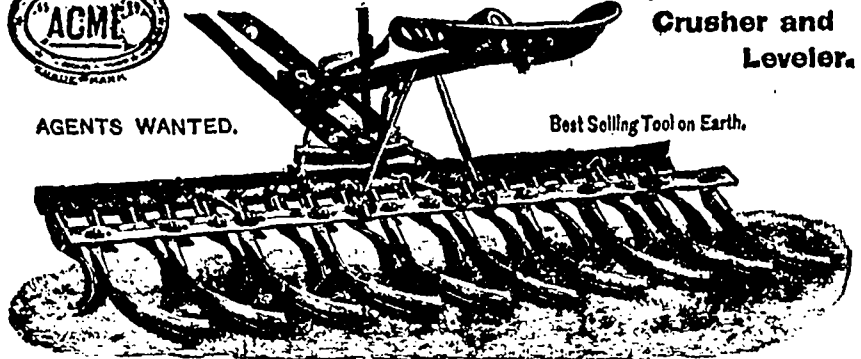


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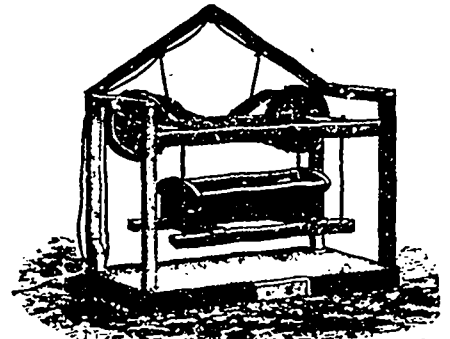
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