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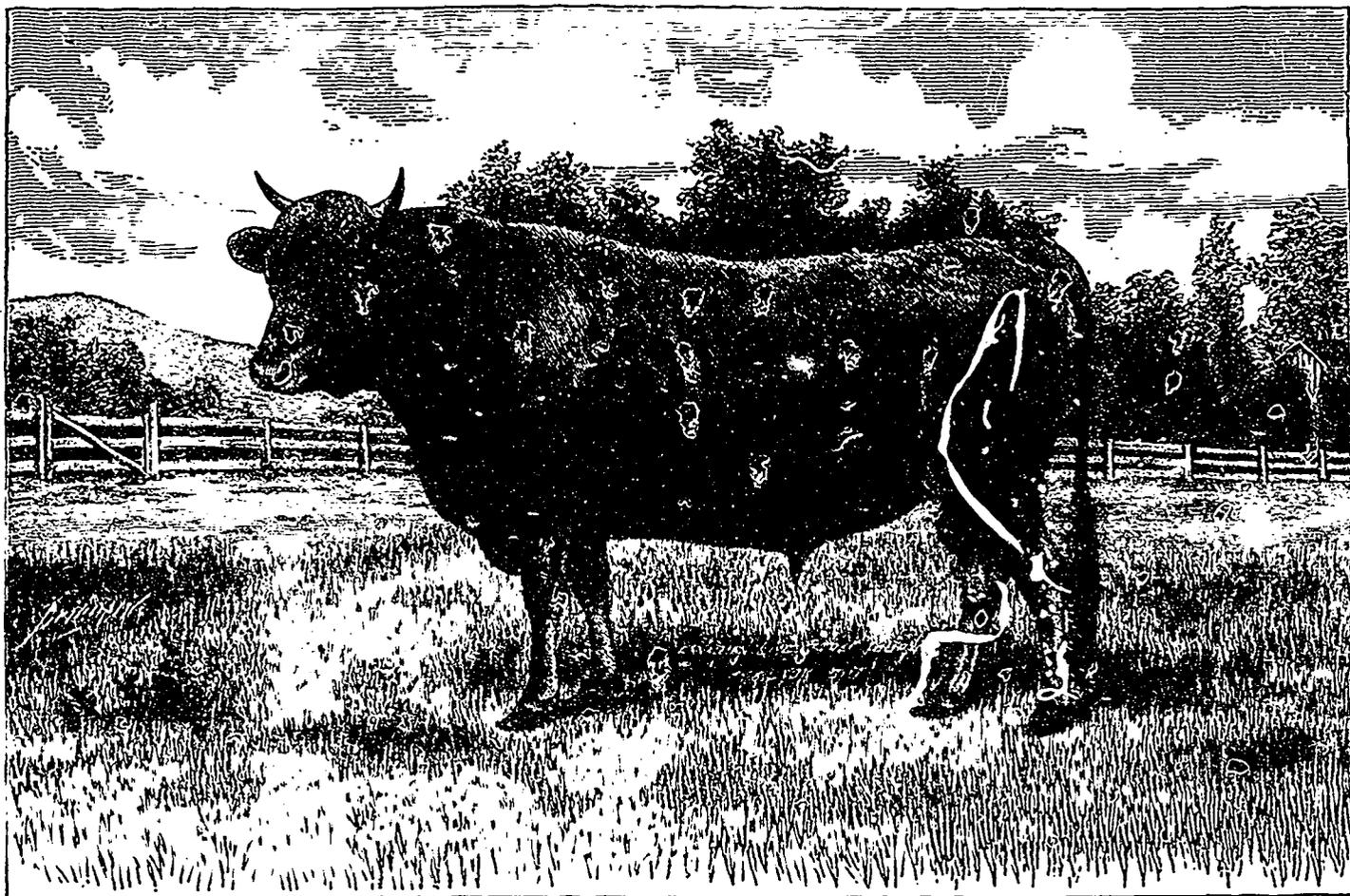
# CANADIAN LIVE-STOCK JOURNAL.

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

VOL. III.

HAMILTON, CANADA, MARCH 1886.

No. 3



THE JERSEY BULL OSCAR OF ST. LAMBERT 11547 A. J. C. C.

*The Property of Jacob S. Hart, Saybrook Farm, Whycomah, Cape Breton.*

### Saybrook Farm.

Whycomah is an Indian word, signifying "the end of the waters." It is the name of a village situated on an arm of Bras d'Or Lake, in the island of Cape Breton. Beautifully situated and surrounded by most picturesque scenery, it is a most inviting spot to spend a summer holiday. Still, it is not quite the place we should expect to find such a select herd of Jersey cattle as is here owned by Mr. Jacob S. Hart, of Saybrook Farm. The herd has been established within the last three years, and now numbers thirty head, all of A. J. C. C. herd register. Oscar of St. Lambert 11547, the subject of our illustration on this page, is the service bull. He is now three years old, large and vigorous, solid colored, with very rich skin. His get are very uniform, handsome and promising. The pedigree of this bull is worthy of careful study by all interested in Jersey cattle.

The combination of the blood of Stoke Pogis 3rd with that of Victor Hugo has produced the greatest family of butter producers the world has ever known. Mary Anne of St. Lambert, with an official test of 36 lbs. 12¾ oz. of butter in seven days, and a record of 867 lbs. 14¾ oz. in 340 days, is the most celebrated member of this wonderful family. Her breeding and that of Oscar of St. Lambert are nearly identical, he having 93½ per cent. of the same blood. With such a bull at the head of the herd we naturally expect to find some females of merit, and we are not disappointed. Here is Cowslip of St. Lambert 2nd, half sister of Oscar; her appearance and merit are in keeping with her breeding; she is now but 2 years and 9 months old, and is already a large, well-developed cow, having given her owner two beautiful and valuable calves. Lady Judy Montague, a first-prize winner, was sired by Romeo of St. Lambert. She is a

beauty, a perfect lawn cow. Her daughter, Jenny Jardine, is a combination of Pogis 3rd, Victor Hugo, and Rioter blood, and has been bred to Oscar. The Fawn 5270, a pure St. Lambert, is a large and beautiful cow, of great milk promise, and secured second prize last season at the Provincial exhibition. With the liberal treatment now afforded her, we may expect to hear from her soon.

Centennial Maid 23338, and Lily Gebhardt 23340 get a strong strain of Victor Hugo and Pauline blood through their sire Velpean 2146, who has several tested daughters over 14 lbs., one of which, Mulberry Maud, tested 22½ lbs. in seven days. Her daughter, by a son of Velpean, is one of the treasures of the herd.

Beautiful Belle No. 17044, rich in the blood of Pauline and Victor Hugo, is perhaps the best representative Jersey in the herd. She gave 14 lbs. without forcing in her second form before three years old. She is well named, and is much prized by her owner, as indeed by Jersey breeders generally. The rest of the herd consists mainly of young stock sired by Oscar. Among them are heifer calves from Cowslip 2d, Centennial Maid and Ligna De Bonair, and bull calves

Oscar of St. Lambert 11547	Baron of St. Lambert 5286	Stoke Pogis 3d 2238	Stoke Pogis 1259	Victor Hugo 197
		Favorite of St. Lambert 5118	Marjoram 3239	
	Cowslip of St. Lambert 8349	Stoke Pogis 3d 2238	Bertha 490	Victor Hugo 197
		Witch of St. Lambert 5479	Marjoram 3239	
		Lord Lisgar 1066	Victor Hugo 197	Pauline 494
		Lucy of St. Lambert	Victor Hugo 197	Lydie 495

from Lady Montague and Beautiful Belle, sired by Oscar.

Mr. Hart is well pleased with the Jersey outlook, and finds that the decline in prices of ordinarily bred cattle only tends to increase the demand for high class animals. During the past year the amount received for sales and services exceeded \$5,000, notwithstanding which the herd is thirty per cent. stronger both in breeding and numbers than at a corresponding date last year.

Many inquiries are received from the Southern States for cattle, the climate strengthening the constitution of the breed, and thus enabling them to bear the change without risk.

The farm itself comprises about one hundred and fifty acres, fifty of which are under cultivation, and may be generally described as a good hay and grazing farm. The barns have been rebuilt and a silo is to be constructed next summer. And so the good work goes on, and may it flourish and bear fruit until the thoroughbred reigns supreme, whether on western prairies or in our own Maritime Provinces down by the sea. We are pleased thus to be able to present to our readers a sketch of Mr. Hart's Jersey bull. It is the first that has been illustrated by us from the easterly provinces, and, to our mind, it affords substantial evidence of the growing power of the JOURNAL, even in the outlying sections of the Dominion.

## Canadian Live-Stock Journal,

PUBLISHED MONTHLY BY

THE STOCK JOURNAL COMPANY,

48 John Street South, Hamilton, Ont.

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, 12c. per line each insertion; for one year, 10c. per line each insertion. Cards in Breeders Directory, not exceeding five lines, \$1 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 of no use for proper classification. Transient advertisements payable in advance.

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

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

All communications to be addressed STOCK JOURNAL CO., 48 John Street South, Hamilton, Ont.

HAMILTON, CANADA, MARCH, 1886.

Please examine your address tag. If it reads, Dec., '85, your subscription expired with that issue, and so of any month, and we will be obliged if readers in arrears will renew at once. We have no means of knowing whether you desire your subscription continued or otherwise, and we therefore do not remove any name from our list until we have been requested so to do, and though always willing to comply when asked, we can in no case do so until all arrears are paid. The terms are, \$1 per annum in advance; \$1.25 in arrears; sample copies, 10c. per copy. Always give name, post office and province, and if it is desired to change the address, give old as well as new office.

NOSTRUMS in the stable are usually an unmitigated evil. Sometimes it may be necessary to use a mild tonic or an alterative, but, usually, ignorant men are not the parties to select these. Horses, in particular, suffer severely at the hands of the domestic quack. They are drugged with antimony and arsenic to give them a nice coat. The groom wishes it to be understood that he is master of his business, and therefore resorts to the use of these deleterious ingredients. Usually, if a horse's diet is varied judiciously, and he groomed sufficiently, carefully worked withal, he will do quite well without the aid of these hurtful compounds. If animals require medicine, one who is ignorant of the first principles of their action is not the party to prescribe them. A more intelligent knowledge of the principles that regulate the health of live-stock is loudly called for, and we are glad to know that the printing press and our veterinary college are doing much to supply the want.

In selecting a bull to head a herd, it is not enough to know that you are getting a good animal with a good pedigree. You should satisfy yourself so far as you can that his ancestry are good also. It is important in selecting a female to breed from to make similar inquiry, but less so than in purchasing a male, as in the latter case the baneful effects of a mistake are confined to the progeny of the cow, while in the former these extend eventually to the whole herd. A fine looking male of only ordinary ancestry may bring only ordinary produce, while one less perfect of a noble ancestry individually may bring better stock. It is indeed a very vital matter, getting a suitable male. On this may hinge the progress or the retrograde movement of a herd for years. A few dollars should never be allowed to stand in the way of purchase if you feel that you are getting the right beast. Happy is the stock-man who makes a wise choice, and handles rightly after the choice is made.

BUT few men will deny that it is important that a farmer should know something of the nature and properties of the soil which he cultivates, and of the manure which he puts upon it; but who of all the thousands engaged in stock-keeping ever thinks of looking to the nature of the structure and processes of the animal under his care? The average cattleman can tell you no more about the action of the heart of his favorite beefsteak than about the action of the most important part of a complicated machine. The reasons are not far to seek. Intelligent reading requires the digestion of careful thinking, and thinking involves effort of a kind that most men do not care to give. And yet it does seem humiliating that one will work at structures all his days, only viewing them from the outside without knowing the slightest thing about their internal fittings. It would surely form a source of pleasure to cattlemen to study something of the physiology of their structures, if they but once get rightly started, and it would add to their usefulness on the principle that knowledge is power.

In many parts the march of improvement in stock-keeping goes bravely on, in other localities the stock is little better, if any, than it was twenty years ago. Twenty years of stagnation is a long time. It means a good third of an ordinary life. Yet now it is not too late to turn over a new leaf, for a few years of persistent effort may work a great change. The extent of the improvement that has thus been made can not easily be ascertained, yet we feel safe in saying that while in some counties of the Province but few of the cattle are below an average, in others of them a really improved beast is rare. The difficulties in the

way of improvement in such localities are much greater than where good stock is plentiful, but on no account should any one allow ordinary hindrances to stand in the way of the improvement of his stock. There is so much of a saving in the way of feed, and the returns are so much more satisfactory, that it does seem strange that those who are content with very common cattle do not realize the extent of injury that they inflict upon themselves. Get hold of a good male, and commence the good work at once.

NEVER miserly cling to his treasure with more tenacity than many a farmer to the idea that because he grows grain principally, he can afford to keep an indifferent class of stock, and to remain in ignorance as to the best methods of improving the stock that he keeps. One would suppose that persons possessing intelligence and good judgment in matters usually would see for themselves that a good class of stock will pay better than a poor class. The idea somehow has got deeply rooted, that because some men keep superior stock and get corresponding prices they alone are to be designated breeders, whereas every farmer who raises even in part his own stock is also a breeder. If it is wise that the ordinary farmer inform himself as to the best methods of tillage, it is also necessary that he inform himself as to the best methods of carrying on the other branch of his work, that which relates to stock-keeping. He is not a farmer of the first order who does but one half of his work creditably. He is like a tree growing in the edge of the forest, the branches of which on one side stretch out to the light, and on the other side they are dwarfed in the darkness.

THE value of fresh air to the human family is often dwelt upon in periodicals, but not too often, as, notwithstanding all that is said upon the subject, the suffering that arises from inattention to its advantages are very great. Not so much is said regarding its necessity for the well-being of the lower animals, and yet reflection will show one at a glance that when deprived of fresh air they must suffer equally with human beings. It has been ascertained by actual experiment in France that the percentage of diseases in military horses has been much lessened by increasing the space allotted to each horse. The danger here is increasing with the advances that are made in housing the animals comfortably. Oftentimes sufficient attention is not paid to the arrangements for ventilation, nor to regulation of these when so made. Placing a large number of animals in one apartment with every aperture closed down tightly, of course necessitates their breathing the same air over and over again the same night, which cannot but react very detrimentally on their well-being. Sheep, above all other classes of our domestics, will not brook close confinement. It has been noticed that where large flocks of them are kept together the number lost proportionately is far in excess of that which results from having them in small lots with plenty of room.

It should not be forgotten that feeding stuffs grown on the farm have three values, as noted by a writer in the *Country Gentleman*—a commercial value, a feeding value, and a manurial value. The commercial value is what they will bring on the farm, the feeding value what they will fetch after having been turned into meat or milk, and the manurial value what additional crop the manure will produce for a term of years after having been applied to the land. The labor is to be deducted. What the precise feeding value is must vary with the commercial prices relatively paid for the feed, and for their meat and milk products, and

the gain will be largely due to the economy and judgment shown in feeding. The manurial value is a quantity not easily determined, and which usually comes back in instalments, in the form of principal and compound interest, and because it has to be waited for a great many are loth indeed to wait. It is when these three values are all realized and retained by the farmer that best results may be looked for. Grain growers may and often do flourish for a time, but the end must be unfortunate for some one. Those who realize these three values and retain them are the men who will come to the front in the end, although they may have a struggle at the first. They cannot be retained on the farm without stock-keeping, and hence the wisdom of growing more and better stock. Beginners cannot be too chary as to the class of stock they buy, as the feeding value of so-called scrub cattle intended for beef will not give half the return of that fed to suitable cross-bred animals, or to those properly graded.

### FARMERS' CLUBS.

The Secretary, President or any member of any Farmers' Club is hereby invited to send for copies of the Journal, (which will be mailed free), to distribute amongst its members with the view of forming clubs for the Journal—a list of ten subscribers, at least, could be got at every club in Canada.

The above appeared in February number of JOURNAL, and so many farmers' clubs have sent for sample copies to distribute amongst their members that we have decided to let it run another number. It is gratifying to the publishers of the JOURNAL to receive so many subscriptions from the farmers' clubs and farmers' associations throughout the Dominion.

### Shorthorns not up to the Standard of Registration.

What shall be done with these is a question that lies uppermost in the minds of many, most of all in the minds of those who possess them. Their number is, we fear, quite large, and their rejection will in some instances be an item of considerable loss, particularly in neighborhoods where Shorthorns have not been numerous, and where the value of unquestionable pedigrees is not so well understood. Whatever is done with them, nothing should be done in undue haste. The decision of petulance, as we regard it—to sell them to the butcher and go back again to inferior grades—would be retrograding, as these animals for breeding butcher's stock are in themselves quite ahead of cattle not so well graded. The attempt to palm them off upon the uninitiated in pedigree lore would be iniquitous, and the combining of the owners to start a public record of them would be folly in the extreme, as in the long run their descendants must take their place side by side with Shorthorn grades that are continually ascending in the scale.

Those who have them will, we apprehend, do well to keep them, and at the same time to keep a strict private record of them and their progeny. The measure of the worth of this record will be the value of present pedigrees, with the nature of the crosses that shall follow, and the reputation of him who keeps it.

Females of this class will still continue to bring good prices, as in instances where the pedigree is good and the animal has only been rejected, it may be on account of one defective cross in seven or more. Intelligent men will know the value to put upon such a record, which may not be much below what the same animal would have brought before its rejection by the revising herd book committee.

Nor do we see any objection to preserving the good bulls, the progeny of such, for breeding purposes for a time at least. Their ancestors proved themselves potent sires in producing a useful class of beef cattle, and why may not they? They cannot bring such prices as will recorded bulls, but will bring paying prices, considerably more than could be got for them very likely if castrated at a similar age.

This will afford that class of cattlemen who look upon the prices of recorded cattle as extreme to supply themselves with good useful bulls for grading upward, and at reasonable rates. The objection that we have read somewhere that all rejected Shorthorns be come *scrubs* is outrageous. A *scrub* as we understand it in the cattle line is a native which has not felt the renovating influences of better blood. There are many gradations of them, extending from *bad* to *very bad*, which fixes a great gulf between them and the rejected Shorthorns as beef-producing sires, although the gap between the latter and recorded sires as beef-producers may be very narrow. Our own rejected animals we shall continue to keep for a time, but shall be scrupulously careful to preserve a full record of all their progeny.

### Cows Coming In.

The best time for this must be determined by the object sought by him who keeps them. If beef is desired, it is better to have them come, say, from October to March, for then they may be turned off at from two years to two years and a half old. The same season also is, all in all, the best, when desired for breeding purposes, as the young bulls are fit for active service when from fifteen to eighteen months old, and will at that age meet with a ready sale at the season when their services are required to commence. If butter-making is the object sought, higher prices rule in winter, and therefore with the further advantage of being able to make it in the less busy season, the cows should come in in the fall. An autumn or winter calf usually thrives better than one coming to hand in the summer, which is a further argument in favor of late autumn as the calving season.

When cheese-making is the object aimed at, it may be different. Then the calves should not come until about the commencement of the cheese-making season, unless in the case of those which are to be reared, which should come much earlier, that they may have the advantage of a good start while milk is plentiful.

The matter is well worthy the closest attention, as calves coming at an undesirable time are not only a source of vexation, but also one of serious loss.

### Amongst Our Friends.

"I would not do without your excellent JOURNAL if I had even to pay more for it each year. You did well with the scrub pest, and may you succeed in banishing them from the land."—J. W. Henderson, Wallacebridge, N. S.

"The JOURNAL contains a very large amount of original matter, not of the machine made kind, but such as is both pleasant and profitable to the reader, and evidently from writers who know their subjects."—A. C. Bell, M. P. P., New Glasgow, N. S.

"I am well pleased with your JOURNAL, and hope its circulation may be greatly increased."—Peter Grant, Byng, Ont.

"My interest in the JOURNAL is growing, and every number is better than the other. I feel that success is sure to crown your efforts."—W. A. N. West, St. Catharines, Ont.

"If every farmer and stock-raiser in the Dominion would subscribe for the JOURNAL and read it carefully, they would find it to their advantage."—A. McDiarmid, Fingal, Ont.

"The JOURNAL is the cheapest and best reading matter that I get."—David Hill, Staffa.

### The Dominion Shorthorn Herd Book.

The Dominion Shorthorn Herd Book is now an accomplished fact. The Canada and the British American Shorthorn Herd Books shall henceforth dwell peacefully side by side on the shelves of reference, and the Dominion Shorthorn Herd Book shall in future comprise the records, we trust, of Shorthorns north of the American line, from sea to sea.

The union was accomplished in the end with a minimum of friction, and with a unanimity that augurs well for the future of the record. We hope now to see every breeder of Shorthorns in the Dominion registering in this book, and there are certainly good grounds upon which to rest this hope. The standard, as will be seen elsewhere, is, if anything, higher than that of the Americans. American numbers will not be recognized in the book, which will place a strong dam on the current of registry that was flowing in the direction of their record, and as a matter of course Canadian purchasers will henceforth be content with nothing short of registry in our own herd book.

The secretary, Mr. Wade, and his assistants, are now hard at work arranging the materials for the first volume. Some idea of the magnitude of the task relegated to them may be formed when we state that in some instances one entry necessitates references to between 50 and 100 different animals. This will preclude the possibility of an early appearance of the new volume. At the soonest, it cannot appear before mid-summer, a deprivation which we must all patiently bear.

While every person on the various committees of conference seemed to do his best to further the work, especially in the later meetings, to Mr. T. C. Patterson, of Toronto and Eastwood, belongs the honor of furnishing the key to the basis of compilation of the first volume, and the suggestion of the new symbol, while Mr. R. Gibson, of Delaware, drew the difficult line of admission and non-admission in reference to animals tracing to the earlier importations, which was finally adopted.

John Dryden, Esq., M.P.P., Brooklin, is again elected President, and H. Wade, Toronto, Secretary.

### "The Making" of British Breeds.

Truly, than in that wonderful "tight little island," Britain, nowhere in the world can be found such a variety of good things in the way of live-stock. Taking Ireland, the Channel, Western, and Orcadian Islands, as under the same denomination, what an assemblage of forms! What a number of breeds of cattle, horses, sheep and swine! It is perfectly wonderful to think of.

But whence came they? How came it about, all this pleasing variety? "Ay, there's the rub" that is puzzling many an enquiring mind to-day in old England.

I notice in these enquiries that the investigators do not go beyond the time when the "silver streak" divided Britain from the continent of Europe. I would go back to the time when that continent and Britain were continuous—when there was no channel dividing them. At this time I believe "the Ure ox"—the common name in some records for *Bos Urus* or *primigenius*, swept over and into the fastnesses of Britain at this period, and became the possessors (with the other "primeval" animal forms) of the land. Of this great bovine form there must have also been numerous specimens of his more ancestral form, viz., polled; for that was assuredly the most original type of all bovines.

Then, ages after, advented the *genus homo*, of the Celtic family. And this introduces at once the great

question, in considering "whence came the present state of British cattle? What influence had the successive colonies of people who settled in Britain in the making of the British bovine races?"

The people of the time previous to the Roman invasion in Britain were Celtic—but of two different branches—originating away in that indefinite and unsatisfactorily known region of Scythia from whence, as an originating seat, the two diverging waves of westward-wending sway divided, taking a southern or northern route. The peoples diverged in speech, etc., till they reached the *ultima thule*—whence they could go no farther—of Britain. The southern were the Celts (or Gaels), the northern the Picts (or Scandinavian). The former landed on the southeastern shores of England, and spread over England away to the north and south and west. They "passed through" Wales into Ireland. From thence they again at later times turned their enterprise on the coast of Britain opposite Ireland. During the Roman period they settled Galloway in North Britain, an important event. Later still, on the evacuation of the Romans they made a permanent footing in Argyle, and the mainland of Scotland became their kingdom—commonly known as the Highlands or Caledonia. All the rest of Scotland, along the eastern lowland shores was Pictish. The origin of these may generally be stated, as already indicated, from the northern wave of European westward-tending migration.

Now came the Roman. Had he any influence, by introducing cattle of his land, in modifying the cattle of Britain? Possibly in this way, that though the introduction may have been small, it had important influence, for the reason that the original Britons, with their household goods and domesticated cattle, fled into the highlands, Cornwall, Wales, the north, etc., where the original bovine possessors of the land still reigned.

Now came the next great revolution—"the making of England"—the Saxons, Jutes and English conquering footholds in Kent, Wessex, Sussex and East Anglia.

Wherever emigrants came, they were sure to have brought their cattle. And the Anglo-Saxon undoubtedly had the most to do with the making of the English cattle foundation. If the first inhabitants had only the original representatives of the now Welsh and Devon, those of the Roman period, the original fathers of Hereford and Longhorn type, the Anglo-Saxon modified or made the East Anglian and Sussex.

The Norman influence was possibly very slight, and the last modification of all, that of the Shorthorn, was not accompanied by human invasion at all.

England being the scene of so many invasions necessarily obtained many modifications in bovine forms. Each invader drove his predecessors from him, so that a succession of breeds, as it were, in parallel lines, might be traced: 1st, those of the pre-Roman (Celtic) period; 2nd, those of the Roman period; 3d, those of the Anglo-Saxon period, these forming the conglomerate English "breed" foundation. The Roman influence is to us even doubtful. They were not so dependent as to necessitate their bringing cattle with them; they were not settlers; and besides, they found the Britons had plenty of cattle already.

In Scotland the breed was quite original from the earliest times, *Bos Urus* being little disturbed from his pristine state, but descending to us in the Hamilton Park wild white cattle to-day, the ancient rallying point of the great Caledonian forest. The Hamiltons were cream white and polled. In these particulars they partook of the same character as the ancient pre-Celtic cattle of Britain, as were also in

their descendants in the ancient Yorkshire and East Anglia white polled herds. In those times the polled were even more numerous and powerful than the horned. All over the Caledonian region the cattle were of this character. The polled gradually affected the north-eastern peninsula lowlands, though still they were numerous represented in the Highlands.

Galloway, as history shows, was a separate affair altogether. Settled at an early period by the Gael, the Picts of this region, would have been driven east or north. If it was then a cattle region like ancient Buchan, there would have been traces in that valuable source, viz., language (which may be regarded as the "crystallization" of early history). But as far as giving evidence of the existence e.g. of polled cattle, this source is silent—there has been no "survival of the fittest," word in this respect in that province. Indeed, nomenclature of such a kind was certainly unknown down to the present century. And thus, even though the language of the Gael had already provided for such expression, there being no "survival" of such word is proof of the non-existence of the objects exhibiting such peculiarity.

In the Caledonian region such evidence is frequent and valuable, as the political history of the amalgamation of the Scoto-(Irish) Pictish kingdoms afforded proof.

MAOL.

### Breeding Light Horses for Exportation.

BY S. B. FULLER, WOODSTOCK, ONT.

(Continued from February.)

FOR THE UNITED STATES.

Of late the demand for saddle horses, hunters, and light harness horses has increased wonderfully in the United States. Hunt clubs have been formed near the greater number of the large cities of the Eastern States. In the neighborhood of New York quite a number of clubs, probably six or seven, have been established. Boston, Philadelphia, Rochester and other cities have their club or clubs. *Numberless driving clubs* have also been formed within the last year or two in which may be found many four-in-hands, with finely appointed coachers, reminding one very forcibly of what may be seen at meets of the four-in-hand clubs there.

The fact is, the American people (at any rate in horse flesh) are becoming decidedly English in their ideas, and to supply this, what some people call English craze, a great many well bred horses are required, and the American people have not been idle in picking up what horses they could find in Canada of the right sort, to fill this vacancy in their own country.

At one time in the New York parks you saw nothing in horse flesh but long tailed horses, lightly harnessed. Occasionally a horseman mounted would appear, perhaps on a Texas pony, Mexican saddle, spurs and stirrups all complete. What a change now meets the eye. Sit down at the entrance to Central Park for a half hour upon a fine afternoon. You are passed by countless pairs of well-bred, well matched, and well appointed horses, high stepping T and dog cart horses, cobs, saddle horses and children's ponies. Nearly every horse has his tail "docked" or "banged," the harness horses with heavy English harness and carriages. The saddle horses carry good saddles and bridles of English pattern. As a rule, these are well ridden. To our notion the ladies you see in New York parks ride better than the men, though there are some splendid horsemen among the latter.

Now, to meet the great stress put upon the trade in

first class horses for such purposes, the American dealers have to hunt all over the States, and as a last resource turn their eyes to Canada to supply their wants, but in how many instances do they find these satisfied, and for what reason? Because the right sort are rarely forthcoming, and because Canadian farmers will not breed them. Our experience has been that if farmers will only breed properly they can sell their young stock of horses at prices that will pay them well.

The stamp of horses now sought for from Canada for harness and saddle work does not differ materially from that for the English market, if we except the heavy draught, or the street-car horse. Occasionally, of course, a speedy trotter is bred in Canada, and will bring a long price, but such cases are rare, and the Canadian horse must show exceptional speed before the American buyer will give the price. The fact is they have been breeding to trotting sires so long over there that they have nearly driven out the blood that gives them good carriage and saddle horses of the stamp that now sell. They are, however, beginning to see this themselves, and are latterly breeding more from the thoroughbred and the coach-horse. There is, therefore, all the more reason for Canadians to bestir themselves to breed suitable horses for the United States market, before they themselves get the right sort.

Across the lines they have any amount of young horses, which to-day in Canada would be called trotters, but such horses sell for only respectable prices with the Americans. Now, to breed a fine large carriage-horse I would select a roomy mare, young, and with no hereditary unsoundness about her, with plenty of good flat bone, and with good action. Mate this mare with a well put together thoroughbred blood horse, of say 16 hands to 16.1, and of good weight, and the chances are ten to one that you get a colt which, with proper care and handling, will turn out a first-class carriage-horse, with courage, action, size, and graceful movement. The dam will give the colt her own size, action, and general appearance, while the sire will give it the graceful carriage and action of the thoroughbred, his stamina, courage and endurance for hard work.

If you miss getting a big carriage-horse from these, you are almost sure to procure a fine, light-stepping harness-horse, for lighter work—a horse that will eventually make a hunter or a good saddle-horse. Such stallions as Woodstock, Reveller, Chancellor, Stracinus, Scalper, and many others owned in Canada, ought to get such horses as I have here described.

(To be continued)

### Mutually Beneficial.

On new year's day Mr. H. E. Revell, Ingersoll, wrote as follows:

I am satisfied I clear as much this year through taking your JOURNAL as will pay my subscription the rest of my life, though I should live to old age. In its columns I saw the advertisement of Green Bros., and was thus led to secure the services of the Earl of Mar, and now have from him two fine bull calves."

While Mr. Revell has thus been benefited, so, too, have the Messrs. Green Bros. to the extent of going far toward paying their advertisement for one year in this one channel. It affords us unmingled satisfaction to know that the JOURNAL is thus doing its intended work.

"The CANADIAN LIVE-STOCK JOURNAL is a highly useful periodical."—Richard Harcourt, M.P.P., Welland.

"Would not be without your JOURNAL for five times the price."—Harry J. Davis, Woodstock, Ont.

### Raising Lambs by Hand.

It is a question with some as to whether it pays to raise lambs by hand. They allege that the value of the milk fed quite equals the amount obtained for the lamb, if indeed it is not in excess of it. Without waiting here to decide this question, we may say that where the lambs are the offspring of pure-bred sheep it will always pay, and where they are not, it does not seem right to allow any of the gifts of a benevolent Creator to be neglected because they do not teach us in the form which we most desire.

From the *Country Gentleman* of 11th February, we glean the following on our subject:

"When it is necessary to raise a lamb by hand feeding, it is best to give its first feed from the milk of another ewe if possible, and the one should be selected to furnish the milk which has most recently lamb ed. If such milk is not available, a little castor oil should be thoroughly beaten with the milk that is used, so as to form an emulsion. A fresh egg may be beaten with it to advantage. Then cow's milk may be more safely used. It should, if possible, be the milk of a fresh cow. When a farrow cow's milk must be used, a little molasses should be mixed with it. The milk should be given at the natural animal temperature, and after it has become cooled it should be carefully warmed to about 100°. If heated too rapidly, so as to become scalded, it will be costly in its effects, and very injurious.

"India rubber nipples are made for feeding lambs, and are usually sold in the 'druggist sundries' trade. They are readily attached to a bottle, or what is better, a tin can such as is used for filling lamps with kerosene. Air can be admitted at the top, which facilitates the flow. Such a can is quite necessary when a number of lambs are fed. It is dangerous to feed with a spoon, or to pour milk into the mouth, as when any enters the windpipe strangulation ensues, sometimes resulting in death.

"A half gill is enough for a new born lamb, but after two or three feedings this quantity may be doubled, and soon the lamb should have all it will take. At first the youngster should be fed every hour or two, then the time may be extended to three or four hours. After three or four days they will do well on four or five feeds a day. As to night feeding, we have never had lambs after two days of feed between ten o'clock at night and six in the morning, and have never seen any injury therefrom. After two or three weeks, lambs should be offered finely cracked corn, crushed oats and clover leaves. They will soon nibble at these, and will be greatly benefited thereby."

### The English Fat Stock Show.

#### GREAT SUCCESSES OF POLLED SCOTS.

[This letter was held over hitherto from pressure on our columns, but will, we feel sure, be of much interest even now to the owners of any of the beefing breeds.—ED.]

Since that great man, the late Mr. McCombie, of Tillyfour, swept the boards at Birmingham and London with the famous ox Black Prince (a portrait of which lies before me), nearly twenty years ago, there has been nothing to compare with the magnificent achievements of the Polled Aberdeen Angus cattle at the English exhibitions during the past and present months. They have had a succession of victories which has given the breed an impetus that should do something to raise the demand for this famous race of cattle. The English feeders were never more hardly pressed by their Scotch opponents, who, however, have for many years won a lion's share of the honors at the great fat stock exhibitions. Strange as it may appear, it is true that the northern counties of Scotland have furnished in the last twenty years a number of "crack" prize-winners at the Christmas fat stock shows out of all proportion either to their extent or natural advantages, and most of the credit has been due to the Polled Aberdeens.

I have attended the Birmingham and London exhibitions for about seven years, but on no former occasion did I witness such a grand display as the "black skins" made this year, and next to the admirable quality of these, the most striking feature was the influence of the Polled blood in the cross-bred classes, in which I may say without exception the prominent

winners were either black polls or animals of distinctly Polled type. At London, for instance, all the exhibits drawn up in the final test for the champion prize of £30, offered to the owner of the best cross bred animal, were black, and I may say polled, as only one showed a slight rudimentary horn. How comes it that whenever the Polled Aberdeen is mated with such well-known breeds as the Shorthorn and the Hereford, or the Devon, or any distinct breed that can be named, he invariably imparts his own outward symmetry of form and characteristics, generally, too, his own jet black coat, to his progeny? It is said to be a generally recognized law that the male gives the outward form, and the female the temperament and inward form, but even in the case of the polled female she defies a sire of an alien race to change the character of her stock very much—they come principally black and polled.

I mention these facts because occasionally one sees an overt attempt made to throw doubt upon the origin of Polled Aberdeen Angus cattle, attempts as ill-founded as uncalculated, and to such writers I would leave the task of explaining what may be termed the prepotency of polled cattle, how it is that their racial characteristics are so strongly fixed. It does not point to a modern breed, or to a mixed breed, does it? These remarks have seemingly no very direct bearing upon the English fat stock shows, but they have been forced upon me by the altogether unique position taken by the Aberdeen Angus cattle at the recent Christmas exhibitions in England. They were the talk of friend and foe alike.

As a result of these annual friendly incursions of Scotchmen into England, polled cattle are spreading south of the "border," in pretty large numbers. There are now several herds of pure-bred Polled Aberdeen Angus cattle in England of great merit, and the cross between polled and Shorthorn cattle is also gaining in popularity and making its way in the same country. I may mention that the Galloway breed was only conspicuous by its absence at the recent exhibitions. This is to be regretted, as on your side of the water one sees occasionally considerable attempts to compare them with the Polled Aberdeens, and to the disadvantage of the latter. Why don't the Galloway breeders first prove the superlative merits of their cattle at home as pitted against their opponents? and then they could go to you Canadians and say, "This is what we have done: we have beaten the Aberdeenshire men into fits at the great fat stock shows in England; ours are the cattle!" I have sometimes seen Galloway crosses exhibited at the English shows, some good ones, too, though a little rough, but always found better Aberdeen bullocks, the fact being that when the two breeds have met in competition the northern polls have always carried the day.

#### THE BIRMINGHAM SHOWS.

I journeyed to Birmingham on the 27th November, to witness the judging at the Birmingham show, an event only second in importance to the Smithfield exhibition at London. The prize money in all the departments, which include cattle, sheep, pigs, corn, roots and pigeons, amounted to the not inconsiderable sum of £2,832, of which over £1,000 was allocated to the cattle sections. The exhibition was held in a spacious building named Bingley Hall, which, as the Prince of Wales as president was to visit the show, was beautifully decorated, as were the main streets of the city. Over 200 head of cattle, 99 sheep, and 71 pigs, made a grand display, reckoned to be one of the best indeed ever held in Birmingham taken as a whole, but I was disappointed to find so few real "cracks" among the Shorthorns and Herefords, though both breeds were altogether very well represented.

The waste involved in keeping animals intended for the block until they are rising four years old must have been obvious to any one who looked at the aged class of Shorthorn steers, one of which (not a prize taker), was the heaviest animal in the hall, scaling live weight no less than 22 cwt., 3 qrs., 13 lbs. Most of them looked as if they were "going off," as it is phrased, and would in these dull times, I fancy, have been exceedingly difficult to dispose of to the butcher.

Her Majesty the Queen, who is a regular exhibitor of stock, was very successful, winning the £50 prize for the best Shorthorn, with a handsome three-year-old roan heifer, with extra middle-piece, bred by Mr. C. Coillard, and after Cherry Duke of Gloster 36348. Had this heifer been better matured, she would have taken a deal of beating. The Queen also won two special prizes for a Devon steer, 3 yrs. and 11 mos. old, by Nelson 1413, and bred by Mr. John Sur-

ridge, Colford Farm. Mr. Robt. Wortley, Suffield, a well-known exhibitor, won the special prize for Herefords with a two-year-old ox, bred by Mr. Geo. Child, Court of Noke, and got by Horatius 5370.

Reference has been made to the newly started English herds of Polled Aberdeen Angus cattle, and it is to one of these this year breeders of this strain are mainly indebted for the sensation which the "black skins" have caused both at Birmingham and London. Other breeders were strongly represented, but it was left to Mr. Clement Stephenson, Sandford Villa, Newcastle, who owns what from a personal inspection I can call a first-rate herd, to repeat the feat which had once before been accomplished by the late Mr. McCombie of gaining the championship both at the Agricultural Hall, London, and Bingley Hall, Birmingham with one and the same animal. Mr. Stephenson's exhibit, which has been the means of directing all eyes to the remarkable qualities of her breed, was bred by himself, after a pure polled bull named Paragon 1653, of the Duchess of Clova strain, and out of a pure polled cow named Lemon 2nd 2264, of Portlethan descent, both her parents having been bred in the north of Scotland. She was 2 years 8 mos. and 4 days, and at Birmingham was credited with a live weight of 15 cwt. and 21 lbs., but at London the following week she was reported to scale 15 cwt., 1 qr. and 6 lbs. This is not a particularly striking record in point of weight, and has often been beaten by former "plums," but then, as a writer in the *Aberdeen Daily Free Press* remarks, "There was no getting over the wonderfully compact, meaty, well-made frame of Luxury (that was the heifers name), which is as free of offal and full of useful flesh as well could be, and she is near the ground, extra good on her fore roasts, and with nice clean bone." Luxury won first prize in her class, the Prince of Wales prize of £25 as best animal bred and fed by exhibitor; £30 as the best Scot, and finally the Elkington challenge cup, valued at 100 guineas, as the best animal in the cattle classes, without restriction. For three years in succession has Mr. Stephenson won this much coveted trophy, a feat which is unprecedented in the history of the exhibition, and each time his exhibit has been a Polled Aberdeen, which makes the victory still more remarkable.

Her Majesty the Queen exhibited some polled cattle from her herd at Abergeldie, and was a prize taker, and Mr. McCombie, of Easter Skene; Mr. Farquherson, of Haughton; Mr. Strachan, Montcoffer, were also among the exhibitors of polled stock from the north. All the first prizes in the cross-bred classes, which were splendidly filled, had polled blood in their veins, which could be clearly traced. One of the best of these was a three-year and 8 mos. old black polled ox, belonging to Mr. Loder, M. P., Whittlebury, after a Shorthorn bull named Grand Duke of Oxford 3rd 39953, and out of a polled cow called Queen Mary of Glamis 3312, which gave the excellent record in pounds of 2 cwt. 2 qrs. and 24 lbs. He had beaten Mr. Stephenson's champion heifer at Norwich a few weeks before, and one of the judges who was in the ring there, who also officiated at Birmingham, would have preferred the steer to the heifer, but his two colleagues never had a doubt about the claim of the latter to the championship, and she won with general consent, the steer being reserve number.

Mr. Greenfield, Beechwood Park, carried the first prize for cross-bred females, with a very pretty polled heifer, bred in Aberdeenshire, which at London the following week beat Mr. Loder's ox in a competition for a special prize.

#### THE SMITHFIELD SHOW.

The attractions which the Smithfield Club offered at their eighty eighth annual show were even greater than those at Birmingham, the premiums amounting to £3,405, of which £1,845 was offered for cattle, £1,005 for sheep, and £317 for pigs, and there were several other prizes besides. The exhibition was opened at the Agricultural Hall, Islington, on Monday 7th December, and, like the one at Birmingham, lasted five days. The display, especially of Scotch cattle—polled and cross-bred—was surpassingly fine, the best I have seen for seven years, and said to be the best ever witnessed there or anywhere else. There was great jubilation among polled breeders at the double victory of Mr. Stephenson's heifer Luxury, which, as I have already said, came up to the metropolis several pounds heavier than when she started on her journey; such was the finished condition in which she was brought out. There was a very fine all round show of the different breeds, and the total entry was

the largest that the club ever had, namely, 293 cattle, 190 sheep, and 60 pigs—543, as compared with 535 in 1884; 484 in 1883, and 526 in 1882. The Prince of Wales, who takes an intelligent interest in all that pertains to the welfare of the nation, paid his usual visit to the show on the day of judging, and was received with manifestations of loyalty. The arrangements in connection with the exhibition were ably carried out by the new secretary, Mr. Hline, and the meeting was in every point of view except the pecuniary one, a decided success.

Only in the very briefest way can I allude to the different classes. By far the most successful exhibitor of Devons was Her Majesty the Queen, who was placed reserve in the champion competition for a two-year-old heifer, bred by herself. Mr. George Child, the breeder of a champion Hereford at Birmingham, was leading in the class for aged Hereford steers with another son of Horatius, 5390, which was here awarded the £30 prize as the best animal of the breed, beating Mr. Wortley's steer referred to. Mr. Hugh Gorringe, of Kingston-by-Sea, for the third year in succession, came to the front for young Shorthorn steers, and he was also the breeder of the first prize two-year-old steer shown by Mr. Wortley, which was beaten by a roan steer at Birmingham, belonging to the Queen, which is only third here. Mr. Wortley's exhibit is a white of the same strain as the winning steers in the young class, his grand sire being Alfonso 36116, bred by the Prince of Wales. An Aberdeenshire exhibitor, Mr. Jas. Bruce, was first and second in the aged steer class, with a pair of grandly fleshed bullocks, one of them weighing 21 cwt. 2 quarters. The Queen's first-prize roan at Birmingham repeated her victory in the heifer class, and the Marquis of Exeter took the lead for Shorthorn cows. The competition in the polled classes was very hot. Mr. Wilken, Waterside of Forbes, a breeder who is well known to many of your readers, was keenly opposed in the young steer class by Sir Wm. Gordon Cumming, Bt., of Altyre; but the Aberdeenshire exhibitors ultimately won the victory. An Englishman was placed first in a grand class of two-year-old steers, Sir William having again to take the second place. The first-class in the show was the polled cows or heifers, in which there was about half a score of entries, including Mr. Stephenson's noted heifer Luxury; Mr. Farquharson's (Aberdeenshire) second-prize Birmingham exhibit, two crack heifers from Altyre, and one from Cartachy Castle. Closely as Luxury's opponent pressed her, the judges could not part away from her, as for maturity, neatness and quality, she was almost unmatchable, and she scored another well-earned victory, a grand-quartered, deep-ribbed, firmly-fleshed heifer from Altyre being second. In the cross-bred classes, which were a strong feature of the exhibition, and a notable ensample of the potency of polled blood, the Birmingham winners held their own, but Mr. Greenfield's very handsome two-year-old polled heifer was preferred by the judges to Mr. Loder's ox in the competition for the best cross-bred animal. Mr. Wortley's first-prize Shorthorn steer gained a special prize of £50 as the best ox and breed in the Hall, and the polled heifer Luxury was adjudged the best female, and finally, amid the plaudits of the onlookers the best animal, irrespective of sex altogether. The prize Mr. Stephenson won at London with this grand heifer were no less than £205, which, added to the prizes she had formerly won, brings her total earnings in the course of three weeks to £414; and besides this her lucky owner received £150 for her carcass, which was sold to a London butcher. The following figures will show that in respect to early maturity the Polled Aberdeens more than hold their own with all comers. Taking the young classes of the various breeds, it has been found that each animal shows an average daily gain as under:

7 Polled Aberdeens	lbs.
8 Shorthorns	2.49
11 Cross-bred	2.48
5 Herefords	2.28
8 Sussex	2.14
7 Devons	1.85

The above stated figures must be very satisfactory to breeders of polled stock.

Aberdeen, Dec. 27.

QUIDAM.

"We consider your JOURNAL altogether the best agricultural paper that we take, although we receive three of them."—I. Turner & Sons, Eden Grove.

**The Comfort of Shipping Cattle.**

EDITOR CANADIAN LIVE-STOCK JOURNAL.

SIR: It think it would be well if those engaged in the production of beef for the English market would try in some way to lay before our Dominion Parliament the great necessity of providing more comfort and greater dispatch in sending our stock to the seaboard.

The fact that Canada is now almost the only country not placed on the scheduled list in Britain, gives the shippers the advantage of landing their animals and selecting whatever market in the land that suits them best. This ought to stimulate all those engaged in the trade to use their best efforts to keep us as we now are—a privileged community in the cattle trade.

If one case of disease is found amongst our cattle arriving at Liverpool, we (I mean the cattlemen of the Dominion), will have to bear the loss, as we shall be cut off from the choice of inland markets.

The comfort of all stock conduces to their health, in a greater or less degree. The points I therefore wish to bring forward are these: First, better accommodation in the yards of railroad companies, such as sheds of shelter from the vicissitudes of climate, and proper facilities for feeding, watering, etc.; and, second, more thorough dispatch in transit. I do hope some one may take the initiative, and commence in right earnest to bring about some amendment to the present system, and that you, Mr. Editor, will put your able pen at work to help in attaining this end, if not from a business point of view, for the sake of *com-mo. humanity.*

D. MESSENGER.

Guelph, Ont.

We are pleased to see Mr. Messenger write in the strain which pervades his letter, and particularly pleased with the earnestness of its tone. We referred in a paragraph some time ago to the rough usage which animals exported must receive, since the number thrown overboard and disabled every year on the passage is very great. We are told that not a little of the suffering arises from the brutality of the attendants on the way over. It is surely to the interest of the shippers to send men with their cattle across the sea, and not those who are outrageous counterfeit-parties wearing the semblance of humanity over the spirit of a wild beast. This does not apply to all the cattlemen thus employed, but it does to too large a number of them, which the shippers cannot be entirely ignorant.

**Ranching Near the Rockies.**

EDITOR CANADIAN LIVE-STOCK JOURNAL.

SIR: The CANADIAN LIVE-STOCK JOURNAL made its first appearance to my "shack" last evening. I cannot but admire its bright appearance. The reading is practical, and its arrangement leaves nothing to be desired. This is written within sound of the Bow River, about twenty miles from where it leaves the Rocky Mountains. This is a rock country, and is fast filling up with horses, cattle and sheep. We are having a most favorable winter—mild weather and no snow. A couple of herds of "pilgrim" cattle are rustling out on the hills rear here in good shape; also about twelve thousand sheep. It is not probable that a pound of hay will be required for the twenty thousand head of stock that are wintering in this vicinity.

J. W. F. BREDIN.

Morley, Alta, Jan. 13th, 1886.

**The Address of Advertisers.**

EDITOR CANADIAN LIVE-STOCK JOURNAL.

SIR: I think if breeders of pure-bred stock would mention the county in which they reside it would be much easier for the readers of your JOURNAL to know where they live. Nearly every schoolboy knows where the different counties are located, but it requires a postal guide to tell where the different post-offices are. You will much oblige by allowing space for the above suggestion in your JOURNAL.

JOHN MCGREGOR.

Felton P. O., Co. Russell.

[The above suggestion is an excellent one, and we hope the parties interested will give it the attention which its importance deserves.—Ed.]

**The Feeding Contest of Steers at the Experimental Farm.**

Mr. Sanford Fleming, our great civil engineer, in a letter written to Professor Brown, from Ottawa, bearing the date 19th December, 1885, criticises the cattle-feeding experiments at some length. By the kind permission of Prof. Brown we make the following extracts:

"I have to thank you for sending me the eighth and ninth annual reports of the Ontario Agricultural College. Much of these I have read with a very deep interest, and more especially the paragraphs, tables and chapters in reference to the important experiments made by you in feeding from their birth the three classes of grade steers. I believe it was your opinion, expressed in the earlier report, that led to my son taking up Herefords as a class of animals likely to prove well suited for the country, particularly the western ranches. He has now a herd of over fifty, embracing some of the best Herefords to be had in England. The last importation during the present month are perhaps peerless. So far as I have read, the result of your most valuable experiments goes to show that your views are correct.

"I have not the report for the year ending 1884, but you were good enough to send me an advanced report for midsummer, 1885, at page 50 of which I find the Shorthorns dropped out, but the Herefords stand higher than the Aberdeen Polls. If you make the age of the Herefords the same as the Poll at the average daily advance, viz., 104 days, at 1.86 lbs. per day, you make the weights of the two animals as follows:

Aberdeen Poll, 1101 days	202 <sup>2</sup> lbs
Hereford (est'd) 1101 "	214 <sup>6</sup> "
Difference	118 lbs.

or not much short of six per cent. in favor of the Hereford.

"Turning again to the table at page 99, report for 1883, it seems to me that the opinions held as to the Hereford, particularly in relation to our great Northwest and the immense field opened up there, are fully confirmed. Milk and beef are two quite distinct things. On the range you can only have beef, and the best average animal for that purpose should be the right one. This table shows that the Hereford stands highest on the whole. The estimate there made stands thus: Hereford, 916; Shorthorn, 893; Aberdeen Poll, 865; Galloway, 832. But in some particulars, viz., early maturity and weight of flesh, the Hereford is stated as under the Shorthorn and Aberdeen Poll. *Strangeto say this does not agree with your recent experiments, by which the very reverse seems to be established.* I refer to the exhibit which you had at the Ottawa show in 1884, as follows:

	Age.	Weight.	Daily gain
Shorthorns, 2 years 6 months		1760 lbs.	2 lb.
Ab. Poll, 2 "	" "	1660 "	2.10 "
Hereford, 2 "	" "	1560 "	2.25 "

and if we bring all up to the same age by estimating the difference in days at the daily average, we have:

Shorthorns, 2½ years	1760
Ab. Polls, 2½ "	1914
Hereford, 2½ "	2032

which makes the Hereford exceed the Aberdeen-Polls 120 lbs., or a trifle over 6 per cent.

"Here, then, is a singular coincidence with the results stated earlier in this letter. The Shorthorns do not appear, but the Hereford at 1101 days is found to be six per cent better than the Aberdeen Poll, at the same age. The deductions from your Ottawa exhibit are in complete accord with the actual results at the closing of the beef contest as far as the two classes (Aberdeen Poll and Herefords) are concerned. It is fair to assume that the deduction with respect to the third class, the Shorthorns, may be taken to be equally correct.

"This admitted, it stands indisputable, that the beefing qualities of the Herefords are six per cent. higher than the Aberdeen Polls, and fifteen per cent. higher than the Shorthorns.

"If the Guelph experiments do anything, they show how extremely valuable to the best and most permanent interests of our country it is to have investigations of this sort carried out by skilful and impartial men."

"We are well pleased with the CANADIAN LIVE-STOCK JOURNAL, and think it should be in the hands of every farmer.—Jas. Graham & Sons, Ailsa Craig, Ont.

**Morgan Horses.**

BY JOHN DIMON.

(Fourth Paper.)

Having in my preceding articles individualized a number of animals of this breed, I shall not consider my papers complete without mentioning several others of much note in their day, and which have done their share, perhaps, in founding this mighty race or family. First among these I will mention Woodbury Morgan, foaled in 1816, the property of Lyman Wight, of Turnbridge, Vt., who sold him at weaning time to David Woodbury, of Bethel, Vt. He was a dark, rich chestnut, his off hind leg was white from the foot half way to the hock, and he had a white spot in his face. He was 14½ hands high and weighed 990 lbs. He was a very handsome, bold, stylish horse, with great resolution and of a very nervous temperament. He was a good driver and appeared well in harness, but showed to the best advantage under the saddle, and was the best parade horse of his day. He was sired by Justin Morgan, and out of a five-year-old bay mare 15 hands high that weighed 1,100 lbs. She was a good mare and speedy, but nothing is known of her pedigree. Woodbury Morgan finally died in Alabama in 1838 from exposure in a long and stormy sea voyage at 12½ years old, perfectly sound.

Fox was foaled in 1813, the property of Colonel Phinney, of Shrewsbury, Vt., sired by Sherman Morgan, son of Justin Morgan; dam unknown; color a dapple bay, black points; mane and tail thick and bushy. He was 14 hands high and weighed 975 lbs. When this horse was about 20 years old he was taken to Upper Canada, where he died. Green Mountain was foaled in 1834, sire, Giffird Morgan; g.s., Woodbury; g.g.s. Justin Morgan, dam sired by Woodbury, a dark bay mare of great beauty and action. Green Mountain was 14½ hands high and weighed 1,100 lbs.; color a deep bay. He was taken west in 1853, and exhibited at several fairs, and took first premiums at the State fairs of Kentucky, Ohio and Michigan. In 1884 he received first premium at the Vermont State Fair. He was a horse of great muscular development, and remarkably nervous and spirited action. Morgan Caesar was foaled in 1828, the property of H. Smith, of Hartland, Vt.; sired by Woodbury; g.s., Justin Morgan, dam by Quicksilver. He was 15 hands high, and weighed 1,100 lbs., was a fast driver, could go a mile (in those times) in three minutes, and was driven 12 miles with two men in a sleigh in 44 minutes. This horse stood several seasons in the State of Maine, and was really the founder of that class or family of roadsters of which Maine has since become quite famous.

But the Vermonters were too shrewd to allow him always to remain in the old Pine Tree State, and got him back again to that of the Green Mountains, where he died in 1848, aged 20 years, and he also died sound in limb. His stock was among the best selling stock bred in Vermont, and geldings of his get brought from \$300 to \$1,000 each. Royal Morgan was foaled in 1821, the property of Mr. Aldrich, of St. Johnsbury, Vt., sired by Sherman; g.s., Justin Morgan, dam known as the Aldrich mare, and sired by Justin Morgan. She was a dark bay of remarkably compact form, with great powers of endurance. She produced and nursed a colt when 29 years old. Royal Morgan was 13¾ hands high and weighed 975 lbs.; color dark bay, with full black points, and a small star in forehead. This horse was also taken to Maine and had much to do with establishing the noted roadsters and gentlemen's driving horses of that State, and he was brought back again to Vermont, and was

owned by a Mr. Crane, and is by some known to this day as the Crane horse. Mr. Crane was so much attached to this horse that a short time previous to his death he directed that a likeness of the horse should be carved on his tombstone, which I believe has been done. When I last heard of this horse he was 35 years old and was as sound and limber as a colt.

Vermont was a dark chestnut, 14 hands high, weighed 950 lbs., a very close, compactly made horse, sire Giffird Morgan; g.s., Woodbury; g.g.s., Justin Morgan; dam sired by Green Mountain; g.d., Phebe by Tom Morgan. Vermont received the first premium at the Vermont State Fair in 1854, and was the sire of many very valuable sons and daughters; among the latter Brown Sally, out of Sally, by Taggart's Abdallah. Brown Sally is the dam of Alma Dimon.

Vermont Hero, by Green Mountain Morgan, g.s., Giffird; g.g.s., Woodbury; g.g.g.s. Justin Morgan; dam by Black Hawk, may also be reckoned as a typical Morgan. He is a bay in color, and possesses all the requisites of his race, with the Black Hawk family cross. After leaving some good colts in Vermont he went to Wisconsin, and was owned when the writer last heard of him near Janesville, in that State. He was the sire of Sargent's Morgan and the g.s. of Alma Dimon.

Having individualized quite a number which I consider typical specimens of this most famous breed, I may not mention any more by name, but will in my next article endeavor to give you more items relative to their race as such, and some facts concerning their performances.

Windsor, Ont., Feb. 8, 1886.

**The Galloways of Alton Hall.**

This splendid herd, now owned by Messrs. Sorby & McCrae, of Alton Hall, Gourrock, near Guelph, Ont., and recently purchased from Mr. Thos. McCrae, Guelph, numbers some 33 head, and are without a doubt the finest herd of Galloways in Ontario.

The king of the herd is McLeod 2nd of Drumlanrig (1675) [553], five years old, and bred by the Duke of Buccleugh, from the bull Stanley of Drumlanrig (1346), which won three prizes in 1879, one being the Highland Society's prize at Perth. McLeod's dam, Harriet 4th of Drumlanrig (2622), was a great prize winner, and her sire, Black Prince of Drumlanrig (546), was first three years in succession at the Highland Society's show, and also won two gold medals. A prize winner in the old country, McLeod has won seven first prizes, six silver medals, and one gold medal in Ontario. He is a grand useful bull, of strong bone and size, weighing a ton. Milligan [153], by McLeod, is a yearling bull of great promise, thick and low set, with good hair and capital style. His dam, Nellie of Corwall (3885) [581], a cow of undoubted merit among Galloway men, is low set, and deceiving in her weight. McAlpine [19534], by McLeod, and the dam Lucella 2nd [370], is also a bull of no second order.

In the cow class, Maggie 2nd of Killiminnan (3877) [571], 8 years old, bred by Joseph Neilson, was sired by Scottish Chief (1040), bred by the Duke of Buccleugh, and her dam Maggie of Killiminnan (2745), was also the dam of the celebrated cow Duchess of Drumlanrig, winner of many prizes at the Highland Society and other shows. Maggie 2nd has won three first and three seconds in this country, and is the dam of three heifers that will do for any ring. Her great opponent is Nellie of Corwall 3885 [581], bred by A. Milligan, and calved in 1879. She was got by Dominic Sampson (1149). Her dam, Mary 3rd of Red Castle (2938), a Scottish prize winner, has produced three bulls and a heifer since being imported to Janesville. Comfort (5555) [363], calved 1879, a strong cow that would weigh about 1,800 lbs., and Cheerful (4422) [561], calved 1880, bred by Mr. McMichen, Gatehouse of Fleet, has produced 3 calves each since being imported. Nancy 2nd of Balgray (4085) [578], is leaving exceptionally fine stock, kept in the herd only by stiff reserved prizes. She was bred by J. Jardine, Patter-

son, Balgray. The six year old Miss Hope 2nd (3972) [575], also bred at Balgray, has been a profitable cow, and Nancy Lee 2nd (4186) [579], calved 1881, and from the herd of Thomas Biggar & Sons, Chapelton, Dalbeattie, traces back to that of Thos. Corrie, Knocklae, who has been breeding pure Galloways for 33 years, following in this respect in the footsteps trodden by his fathers before him. Lady Geills [568], from the Belted Lass [537], a wonder in color to the uninitiated, has a fine bull calf at foot, by Hawarden [831].

Of the three-year-old heifers—Coomie [781], by McLeod 2d (1676) [533], and the dam Comfort (5555) [563], is a prize-taker; Fairy Delt [549], the same age, by McLeod of Tarbrooch (1471), has a fine heifer calf at foot, and has already carried off six prizes at our leading fairs. Nina [783], by Lochiel [591], and Oakshade [784], by McLeod 2d, (1676), dam Mary 2d by Balgray (4085), possesses uncommon merit. Their owners say they would be hard to beat in Scotland. They weighed over 900 lbs. each when one year old, Oakleaf (2357), a full sister of the latter, is following on closely. Maid of Guelph [852] by Elrig (2105) [551], and Cherry Bud, bred by S. Beattie, Annan, Scotland, sire Young Franklin [595], are good beasts, the latter a prize-winner.

The two-year heifers in no way detract from the merit of the other classes. Cherry Leaf by Autumn (1698, [549]), Cherry [780], by Elrig (2105), dam Cheerful (4422) [561], Duchess of Wellington (1151), by McLeod (1676), dam Maggie 2d of Killiminnan, are amongst the favorites at Alton Hall.

Of the yearlings Emmeline [1152], by Lochiel [591], dam Edith of Troquhair (3518) [565]; Lilly Lee (782), by dam Nancy Lee 2nd (4185) [579], with long pedigree, Bridesmaid [779], dam Nancy of Tarbrooch [598], of prize-winning ancestry in Scotland, all by McLeod (1676), and Topsy of Tarquholm [785], dam Topsy of Galliston [1942], by Scottish Borderer (669), are the chief. The calves are also a promising lot.

Considering the ancestry of this herd, their purity of breeding and their triumphs in the show-ring, and the excellence of their record, both in the Janesfield herd and in our leading Canadian show-rings, it will be strange indeed if it does not prove an unqualified success at Alton Hall.

**Placing Stock in the Northwest.**

We have not been requested to publish this letter, which was semi-private in its nature, and written by a tried and reliable friend from Ontario, now settled in Grenfell, N. W. T., but as it strikes a chord upon which many may yet play, we venture to publish it. It reads thus:

"The past season of toil has not been very successful here so far as crops are concerned, owing to the June and August frosts. They have been a failure, but we are not left without hope for the future, as such frosts are rare, at least so say the oldest inhabitants.

I am more confirmed than ever that stock raising should be our specialty, and of course grain sufficient for man and beast in connection. I have been wondering if some person with a little capital to spare, and engaged in the stock business, could not be found willing to invest in here. I would be willing to take charge of a small herd and divide at the end of a given time, say three or five years. There would be no money expense, and I reckon a good cow should pay for herself in one year in butter and offspring, which would be 100 per cent., and the following years would be each better than the preceding. I think I should be entitled to at least one-half for labor and feed. The first investment would remain the property of the party investing for security, until a dividend should be declared.

READER.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

Please forward the large cut of Oliver Twist. We are very much pleased with it; also with the small one. We really think the small one the best. We believe the advertisement will do us a great deal of good. Have had letters both from the Province of Quebec and the United States from intending purchasers since its appearance.

ROBT. BEITH.

Bowmanville, December, 1885.

### Our English Letter.

(From our English Correspondent.)

The returns of the attendance at the various Christmas shows, and still more of the prices made at the various markets of choice Christmas fare have proved that the spending power of large classes of generally well-to-do English folk is now materially weakened. The returns, too, for the national revenue, made at the end of the year, teach the same lesson.

We are assured by the *Times* (London), that beyond the Atlantic signs of improved business are already manifesting themselves. It is quite certain that as yet no such silver lining to the cloud has been visible to any observers here. Probably the rent audits of Great Britain taken in the present month for the year ending October 1st, 1885, will be the most disheartening in the experience of any persons now living.

As a consequence of this general pinch, there has been at the yearly meetings of all our agricultural societies an unusual number of suggestions as to needed reforms. Even at the December meeting of the English Royal and the London Farmer's Club—two institutions as much possessed by the spirit of optimism as any which we have—were heard many propositions as to altered courses. It is but natural that this should be the case, yet embarrassments which prompt so readily the conviction that "something must be done," is a very poor advance as to what the alteration should be, and as to what is the best method of setting to work so as to bring the desired reform about.

No doubt the exhibitions of live stock have been of late years the most prominent feature with all our agricultural societies, and for this reason alone, therefore reforms of live-stock exhibitions were sure to have been the propositions most in favor. They have been so, and suggestions to amend these in the direction of subordinating them more to other departments of agriculture have this winter been specially popular. We believe this movement to be wholly erroneous. The real facts of the position do not point toward the well-being of our live-stock becoming of less importance to the British farmer, but that they are every day becoming more. We require, in fact, on the part of the agricultural societies not less attention to questions involved in stock-keeping, but greater, and above all, attention which shall be persevered in more intelligently and more thoroughly.

The amendments of present practice which have been most discussed are those which aim at bringing the grazier more directly into touch with the consumer of meat, and those which profess to bring cattle into the show yard in what is deemed a more natural condition. It will be seen that these two propositions for reforms are of very different character, and they appeal to quite different principles. The former is an economic question, part of the great puzzle as to how distribution is best (i. e. least wastefully) carried out; but the latter is really one which touches the foundation principles of all live stock exhibitions, and to this therefore we shall mainly confine the few remarks for which we can spare room.

We shall dismiss the former suggestion by saying that there can be no doubt that more united action by producers to put their produce before the public upon more advantageous terms is imperatively called for. Breeders, feeders, dairymen, etc., must not continue to submit to be taken separately and broken one by one. They must combine to obtain trustworthy information about markets, so as to be able to withhold or forward supplies in accordance with the actual demand at any given place on any given day. What is meant may be inferred by one fact: the district about Aberdeen is one in which the very best Christmas beef is annually produced in very large quantities. In 1885 the Aberdeen graziers sent up to the great Christmas market in London such an enormous consignment that the London demand was entirely glutted, and it is believed that the Aberdeen supply was the means of losing £10,000 to the men who sent it, i. e., the cattle, through the excess present fetched £10,000 less than the going prices in Aberdeenshire warranted the senders in expecting. Had the Aberdeen men combined to divide their great annual output, and to arrange that it should have been offered by instalments, not merely would they have suffered less loss, but the position of holders of beef throughout the island would have been improved, for the glut at Smithfield effected unfavorably—to the vendors—every meat market in Great Britain.

The other question—that of what is called popularizing the live-stock shows by enabling more exhibi-

ters to take a part in them by showing animals in lower condition—cannot, we think, be defended. Shows exist not to enable the largest number of persons to share in the prize money, but to enable the largest number of persons to see the *maxima* of stock breeding. By this we mean that the animals rewarded at the shows should be as near perfect as possible as individuals, and not as large a body of competitors as could be brought into any yard. It is the highest type which is wanted, not the greatest crowd. As for natural condition, there cannot really be any such thing now. All domesticated animals in a thickly populated country under highly artificial surroundings must be kept, under unnatural conditions. The natural condition of bulls and tups and boars is to be fit for challenging rivals at any minute, and the natural condition of cows, ewes and sows is how to continue maternity without the dams being weakened by it against natural enemies. Under domestication, the least pugnacious males are the best adapted to their owner's use, and the least affectionate mothers. We don't want natural condition; we want animals of such character that they can be kept easily within bounds without danger, and such as will allow their milk and their wool to be taken from them with the least of resistance from natural impulse, and above all, they must be such as can at short notice be converted into cash in the only markets which are certain to be always open, i. e. the markets for immediate consumption.

This involves the power of carrying on flesh at every stage of life, of being able to grow and to breed, and yet to be able to furnish at short notice a salable carcass. The best evidence that any strain of blood has these qualifications is by letting people see the members actually breeding when full of flesh; or continuing to breed year after year, although they have been kept usually in a state which once used to be thought incompatible with breeding.

For the rest, it can only be said that all the feed statistics which were taken in Great Britain this Christmas go to show that, neither in percentage of salable beef, out of living weight, nor in growth per day during the whole of life, are our British cattle—in spite of some rather unfair assertions upon these points—losing ground. The average sales of the steers shewn fat under six months was unprecedentedly high. Several prize winners yielded 70 per cent. of meat, and by special observation, this meat was found to be in quality and quantity as good as ever has been seen in Great Britain. And where has better beef ever been found?

### Scrub Taxation.

(Held over from February.)

EDITOR CANADIAN LIVE-STOCK JOURNAL.

SIR,—In your issue of Dec., 1885, I see a letter from Mr. Brown on this subject. In one clause of his letter he states, "Through continuous cropping, lands have lost their virgin productiveness, and through careless farming they have become infested with foul weeds. Just so through continuous using of scrubs, Mr. Brown, our markets have become glutted, especially the horse market at the present time, and as there has been little or nothing said with regard to horses, I may state that I consider the scrub horses are causing fully as much annoyance and loss as the scrub bulls in this part of the Dominion, simply through a penny-wise, pound foolish class having their mares served by scrub horses, because they can get these a few dollars cheaper; whereas if they would pay a little more for a good draught horse they would have colts that would take the market and realize at least one-third more in price, and be a credit to their breeders at the same time. I may state I have experienced a few of the drawbacks these scrubs are entailing on the class who are trying to introduce a good stock of draught horses into this part of the country, and my experience is that it won't pay to introduce a really first-class horse here so long as this thing continues, as it is impossible to get reasonable terms for service in this neighborhood.

For the above reasons, I for one would not grudge a \$50 or even \$100 tax on horses, which might be applied to good purpose as premiums for thoroughbred stock at our township shows. Go on and win.

CLYDESIDE.

Tiverton, Jan., 86.

"You are certainly making splendid efforts to make the CANADIAN LIVE-STOCK JOURNAL second to none in America."  
—W. Lang.

### A Very Useful Work.

Mr. Francis Green, of Innerkip, Ont., is, we understand, busily engaged in the preparation of a list of all the imported Shorthorns that have been introduced into Canada, both male and female. Although intended in the meantime simply for his own use, its preparation involves an immense amount of research, and must prove invaluable as a work of reference. It shows the dams and sires of all the animals imported, leaving out all doubtful animals. It will also contain the progeny of all the calves dropped by the cows, showing these in a tabulated form, together with the names of the breeders and importers.

We think that the owners of all imported animals and their progeny, so far as there can be identified, should forward a list of the same to Mr. Green at an early day. We have seen this work in skeleton form, and already it extends over some 140 pages. We hope at some time in the future to have an opportunity of presenting it to our readers.

Mr. Green has rendered excellent service in reference to the herd-book union, and we were glad indeed to see so reliable an authority placed on the revising committee of the B. A. S. Association.

### On the Right Track.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—Your sample copy of January to hand. A neighbor lent me some of the back numbers of 1885. The JOURNAL is in many points the best and most interestingly edited live stock paper that has reached me for a long time. In particular I like the energetic way in which you handle the scrub question. Poor "Minnie May," do you think that she sees the cruelty and wickedness indulged in by her proprietor and others in forcing poor mangolds, turnips, and other roots to such plethoric dimensions as these which prize specimens have now attained, stuffing them with nasty manures and other artificial foods? It would be well for all the farmers in this section of the country if they could be induced to subscribe to the JOURNAL, and hearken to its teachings, for although the farm of the Scottish Ontario Land Co. at Binscarth is within 50 miles, with their fine herd of well bred cattle, yet the farmers instead of availing themselves of the young bulls there, use some of the veriest scrubs, which would not even make decent stags.

Nine years ago I was a student at the Royal Agricultural College, Cirencester, when the lecturers were such men as Prof. Church (chemistry), McBride (vet.), McNabb (botany), Wrightson (agriculture), and Swanswick manager of the farm, famous for his Park shires and Cotswolds, and can therefore feel, to some extent, what a benefit to this country such institutions can be made. I am likely to trouble you in the near future with a good many questions. I close by congratulating you on the good work which you are engaged in.

N. W. C. BAUGH.

Kinbrae P. O., Assa., N. W. T.

### Live Stock at North Oaks, Minnesota.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—Just a line to let you know how we are getting along in this cold country. It has been below zero for over two weeks, night and day, and sometimes 35° below at night.

This is one of the largest establishments by the way of raising stock in the country. We have Bates and Scotch Shorthorns, Angus, Jerseys, Clydesdales, Cleveland Bay and Norman horses, Shropshire, Black Highland and common sheep, buffaloes, elk, deer, and 150 Berkshire pigs, etc. Can tie up 80 head, and have nearly 200 box stalls for cattle, and horse stable for over 40 horses. It will take some time to get around the whole.

JOHN GIBSON.

Jan. 25th, 1886.

[White Oaks is the colossal stock establishment of Mr. J. J. Hill, of St. Paul, and has recently been placed under the management of Mr. Gibson.—Ed.]

**Barrington.**

This very fine illustration represents one of the most noted and very possibly the best Holstein-Friesian bull living. It will be of special interest to our readers inasmuch as many of the heifers offered at the public sale of Holsteins at Toronto, Ont., March 30th, (see advertisement on page 76 of this issue) are in calf to him.

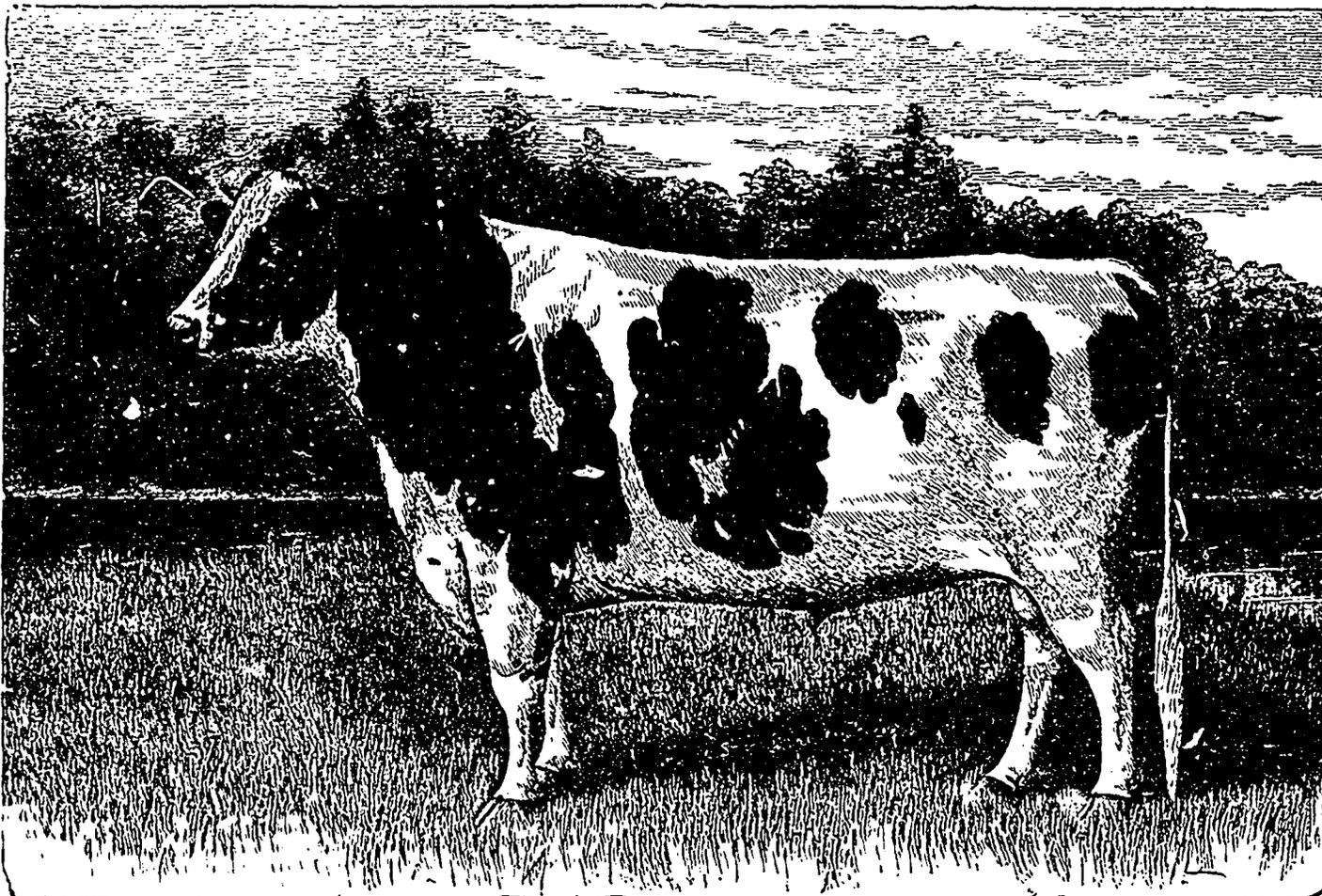
Messrs. B. B. Lord & Son, of Sinclairville, N. Y., are well known to our people as importers and breeders of first-class Holstein-Friesian cattle, and owners of one of the finest herds of these beautiful animals on the continent, at the head of which stands Barrington, a magnificent specimen of one of the best types of dairy cattle in the world. He is now three years

**Bellevue.**

The names of some places are misleading, giving one occasion to expect more than is found when the place so named is brought under review, but it is not thus with Bellevue, the extensive and picturesque domain of Mr. A. Hagar, M. P. P., which lies above and below and around the pretty little village of Plantagenet, on the banks of the Nation, some six or seven miles above its junction with the Ottawa. The name is singularly appropriate, for not only is it a land of natural beauties, but the inhabitants, like the name, which represent the French and English languages, also represent these two nationalities. May the day speed on when the differences of language, race and religion shall disappear, and the two peoples blended

tillage that all at once appeared, and so it proved—characteristics of all the field operations that passed under review during the whole half day that we spent with its proprietor in driving through some portions of this extensive domain.

Turning to the right within its borders and driving toward the midday sun shining in the fulness of his strength, we paused at the side of an outlying barn on the crest of a hill, which commands a magnificent view of this land of eastern Ontario glories. Look which way we would, the eye in its nearer view rested upon some portion of the 1,500 acres which make up this pleasant, fertile farm. In the resplendence of the fulness of the late summer richness, the wide valley of the Nation un-



**HOLSTEIN-FRIESIAN BULL BARRINGTON 278 N. H. B., 2103 H. H. B.**

*Imported and Owned by B. B. Lord & Son, Sinclairville, New York.*

old, and weighs 2,200 lbs. His services are held at \$100 per cow, and his owners have twice refused \$3,000 for him. Many of his get, while yet calves, have sold for \$500 each. His dam Hamming 3851 H. H. B., has a milk record of 99 lbs. in a single day. She is one of the finest and most perfect cows living. Her dam has a milk record of 90 lbs. per day, and the dam of her sire 88½ lbs. of milk in a single day, and a butter record of 20¼ lbs. in seven days. The dam of the sire of Barrington has a milk record of 86 lbs. per day and 18 lbs. 9 oz. of butter in seven days. This herd includes, not only Barrington and Hamming, but many others of the very best quality, and many of them will be offered at the coming sale.

"Your JOURNAL in my opinion is one of the best I have ever read, and would recommend it to every farmer."—Samuel Beamist, Bothwell, Ont.

like the name of the domain of the largest landowner in the locality, shall unitedly labor to build up our northern Dominion, and to make it more and more worthy of the praises and the esteem of our great forefathers, dwelling so securely in their island home beyond the Atlantic.

We reached Bellevue late in September, just before the days were in the yellow leaf, although here and there some were tinged, carrying home to one the truth of our mortality, in spite of our natural reluctance to dwell upon this, which is too often looked upon as the grim spectre of the inevitable; coming from Ottawa city by boat adown the majestic Ottawa river to Brown's wharf in north Plantagenet. Ascending the river bank and driving inland some three or four miles through a neglected country, we suspected the limits of Bellevue had been reached by the strength of the crops and the cleanness of the

folded its beauties one by one as we had time to take them in.

There lay at our feet wide fields (little farms in extent) of silver yellow oats falling before the reaper, and numerous herds grazed in the meadows of the valley, which had already furnished a supply for winter. Years ago these strong bottom lands in places were so swampy that it was thought they could never be tilled. Immense rafts of pine and oak were sent from these in days gone by, which long ago have perished in British ships of war and peace. In the centre of the valley run the waters of the Nation, a mighty flood in spring-time, but now a modest river, the waters of which were making their way through shallows where the stones lay confusedly in the river bed or congregating in deeper and wider basins to rest awhile in their onward journey. On the farther bank stood clumps and lines of trees, on this silent autumn

day, in the stateliness of a beauty that is given alone to evergreens. Our attention was speedily drawn to a group, or indeed a little forest of pines, looking down upon the river and singing with ten thousand voices the song of every passing breeze. Here, we are told, the people of the neighborhood love to hold their picnics, and oftentimes upon a summer afternoon the waters of the river on the margin are dotted with boats, in which many a young man and maiden commence that endless voyage together that terminates only on the shore of the great glassy sea of eternity.

A little up the stream, and mostly on its farther bank and near the centre of Bellevue, lay the village of Plantagenet, with its 500 or 600 inhabitants, where the blacksmith was swinging his hammer and the shoemaker driving his pegs, the schoolmaster tending his little French and English boys, and where, indeed all the rounds of North American village life were being lived in all its phases, within the whitewashed and painted dwellings and places of business. This village is largely owned by Mr. Hagar. The grist-mill, the saw-mill, the woollen-mill, and other branches of industry, are all the product of the one versatile mind.

Above and beyond the lower valley, half hidden with the fringe of trees, lies the beaver farm, comprising over 200 acres, divided into two fields, apparently level, but with sufficient drainage—without stone or stump, and running up to the base of the grand old hills that in the various forms of pretty vegetable life that grow upon them, were bidding us welcome by their attractions. Two large barns stood near the centre of this charming plateau filled to the roof with cured hay.

Away beyond Plantagenet, apparently on a sunny slope, lay the little village of Curran, with an air of quiet beauty that was in keeping with the stillness of the atmosphere, the inhabitants of which seemed to live in proximity to the sky.

To the right lay field and forest, hamlet and steading in a widening basin, in the midst of which— $3\frac{1}{2}$  miles distant—lower down the river and at the head of steamboat navigation thereon, the smoke of Mr. Hagar's principal sawmill lazily floated about, and far beyond, the grand old hills on the farther bank of the Ottawa rose in their strength, shorn of all severity of look by the green trees clinging to their steeples.

To the left lay a wide stretch of forest, 500 acres in extent, where the evergreen trees crowd each other for a place, and yet they make room for their deciduous brethren in many parts, thus teaching another lesson as to the hatefulness of that selfishness which would prevent the distinctions of race from dwelling peacefully together.

Reluctantly we turned away from this wide panorama of beauty, sighing for that artistic inspiration that would enable us indelibly to stamp its impress on the page of Canadian story, never to be obliterated so long as printer's ink shall make impressions, and Canadians can read.

The farm, over 450 acres of which were cleared by the present proprietor, is made up of various soils. Here are the sandy loam of the ridge, from which we first beheld its beauties, the black mould of the heavy bottoms just below, the warm, mellow limestone and interval land between these and the river, and the rich clay flats covered with black muck on the western side—these allow ample scope for the growth of every description of crop requisite in stock-keeping.

The steading of Bellevue is situated below the village and on both banks of the river, and to avoid the roundabout way of crossing by the village bridge, carriages and full loads of hay and grain are driven over

the limestone bed of the river during the summer season, an additional means of transit being a large canoe, built, we suppose, it not after the pattern of that of Hiawatha, after the model furnished by some of the tribes of his race. The dwelling of the proprietor faces the Montreal and Ottawa road, and is built upon a rounded ridge, high and narrow, formed by the junction of a streamlet emerging from the deep dark glades of a Bellevue forest across the way, where a vast army of evergreen second-growth trees growing out of the ashes of some mighty conflagration which wrapped the forest in one winding-sheet of flame, and the story of which has been buried in the graves of an equally forgotten generation, are there fast growing up into usefulness, which cannot always be said of the young men of our country.

In the depths of that woodland we drank from the invigorating waters of a sulphur spring, and not far away from those of one strongly saline; and in the evening of the day beheld the herds of Bellevue wade through the running waters of the Nation, to take their evening drink, and with one accord, from the streamlet, fed in part by the waters of these springs. If mankind would show but half the wisdom of these herds, taking only what was best for them, the millions upon millions that are wasted in nostrums would be saved, and the hideous lies about them that stain the pages of newspapers otherwise respectable, would be left un- told.

Either slope of this ridge of land is lined by gracefully slender pines and tamaracks, with oaks and elms intermingling, and each, unlike the persistent keepers of scrub stock, looking for the light. So completely do these fringes protect the dwelling, that in the dark days of winter, when the mighty tempest beats about the heights of North Plantagenet, the proprietor of Bellevue only hears their voices much subdued, murmuring in the pines.

The outbuildings across the river are numerous, so much so that they suggest the thought of lumberman proprietorship. They include farm house, a private dairy, ice house, barns, sheds, and conveniences for the different kinds of stock with yards attached, like the tenements and garden plots of a village. The root-cellar is overground, and attached to one of the large stables, the walls consisting of a double lining of boards six inches apart, and filled with sawdust; then outside of this a large layer of tarred felt paper covered by the sheeting boards. This has been found sufficient to keep the frost at bay during the sternest of our recent winters. From the side of a hill nearly half a mile away, the waters of a spring gambled down into the valley in other years, with the indefiniteness of aim that characterizes a thoughtless maiden. Mr. Hagar arrested these with a dam, and then through bored wooden pipes had them conveyed to the barns, whence the overflow is carried in pipes to several of the surrounding fields.

For long years Mr. Hagar has had a taste for keeping good cattle, and indeed the same may be said of his father before him, along with Mr. Rodden, also of Plantagenet, who keeps choice Ayrshires. Mr. Hagar has, for years, in the stock line, been hanging out a light in a dark place, for \$25 milch cows are very abundant here, although on the day of our visit he (Mr. H.) sold two of these (Shorthorn grades) for \$65 each, to a Montreal buyer. The grade cattle kept in former years were of a large class, and for long have been dashed with the Shorthorn blood, many of them now bearing all the characteristics of Shorthorns. The grades of this class now number 120 head, a contingent of 30 head being sent to Manitoba last winter.

The first Shorthorn brought to Bellevue was the bull Duke of Newcastle in 1863, bred by the late John Bellwood, of that place, sired by Sultan, and from the dam Newham Lily. In 1869 Prince Albert was bought at Guelph, a red in color, calved 1868, and bred by Samuel Barber, sired by Grand Duke of Mer ton [324] 5732, dam Eita, by Derby [65] 4690. He proved a good stock getter. The late Mr. Benson's (Cardinal) Baron Grenville followed, but before doing much service unfortunately broke his leg in the stall, and had to be slaughtered. Then followed Prince Albert 28336, a Princess bull, raised by Geo. N. M. Curtis, Ogdensburg, N. Y., a rich roan, calved October, 1876, sire Saladin 10938, and dam Princess of Oxford, by Earl of Oxford (8072), which did well, and in 1883 he was sold to Angus McMartin, Laggan, Ont.

In 1883 Nero, bred by C. Marsh, Port Perry, got by Waterman—1554—, dam Blossom, by Royal Barmpton 32996, was bought, and is still in the herd. He has a good front and head, and is a strong, compact Cruikshank bull, now held for sale. The other stock bull is Soldier Boy, calved Dec. 24th, 1883, and which, along with his dam Sunbeam, appeared in the December JOURNAL of 1884. His sire is Lord Glamis (48192). He has made good progress, is large for his age, clean and strong in limb, nicely proportioned, and retaining that style which characterized him as a calf. At the time of our visit, though only in safe breeding condition, and 20 months old, he weighed 1450 lbs.

Along with Baron Grenville came two cows which have not done well, and with Prince Albert from Guelph, a heifer calf, Sweet Rose of Milton, of the stock of Joseph Kirby Isabella, bred by John Miller & Son, Brougham, calved March, 1882, is a good shapely cow, got by Crown Prince of Strathallan, and from the dam Isabel 6th, by Young Mayflower (41863) along with a number of other females of good type in the lineage. They will soon build up a strong herd of Shorthorns. It now numbers 16 head.

Mr. Hagar has done something in breeding thoroughbred horses, and owns two beautiful stallions coming three and five years, by the horse Figaro. They are black in color, very pretty, and possess unbounded life. Figaro, brought out by Captain Moore of the Guards, at the time of the Trent affair, is described as a beauty, and was highly bred. Brought to Bellevue in 1871, he proved a very serviceable horse, yet it has been Mr. Hagar's experience that there is more money in breeding heavy horses.

The Clydesdale stallion Prince Imperial 2nd, bought in the winter of 1885 from H. H. Spencer, Brooklin, is a beautiful beast, well coupled, and finely ribbed, with broad flat bone, clean limbs and good feet.

The fine old road mare Dolly, which conveyed us from point to point, is worthy of perpetual remembrance in the story of horse lore. She is 22 years old, and during that time has only been once shod in her front feet, and yet is perfectly sound. Indeed, there is no blemish upon her in any part. She has the life of a colt, and yet will go through a snow bank up to her back in safety. She has frequently carried her owner 80 miles in a day, without apparent fatigue.

Here too are Shrops, a very good lot of 15 breeding ewes, imported, and from the herds of Mr. Fowler and Mr. Farmer, of England. The stock ram, from the former breeder, is a fine fellow, with short limbs, and well wooled on head, body and legs. Ten of these were purchased from John Dryden, M.P.P., Brooklin, in 1883. The lambs of both sexes are very good.

There are also Berkshires of a good type. They came originally from such men as Dawes & Co.,

Lachinc, and Andrew Allen, Montreal, but latterly from J. C. Snell, of Edmonton, Ont.

Mr. Hagar was born at Belleview in the year 1827, and as no adequate education could be got amid the tamaracks and cedars of Plantaganet, he was sent to receive this amid the green mountains of his father's former home. This gentleman settled on the Nation about the year 1817. He came originally from the singularly beautiful uplands of Vermont, erected a saw mill near the site of the present one, met with vicissitudes of fortune that would have crushed the spirit of most men, though from no fault of his, which, it may be, hurried on the decline which sent the faithful sharer of his joys and sorrows to die amid the scenes of her childhood, and there to be buried.

Returning from school in the flush of manhood, he went to work with a will, taxing severely the powers both of muscle and mind. The results were a mill, a store, a farm, other mills, rafts of timber, scow loads of lumber, other farms, a village, 1,500 acres surrounded by one fence, a seat in the Dominion Parliament from 1867 till 1878, and in the Ontario Legislature since 1880, and a business so varied and complicated that one day's history of its details would sound more like fiction than real life.

#### Tax Upon Dogs.

The most faithful of man's domestics, the dog, may easily be allowed to become one of his most treacherous foes, when not properly regulated. The horse is not the only animal requiring a bridle: the dog also wants one, and it should be put, not in his mouth, but around his neck every night, and as regularly as the night recurs.

Ever and anon reports are published of sheep having been killed by dogs. When "highway" sheep are the victims, the loss is not so serious; but dogs, like men, prefer mutton of a superior type. They have not the slightest respect for lineage or pedigree when they are out on a sheep hunt.

So grave are the proportions that the evil has assumed, that in some parts sheep-raising is practically prohibited. Mr. Harry Pattison, of Dover, Secretary of the Thames Farmers' Club, mentions in a recent letter, "We are completely overrun by straggling canines. The sheep and wool-growing industry are almost dead in the county, through the losses sustained by sheep-killing dogs." And similar is the testimony that has reached us from other parts.

With a view to improve this state of matters the aforementioned club has employed S. B. Rankin, barrister, Chatham, to draw up certain amendments to the existing Act, which have been introduced in substance into the Ontario Legislature by J. Clancy, Esq., M. P. P., the member for West Kent. They are also commendably seeking the co-operation of other Farmers' clubs and Institutes. The following are the principal amendments:

"There shall be levied, annually, in every municipality in Ontario, a tax of one dollar for each dog and two dollars for each bitch, in addition to an annual tag, furnished by the Municipality, and to be handed by the Assessor or Assessors to the owners or keepers of dogs, who shall be compelled to place on each dog or bitch a collar, to which said tag shall be attached.

"Any person or persons owning or harboring any dog, or dogs, after the first day of May, in each year, without a collar bearing Municipal tag, shall be liable to a fine of Five Dollars and costs, on complaint being made before any Police Magistrate or Justice of the Peace having jurisdiction. The informer shall receive half of said fine; and in default of payment by the person or persons so convicted, he or they shall be imprisoned in the common goal for a term of not less than fifteen days or more than thirty days."

"Every owner or keeper of dogs shall be compelled to have his dog or dogs securely fastened up at

night, and every dog not being in company with his owner or keeper, and found running at large at night, even with Municipal tag attached, shall be liable to be either destroyed, or his owner or keeper fined, with a penalty of five dollars for the first offence and ten dollars for the second, on complaint being laid before any Police Magistrate or Justice of the Peace having jurisdiction, it being optional to either destroy the dog or to lay the complaint."

This very necessary and not over stringent measure, as we regard it, will, we trust, meet with the approval of the Legislature.

#### Standard of Dominion Shorthorn Herd Book.

As we failed to add the qualifying clause in giving the standard of the new Shorthorn herd book in a former number of the JOURNAL, we give below the exact words copied from the circular Mr. Wade has issued in reference to the standard, etc.

No animals shall be admitted to registry in the Dominion Shorthorn herd book except those whose pedigrees trace in all their crosses to imported cows registered in the English herd book. Registration in the English herd book of stock imported previous to 1865 will not be required. No recorded animals in the English herd book that have not ancestors on record previous to vol. 21 will be admitted. Those imported since 1846 must trace to ancestry distinctly designated, but owing to the difficulty connected with keeping proper records prior to that date, it will be sufficient to know that the ancestry has been imported.

The charge for registration is as follows:

The pedigrees of all qualified animals at present recorded in either Canada or British American Shorthorn herd books, if ownership is not changed, shall, on application being made, be re-printed gratuitously in the Dominion Shorthorn herd book.

The charge for registration for members of the Dominion Shorthorn Breeders' Association is 50c. per animal; for non-members, \$1; and for special certificates in either case, 25c. more; for changing the ownership of any animal previously recorded, 25c.

We were minded to give all particulars in this issue, but must forbear this time, as our space is gone.

#### The Willow Lodge Herd of Shorthorns.

This fine herd of cattle, owned by Mr. J. C. Snell, of Edmonton, Ont., and to be sold on April 7th, as announced in our advertising columns, has been selected and bred during the last ten years with the well known good judgment and taste of the owner, and we are sure it is with reluctance that he has decided to part with them, but a combination of circumstances, such as the relinquishing of a rented farm and the intention to rebuild his barns, seems to mark the present as a fitting time to make the venture of offering the herd for sale, and we are assured by Mr. Snell that he is prepared to accept the verdict of the public as to the value of his cattle, and will make it, not a weeding out sale, but an unreserved offering of the entire herd.

The name of Willow Lodge has been associated with several good sales in the past, and one of the most satisfactory features in this connection has been the faithful manner in which the public have been dealt with.

The leading feature which has marked the success of the Willow Lodge herds and flocks in the last 30 years has been the settled conviction carried into faithful practice of securing only first-class sires to place at the head of the harem, and who that is familiar with the history of Shorthorns in Canada does not remember with feelings of admiration the long line of illustrious sires which have hailed from Willow Lodge, to wit, Baron Solway, Duke of Bourbon, Loudon Duke, British Baron, Knight of the Rose, Aurdrie 9th, Waterloo Warbler, and last but not least, the present incumbent, Royal Irwin. The blood of nearly all of these, most of which have made famous records as prize winners, will be found more or less prominently figuring in the present herd, and it goes without saying that it must inevitably have had a good influence

in moulding the character of the herd. A glance at the pedigrees of the bulls above mentioned will show that Mr. Snell has not been tied down to any special formula of line breeding, but has adopted the motto, "a good beast with a good pedigree," a safe course we are quite sure where the object is, as it ought to be, the development of the breed to its highest possibilities.

While this is true, we may here remark that Mr. Snell is no inapt student of pedigrees, but has kept abreast of the times in all that constitutes an intelligent knowledge of the most modern phases of this interesting class of literature, and has been to the fore in all the late movements for the consolidation of the herd books, and the elevation of the standard of purity of Shorthorns.

A glance at the advance sheets of the catalogue of sale shows an interesting variety of pedigrees, comprising some ten or twelve different families, all tracing to imported ancestors in all lines, and fully up to the requirements of the Dominion Herd Book lately inaugurated, which, as stated elsewhere, is the highest standard adopted by any Shorthorn herd book in the world. While there is a considerable range of diversity in the pedigrees of the cattle, we are persuaded from a personal inspection of the herd that there is a large measure of uniformity of type perceivable in the individual animals thereof, which gives evidence of an aim and object on the part of the owner to produce and perpetuate certain useful characteristics, prominent among which is what is known as good feeding qualities, short legs, deep bodies, strong loins and lengthy quarters, with good handling and abundance of soft hair.

The principal sire used in the last four years has been the imported bull Waterloo Warbler (47222), bred by Lord Polworth, St. Boswell, Scotland, a prize winner at leading shows at home, and winner of first prize as a two-year-old at the Dominion Exhibition at Kingston in 1882, where he divided the committee of four judges in the competition for the gold medal for the best bull of any age, two favoring the Willow Lodge bull and two the aged bull Royal Barnpton, which necessitated the appointment of a fifth judge, who decided in favor of the latter.

Waterloo Warbler has been succeeded by Royal Irwin, a worthy son of imported parents, from the famous Sheriff-Hutton herd of Mr. Linton, whose bulls and their sons and grandsons have literally swept the prize lists at the Royal and other leading shows in England and Scotland during the last fifteen years up to the present year, when the following bulls, deep in the blood of Sheriff Hutton, have made a remarkable record as prize winners in the home of the Shorthorns, namely, Hovingham, Self Esteem 2nd, Goldfinder, Hopewell, Golden Treasure, and Royal Ingram, the latter winning the champion prize as best Shorthorn bull any age at the Royal show at Preston. The sweepstakes prize bull shown at the head of the Bow Park prize herd last year (Sir Arthur Ingram), as well as the first prize yearling bull Ingram Chief, are also bred direct from Sheriff-Hutton stock, which makes a record seldom equalled by the descendants of any single herd.

The females catalogue include a half-dozen choice representatives of the Kinellar herd of Mr. Sylvester Campbell, of Aberdeenshire, Scotland; three very fine specimens of Mr. Cruikshank's Duchess of Gloucester family, the dam of the younger two being sired by a son of the famous cow Golden Drop 1st, sold for \$1,225 at the Willow Lodge sale in 1874. Six highly bred representatives of the Seraphina tribe, three tracing to imported Pansy, by Blaize, with rich top crosses; two strongly bred Torr-Waterloos, of Booth blood, same family as Waterloo Warbler. Several good individuals running to Beauty, by Snowball, imported by Hon. Adam Ferguson, besides a few scattering representatives of the Zora, Boston Cow, Syme, Lady Jane and other useful and well known families.

Fifteen of the cows will have calves at foot, sired by Waterloo Warbler and Royal Irwin, and most of them will be in calf again before the sale.

A fair proportion are yearlings and two-year-old heifers, some of which are in calf, or will be bred before the sale. As Mr. Snell has an abundance of feed, he is prepared to keep at a moderate charge till grass comes, if required, any cattle which may be bought for the Northwest, or where it is not convenient to remove them for some time after the sale. We look forward to a large gathering of stockmen and farmers at Willow Lodge on April 7th, and we are safe in assuring them a warm welcome and good treatment.

**Inquiries and Answers.**

POLAND CHINA SWINE.

In answer to an inquiry from Port Hawkesbury, Cape Breton, in reference to the color of Poland China swine, we give the scale of points adopted by the Central Swine Record of Indiana, one of the leading records of this breed in the United States, but not the only one. It is as follows:

Head—Small, broad, slightly dished.....	5
Ear—Thin, fine, drooping.....	3
Neck—Short, full, well arched.....	3
Jowl—Neat and full.....	2
Brisket—Full.....	3
Shoulder—Broad and deep.....	6
Girth above heart.....	10
Back—Straight and broad.....	6
Sides—Deep and full.....	6
Ribs—Well sprung.....	9
Loin—Broad and strong.....	7
Belly—Wide and straight.....	4
Flank—Well let down.....	3
Ham—Broad, full, and deep.....	10
Coat—Fine and thick.....	4
Limbs—Strong, straight and tapering.....	5
Tail—Tapering, and not coarse.....	1
Color—Dark.....	3
Action—Vigorous, easy, lively.....	5
Symmetry.....	5
Total.....	100

## DETAILED DESCRIPTION.

**Head**—Short, broad between the eyes, and nicely tapering from the eyes to point of nose; face slightly dished, cheeks full. Objections—Head coarse, long and narrow; face too much dish; snout coarse or thick.

**Ear**—Drooping, thin, pointing forward. Objections—Too large and coarse; thick, looping, lying too near the face; stiff, erect, or too round.

**Jowl**—Full, firm and neat, carrying fullness to shoulder and brisket. Objections—Flabby, light, thin in cheek.

**Neck**—Full, deep, short, and well arched. Objections—Long, flat, lacking in fullness or depth.

**Brisket**—Full, well let down, extending well forward, and on line of the belly. Objections—Narrow.

**Shoulder**—Broad, deep, full, and even on top. Objections—Lacking in depth or width, blade too prominent.

**Back**—Broad, straight, or slightly arched, carrying width back to the ham, and of medium length. Objections—Narrow, creasing back of shoulders; narrow across the loin, swayed, too long, fish shaped.

**Girth around the heart**—Full back of shoulders; ribs extending well down, wide and full back of fore leg. Objections—Less than flank or length of body from top of the head to root of tail, or creased back of shoulder.

**Sides**—Full deep, carrying size well down and back. Objections—Too round or flat, or thin at the flank, flabby.

**Ribs**—Well sprung and long. Objections—Too flat, curve of rib too short.

**Loin**—Broad, strong and full. Objections—Narrow, weak.

**Belly**—Wide and straight. Objections—Sagging, narrow.

**Flank**—Well let down and full. Objections—Thin, tucked in, cut up too high.

**Ham**—Broad, deep, coming down well to the hock. Objections—Narrow, short, too steep at the rump.

**Limbs**—Medium length, stout, tapering, set well apart, bone firm and not coarse; pasterns short; short toes. Objections—Long, slim, coarse, crooked, muscle light; pasterns slim or flat, toes long or spreading.

**Coat**—Fine, thick, straight. Objections—Bristles, hair too long, harsh or curly.

**Tail**—Small, tapering. Objections—Coarse, large, too prominent at the root.

**Color**—Dark, with a few clear white spots (sandy spots and speckled color shall not argue impurity of blood, but are not desirable). Objections—Solid black, or with more sandy or more white than black hair over body, or plum color.

**Action**—Easy, fine and graceful. Objections—Slow, clumsy.

**Symmetry**—Harmonious combination of all the foregoing schedule of points.

**Veterinary.****A Delicate Surgical Operation.**

On the 22d January the veterinary infirmary of J. D. O'Neill, V. S., London, Ont., was the scene of a very successful though formidable operation. The patient was a valuable three-year-old mare, the property of Mr. Riley Day, of the 7th con., Nissouri township. The mare had been suffering for upwards of a year with indurated or suppurating mammary glands, the functions of which being lost, its entire removal was deemed advisable.

The patient having been properly prepared for the operation, was secured, and chloroform administered (the first horse ever chloroformed in London), and the delicate operation of removing the glands was successfully accomplished by Drs. O'Neill and Green, of London.

A number of prominent horsemen witnessed the operation, and expressed their opinions to the effect that operations of the kind should be placed in the hands of surgeons competent to administer anesthetics, and that the barbarous practice of allowing animals to struggle during the progress of severe operations (often to their total destruction) should be done away with. We rejoice in the humane example they have given to the country.

**Diseases and Accidents Incidental to Parturition.**

BY F. C. GRENSIDE, V. S.

Although parturition (bringing forth) is one of the natural functions of females, of all the higher forms of animal life, it differs from all other natural processes in the innate tendency which exists to more or less derangement of the system attendant upon that act. Even when no actual disease results throughout the course of delivery, still there is always a certain amount of irritability, fever, distress and pain. It is in this wherein the difference lies between parturition and the course of the other natural offices of the body, which, when in a state of health continue to perform their respective functions, without the individual to whom they belong being reminded of their presence; as, for example, the kidneys secrete the urine, the liver the bile; while the stomach proceeds with the digestion of food.

**RETENTION OF THE FETAL ENVELOPES OR AFTER-BIRTH.**

The coverings of the unborn animal are usually naturally expelled within a few hours after delivery, but not infrequently we find them retained beyond the expiration of the usual term; this constitutes an unnatural condition, and one which sometimes results in serious consequences. This accident is seldom to be seen occurring in the mare, ruminating animals being the most prone, and of these the cow is the usual victim. This can be accounted for by the fact that the connection between the after-birth and the womb is much more feeble in the mare than in the cow or sheep, the arrangement being different. In the latter animals we find large semi-spherical masses present here and there on the lining of the womb, and corresponding ones on the outer envelopes of the unborn animal; between these the attachment is very firm. The mode of attachment in the mare is by little elevations diffused all over the outer envelope, resembling the pile on velvet—and received into depressions which occur on the lining of the womb. One can readily understand, on examining this arrangement, that the connection is frail and readily overcome.

Practically the cow is the subject in which it is desirable to study this condition. Experience shows us that the

## CAUSES

of this trouble are those which allow a persistence of union between the envelopes and womb; so that cows which abort, calve prematurely, or are in low condition, are those in which it is most frequently noticed. In some cases these are unnaturally firm adhesions, and in which the causes above mentioned may not be in operation. As the time for natural birth draws near, a softening process takes place in the connections between the womb and after-birth, so that if anything, as abortion or premature birth, occurs to shorten the usual period, this softening change not having been accomplished, the union is maintained and retention results. In weakly cows the labor pains being feeble, and stopping as soon as the foetus is expelled, leave no force to remove these coverings, so that they are retained, although no firm connections remains to keep them there. In many cases the

## SYMPTOMS

are very apparent, as a portion of the membranes will be hanging from the passage of the mother; in others the membranes will only be visible when the subject is lying down, while in some instances they are completely retained within the womb, and their presence can only be detected by making an examination with the hand; although suspicion may be excited that expulsion of these has not taken place, from certain symptoms to be yet mentioned, mistakes sometimes occur from people concluding that the membranes are some portion of the womb or passage of the female, and the ridiculous error of returning the matter was considered their proper place, carried out. If they are examined by the hand, and their thinness and frailness noted, their identity need hardly be confused with that of either the thick coating of the womb or passage (vagina).

In some cases the retained membranes undergo very slight change if any, particularly the parts that remain inside—until some time has elapsed, even as much as a week; but in others decomposition soon commences, and a very fetid odor is emitted, and accompanied by a semi-fluid discharge. When the former state exists they retain their usual degree of toughness, but as putrefaction progresses the external portion, becoming soft, drops off in pieces. Even although decay has made some headway, and sometime has elapsed since delivery, yet in many cases the subject does not seem inconvenienced, nor manifests any sign of ill-health. The consequences are not, however, always so favorable, and irritation of the womb is set up, resulting in a greater or less degree of inflammation. When inflammation does not follow, or associate with it, the blood in some cases becomes poisoned by absorption of the putrifying material, and serious illness ensues.

When inflammation of the womb supervenes great derangement of the system is apparent, but the more characteristic signs of this condition are repeated straining and evident pain. On passing the hand into the womb it will be found much raised in temperature, with thickening of the walls.

In blood poisoning, without any decided inflammation, the symptoms are not so severe. The appetite becomes impaired, the secretion of milk much lessened in addition to the other signs of systemic disturbance, as confinement of the bowels, frequent and weak pulse, hastened breathing, dry muzzle, cold horns, glassiness of the eyes, and loss of flesh.

Where there is simple retention of the coverings

without any complication, no very immediate action is imperative in the way of

#### TREATMENT.

But after twenty-four hours has elapsed it is advisable to administer a moderate purge, the action of which will in some cases cause expulsion of the source of trouble; but, failing this, it will tend to ward off the dreaded complications.

A convenient physicking dose for such a case is the following preparation, viz., Epsom salts, one pound and a half dissolved in a pint of warm water, to which add one quart of cold water, and from ten to thirty drops of croton oil, according to the size of the patient. All bulky food should be withheld until the purgative has operated. As soon as purgation ceases, if the after-birth has not been expelled, it is well to pass the hand into the womb and attempt its separation from this organ. Only a moderate amount of force should be used, as there is a danger of causing irritation and injury to the womb; and it is better to allow some time to elapse—it may be several days—until softening of the connections occurs, and then removal will be easy. In attempting separation of the retained mass it should not be pulled at as a whole, but each prominence (cotyledon) should be disconnected separately from the membranes, unless they come away without much effort.

When it is considered most prudent to wait for a time, any free end of the membranes should be drawn out and allowed to hang, but no weight of any kind be attached, as such treatment may give rise to irritation.

An extruded portion is of benefit in keeping the mouth of the womb open, for if this passage becomes closed, as it is inclined to, it will have to be dilated before withdrawal can be accomplished; and there is further danger of a portion becoming imprisoned, closure having occurred, thus giving rise to the impression that all has been expelled, until serious illness may arouse suspicion of its retention if repeated straining commences; it is then imperative to remove foetal coverings entirely and keep the animal quiet and warm. Warm water that the hand can stand comfortably, should be forced into the womb, with the twofold purpose of allaying irritation and washing out any putrifying accumulations. A couple of pails of water so used three times a day will be of much benefit.

A simple and cheap tin instrument answers very well for this purpose, consisting of a funnel-shaped end with a tube two feet long and one inch in diameter attached at right angles by its end. The tube is passed through the maternal passage into the womb; the water being poured into the funnel gravitates into the organ, and is forced out by the patient; thus the womb is cleared. To the last quart of water add a tablespoonful of carbolic acid, and encourage it to be retained for some minutes by pinching the loins to prevent straining. If such an instrument as I have spoken of cannot be procured, a bladder tied on the end of a piece of pithed elder would answer for force in the water.

In addition to the local treatment, two ounce doses of laudanum mixed with a pint of cold water, or with a quart of linseed tea, which is better, and given every three hours, while the acute symptoms are present.

When the symptoms are indicative of blood-poisoning, as already described, the same local treatment is suitable; but the systematic course is different, and is directed more towards the support of the strength. Ate in quart doses has a splendid effect, given four times a day, and to which may be added half a tea-

spoonful of carbolic acid. The best food is roots, grain and hay should be allowed, and if linseed tea or gruel is partaken of voluntarily, so much the better. Cows will sometimes drink these preparations, especially if kept short of water; but if they refuse them after a fair trial, then cold water should be kept constantly before them. Recovery from these conditions does not occur before a week, and generally longer, up to two or three weeks. When inflammation is well established a fatal result often takes place, but the animal may linger on for several weeks and become much emaciated.

### Inquiries and Answers.

#### CARE OF A YOUNG STALLION.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

SIR,—Please inform me how to feed a stallion coming two years old for the season. To what extent should the services of a carriage stallion be limited?

GEO. W. STROWER.

Orangeville.

ANSWER BY W. F. GRENSIDE.

A carriage stallion coming two years of age should be liberally fed. Eight pounds of oats and about the same quantity of good hay per day would be a suitable ration; but exercise under the circumstances is indispensable. He should also have a bran mash twice a week, and salt always before him.

It is not advisable, either for the sake of the colt or his progeny, that he should be put to mares at such an undeveloped age; but he might of course serve fifteen mares without any immediately serious consequences.

### The Farm.

#### An Advisory Board for the Ontario Agricultural College.

Before this paper reaches our readers it may be that an advisory board shall have been appointed by the Ontario Legislature to preside over the affairs of this institution, the best interests of which are so essentially interwoven with those of the farmers. If the selection made, which of course shall be from amongst the farmers themselves, has been wise and good, the measure cannot but react favorably on the institution.

Hitherto we believe the chief officers of the college have been responsible to the Minister of Agriculture directly; henceforth they will be responsible to the advisory board, thus relieving the former of a large share of the responsibility which he has hitherto borne alone, a change which we have no doubt will be welcomed by our chief agricultural officer.

We trust that the utmost wisdom will be shown in the selection of those who shall compose this board. They should be men, not fogies—living men of sterling worth, with minds of their own, and unbending rectitude of character, and should come from both shades of politics. Our farmers must be made to feel that the Ontario Agricultural College is the heritage, not of Reformers as such, or Conservatives as such, but of themselves. The sons of both political parties, burying the hatchets which have kept their fathers apart, can together smoke the peace pipe in the class rooms of the college, and go away feeling rather that they have a calling and a country, than that they are the blind devotees of party.

With the appointment of this board we shall look for even greater results from the Ontario Agricultural College. The division of the responsibility will direct many eyes, instead of two, toward any weaknesses that may cling to the institution, with a view to their removal, and the united decisions of such board shall be hard to withstand or gainsay. The board should

not be large. Five or seven representatives will amply suffice, and they should all be sectionally representative men.

#### Seed Time.

Time is ever on the wing, and spring is rushing on apace. It will be here before we are aware, but it matters little how soon it comes, providing we are ready. Being ready for it implies a good deal, and while the March suns are diligently dissolving the snows of winter, it is very important that every farmer shows greater diligence in making everything ready for the seed time of April and May. Two conditions are usually essential to successful cropping in this land of tardy winters and rapid summers; the first is that the seed be sown early, and the second that the ground be thoroughly prepared. Partial failure in either case will, with almost unerring certainty, be attended with corresponding deficiency in the crop returns.

To facilitate the accomplishment of the first object, every particle of seed intended for the earth should be ready by the time the first visits of the robin are made. The winnowing should all be done before the harrow leaves the implement house, and every kind, sufficient in quantity, in the bag ready for the seeder.

To further the second, implements, the best of the kind should be on hand, ready to hitch to, not in the warehouse of the maker or on the way when work is ready to begin. To ignore the improvements that are being made in all kinds of farm machinery, at once lands the farmer far in the rear, and failure to secure the best keeps him working at a disadvantage, which no extra diligence can overcome. To say who makes the best implements to help the farmer to put his seed into the ground rapidly, in this age, when competitive improvements in implement making are running neck to neck, would be hazardous indeed, but to say who they are who make good ones is no trouble at all. For instance, the old and popular firm of J. O. Wisner, Son & Co., of Brantford, Ont., could alone equip the farmer for his spring work, the ground being ploughed, with their spring tooth harrow, spring tooth cultivator, the single grain drill and single broadcast seeder, or the combined one if you please, or the grain drill and fertilizer sower combined, all of which they manufacture.

But it is of the grain drill and broadcast seeder combined that we wish more particularly to speak, as we feel that it will be to the advantage of our farmers to know about the particular points of excellence of this prize winning drill, and also regarding its superlative efficiency. It has a tubular iron frame, which is at the same time light and strong, an iron index grass seed sower, which not only sows with great accuracy, but does not crush the seed; a steel axle which extends the full width of the drill, and tubular iron rollers. The feed run not only regulates the quantity per acre at the fiat of the driver, but is provided with shut off slides for each run, which enables the user to sow a narrow piece without sowing the land twice over. The index plate is clear, distinct, simple, exact. The Wisner patent spring hoe and steel draw bar are distinguishing features, the value of which is unmistakably shown in the purchasing of the right to use them by several of the principal drill firms of the United States. The drill hoe (a patent spring one) may be changed for the patent spring seeder tooth almost in a moment, and without the use of wrench or hammer, and the changing of the angle of hoe or tooth to regulate the depth is equally expeditious. Further particulars may be gleaned from the advertisement on another page. The full and complete equipments of this drill determined us to secure one for our own use.

Thorough cultivation of the seed bed, particularly on heavy soils, is very important, as grain lying on a bed so compact that the rootlets cannot penetrate it will not do well. Where not underdrained, the cross furrows should be opened, to provide for any contingencies of weather, and when the grain is nicely above ground it should be rolled, to make pleasanter and easier the work of harvesting.

### First Prize Essay.

ON THE BEST METHOD OF UNDERDRAINING THE DIFFERENT SOILS OF ONTARIO, THE COST AND THE PRACTICAL BENEFITS RESULTING THEREFROM.

(By the Editor)

When the Council of the Agriculture and Arts Association of Ontario request an essay on a subject so comprehensive, compressed within the limits of "twenty" pages, they ask a hard thing, nevertheless it is the part of the essayist not to repine, but with one strong arm to hold it fast and with the other to hew it down within the assigned proportions.

The importance of the subject is beyond all estimate, and if properly handled may prove more beneficial to our Province in a single year than the entire annual cost to it of the Association, by the increased attention it may draw toward a subject too frequently looked upon with the most apathetic indifference, by an overwhelmingly large majority of our hard working yeomen. It is well to remove obstructions that hinder cultivation, as stones and stumps, at the earliest possible moment; it is wise to give back to the soil in some form as much as we take away; thorough surface cultivation is grandly important, but none of these is more so than the carrying away in buried channels the surplus waters that so very much hinder almost every process of agriculture.

Water, next to food, is the most essential earthly bestowment of an All wise Providence, at least so far as our sensuous natures are concerned; yet, like a wanton child, is not to be allowed to roam at large working mainly mischief, where, under proper conditions, and with right guidance, its presence would be freighted with naught but blessing.

Lands in a state of nature sufficiently drain themselves, or adapt the vegetation they sustain to their present conditions, although in very many instances they retain the elements locked up within them which would sustain a vegetation immensely superior when aided by the hand of man. In undisturbed soils that are free from surface waters the hidden channels of percolation that have run for ages take away the waters, but when the surface has been disturbed by cultivation this condition of things is altered. Constant pressure of the horse-hoofs and other causes close up those hidden avenues, and hence the necessity of opening artificial ones, to carry away the superabundant moisture which, like an unwelcome and indiscreet guest, unduly prolongs his stay by lingering near the surface.

The sources from which excessive moisture arises in surface soils are three:—ooze water, spring water and rain water. Ooze water is that which has soaked out from adjoining land and left most of its nutriment in the soil which it has traversed. Its presence, therefore, is baneful to vegetation. Similarly spring water is collected only from sources more remote and conveyed through avenues more deeply buried. However essential its presence is to animal life, it has the upas blight for most forms of vegetation. Rain water is the rightful heritage of the soil, and if it could be made to pass through three or four feet of the soil from the surface downwards, and were then conveyed away

within the unwearying little tile workers, the Province would be many millions the richer annually, as every drop of it is freighted with fertilizing properties, washed out of the air.

Sorrowfully we have watched the silent flow of streams brimful, the waters of which were soiled or blackish by reason of the immense stores of fertilizing matter washed out of the soil through means of surface drainage or from the lack of underdrainage.

The stores of enrichment washed out of the air join company with those of the surface soil, and are thus forever lost to lands from whence they are borne. They may tend to increase the harvest of the fisherman whose hut rises by our lakes and rivers, but they come not again to gladden the heart of the husbandman. We verily believe the tide of wealth thus borne away from our bountiful lands from year to year would more than suffice to meet the entire annual expenditure of our Government. And wherefore this waste? Because the inability, or the ignorance, or the indifference of perhaps nineteen out of twenty of the landowners of our beautiful Province permits it.

The indications of lands that require underdraining are usually not far to seek. Waring has put the thing in a nutshell when he says: "All lands of whatever texture or kind in which the spaces between the particles of soil are filled with water (whether from rain or from springs) within less than four feet of the surface of the ground, except during and immediately after heavy rains, require draining." The surface indications are, standing water, prolonged dampness in the appearance of ploughed land, and in dry weather cracks in the soil. The vegetative indications are (unless in very poor soils) the curling of corn in the leaf, a wiry appearance in the growth of grass, a mossy appearance of the surface of the ground, and a spindling growth of grain with a lightness of tinge, as lands ordinarily fertile will produce good crops with an almost unerring certainty, when properly drained, let the season be what it may. When a pit dug in the earth to the depth of three or four feet collects water, it is a sure indication of the need of drainage, and such test should always be made during wet spring weather when possible.

As underdraining is a costly operation, no wise man will engage in it who does not first completely satisfy himself that his lands require it. It would be money lost to drain soils which have subsoils as open as those which overlie them, as is sometimes the case with sandy soils, gravels, light loams and moulds. Other soils may be so remotely situated as to markets as not to justify such expenditure at once, and still others lie in a plain so level, as did the marshes of Essex and Welland, that a sufficient fall cannot be obtained until canals of a suitable depth are cut to carry off the surface water. Some stretches of soggy land are so cumbered with stones as to forbid the outlay for the present, and in other places the surface soil is so thin upon the impenetrable bed that underlies it as to lead one to hesitate.

The area of these lands in Ontario is, however, comparatively limited, as will be apparent on reference to the accompanying map (not inserted in this paper), which is grounded on information obtained from "Appendix B" of the "Ontario Agricultural Commission, 1881." We would fain have indicated the exact areas of the different soils by shading on this map, but the information that we could glean upon the subject was far too meagre to justify the attempt. The individual who shall present our Government with such a work, and the Government which shall furnish the same to our public schools, shall be deserving of the gratitude of all who

are interested in agriculture, as then those in one locality should learn wise lessons from the practice of those in another possessing a precisely similar soil, and they would know at once in what quarter to seek the information.

The materials that have been used hitherto in underdraining are various, as sods, brush, wood, stones and tiles. It is important that it should be well understood which class of material used will on the whole give the best results, or, in other words, prove the cheapest in the end. The use of sods and brush are now almost universally discarded. Stones have been used in many parts of Ontario, but are less in favor now than formerly; a large number of those who have tried them are now using tiles instead. There are two classes of stone drains, the one consisting of field stones thrown loosely into a trench of sufficient depth through which the water filters, and covered with earth laying on a layer of straw. These are very apt to fill with sediment and choke, hence their growing disfavor. The other class consists of a continuation of parallel lines of flat stones with an opening of from three to six inches between them, overlaid with broader stones, and covered similarly. Of the many individuals who have practiced this mode of draining in the Province, Messrs. Charles and Wm. Graham, of Ottawa, Nepean Township, have perhaps the most perfectly constructed drains, being singularly favored by the formation of the stones, which are smooth and flat and lie open in inviting layers in quarries upon their farms. As the ditches for stone drains have to be cut much wider, and considerably longer time is required for laying in the stones and filling the drains, the first cost is usually greater than that of constructing tile drains, including the cost of the tiles, so that even where stones cumber the soil it may be cheaper in the end to remove them by some other mode.

Wood drains have been largely laid in various parts, more especially where cedar has been plentiful. We have met with four patterns. The first consists of two poles laid parallel, a little distance apart, with a third on the top. These have not given satisfaction. The second is made by nailing two narrow boards at right angles in the form of a V inverted when in position. The third is similarly formed, with the difference that the angle of the V is lessened by bevelling both boards equally where they are nailed, which enables them the better to resist pressure from above. The fourth, and perhaps the best form of wooden drain consists of two scantlings of cedar or other resinous wood, laid parallel, with a board of the same nailed on the top, but so as to break the joints. This, too, is costlier than tiles, requiring as in stone drains wider ditches, and from eighteen to thirty feet of lumber for every twelve feet of drain, which at \$10 per thousand amounts to from 18 to 30 cents, while the same length of two or three inch tiles will cost but 7 to 12 cents at the tile yard. Then, like stone drains, they are more apt to clog, nor will they last as long as tiles, especially where the ground is not always kept scaked. Tile drains properly constructed practically last forever. All things considered, then, we pronounce unhesitatingly in favor of tiles as the best material to be used in the construction of underdrains.

(To be continued.)

### Clubbing Rates.

A little effort at farmers' institutes and other gatherings on the part of our friends, and the work of forming a club is soon done. The JOURNAL will be sent for one year in clubs of five for four dollars. It will be sent in clubs of ten for seven dollars and fifty cents. The names may belong to different offices.

## The Ontario Experimental Farm.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—It has been to me a matter of no little surprise that so much has been said and written adversely regarding the Ontario Agricultural College, in certain quarters, and that such an ado should be made about the expenditure in running the institution, even by farmers themselves, the class whom it is intended to benefit more than any other. It is only meet, Mr. Editor, that I should say here that I admire the stand that you have taken in reference to the Experimental Farm from the first, and for your making it so clear that your course is not prompted by any sentiment of party partizanship, insomuch as you say that you will stand by an experimental farm for Ontario, where farmers' sons may get the scientific side of their calling, no matter which political party may be in power.

All manner of charges have been brought against the Guelph College and its management, some of them no doubt sincere, but oftener for partizan purposes. If the element of partisanship were to be taken out of these attacks, assuredly a very small vessel would be required to hold what was left.

It has been argued that the expenditure in running the institution has been unjustifiably large, but in which particular it has never been made very clear. While I admit that some things might possibly be done on a more economical basis, on the whole, candid men must admit that the college has been fairly well managed, and that in proportion to the expenditure of money it has given the Province a fair return. The annual public expenditure with a view to the advancement of higher education is \$85,000, and more is sought, which is perhaps all well enough, but why in such a case grudge the expenditure—very much less—in promoting the higher education of farmers' sons, as the farming community is the most numerous, and owing to its relative importance has the first claims on the attention of a legislature to provide for its wants.

The Experimental Farm has done good work in many ways, although it may not have done everything that we might desire. The institution is young. Give it time to develop. The system of collegiate and university education is old as the hills, and yet even now what are regarded as reforms are ever and anon introduced. Why then should we look for perfection from an institution which is just entering on its teens?

The college has done good work in its experiments in cattle feeding and dairying. Its reports may not have pleased everyone, since some are interested mainly in the pushing forward of one particular breed of live stock, and whatever in the reports touched their interests adversely, touched a very tender sore. The experiments carried on by it in this way have been favorably noticed in leading agricultural journals on both sides of the Atlantic, in the pages of which not a line from the agricultural papers of our own land with their adverse criticisms ever finds a place.

But equally good is the work which the College has done in the experimental field. Think of the frauds that were practised a few years ago in the sale of seed grain which had proved to be worthless, but which nevertheless had been sold for outrageous prices before it had been tried. Now, when any of these seed vendors come along, they are told they must get a certificate from the Experimental Farm before their seed will be bought. The great loss to the farmer did not so much consist in the extra price paid for the seed, which was a mere bagatelle compared to the loss of the crop the following harvest.

It has also done good work in the impulse it has given to the stock-growing industry. The experiments at the farm have confirmed the reports of fat stock shows as to the early age at which animals intended for the block may be matured. The investigations in this respect have astonished farmers of old-time practice. These results printed in the annual reports have been read by thousands, and even the most skeptical, if they would only acknowledge it, have been influenced in a degree by what they have read.

Some have argued that this agricultural college should be done away with, since most of the students have not followed farming as an avocation after leaving it. This I do not believe, but admitting it, then all the model schools must go, as a very large proportion of those who prepare themselves for teachers never take up the profession, and a large number of those who do, only make it a stepping stone to something else.

The day is fast going when farmers' sons will think so

little of the calling of their fathers as to run away from it at the first opportunity. Some years ago, while sitting in the Ontario Legislature, I heard one of the members state that he could understand a man coming from the *stills of the plough* making an exhibition of himself in the House, but for a man of the *legal profession* to do so was more than he could understand. Since those days farmers' stock has gone up. Now, no member on either side of the House dare attack them openly, and with the still greater advance of coming years we may confidently look for the profession to be held more and more in honor.

Now that farming is becoming recognized as a distinct profession, and one of the first magnitude, it becomes more and more important that the one institution in Ontario, which can give them an insight into the scientific details relating to their calling, be sustained in increasing efficiency. It is a simple thing in a sense to be a merchant. If one buys goods at \$1 a yard and sells them at \$1.50, he cannot go wrong if he but gets enough sold. An important feature of the lawyer's duty is to make black appear white and white black, but it requires *brims* to be a farmer. It requires pluck, perseverance and determination to be a successful farmer, and the more highly educated a man is, possessing the above characteristics, the more likely is he to succeed.

Farmers should rally around their own institution. To allow a lawyer to give it a stab, a merchant a blow, and an editor a hack, unresisted, is unjustifiable timidity, and to manifest indifference in not making the most of the opportunities its advantages afford is blame-worthy.

Exeter, Ont.

A. BISHOP.

## Permanent Pasture in North Middlesex.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

Dear Sir: As no part of farm economy has more to do with stock raising than pasture, I thought a few remarks on this subject might be of interest to your readers.

We believe the first requisite of a pasture grass is that it be highly nutritious. Secondly, that it grows abundantly, and thirdly, that it keeps up a regular supply throughout the season.

It will have been noticed by all observing stockmen, that animals in grazing, invariably pick out the leaf or blade, and never eat the stalk except when compelled to do so by hunger, which clearly proves that the chief elements of nutrition are in the blade, therefore it follows that those grasses which furnish the greatest percentage of leaf (other things being equal), are the most desirable. Now the grass that fills the above mentioned requirements is *Poa Pratensis* or Blue Grass generally mistaken in Ontario for *Triticum Repens* or Quack Grass, which for nutritive value and regularity of growth is superior to any other. The second place we would give to White Clover; no forage plant grows that is more nutritious, but it is deficient in quantity, and as it comes in during a slight lull in the growth of the Blue Grass, we give it the second place. The third place we assign to orchard grass, which is fully equal to number one in regularity of growth, but far below in nutrition, and no better in quantity. The fourth and last place we give to alsike clover, which is below numbers one and three in quantity, and not equal to numbers one and two in nutrition, but as it has staying qualities, and is palatable to stock, we would not be without it.

I am aware that many will say that these grasses are not sufficient for a permanent pasture; well, for some localities perhaps they are not, but we must speak of things as we find them. Ten years ago we seeded down seven acres for pasture, sowing a mixture of timothy, orchard grass, oat grass, Italian and English rye grasses, and meadow fescue. They have all disappeared excepting the timothy and orchard grass, which is no loss, as nothing would eat them without being pastured too close for profit; indeed, the last mentioned are worse than worthless, as they for a time kept other grasses from growing. The pasture is now chiefly blue grass, a sprinkling of white clover, a little timothy, orchard grass and redtop, the last being but an inferior grass. You will bear in mind that these remarks apply only to this locality. We admit that those grasses that have proved failures so great with us may prove useful in other places; but as far as this section is concerned, we have no hesitancy in proclaiming blue grass the king of pasture grass.

Within a radius of fifteen miles of Alton Craig, there are thousands of acres devoted to grazing steers, and all this pasture is composed of blue grass and white clover (which latter appears to be indigenous to the soil), that will fat bullocks from the straw stack in April, fit for the English market in August. Yes, but some will say it takes three acres of such pasture for each head for the season, but it must be remembered that they are turned on about the first of April, and sooner if the weather permits, and when they are removed, others are put on and remain until the first of December, which makes eight months or more.

We doubt if a pasture of the cultivated grasses would do any better; it certainly would not come up to it in regard to fattening.

STEPHEN NICHOLSON.

Elmdale Stock Farm, Sylvan.

## The Dairy.

IN no department of farming is there more room for improvement than in the butter industry, and in no line, we may add, is the outlook so bright for many years to come. There is practically an unlimited demand for good butter and at good prices. It is the very large amount of medium and inferior that keeps the price so low as it now is. Good butter is made by a considerable number. Why, then, are these so largely in the minority? The tocsin of advance has already been sounded by the proposed formation of an association of the butter dairymen of Ontario. But this is only one step in the advance, as the influence of this association will only reach certain sections for a time. There will still be a very large number of butter-makers—farmers' wives and daughters—who will continue to make butter with the home churn. It is a thousand pities that so much of the product thus made finds its way to the confectioner, to reach the stomach of the eater in a very roundabout way, who would reject it with loathing, if it were offered him directly. This is one of the strange results of the circuitous methods of preparing food.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

## The Holstein's Defence.

(Continued from February Journal.)

I will now proceed to give a few facts bearing more particularly on the relative value of the Holstein compared to other breeds as a general purpose animal. Firstly, as regards production of milk. The largest daily, monthly, and yearly records that have ever been made by cows of any breed have been made by Holsteins. There are eleven Holstein cows that have produced over 18,000 lbs. of milk in one year, and one nearly 24,000 lbs. Here are a few of these large records made. Empress, 19,714 lbs.; Aaggie, 18,004 lbs.; Jamaica, 19,546 lbs.; Ethelka, 18,131 lbs.; Echo, 23,775 lbs. In one herd alone there are twenty mature cows, including four-year-olds, which averaged 15,567 lbs. in one year—equal to 42 lbs. 6 oz. for every day in the year. For want of space I will not quote any of the hundreds of daily and monthly records made within the last few years, but will content myself with asking, where is there another breed that can make such a showing?

"Yes," some will say, "that's all very well, but Prof. Brown has said that the milk is of very poor quality." Very well, let us see. "The proof of the pudding is in the eating." The amount of butter a Holstein cow is capable of producing surely ought to be sufficient guarantee as to quality of milk.

Messrs. T. G. Yeomans & Sons, of Walworth, N. Y., write as follows to the *American Dairyman*:

"To show what the real average quality of Holstein-Friesian, we give you herewith the average per cent. of 21 cows of our herd, embracing all in our

herd as per published list, over two years old, and giving an average of one pound of butter (well worked and unsalted) to 22.48 lbs. of milk. The ages of these 21 cows are as follows: 7 are six years old and over; 9 are four years and under six years; one is four years; 4 are three years; and the whole 21 have made an average of 20 lbs. 10.45 oz. each per week of well worked unsalted butter as per our latest list enclosed."

Where is there a herd of any other breed that can make such a grand showing as this in practical butter making?

In Prof. Arnold's *American Dairying* he says:

"Butter from the milk of Dutch cattle (Holstein) has some special qualities. It stands up well against heat, and is said to be especially good for long keeping."

This is fully corroborated by Dr. E. Lewis Sturtevant, who some time ago conducted a practical experiment as to the keeping quality of the butter of various breeds, in which pats of butter were placed in a warm cupboard near a steam-heater, and the behavior noted under these unfavorable circumstances. He says:

"There was one sample of Dutch butter, one of Guernsey, seven of Jersey and two of Ayrshire. A few days later another pat of Ayrshire butter was added. The Guernsey butter was very high colored, melting point 99°; had an oily rather than waxy look, but was very attractive; it molded in spots in about a month. The Jersey butters in about seven weeks were all slightly rancid; one sample lost its color in spots, the white spots left resembling tallow in color and taste, no butter flavor. The Ayrshire butters had lost all flavor, were poor, very poor, but scarcely rancid. The Dutch butter was the best preserved of the lot."

Here is another proof of the Dutch outranking the other breeds as a butter cow. The keeping quality of butter is certainly an important item in determining its value.

Mr. L. A. Hardin publishes in a work on "Modern butter-making," the results of some tests made in five different herds, namely, Shorthorn, Ayrshire, Jersey, Native and Holstein. They were carefully conducted and showed the following average yields of butter per cow per annum were made: Shorthorn, 252½ lbs.; Ayrshire, 273 lbs.; Jersey, 281 lbs.; Native, 302 lbs.; Holstein, 350 lbs. The Jersey butter was from the celebrated herd of Mr. E. Burnett.

Everyone who is familiar with the breed will remember how Mr. Wales' grand cow Mercedes beat the record of the world as a producer of butter in thirty days, thus winning the *Breeders' Gazette* challenge cup for the best butter cow of any breed. Since then Holstein butter records have been increased to over 120 lbs. for thirty days; over 200 lbs. for sixty days, and over 300 lbs. for ninety days.

For evidence from the plain, hard working Holsteins of the country, let me refer to the columns of the *Farmer and Dairyman*, edited by T. D. Curtis. He says:

"The treasurer of the Elgin (Ill.) Co-operative Butter Company, which makes up the milk of 700 cows, says 200 of them are Holsteins. As an experiment, one week the milk of the Holsteins was kept separate from that of the other cows, and the cream made into butter. The yield was greater than that from the other cows, and the quality of the butter was so superior that when it was shipped the commission man, knowing the butter was all the same week's make, wrote to know what caused the difference.

Here we have again the evidence to date of the record of the breeding herd that we know not where to find its equal; the opinion of three of the greatest authorities on butter-making, the official test of the single cow wherein she beats all comers, and the unbiased statement of the treasurer of a butter factory, wherein the Holsteins produced the most and the best butter of all the cows contributing milk to the factory,

though they numbered but 200 out of a total of 700 head.

Is not this a splendid showing, and one that entitles the Holsteins to rank among if not at the head of butter breeds in the dairy world? And yet they are numbered amongst the unfortunates which these learned gentlemen at Guelph propose to relegate to obscurity.

Prof. Brown, in his experiments at the Ontario Experimental farm, pronounces in favor of the common cow, and against the Holsteins. A similar but more practical experiment was conducted at the Iowa Agricultural College, but with an entirely different result, as will be seen from the following report, published in the *Dairy World*.

Two cows were selected, Metje, an imported Holstein-Friesian, and Jennie, a native, both being fed alike, and treated in the same manner. Both cows were 6 years old, and came in with calves at the same time. The thoroughbred cow, however, ate more than the native, and her cost of keep was 4 cents a day more, but she gave 60 lbs. of milk per day (about 30 quarts), while the native yielded only 22 lbs., or about 11 quarts. The cost of food per day was 18 cents for Metje, and 14 cents for Jennie, but the large yield on the part of Metje enabled her to produce milk at a cost of only three-fifths of a cent a quart, while the milk from Jennie was produced at a cost of one and three-eighths of a cent per quart. The milk from the two cows being sold at three cents a quart.

Comparing the receipts and expenses for two years, Jennie produced two calves, which sold for \$10, and 6,000 lbs. of milk, \$90, or a total of \$100 for two years, making \$50 per annum. The income from Metje was two calves, which brought \$375, and 20,000 lbs. of milk (less 6,000 lbs. consumed by the four calves), \$210, a total of \$585, or \$292.50 per annum. The expense of food, shelter, care, milking, and interest on capital amounted to \$52 for Jennie, and \$90 for Metje, estimating the cost of Metje at \$300. It will be observed, therefore, that Jennie, although she consumed less food, and cost less as an animal, occasioned a loss of \$2 per annum, while Metje gave a profit of \$209.50 per annum. Jennie was a good cow compared with the majority of natives, while Metje was not an extraordinary cow considering the excellence of the breed to which she belonged. Although the cost of keep for Jennie may seem large, it is due to the fact that every item is taken into account, such as labor, superintendence of buildings, capital invested, etc. If to the \$209.50 profit per annum on Metje the interest on her cost be added, the resulting sum is 10 per cent. on a capital of \$2,395. Allowing 15 per cent annually for insurance and ultimate loss of the animal, and 5 per cent. for loss in calves, the average value of Metje measured by income is reduced to \$7.75, but upon the same basis Jennie is worth for milking purposes simply nothing. The price obtained for the milk exceeded what it would have brought if butter had been made from it, and therefore was not a low price compared with other sections."

Prof. Rhoda, of Eldena, Germany, reports thirty-five Holstein cows averaging over 1,000 lbs. of cheese in a year, while Prof. Brown, after testing one interior animal, reports them indifferent cheese makers. Aultsville, Ont. M. COOK.

(To be continued.)

### The Proposed Butter Association.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

It has been claimed by the creamery men during the last several years that the butter industry was not receiving justice at the hands of the Western Dairy-men's Association, and never was this feeling stirred up to such a high pitch as at the last convention held in Woodstock, where the creamery men were obliged to sit and listen to cheese papers and discussions for three long days without hearing a word in reference to creameries. Very able and valuable papers were read on cheese-making, which were always followed by lengthy discussions; but only one paper, read by Mr. Lewis, on butter-making, was found on the programme, and no time allowed for any discussion to follow. This paper was not calculated to be of any benefit to creamery men, as Mr. Lewis is a private butter-maker who finds a market in the city near

which he resides. From him we could learn nothing in regard to the more perfect working of the creamery business, and to overcome the difficulties with which we have to contend. It is perhaps hardly fair to put any blame on the president of the association for this state of affairs.

At the convention held in Stratford in 1885 we showed that butter-making did pay, and fully as well as cheese, and that the industry was far more suitable to a great part of our country than cheese-making.

Last year the creameries compared far more favorably with the cheese factories than ever, and in consequence of this it may have been considered policy on the part of the cheese men to take our \$1 at the door, but allow us to give no expression as to the position of the creamery.

The creamery men, only a few in number, but thoroughly loyal to their promising industry, made a bold stand for their rights then and there. This action was at once favored by a number of the members of the association, and our independence declared by a resolution, as stated in the February issue of your JOURNAL.

Immediate steps were taken to organize, and it is hoped in a short time the creamery men of western Ontario will stand united, and with energy and determination will make the butter business what by the natural facilities of our country it is entitled to be.

The Government, ever ready to assist in developing the resources of our farming industries, has done a great deal, through assistance, in building up the cheese industry to its present proud position.

Interested and practical cheese men made their wants known to the Government, but thus far prominent dairymen, in the cheese line, who did not understand our difficulties, were advising the Government in regard to aiding the butter business, and the result is that the money spent did the creamery no good whatever.

It is the intention that a number of practical butter men wait on the Government, to make their requirements known; and it is to be hoped that they (the Government) will extend to the buttermen as liberal assistance as to the cheesemen.

M. MOYER.

Georgetown, Feb. 15, 1886.

### Holsteins vs. Jerseys.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

On p. 41 of the JOURNAL, in a letter headed "The Holstein's Defence," unsigned (probably by oversight), but of which I am led to believe Mr. M. Cook, of Aultsville, (the Holstein breeder) is the author, he states that were the "Holsteins as well known in Canada as in the United States, a defence of their merits as a dairy breed of the first order would be entirely unnecessary," and adds, "Then the figures and conclusions of Messrs. Brown and Fuller would only seem to heap ridicule on themselves." I take issue with Mr. Cook in these statements, and claim that the more thoroughly the impartial public look into the claims of the Holsteins "as a dairy breed of the first order," the more is it becoming apparent that they fail as such. That they can, under a forced system, yield large quantities of milk in individual cases, is generally admitted, but at what cost that production is reached, is not known to the public. In my readings of various dairy and stock papers of all classes, I have noticed that the Holstein men have carefully abstained from giving the food upon which those alleged yields were produced. A western dairy paper asked this question directly of Messrs. Smith, Powell & Lamb, but up to this writing I am not aware that any answer has been given. Right here I would ask Mr. Cook, were the majority of cows for which such prodigious yields of milk are claimed "farrow during the whole of the greater part of the year in which these milk tests were made?" Certainly at the London public tests the Holsteins failed to maintain their reputation as such extraordinary heavy milkers, the highest milk record of any Holstein being 37 60-100ths lbs. in 24 hours (less than 18 quarts), and the average of the whole seven Holsteins being 32.19 lbs. less than 16 quarts), the Shorthorn grades averaging 35 52 lbs. If I mistake not the intelligence of the Canadian farm and stockmen, they will prefer to accept the result of such an open, fair and public test as this, in preference to the evidence of the Holstein breeders, until their tests are corroborated in some open and satisfactory manner.

Now as to the milk itself. Before any value can be set on it, we must know what quantity of solids it contains; and if we judge by the result of the London tests the solids are as compared with other breeds decidedly lacking; it taking over 35 lbs. of milk to every lb. of butter of the Holstein milk; less than 14 lbs. of Jersey milk to every pound of butter, and less than 24 lbs. of Ayrshire milk to every pound of butter. Every 100 lbs. of milk produced the following quantity of wet curd to the various breeds: Ayrshire, 22.70; Jersey, 20.30; Holstein, 16.59. Did the test made by Prof. Brown, of the Agricultural College, between any Holstein, Ayrshire and Jersey stand alone, Mr. Cook might with reason argue that the Holstein was not a fair representative of the breed, but the tests that were made at the London Exhibition so thoroughly bear out the results of the tests at the college that they are the strongest corroboration of the entire accuracy of the tests made at the Agricultural College.

I have challenged Mr. Dudley Miller in some of my writings on this subject to state that the Holsteins at London were not a fair sample of the Holsteins as a breed. He has remained discreetly silent on this point, as I think I can prove that before the results of these tests were made public they were claimed to be a grand representation of the breed. If so, judged by these tests, as a breed of dairy cows, they are an entire failure. It is a most convenient way out of the dilemma in which Holstein men have placed themselves by permitting their cows on this occasion to be subjected to public tests, to state "that they are inaccurate and ridiculous." But though challenged by me to do so, no one has yet pointed out where they are inaccurate, where the system was wrong, or unfair, or partial, or where the Holsteins were placed at a disadvantage. Can Mr. Miller do so? If not, what evidence has he that they are inaccurate and ridiculous?

Mr. Brown's accuracy and impartiality is too well known in Canada to be lightly set aside by the "champion of the vanquished." I again challenge the Holstein admirers to show where the tests were inaccurate, incorrect in principle or did the Holsteins injustice. Until such is done, he will very properly enjoy the confidence of the impartial Canadian public.

Mr. Cook asserts that the tests at London and Toronto were under precisely similar circumstances. A most casual perusal of the result of the tests of the cheese curd will show that at Toronto it was subjected to a greater amount of drying. Mr. Cook also asserts with truth that I claim to be aware of the capacity of each cow in my herd, but also states that I knew that Jessie Brown was my third best cow available in the herd, and adds, "If Jessie Brown, the third best available cow in the herd, stood 52 points below the best, where would the 147 other Jerseys that compose this famous herd stand, and how many points would they score?"

Permit me first of all to correct an unintentional error Mr. Cook has made in stating my cows at 147. That would include a number of heifers and calves not yet in milk. Cows and heifers in milk are about 100 in number. Of these, 60 are cows only, and 40 two-year-old heifers. Jessie Brown, in place of being the third best cow in the herd, rates about 40th. I was aware of this at the time of entry, but believed her to be a good enough cow to beat the average Holstein, and in this I was not mistaken, as she came within 3.30 points in the total number of the highest Holstein on record at London, 3.08 of the second highest Holstein, and excelled the record which each of the other six Holsteins made at London.

Following the line of argument of Mr. Cook, if 39 cows in one Jersey herd can, out of 8 of the representative Holsteins excel the records of 6 of them, what a poor dairy race of cattle are represented by the Canadian Holsteins.

Mr. Cook asks, would I care to have Prof. Brown test my 150th rate cow in the Oaklands herd and give the result to the world? In reply I say I will only too gladly have Prof. Brown test every cow in my herd for milk, cheese and butter combined, on the plan of the Toronto and London tests, and give the results to the world, provided Mr. Cook will subject his entire herd to a like test, with like publicity.

As I am not aware that the results of these competitive tests have ever been published in the JOURNAL, I herewith state the average of the various breeds at the London Provincial and Dominion exhibition:

	Milk in 24 hrs.	Lbs. Butter per 100 lbs. Milk.	Wet Cheese Curd per 100 lbs. Milk
Jerseys.....	25.56	7.28	20.30
Ayrshires.....	24.51	4.24	22.70
Holsteins.....	32.19	2.98	16.59
Grade Shorthorns.....	35.52	3.16	20.62

VALANCEY E. FULLER.

Oaklands, Hamilton, Feb. 27, 1886.

(To be continued)

## Poultry.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

### The Scoring System of Judging Poultry

(Held over from January.)

As some of your readers are interested in poultry, a few lines on the late great show in Toronto will perhaps prove interesting. It was a great success, the St. Lawrence Hall, in which the show was held, being completely filled with the choicest specimens of our feathered friends. The building is just adapted for such an exhibition, being large, warm, well lighted and ventilated. But the interest manifested in this show was due to the fact that the birds were to be judged by the scoring system, as it is called, and that the great American judge, J. K. Felch, was engaged to apply it. We may safely conclude that it has had, in this instance, an impartial trial, and whether it becomes the favorite system or not, no one will regret that it has given to all interested in poultry a chance of knowing what the system is, when applied by one competent to judge by it. In the hands of those not thoroughly qualified the effect would be, we should say, most disastrous. The number of birds that were disqualified proved that even good breeders can live and learn, many of those disqualified being almost perfect specimens of their class. But under the scoring system each bird is examined—we might say in detail—every feather is seen, and no defect in any part escapes the keen eyes of the wonderful judge. It is no wonder there were a few disappointed ones among the members. But is not this knowledge, so bitter to learn, the very point we are all seeking for, viz., what is the greatest excellence our birds can attain? We think so. And thus we can take heart, and from the seeming failure learn the way to almost certain success. The show certainly was a credit to all concerned, and much hard work must have been done by the promoters and managers to make it such an unqualified success. Good temper and kindly feeling was the order of the day among those concerned; and this friendly meeting will do much to foster the interest in poultry shows. So many excellent birds are seldom seen at one exhibition as were shown in Toronto, and the prospects for the future of the fanciers and breeders are bright indeed. Those who took the long cold journey to the Queen City must feel amply repaid for the experience gained at this interesting exhibition.

Mr. Felch has the reputation of cutting severely; which means that the least defect is cut one or more points, as according to his judgment it is lacking of perfection; and as there were so many birds that scored well over ninety out of a possible hundred points, the result must be exceedingly gratifying to those who exhibited. Many of the second prize birds scored a few points over ninety, and a few third-prize scored the respectable total of ninety points. These figures will show what kind of birds they were, and what we may expect to raise in the near future. There was no guess work about it, every bird was worthy its record that scored by the master hand of the judge.

Angus, Ont.

W. J. C. G. PETER,

## Diseases of Poultry and their Cure.

(Continued from February Number)

### BROKEN BONE.

I cannot give any experience of my own on this subject, not having the misfortune to have an accident of this kind happen to any valuable birds. I have several times had a leg or wing broken with some inferior stock, both of duck and chick, but consider that unless the bird is valuable as a breeder, the care does not pay for the trouble, and the best plan is to put the bird out of misery as quickly as possible. I shall have to give Wright's treatment of fracture, which is as follows:

"We once saw an old hen—very old she was—with a wooden leg; but in general fowls are too lively in their habits to bring any great credit to the surgeon, the bones almost always setting more or less out of position. The only exception, perhaps, is fracture of the shank, which, on account of its straight and accessible character, is 'set' without difficulty, placing the bones in position and securing with a splint formed of filtering or porous brown paper saturated with white of egg, which hardens as it dries. Thick bones and wing must be bandaged the best way possible; perhaps in the case of a broken wing it is best merely to tie the feathers tightly together, after putting them in position, at about an inch from the end. We should always do our best with a valuable hen, as she might recover sufficiently for breeding, even if spoilt for the show-pen."

THOS. GAIN.

Hamilton, Ont.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—Kindly allow me space to thank Mr. Bartlett for his interesting letter in reply to our inquiry for information re "Incubators." I have been so very busy that I was not able to get in a word of thanks last month.

I quite agree with Mr. Bartlett, that it is better to supply the brains oneself. If there is one thing more trying to the patience than submitting to ordinary hen-brains, I should like to know what it can be. I have an incubator, but have not tried it this season. Authorities differ so greatly on the merits of chicks hatched in them, notably the great judge, J. K. Felch, and a certain Mr. Pitkin, who, I believe, claims that exhibition birds cannot be had from incubator chicks; besides others I have remarked, who think somewhat the same. And this is partly the reason I asked Mr. Bartlett to give his opinion. I am glad to know he thinks as favorably as he did at first of the artificial method of hatching. I am at a loss to understand why, if a chick hatches at all, and is healthy, there should be any difference whether hens or incubator hatch them. I have read and studied all I could, and the best authorities, too, for the past two years, and I intend to try my hand this season on the incubator. I know every one cannot make them a success, however well they may try. I think the pleasure of raising the chicks to be so gentle and tame, is worth a very great deal of effort. If I am half as successful as Mr. Bartlett has been I shall be truly delighted. If I can't get my own incubator to do it, I must try one like that he has had.

With thanks to Mr. Bartlett and yourself, Mr. Editor,

W. C. G. PETER.

Angus, Ont.

### The Proper Kind of Writing.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—After reading in your January issue Mr. Peter's letter on "Winter management of poultry," I concluded to try the same plan, that is in feeding, and I soon found a marked increase in the number of eggs. I have 13 pullets and 4 hens, and have received last month 173 eggs.

JOHN A. BAIN.

Woodstock, Feb. 3rd, 1886.

If there is no club agent at your Post Office, you, reader, are hereby authorized to make up a club, and earn the cash premiums we offer. Send for terms, sample copies, etc. Now is a good time.

## The Apiary.

### The Field for Bee-keeping.

It would not be correct to say that for this purpose the field is the world, but it would to say that so far as our Dominion is concerned, its entire southern latitudes will provide food for those busiest of workers almost from sea to sea. The honey harvest is getting to be a comparatively large one, yet the many tons laid up for us every year by the busy little toilers, is but a fraction of what goes back again to earth and air because no means have been provided of securing the tempting sweets which nature, in the lavishness of her bounty, furnishes in almost every flower that paints the field or adorns the tree. Our statisticians can furnish us with the enormous capabilities of our wheat-producing belt, as the multiplication of the general average per acre by the extent of the available area presents us at once with an approximately correct aggregate; but no statistician has as yet told us the honey-producing capacity of an acre of Canadian soil. Much of course depends upon what crop is grown upon it. If there was but one variety of plant which produced honey, the measure of the capacity of the country could easily be ascertained, but instead their name is legion. In a hundred fairy forms the treasures of our wealth of bloom unfold themselves, nodding a welcome with every passing breeze to come and partake of their proffered stores. With the occupancy and cultivation of our lands comes increase of capabilities in many ways. The wildwood in a state of nature will support but a limited number of bees. Turn the forest into meadow-land of the right varieties of clover, and a vast army of little workers will be kept busy for weeks together, so that with advanced tillage we may expect constant improvement in the capabilities of our land for honey production; or, in other words, the honey yield is likely to keep pace with the march of improvement, practically with the advancement made in fruit culture, dairying, and also of beef production.

Fruit-culture and bee-keeping are twin avocations which react most favorably one on the other. A profusion of blossom gives a harvest to the bees, and an ample supply of bees gives a harvest to the fruit-grower, so that every additional acre of orchard grown materially aids every apiary in the neighborhood.

So, too, does every dairyman help to gladden the heart of the bee-keeper. He must have clover for his cows, whether butter or cheese is the object of his search. And the same obliging plant which gives of its richness to the milk-pail, gives also of its sweetness to the bee-hive. The producer of beef also lends a helping hand, as the same grasses which sustain the products of the dairy are also used, though not in the same degree, to produce flesh. Thus it is that we perceive a close bond of union between stock-keeping and bee-keeping, and for the sake of their mutual interests stock men and bee-keepers should be fast friends.

The planting of certain kinds of shades will also fill the empty honey-cells. The linden is a beautiful tree, but with the destruction of our forests its ranks have been sadly thinned. Like the palm tree of eastern lands, it loves the path of quiet waters, and flourishes in soils where its rootlets may often drink of these. We can scarcely picture to ourselves a lovelier scene than the meandering streamlet winding through a pasture land; and fringed with wide-spreading, broad-leaved lindens, herds lying down beneath their deep shade and listening to the hum of bees busy

gathering their stores. And this may be a common scene in the days that are on the way.

How much we know about bees, and yet how very little! We would that some one would tell us the honey producing capacity of a well-grown linden tree, or that of a full-grown apple tree covered with bloom, or an acre of alsike or white clover one mass of pale white or pink tinged bloom.

The field, then, for bee-culture is very, very wide, and as yet mostly unoccupied, and we are glad to witness so many of our countrymen doing their best to prevent this harvest of choicest sweets from perishing ungathered.

### Who Should Keep Bees?

Not every one, or the country would be overrun with them, and much time would be wasted in caring for them. It is always questionable wisdom to keep anything on the low-pressure system—securing but a limited return—as a half-producing soil, cow or apiary, always means a waste of time and labor on the part of the owner. Busy men whose whole time is occupied with other things, should not keep bees, as they require much attention. No person should buy a hive who does not possess a large share of patience, and who has not an innate love for the work. Not in these modern days should one go into the business who is not prepared to study it thoroughly, and keep pace with the march of improvement all around. Those who have a good deal of leisure, whose calling only occupies a portion of the day, may stock an apiary with fair prospect of success, other things being right. So of course may the specialist, and the aged farmer who wishes an interesting pastime combined with utility, after having borne the heat and burden of a more active past. The careless and inattentive will never succeed in bee-keeping.

## Horticultural.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

### Proposal for Orchard Culture.

1. The Province is greatly indebted to the Fruit Growers' Association for the encouragement it has given to the planting of fruit trees. But we believe its efforts in this respect have been chiefly if not entirely devoted to the distribution of a few trees annually amongst its members, more with a view of testing the quality of the various fruits they produce, and which are intended for private use, than with any idea, at least any expressed idea, of promoting on an extended scale the cultivation of fruit trees whose produce is intended for the home or foreign market. The course which appears to have been taken, however, is a good foundation to go upon. First ascertain which trees produce the best varieties of fruit, and then grow these varieties, not simply for private enjoyment, but as a most profitable article of commerce. In furtherance of this latter object we make a few remarks.

2. Almost every farm should have on it a good orchard. In favored fruit growing districts it is often one of the chief sources of profit, but in every part of the country where a farm is made the home of a family there should be fruit trees for family use and enjoyment, even though no sale of fruit is contemplated.

3. The expense of planting is trifling, whilst the trees are growing the land can be worked for other crops, and this course is generally adopted, although the better opinion is that grass is the only crop that should be taken from an orchard, but either way the farmer is not present loser, and at the end of three or four years he receives a fair return, except in the case of apples, which not only benefits his family in many

ways, but adds very considerably to the value of his farm in the event of his wishing to sell or lease or mortgage.

4. And yet the planting of an orchard, even on a well cleared farm, is one of the last instead of one of the first things a proprietor thinks of. All his anxiety is for good returns, which he thinks grain crops will give him, but if he would exercise a little forethought he would see his true policy is to do as above suggested. Of nearly 1,800 farms which have been under inspection in various parts of the country west of Hamilton, excluding purely fruit farms, only 32 had orchards on them. If this be a fair sample of the whole of Ontario, it is quite within the mark to conclude that there are only about three orchards for every 100 farms throughout the Province.

5. If, then, orchards on farms add greatly to their value, and if multiplied to a much greater extent than at present, they would immensely increase the wealth of the country. It is well deserving of consideration whether it is not sound policy to encourage the planting of an orchard on almost every farm, and whether in particular the Fruit Growers' Association, since it is clearly within the scope of its powers, might not be the means of giving, to some extent at least, much greater encouragement in this respect than it has hitherto done.

6. And we would also venture to enlist in this movement the attention of several of the leading loan companies, who are deeply interested in the well-doing of the farming community, nor should they say it is not a legitimate part of their business. The Canada Company has for a series of years, although by no means a part of their business, yet very kindred to it, done good service to the country by encouraging the growing of first class wheat, and it is now proposed to follow their example in another branch of agricultural industry, of nearly, if not equal importance.

7. Many ways present themselves by which the object may be accomplished, but if, as a beginning, the Fruit Growers' Association, or a loan company, could be induced to offer at the next Provincial or Industrial Exhibition a prize of one hundred dollars, we submit it might be offered on the following conditions:

8. For the best four (named) varieties of apples, six of each, the produce of a farm of fifty acres and upwards, on which there shall be at least 100 fruit trees, ten or more being grape vines, certificate of the facts to be required in the usual way.

9. A farmer having a less number than 100 trees, say 50, may in the spring of 1886 plant 50 more, always taking care to plant the ten or more grape vines. He would then be in a position to compete for the prize at the Provincial or Industrial Exhibition for 1886, with the fruit from his old trees. Farms already planted with 100 or more trees are not to compete.

10. For the first few years, old as well as new farms of 50 acres and upwards, having a less number than 100 trees, but made 100 by fresh planting, as just stated, might compete; but at the end of, say five years from now, the prize should be for the fruit of such orchards as have been planted within such five years, so as to give to present or new proprietors the opportunity of immediately commencing the operation of planting.

11. We have suggested the planting of ten or more grape vines on farms. The number might be advantageously increased, since we feel confident it would become the foundation of a new and most important industry, the curing of the fruit for raisins. Ontario has the same climate as Spain, Italy and Turkey, from whence come our chief supplies, which we need

hardly say are of enormous magnitude. The curing of the fruit is a very simple and inexpensive process. Any careful farmer is competent for the purpose. We have cured Canadian grapes on a very small scale with success, and are satisfied that with proper appliances and attention raisins may be manufactured with great profit for our own and for our eastern and western Provinces. And as regards the produce of fruit trees generally, there need be no apprehension on the score of overproduction, even though the planting were to the full extent supposed, when we look to the enormous markets open to us, both home and foreign.

12. We very confidently and respectfully commend the suggestion to the consideration of the Fruit Growers' Association, to our several loan companies, and to any private individual interested in the general welfare of our great country.

S.

### Welcome Visitors.

For the month these are :

Winona Fruit Farm Catalogue and Price List of Plants and Trees.—The proprietor, Mr. E. D. Smith, Winona, Ont., advertises for sale in this catalogue and at prices named, which are certainly reasonable, leading varieties of strawberries, red raspberries, black raspberries, blackberries, gooseberries, currants, grape vines, apple, peach, pear, plum and cherry trees, quinces, osage orange hedge plants, and ornamental trees. All orders from this reliable nursery are packed in a first-class manner, and delivered to forwarders free. Send for catalogue.

Illustrated and descriptive catalogue of J. S. Pearce & Co., London, Ont., successors to Pearce, Weld & Co. Field, garden and flower seeds. Send for catalogue. (See advertisement on inside cover).

Wm. Rennie's illustrated seed catalogue for 1886. Seeds for permanent pastures a speciality. See advertisement.

The 35th annual edition of illustrated catalogue of John A. Bruce & Co., Hamilton. Seeds for the farm and garden. Send for catalogue. See advertisement.

Price list of small fruits, Jos. Tweedle, Stoney Creek, Ont.

Price list of nursery stock, W. N. Hilburn, Arkona.

Price list of small fruits, A. G. Hill, St. Catharines.

### Personal.

The late Mr. A. C. Bell, junior partner of the firm of Messrs. B. Bell & Son, St. George, Ont., died on January 31st. Mr. Bell was not only energetic in his business, but approachable and affable while thus engaged. Not only St. George, but the farming community whose interests he so well served by the excellent implements which he aided in producing, will feel the loss.

### Jottings.

**Stock for Sale.**—Read all the advertisements of stock for sale, beginning on page 76.

**Geese.**—We shall feel obliged if some of our readers will make known to us the name of the largest variety of geese in Canada.

**Auction Sales.**—Those wishing to attend auction sales to purchase good stock should read the advertisements of J. R. Davis, Glanworth; J. C. Snell, Edmonton; Robt. Thomson, St. Marys; John Gibson, Denfield.

**Best in Canada.**—The advertisers of the different breeds of horses, cattle, sheep and swine in the JOURNAL are amongst the best in Canada. Those wishing to purchase should scan the columns with care, and correspond with advertisers, before purchasing elsewhere.

**Enlargement.**—Owing to the great pressure upon our advertising columns, we have been necessitated to add four additional pages, lest the space allotted to reading matter should be curtailed. Notwithstanding, a large number of valuable contributions had to be held over. We ask the forbearance of our contributors in the meantime.

**Binders.**—We are to-day (Feb. 13th) loading for Stratford six cars of goods, 38 binders, 14 mowers, 3 reapers, 5 tons binding twine all sold by one agent, and all to be delivered in one day to the individual customers. This is the largest single delivery of binders ever made at one time, to one individual, on the continent.—A. Harris & Son, Brantford.

**Stud Book of the Shire Horse Society.**—The seventh volume of the stud book of this society has been issued. It contains the entries of 643 stallions and 1,102 mares. The illustrations comprise the champion stallion Enterprise of Cannonock 2772, Prince William 3956, and the champion mare Chance. There is also a list of the prizes and awards taken at the London show of 1885.

**Sewage.**—The Metropolitan Board of Works, London, Eng., propose to spend £4,000,000 in sewers to conduct the sewage of London into the sea. The Native Guano Company propose to transform it into Guano, at an outlay at first of half a million, and an annual outlay of £182,000. Surely the authorities should hesitate before they adopt the former alternative.

**The American Crop of 1885.**—On the whole, the year has been a full average in productiveness. The corn crop was 26¼ bus. per acre, or one-half bushel above the average. The oat crop was the largest ever reaped. The buckwheat crop was above the average, and the barley crop but medium. On the basis of the area of wheat sown, the yield was but 9.2 bus. per acre: of that reaped 10.4 bus. The cotton crop was barely medium. Potatoes have rotted badly.

**English Herd Book of Jersey Cattle.**—The third volume of the English Herd Book for Jersey cattle has just been published. The first volume was commenced in 1872. Mr. Thornton is editor of the herd book, and secretary of the English Jersey Cattle Society, which was established in July, 1883. This volume contains the pedigrees of 833 bulls and 1279 cows, a great increase on the entries in former volumes.

**Neverslip Horseshoes.**—This American invention has reached Canada. The shoes and calks are being sold by J. M. Belton, No. 5 Custom House Square, Montreal. The calks are screwed into the shoe, which may be done by any one possessing these and the requisite wrench. They are said to keep sharp, owing to the peculiar composite nature of their construction, till worn out. Have any of our readers tried them, and what were the results?

**Devon Records.**—Three volumes of the American Devon record have already appeared, the first of which was published in 1881. These contain the entries of 2,990 bulls and of 5,760 cows and heifers. Davy's Devon herd book (English) contains in all 1,876 bulls and 7,312 cows. In the American record it is necessary to have every animal registered within 60 days of the date of birth, otherwise it will not be received, except by the consent of the executive, the expense of obtaining which must be borne by the applicant.

**Prizes at the Chicago Fat Stock Show.**—The next Chicago Fat Stock and Dairy Show will be held Nov. 8th to 16th, 1886. In each of the classes a cash prize of \$100 is offered for the best herd. A herd will comprise a steer or spayed cow three years and under four; steer or spayed heifer two years or under three; steer or spayed heifer one year and under two; steer or spayed heifer under one year. A \$200 prize will be offered as a sweepstakes for the best herd in any of the classes.

**Ostrich Farming.**—We learn from the *North British Agriculturist* that ostrich farming has been successfully introduced into southern California by one Dr. Sketchley, who formerly carried on the business in South Africa. Amongst the requisites for raising them successfully are a sufficiently warm climate, an abundance of stones, lime and water, and of alfalfa, of which a full grown bird will eat 40 lbs. per day. The eggs weigh 3½ to 4 lbs. each, and require six weeks to hatch. A full grown bird weighs from 350 to 400 lbs. The feathers are plucked every seven months.

**Branch Herd Book for Holstein-Friesians.** The "American Branch" of the North Holland Herd Book is now fully organized, with P. E. Sanford, Warwick, President, and Jas. K. Hand, Sing Sing, N. Y., Secretary-Treasurer. All

persons of good character and interested in the breeding of Holstein-Friesian cattle may be admitted as members. The membership fee shall not be raised above \$10, and the registry fee not above \$2.00 per head, without a majority vote of the Branch Association, and the approval of the North Holland Herd Book Association. The Dutchman is setting an example in this which it might be well for the Hereford men in England to imitate.

**Spring Fair and Stock Market of Essex.**—The fourth annual spring show and stock market of the North Colchester Agricultural Society, will be held at Essex Centre on Thursday, April 27th, where in addition to the show of live-stock, all stock seeds and implements brought for sale shall be admitted free of charge. An advertising catalogue will be circulated in the district, and anything to be offered for sale on that day will be advertised in the catalogue free, by applying for same not later than 21st March next, to the Secretary W. H. Russell, Essex Centre. Prize lists and catalogues sent free on application. We do not see why this arrangement will not work much to the advantage of the farmers if they show themselves fully alive to the importance of patronizing the scheme.

**Farmers' Clubs.**—Mr. Harry Pattinson, Dover East, submits the following scheme of organization for Farmers' Clubs and Institutes: "Form Farmers' Clubs in sections, or union of sections, throughout a riding. From these elect annually a delegate or delegates to represent the Club or Institute of the riding or county. When our farming people begin to look upon it as an honor to be a representative at the County Institute, they will take a far deeper interest than is exhibited at present. We are of the opinion that to sustain these institutes in their riding or County in full efficiency, there must of necessity be organizations covering less ground, where the value of the larger meetings may be learned from what transpires at the smaller ones, which have the great advantage of being near at hand.

**The Ontario Agricultural and Experimental Union.**—The annual convention of this association composed of students of the Ontario Agricultural College, ex-students, the Presidents of agricultural societies and other honorary members will be held at the College, Guelph, on the 11th and 12th March. The programme arranged is a good one. Visitors who secure certificates from the Secretary, C. R. Brown, will be carried to and fro at reduced rates, and will be furnished with dinner at the College. This annual meeting affords an excellent opportunity for farmers to judge for themselves, as to the work the College is doing, on the principle of judging the tree by its fruits. We can assure them they will meet with a cordial welcome, and hope that they will not be slow to avail themselves of the privilege.

**Potatoes as a Food for Stock.**—There is not much likelihood that potatoes will be fed to stock this season, they have rotted to such an extent in many parts of the new world. Yet the time may come again when, as last winter, they will be drawn to our towns, and sold on our markets at from ten to twenty cents per bag, which is below their feeding value. They usually contain from 75 to 76 per cent. of water, and from 2 to 3 per cent. of flesh-forming ingredients, so that they should be fed to stock getting some kind of meal to supply the lack of flesh forming ingredients. Taking the labor and cost of cooking into consideration it is questionable if the best results, on the whole, are not obtained by feeding them raw. They should not be fed at any time in large quantity especially when first commencing to feed them.

**The Test of the Holstein Glenburine.**—The famous Holstein cow Glenburne, No. 8788 H. H. B., 506 N.H. B., belonging to Mr. H. M. Williams, Picton, Ont., and a sketch of which appeared in the August number of the JOURNAL for 1885, has been under test for some time. We give the result. She was imported from Holland October 15th, 1884, by Messrs. B. B. Lord & Son., Sinclairville, N. Y., and sold the following January to Mr. Williams. Not standing the voyage well, she was dried by Mr. Williams, with some difficulty, and allowed to run the summer, until in September, along with 36 others from the Hallowell Stock Farm, she went the round of the fairs, and won many prizes. On the 9th day of November, 1885, she dropped a beautiful bull calf, considered by Mr. Williams the best he has ever had. Fed tight at this time, she began with 50 pounds of milk per day, which, with increase of feed, was soon increased to 80 pounds. Mr. Nelson Cahoon, of that section, a gentleman who breeds pure Shorthorns, was then employed to conduct a seven days' test, which was made early in January of this year. The result was an average of 82 lbs. of milk per day during the seven days, and the largest yield in one day was 87½ lbs. The butter yield was 3 lbs. to 3½ lbs. daily, or an average of 4 lbs. to the 100 lbs. of milk, set in the ordinary way. She had a record in Holland of 82½ lbs. of milk per day, but this she has now slightly exceeded. The feed before the test consisted of about 20 quarts of chopped grain a day, of which

two-thirds was oats, and one-third peas, with bran and middlings added, and clover hay. During the test the grain was increased one-third, but in the same proportions. Mr. Williams thinks that both the cow and the milk can be made to show better results, and has written to the Minister of Agriculture for Ontario asking that one of the professors of the Ontario Experimental Farm be permitted to make an official test with Nixie L. and Glenburine, both for milk and butter. This is the most conclusive way of setting forth the merits of any breed, by the milk pail and the milk, butter and cheese scales.

New Advertisements.

Table listing various advertisements and their categories, including Gurney & Ware, The Waterous Engine Works Co, Thorley Horse and Cattle Food Co, etc.

Table of Contents.

Table of Contents listing sections such as STOCK DEPARTMENT, VETERINARY DEPARTMENT, FARM DEPARTMENT, DAIRY DEPARTMENT, POULTRY DEPARTMENT, and AGRICULTURAL DEPARTMENT with corresponding page numbers.

Stock Notes.

Parties forwarding stock notes for publication will please condense as much as possible. If written separate from other matter it will save much labor in the office. No stock notes can be inserted that do not reach the office by the 23rd of the month preceding the issue for which they are intended.

Horses.

Messrs. Ballachy Bros., Brantford, Ont., mention that they have sold their Percheron fillies to Messrs. Brickman & Baker, who are breeders of Percherons. The price for the lot was good.

Mr. Wm. Rennie, Toronto, writes: I have sold the following from my farm in Markham: "To Edward Morgan, of Indiana, U S A., two young stallions and a filly, and to Samuel Eastwood, Mimico, the fine young imported stallion, Sir Edwin

Mr. J. Duff, of Everton, has just sold the imp Clyde stallion Davy Lad to R. McConkey, Arkwright, Co. Bruce. He is a registered Clyde horse, which Mr. Duff has travelled for three years. His colts took 15 first prizes at 4 shows last year. Davy Lad has carried 8 firsts himself in 3 years.

F. Earchman, Epsom, Ont., reports the sale of the Clydesdale stallions, Jamie Fleaman and Sir Walter Scott, the former to Messrs. W. Lamb & Thos. Prowse, and the latter to J. A. Asling, Berea, Ohio. Mr. Earchman thinks the demand for good horses is getting better.

Messrs. J. G. Snell & Bro., Edmonton, Ont., write (16th February, 1886): "We have sold 4 of the Clydesdales advertised in the JOURNAL, 1 two-year-old stallion Good Connection to Jno. Little, Mono Road, Ont.; 2 fillies to N. H. Salisbury, Kearney, Nebraska, and 1 filly to E. H. Andrews of the same place. The last two sales were made through our advertisement in the JOURNAL."

Mr. Robert Ness, Howick, P. Q., writes: "I have just sold The Montgomery (three years old), which has made a good record for himself thus far. He has been shown nine times and never was beaten—won nine first prizes, including first at the Provincial, Montreal—two sweepstakes as two year old, for the best animal all ages, and diploma and gold medal this last year for the best horse any age. Thos. Good, Esq., Ottawa, has become the owner at the cost of \$3,000. I have also sold a yearling colt, The Emigrant, to Mr. Malcolm McNaughton, of Huntingdon, P. Q., a filly to John Lockerby, Beauharnois, P. Q., and one to Robert Robertson, Howick, all at highly remunerative prices, and have still four good stallions on hand."

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—Would you be good enough to inform me of the whereabouts of the Clydesdale stallion South Western, of which a cut is given in the September number of the JOURNAL 1885. There is one of that name near here, and some friend and myself disagreed about the identity of this horse, and agreed to leave it to you for a decision. Please answer through the JOURNAL, and oblige,

ALFRED WARREN.

[The Clydesdale stallion South Western, a cut of which appeared in the JOURNAL September last, is now owned by the Messrs. Campbell Bros., Steel P. O., Co. Simcoe. (See October number, page 273).]

The Messrs. Graham Bros., Claremont, Ont., are bringing out a fresh importation of registered Clyde horses, all stallions, and of ages varying from one to three years. They will be of a carefully selected class, and of the usual type imported by this firm, that is, low set, close coupled, heavy and strong. They are expected about the 1st of March. Since the Toronto exhibition this firm have sold to entire horses, all registered and imported, at good prices. They include Nutwood to Messrs. Trinder & Groff, Simcoe; Shamrock, three years old, to Messrs. Kilby & Kitchen, of Brechin; Clangrant and Cheviot, three and four years, to Samuel Staples, Cavanville; Kildolton, two years, to Messrs. Hubbard & Suggen, Mt. Albert; Garvald, two years, to Chas. Bennett, of Innisfield; Mollance, two years, to Brooks & Colquhoun, Mitchell; Prince of Dee, two years, got by the Prince of Wales, to west of London; Carstairs, four years, to Wm. Graham, Barrie, and Manfred, the great stock horse, six years old, to Messrs. Brooks & Colquhoun, Mitchell, all of Ontario. The low set, arched bodied three year stallion McMaster, by the great McC gor, is yet in the stud, a first prize winner at Toronto Industrial and Commodore, of similar type, also Warrior Boy, a tidy bay three years old, and Doubt Not, a half brother to the great Oliver Twist of R. Beith & Co., Bowmanville, which appeared in the December number of the JOURNAL, out of the same mare, and by the sire Goodhope. Some good females are also in the stud.

Mr. J. G. Hall, Gibbon, Buffalo County, Nebraska, favored us with a visit at Riverside a few days since, and spent an hour or two looking at the stock. Mr. Hall speaks of the country as producing profusely grain being abundant and cheap. He claims that Nebraska is the best corn producing state in the union. It also grows oats and potatoes in abundance. But stock raising will soon be the great industry of the country. Cattle are brought in large lots from Wyoming and other grazing districts to be fattened. Mr. Hall, a countryman of ours, originally from Milton, Ont., is engaged in raising and handling Hereford cattle and Cleveland Bay horses. Recently this gentleman and two others, Mr. E. H. Andrews and Mr. Henry Salisbury, both of Kearney, Nebraska, took away a car load of horses, Cleveland Bays and Clydes. Mr. Hall, who took the Cleveland Bays, purchased from Mr. Matthew Howson, Ashgrove, Ont.; Mr. Andrews, the imported Clyde five year stallion brought out by David Annan, Pickering, from R. Cheyne, Toronto, and Mr. Salisbury an imp. Clyde stallion coming two years, and some imp. mares from J. G. Snell & Bro., Edmonton, and a filly coming two years from J. Jackson, of Grahamsville, Ont. Mr. Hall says that if the producers of Cleveland Bays only knew the demand there is for registered animals of this class of stock in the west, they would be very diligent in providing them.

Advertising Rates.

The rate for single insertion is 18c. per line, Nonpareil (12 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 per line per annum. 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.

FOR SALE.—Shorthorn Bull, red, 14 months old. Address D. BARKER, Paris Station, Ont. fe-2

FOR SALE.—Thirteen Young Shorthorn Bulls, from 12 to 19 months old, color red and roan, by imp. Cruickshank bull Premier Earl—2005—. Prices reasonable. JAMES GARDHOLM & Sons, Malton Station, G.T.R., Highfield P.O., Ont. fe-1

FOR SALE, 4 young Bulls and five Heifers, by British Statesman—753—(42847), also 2 very nice Berkshire Boars, and a few Sows, farrowed in July last (registered), good animals, good pedigrees, and low figures. Send for catalogue EDWARD JEFFS, Bond Head, Ont. fe-3

FOR SALE.—3 Shorthorn bulls, one 25 months old, weight 2000 pounds, the other 12 months. Good colors. The first got by Mr. Fothergill's Prince James—95—, the other two by Mazurka Duke 16553, [5703.]

GEORGE ALTON, Nelson P. O., Ont. jan-31

FOR SALE.—Five Shorthorn Bulls. One named Soldier Boy, 1 year old, weight about 1100 lbs. Will be sold for \$100. The rest good animals and good pedigree. Also, a pair of four-year-old Percheron Stallions for sale cheap. Also 4 Collie pups, price \$5 each. Address JOHN LAMONT, Caledon, Ont.

FOR SALE—SHORTHORN BULL "OLIVER TWIST." Color, red; fifteen months old; registered in C. S. H. R., [13457], vol. 10. Also Registered BERKSHIRE SOW, in pig, two years old, one young BERKSHIRE B.C., four sows, 1 mo., are eligible to register. All good ones. Will be sold cheap. HENRY ARKELL, Arkell, Ont. mar-1

FOR SALE.—Seven extra choice Southdown Ewes from one to three years old, all supposed to be with lamb. Also a reserved Shearling Ram, of good sire. Address, H. H. SPENCER, Brooklyn, Ont. fe-1

FOR SALE, Three Young Shorthorn Bulls, good individuals. Good color and good pedigrees. E. A. & S. W. EDWARDS, Watford P. O., Ont. fe-3

FOR SALE.—Two Shorthorn Bulls, 9 and 12 mos. old, first-class pedigrees and good colors. Sired by Laddie of Buchan—2196—. S. B. GORWILL, Ballymote, Ont. fe-2

FOR SALE.—Shorthorn bull, dark red, one year old, registered Canada Shorthorn Herd-book, Lord Lansdowne, [12854], Vol. 10. JOHN COUSIN, Buena Vista Farm, Harriston P.O., Co. Wellington. ja-3

FOR SALE.—Two Shorthorn Bulls, 8 and 13 months old, color cherry red. Reg. in B. A. H. B., sired by Brilliant,—1235—, son of Barmpton Hero. ja-14 JOHN CURRIE, Everton, Ont.

FOR SALE.—Six Shorthorn Bull Calves, from 8 to 11 months old, by Aberdeen Duke the 2nd, color and pedigree good, also a few females. Apply to ja-3 H. & B. SNAREY, Croton P.O., Ont.

FOR SALE.

3 SHORTHORN BULLS, from 10 months to 3 years; also a good selection of cows and heifers. fe-2 C. PETTIT, Southend P. O., Ont., near Niagara Falls.

FOR SALE.

SHORTHORN BULL CALF, dark red, by Rob Roy, 172, N. S. H. B., dam Daisy Deane 2nd, 104 N. S. H. B. Address A. C. BELL, New Glasgow, N. S. ja-3

FOR SALE—IMPORTED CLYDESDALE STALLION.

Duke of Argyle (4342), foaled May, 1883, brown. Sire, Sir John (2412). Dam, Bell, vol. viii, by Lord Clyde (2958); gr. dam, Fanny, by Rob Roy (2379) JOHN STEWART, Importer and Breeder, Chesley P. O., Ont.

SHORTHORNS FOR SALE.

ONE IMPORTED BULL AND ONE BULL CALF. Also a few Heifers. SMITH BROS., Innerkip, Ont. ja-3

SHORTHORN BULLS.

6 excellent young bulls, 8 months to year old, and a few young heifers. Come and see them, or write. Farm, 2 1/2 miles from station. JNO. D. PETTIT, Paris, Ont. fe-11

**FOR SALE.**—Half-bred Percheron Stallion, 3 years old in May; sired by imported Dauntless; dam by Fox Hunter. Weight, 1,600 lbs. D. G. HANMER, Mt. Vernon, Ont.

**SHORTHORNS.** A few choice young bulls and females for sale. Come and see them. Stables one mile west of junction of G. I. Ry. with L. H. & B. Trains stop there.

JAS. S. SMITH, Maple Lodge P. O., Ont.

**5 SHORT-HORN BULLS 5 FOR SALE.**

Two coming 2 years old and three 1 year old. All good ones, and eligible for registration in the B. A. S. H. B. Address R. MITCHELL, Proprietor, or JOHN PEWS, Manager, Stamford, Ont.

**Imported Shorthorn Bull For Sale.**

The yearling Shorthorn Bull Wallace, color red, bred by Wm. S. Marr, Uppermill, Tarves, Aberdeenshire, Scotland, got by Elocutionist (47832), Dam Missie 81st, by Bentick (42787). Parties will be driven to the Farm by calling at the office, Idington Block, Erie Street. THOS. BALLANTYNE & SON, Stratford, Ont.

**IMPORTED STALLIONS FOR SALE**

Registered Clydesdale and Cleveland Bay. Pedigrees and other information sent free on application to THOMAS TAYLOR, Harwich P. O., Ont.

**THE SCIENCE OF FEEDING.**

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

This excellent work will be sent to any address, post-paid, on receipt of publisher's price, \$2.00.

**FOR SALE CHEAP.**

IMPORTED CLYDESDALE STALLION, (registered B. C. S. B.) rising five years, sound, quiet and sure, a grand horse every way, \$500 less than same horse could be bought from importer. Also, fine well-bred Roadster Stallion, large and sound, four-years-old; for sale much below value.

**IMPORTED BULLS FOR SALE.**

SIX YEARLING BULLS, dark roan, bred by A. Cruikshank, Esq. Several of them are from his best tribes, and as good as any I ever imported.

**SHORTHORNS FOR SALE.**

BULL CALVES, HEIFERS AND YOUNG Cows in calf, also Southdown ram lambs, Shearlings and Ewes, all bred direct from imported stock from the best breeders in Britain. Prices moderate. Write for particulars to SETH HEACOCK, Oakland Farm, Kettleby, Ont.

**FOR SALE.**

Herd of Registered Shorthorns. Consisting of bull, 3 cows in calf, 2 bull calves, 1 heifer calf—most of them prize-winners, including first at Toronto, Ottawa, Hamilton, Guelph, etc. Will be sold cheap if taken together, as owner is quitting the business. Apply, MAJOR LLOYD, Oakville, Ont.

**BUY A BULL**

At my sale, April 7th, if you don't get suited before that time I will sell 15 good ones from 10 to 28 months old; also 35 cows and heifers—35 cows with calf at foot, and in calf again to first-class bulls; also a fine lot of yearling and two-year-old heifers. Send for catalogue of pedigrees. Address, JOHN C. SNELL, EDMONTON, ONT.

**CANADIAN CLYDESDALE STUD BOOK**

As the management propose closing the entries for the first volume about the 1st of April, 1886, it will be necessary to have all entries for that volume sent in before that date. Blank forms can be had by writing to the editor, HENRY WADE, Secretary of the Agricultural and Arts Association, TORONTO.

**Ayrshire Bull Calf for Sale.**

Took Third Prize at the Provincial Exhibition, London, 1885. His dam took the Twenty Dollar Special Prize in the Milk Test, quantity and quality considered, scoring far ahead of all competitors, being second best cow of any breed at the Exhibition of 1885. Apply to owner, GEO. HILL, Delaware P. O., Ont.

**Stock Notes.**

It is pleasing to notice that when our countrymen migrate to western lands they remember well the old Province, which is so capable of producing first-class stock, and which is doing it, but not nearly to the extent of her capacity.

**Shorthorns.**

James Hazlewood, Kirkton, Ont., writes, 2nd February: "My herd of Shorthorns are doing well. I have sold my bull Prince of Lerme to James Clark, Co. Huron. He is a fine animal for his age—having all the points of a pure bred Bates Shorthorn."

Mr Wm Murray, of Chesterfield, Ont., will hold a sale of his purely bred Bates Shorthorns at Dexter Park, Chicago, on Thursday, 22nd April. This herd is not only well bred, but the cows composing it have proved themselves very rare, able breeders. Any one desiring good useful Bates Shorthorns should visit Mr. Murray's herd, and not allow them all to go to our enterprising neighbors across the line.

The Shorthorn herd of Mr J McNaughton, of Meaford, now numbers 9 head. The first purchased came from Peter Bathgate, Eramosa, in 1880, a one-year heifer, and the bull Lorne. Then followed the one year heifer Matchless of Elmhurst, from the herd of Messrs. J & W. Watt, Salem, and carrying calf to Barmpton Hero. This calf is now used in the herd, also the bull calf Barmpton Duke, by Barmpton.

Mr. David Birrell, of Greenwood, Ont., is now the possessor of 25 head of good Scotch Shorthorns, with the Cruikshank bull Duke of Lavender at the head for the past three years. This herd are all either imported or from imported stock, and are in a good healthy, prosperous condition. The young heifers are particularly good, 10 females are now carrying calf, in addition to two that have already calved.

Mr. John Wilson, Whitevale, has been keeping Shorthorns since 1860. The late Geo. Miller, Markham, who furnished so many with the first cow, held the name for Mr. Wilson. The herd is now mainly home bred, on an imported foundation, but latterly more of the Cruikshank blood has been introduced into it. Mr. W. has used imported bulls occasionally. At present the herd numbers 15 head. A good many have been sold at sales and otherwise. The present bull, a pure Bates, was bought from a neighbor, and is from imported cow and sire.

Mr. James Gibb, Brooksdale, mentions, "I have sold all the three Shorthorn bulls advertised in the JOURNAL. The Shorthorn bull Sutton Champion went to Leander Woodworth, president of the Union Agricultural Society, Cornwallis, Nova Scotia; Scarlet Duke to Joseph Lurmer, Fairview, Ont., and the bull calf Robin Gray to John Parker, Maplewood, Ont. The prices, though not high, were very fair."

The Messrs. Green & Bros., of the Glen, Inverkip, have made the following sales during February: Horses—The imp. English shire stallion Regent (2381), to Mr. N. T. Parker, Simcoe, Ont. Shorthorns.—The red heifer Myosotis by the Earl of Mar (47815), out of imp. Mysie 34th, and the red bull calf, Proud Duke, by the Earl of Mar (47815), out of the imp. Proud Duchess, to Mr. C. R. Campbell, jr., Woodville, Ont., and the roan bull The Premier, by Earl of Mar (47815), out of imp. Princess Royal 23rd, to Mr. R. Scott, of Blandford, Oxford Co., Ont.

Mr. John Dryden, M.P.P., Brooklin, Ont., reports the following sales: The lavender bull Lansdowne to John Buchanan, Branchton; Solicitor, dam Sunbeam, to John Heron, Ashburn, Barrister, dam Blanche, by Loyal Barmpton (32996), all of them by the Prize bull Lord Glams, lately pictured in the JOURNAL. He has also sold to L. Miller, Maryville, Missouri, the show bull Red Emperor, at a very long price, and to Mr. Linville, of the same State, the young bull, Grand Elector, imp. last autumn. "I find a brisk demand for the better class of Shorthorns, which is certainly a healthy indication. The young bulls still on hand are all of the thick fleshy sort I am wont to admire, and the production of which you know is my aim as a breeder."

Mr. James Gardhouse, of Rosedale, Malton, has been breeding Shorthorns for the past 13 years. Mr. G. informs us that his herd now numbers 65 head, 26 cows and the balance young stock. Among the breeding cows of note may be mentioned imp. Verbena, by Royal Windsor (29800), and bred by Mr. Outhwaite, Yorkshire, England; Fairy Girl, Fairy Circle, Fairy Lass, Red Rose, Rosella, Favorite, Maid of April, Crimson Flower of Greenwood 4th, Rosedale 6th, Fairy May and Lady Waterloo. Chief among the heifers are Mary Anne of Lancaster 12th, bred by Nathaniel Reid, Aberdeenshire, Scotland; Clea, bred by S. Campbell, Kinellar, Aberdeenshire, Scotland; Red Rose, Verbena's Pride, Maggie, Lady, Waterloo 3rd and Emma. The bulls used in this herd are imp. Count Grindelwald—29—, bred by Mr. T. Stamer, Yorkshire, England; imp. Prince Inglewood—318—, bred by Mr. Robert Thomson, Cumberland, England; Captain Cook—81—, bred by J. & R. Hunter, Alma, and the imp. Cruikshank bull Premier Earl—2005—, which heads the herd at the present time, and is doing good service.

Mr. James Hunter, Sunnyside Farm, Alma, Ont., has recently made the following sales: To Bliss Anderson, Sackville, N. B., the two-year-old bull Clinker, winner of second prize at the Toronto Industrial Exhibition 1885. Clinker is by Knight of Warlaw (29014)—472—, dam Lady Mary, by Lord Aberdeen—80—. He is full brother to Lady Ann, the winner of silver medal for best female of any age at Provincial show, Kingston, 1882, also the sweepstakes cow of any age or breed at Minnesota State fair two years in succession, and also full brother to the grand show bull Prince Arthur, now heading the fine herd of Shorthorns owned by the English Northwest Land Co. Prince Arthur won the first prize in his class and diploma for the best bull of any age, and the Hudson Bay Co's gold medal, valued at \$100, for the best bull of any age or breed. Mr. Anderson also gets two Queen of the May heifers, by Socrates—97—, one of them, Lady Mirth 3rd, from Lady Mirth, and by the grand show bull The Baron—90—, g. dam Lady Florence, the first prize cow at the Industrial Exhibition, Toronto, 1881, and the pure-bred Clydesdale stallion Lord Clyde. Lord Clyde is a

**FOR SALE**

The Royally-bred Princess Bull

**PRINCE OF WINDSOR**

Sire, 6th Duke of Vinewood; dam, Princessa 3rd, by 6th Duke of Vinewood also. This is a beautiful red bull, two years old, as well bred as the best, and suitable to head any herd in America or the world. Apply to JOHN DIMON, Windsor, Ont.

**12 YOUNG HEREFORDS FOR SALE.**

VIZ: 7 YOUNG BULLS AND 5 HEIFERS, all either imported in dams or from imported cows. Also for sale aged bull, Duke of Argyle, bred by Her Majesty Queen Victoria, imp. by Ontario Government 2 of the heifers and 1 bull were got by the Ontario Agricultural College stock bull Conqueror, son of the celebrated \$20,000.00 Lord Wilton 4,740.

JOSEPH SHARMAN & SONS, STRATFORD, ONT.

**Cleveland Bay Stallion For Sale.**

CROWN PRINCE, 3 yrs. old, sound, gentle and sure. Took first prize at Industrial and all the local shows in 1884. Bred from pure coach stock, four (imp.) crosses—not a chance horse, as his family will show. Come and see and be convinced. See "Stock Notes" for December.

W. C. BROWN, Meadowvale, Ont. FARM—1/2 mile from Meadowvale Station, on the C. P. R.

**Shorthorns for Sale.**

Two Bulls two years old, one out of a Polyanihus Cow, imported by W. F. Stone, Guelph, the other bred by John Miller & Sons, and of the famous Rose of Strathallan family, also young bulls and heifers for sale cheap.

Address VALENTINE FICHT, Oriel, Ont.



**GRAHAM BROS., CLAREMONT, ONT.**

RESIDENCE ONE MILE FROM CLAREMONT STATION.

Importers of Registered



**CLYDESDALE Stallions and Mares.**

We have constantly on hand and FOR SALE

At reasonable terms, a number of superior Clydesdale stallions and mares, registered, and which have been selected from the most successful prize winners at the leading shows in Scotland. Also a few choice

**SHETLAND PONIES**

Correspondence solicited, and visitors always welcome CLAREMONT, Feb 17th, 1886.

**GERMAN MILLS Importing and Breeding Establishment of**



**Percheron Horses and Shorthorn Cattle.**

A CHOICE LOT OF IMPORTED STALLIONS ON HAND and for sale as low as can be bought from any importers, quality and pedigree considered. Prize-winners at all the leading fairs in Ontario, first prize and sweepstakes at the Provincial 1883-84. Also a choice lot of half and three-quarter bred stallions, different ages. Also a few superior young bulls and heifers from our show cows. Person inspection invited. Railway station at German Mills, on Galt branch Grand Trunk Railway.

T. & A. B. SNIDER, German Mills P. O., Waterloo County, Ontario.

**Stock Notes.**

bright bay, with good temper, great substance and good action. In his breeding he combines a very large per centage of the best blood of the Clydesdale breed. He is by imp. Gambetta (43), dam imp. Queen, by Dainty Davie (214), a prize winner on three occasions at the Highland Society's Show, Scotland. Lord Clyde is full brother to Douglass, sold to Geo. F. Jackson, Minneapolis, Minn., U.S., for \$1,000. Mr. Anderson certainly deserves credit for the spirit shown in taking home with him to N. B. such choice specimens, and so well adapted for improving the stock of his own Province. Mr. Hunter has also sold to John Marshall, Cass City, Mich., U.S., a very promising 13 mos. calf, by Socrates—97—dam Lady Mary, the dam of Clinker, Prince Arthur and Lady Ann. To John Cook, Amulree, Ont., one Shrop ram, and to John Berg, of the same place, a pair of Shrop ewes.

Mr. Jas. I. Davidson, of Balsam, Ont., writes (too late for Feb. issue). "My cattle, 24 bulls and 10 heifers all bred by Amos Cruikshank, Esq., and I think the best lot I ever had, got to Balsam on the 18th January. Mr. J. H. Potts, Jacksonville, Missouri, and Mr. R. Miller, of West Liberty, Iowa, were on hand before the cattle. Mr. John N. Coldren, Iowa City, Ia., came next morning, all desirous of securing Cruikshank cattle, which resulted in the following sales. Messrs. Coldren & Lee, who laid the foundation of a Shorthorn herd last year by purchasing Golden Rod, Cranberry, and the bull Troubadour, all bred by Mr. Cruikshank, took the heifers Lavender 37th, Violet Cloud, (the o'dest tribe at Sittytion), Lovely 42nd and Arum, of the Easthope tribe, the last three reds. Mr. C. N. Norton, of Corning, Iowa, secured Thistle-top, of the Bampton Rose tribe, who has also some very choice Shorthorns of the Secret, Clipper and Violet tribes. One bull of the Secret tribe goes to A. & J. Davidson, Monticello, Iowa. Mr. Potts bought King of Aberdeen, of the Violet tribe, which I think is equal to any of the three imp. bulls he took from here before, and if nothing happen I believe his success in the show-ring will equal that of Antiquary or Van Tromp, both of which have gained the highest honours in Minnesota, Indiana, Illinois, Iowa and Missouri at the state fairs. He also took Surprise of the Secret tribe. Mr. Robert Miller bought three imported bulls, Baron Aberdeen (47373), of the Duchess of Gloster tribe, and Goldstick and Grand Inquisitor of the Venus tribe, (the second oldest family at Sittytion), also the heifers Lavender 37rd and Lavender 45th, all of which were imp. He also took of home bred heifers Rosemary 3rd, dam imported from Sittytion, also the 25th and 26th Duchesses of Gloster running back to the 12th Duchess of Gloster, imp. from Sittytion, and Mina, of the Kinella Mina tribe. The bull Robber Knight of the secret tribe went to J. E. Bentley, Green Hill P. O., Ohio. Hospodar of the famous Brawith Bud tribe, to Joseph Robinson, Romney, Co. Kent. Bud cost Grant Duff, Eden, Banffshire, 170 guineas, and he was luckily enabled to record that she had paid him 100 per cent, and was useful until 18 years of age. At the sale in 1853 her daughter Jenny brought 100 guineas, and Mr. Cruikshank marked his estimate of Brawith Bud at 92 guineas—pure gold. Her Apparent went to Thos. Baak & Son, Geary, N. Y., Grand Elector to John Dryden, M. P. P., Brooklyn, and Endymion to Wm. Wilson, Brampton, Ont. We may add that Mr. Davidson has still on hand a number of good useful bulls one year old, a few two-year-olds, of shapes and colors to suit the admirers of this popular strain of cattle. The Clyde Stallion Darling's Prince, better even than Mr. Burke makes him in his good picture, served a limited number of mares last season, nearly all of which are carrying foal.

**Aberdeen-Angus.**

Messrs. Hay & Patten, New Lowell, Ont., are issuing a very complete catalogue of their splendid herd of Aberdeen Angus cattle. We have been favored with a glance of the proof sheets, and will give a more extended notice of both catalogue and herd in next issue. It will be ready for distribution in a few days, and anyone looking in the direction of Aberdeen Angus cattle should by all means send for it.

**Herefords.**

Messrs. Dorby & McCrae, Alton Hall stock farm, Gourock, Ont., have sold two Shorthorn heifers, grounded on Mr. F. W. Stone's stock, to T. Shaw, Woodburn, Ont., a Shorthorn bull to James Gibb, Brookdale; 1 pair Plymouth Rocks to I. Bartlett, Futton; 1 pair to James Glennie, Guelph, and a trio to A. Stewart, Ottawa. They have also just received from quarantine 4 imported Hereford bulls one year old.

**Jerseys.**

Mr. Samuel Smoke, of Canning, Ont., writes: "My stock of Jerseys is wintering well—never looking better. I have, as sold a heifer calf out of Baronet's Victory for \$150."

**Holsteins.**

Messrs. M. Cook & Sons, Aultsville, Ont., report the following sales of Holstien Friesian cattle. Bull Robbie Burns 513, H. F. H. B. to A. R. Kidd, Waraw, Ont. Bull Lord Byron 4th, 233, H. F. H. B. to H. Campbell, jr., Ingersoll, Ont.

Messrs. A. Hallman & Co., New Dundee, write: "Our herd of Holsteins are doing nicely. Had two fine bull calves dropped from our cows Blandina and Worthwell, and expect some more young stock shortly. The calves are doing well, and the cows give an abundance of milk. We made several sales since the exhibition. Sold a pair of our prize winners (yearlings), to Alex. Kennedy, Ayr, Ont., at very fair prices. Have still a number of fine bulls on hand. We are still well pleased with the JOURNAL, and shall in the future, as well as in the past, tender our hearty support."

The Messrs. Bollert Bros. Cassel, Ont., of the Maple Grove, report that their Holsteins are wintering splendidly. They mention having on the 18th of Feb. tested the three of their heifers which are yet in milk, with the following result. Guinecette, 3 years old, being 2 year and 15 days in milk, yielded 24 lbs. per day, which showed 15 per cent. of cream. Eustroia (2 years old), being in milk 20 months and 9 days, yielded 12 lbs., which tested 18 per cent. Colonna, 2 years old, being in milk 12 months, yielded 12 lbs., which tested 20 per cent. of cream. They express themselves well satisfied with their experience in Holsteins, and

**THE BARTON POULTRY YARDS.**

A. G. H. LUXTON, 12 York St., Hamilton, Ont.

Breeder of Light Brahmas (McKay's strain). Eggs, \$2 per setting. Plymouth Rocks (Ginn's strain). Eggs, \$1.50 per setting. White Faced Black Spanish (Ware's strain). Eggs, \$2 per setting. Am breeding from nothing but prize-winning stock. SATISFACTION GUARANTEED. mar-2

**FOR SALE.**

The Sheriff Hutton bred bull Sir T. C. Booth—740—, red, dam imp. Rachel, sire imp. British Hero, almost 4 years old, quiet, sure, and very healthy. Has been bred to imported cows, and improved their stock, a splendid sire of females. Herd small, and can use him no longer. Will sell reasonable.

D. ALEXANDER, Box 8, Bridgen, Lambton Co.

**FOR SALE**

**Choice Young Shorthorn Bulls,**

Large size, and good individuals, and bred from good dairy stock on both sides.

Prices moderate. Terms made to suit the buyer. Send for catalogue.

**WM. DOUGLASS,**  
CALEDONIA P. O., ONT.

**IMPORTED**

**SHORTHORN BULLS FOR SALE.**

2 ROAN AND 2 RED WITH A LITTLE WHITE.

These are from the far-famed Sheriff-Hutton Herd, which has produced the all-conquering LORD IRWIN (29123), the invincible SIR ARTHUR INGRAM (32490), the grand show bull LEE MAN (29031), also Fritz Irwin, Royal Irwin, Young Irwin, Sir Hugo Irwin, Sergeant, Fritz Arthur, Lord Arthur, Irwin Fritz Ingram, Arthur Benedict, Ovingham, etc., these all bred at Sheriff-Hutton.

The following are from Sheriff Hutton bulls and are all Royal prize winners, also, viz:

Self Esteem 2nd, Gold Finder, Gold Digger, Royal Ingram, Golden Treasure, etc.

Sir Arthur Ingram—3453— (Bow Park Farm), which won both 1st and Champion prizes at Toronto and London in 1883, is from a cow bred at Sheriff Hutton, and imported by me, and Ingram Chief, (Bow Park Farm), 1st in his class at Toronto, 1885, was sired by old Sir Arthur Ingram (32490).

One of my Bulls is 3 years, red; and, 2 years, red with little white, 3rd, 20 months, roan, 4th, 7 months, roan.

I will sell cheaper than the same class can be bought in England, to say nothing of freights, quarantine, risks, etc.

My farm is 24 miles North of Toronto, on Yonge St., Aurora, Northern & Northwestern Railway.

fe-2 **WILLIAM LINTON,**  
Aurora, Ont.



**NOTICE TO CONTRACTORS.**

**SEALED TENDERS** addressed to the undersigned, and endorsed "Tender for Infantry School", London, will be received at this office until **MONDAY, 20th proximo**, for the several works required in the erection and completion of

**INFANTRY SCHOOL, LONDON, ONT.**

Plans and specifications can be seen at the Department of Public Works, Ottawa, and at the office of Messrs. Durand & Moore, Architects, London, Ont., on and after **MONDAY, 15th proximo**.

Persons tendering are notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures. Tender for each building to be separate, and forms will be supplied for each.

Each tender must be accompanied by an **ACCREDITED** bank cheque, made payable to the order of the Honourable the Minister of Public Works, **EQUAL TO FIVE PER CENT** of the amount of the tender, which will be forfeited if the party declines to enter into a contract when called upon to do so, or if he fails to complete the work contracted for. If the tender is not accepted, the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order, **A. GOBEL,**  
Secretary.

Department of Public Works,  
Ottawa, 24th February, 1886.



**RUPTURE!**

**CURES** every child sure, and 80 out of every 100 of adults, can prove this by testimony of your own neighbors. **Facts the best evidence.** Send stamp for full information. Address,

**EGAN'S IMPERIAL TRUSS CO.,**  
23 Adelaide St. East, Toronto, Ont.  
mr-9

say that they can vouch for the correctness of the above statements.

Mr. Gilbert Dolsen, of Raleigh, and 1st vice-president of the Thames Farmer's Club, has introduced a pure-bred Shrop ram into that section, from the flock of J. Campbell, Jr., of Woodville.

Messrs. D. B. Lord & Son, Sinclairville, N. Y., write: "A letter received from quarantine today (Feb. 15th) states that stock is all doing splendidly, and will be in fine shape for the sale. We are making a great many sales from the herd here at home, and the future for the first-class Holstein-Friesian was never so bright as at present." The sale catalogue of the above firm is to hand, containing the full pedigree of 6 young bulls and 23 heifers to be sold at Grand's Repository, Toronto, on March 30th as advertised, in which sale Mr. Williams, Pictou, Ont., joins with some 15 head from the Hallowell Stock Farm.

**Shoop and Pigs.**

Mr. Peter Arkell, of Teeswater, Ont., mentions, "I have sold eight Oxford Down ewes to Mr. Frank Wiltcher, of Kentville, Nova Scotia, three of them in lamb, the balance last spring lambs. They have arrived safely at their journey's end. My Shorthorns are doing well. Have five young bulls dropped lately, and 15 Shorthorn cows yet to come in. One of my Oxford Down ewes has two very fine ram lambs (Feb. 15th) two weeks old, and doing splendidly."

Henry Arkell, Arkell, Ont., mentions the following sales since last report. One Oxford down ram lamb to Colin C. P. Wright, P. E. I.; one Oxford Down ram lamb to Henry Bailey, Victoria Co.; one ram and two ewes to Leslie Ellis, Dundas Co.; one ram and two ewes to Capt. Macfarlane, Parry Harbour; and two yearling ewes to D. P. L. Campbell, Vanleek Hill, Prescott Co.; also six Southdown ewes to The English Grazing Co., Parry Sound; one Berkshire boar to Wm. & Geo. Hampson, Eden Mills; and one Berkshire boar to Duncan Gilchrist, Puslinch.

**HAMILTON CATTLE FOOD.**



**A Trial will Cost you but One Dollar.**

The farmer who owns a horse, cow, sheep, pig or fowl, and who has not yet tried Thorley's Improved Horse and Cattle Food, should at once purchase at least one dollar's worth from the nearest merchant who has it for sale.

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

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

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

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

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

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

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

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

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

For sale by leading merchants in every town and village in the Dominion in quantities of from 5 lbs. to 100 lbs., at 6c. to 8c. per lb., according to quantity purchased. See advertisement in December and February JOURNAL. If you fall in getting the genuine article, write to

**THORLEY HORSE AND CATTLE FOOD CO.,**  
HAMILTON, ONT.

**FOR SALE.**

**2 YOUNG BULLS**, (Ayrshires.) General Gordon, No. 1642, aged 2 year, bull calf eight months old, both of the above sired by Stoncalsey and (imp.) General Gordon took first prize at Great Central fair this fall. Will sell reasonable, or would take a good nice work horse in exchange.  
fe-1 Address, E. W. WARE, Hamilton.

**AUCTION SALE**  
OF THE ENTIRE HERD OF HIGH-BRED  
**BATES SHORTHORN CATTLE**  
The property of JOHN GINSON, Denfield, Ont., on his farm,  
Lot 25, Con. 16, London Township, Co. Middlesex,  
Wednesday, March 10, 1886.

HAVING made a business engagement in the West, and rented my farm, the subscriber will sell by Auction, without any reserve, the above herd, consisting of  
**18 FEMALES and 8 BULLS.**

These cattle were all raised by the subscriber but two, and all descended from the famous Lyndale herd of Col. Wm. S. King, Minneapolis, Minn. While I have always used highly-bred Bates bulls, individual merit has not been lost sight of, as the cattle themselves will show. Amongst them are some first-class milkers. The Constances are famous all over the American continent, they are thick, short-legged, blocky cattle. They have neither been forced nor starved, will be offered in good breeding condition.

**THE BULLS**

consist of four yearlings, three calves, and the imported bull. They are well worthy the attention of any one wanting bulls, they have size, quality and substance. Also will be offered

**SEVEN HORSES and COLTS,**

**A FEW GOOD LONG-WOOL D SHEEP**

**And a Full Set of Farm Implements.**

**DENFIELD** is 16 miles from London, a station on the L. H. and Bruce R. R. Trains leave London for Denfield 7:55 a. m. Returning, leave Denfield 5:30 p. m. From the North arrive at Denfield 9:50 a. m. Leave Denfield at 5:30 p. m.

**THE FARM** is 1 1/2 miles from Denfield Parties will be met there on arrival of trains and returned in the evening.

No postponement, will sell under cover if it storms.

CATALOGUES ON APPLICATION.

**TERMS** All sums over \$50, six months, on furnishing approved joint note; six per cent. per annum off for cash.

JOHN GIBSON.

DENFIELD, ONT., 1/11/85.

jan-31

**IMPORTANT AUCTION SALE**  
On April 15th, 1886,  
OF 13 HEAD OF  
**SHORTHORN COWS**  
Heifers, and one Yearling Bull.

Eight cows and heifers calved or with calf; registered in the B. A. H. B., from the Pomono family; imported for excellence as beefers, their size and milking qualities, which they yet retain, having for the last ten years used the Bates strain of bulls; cows of the herd milking 35, 38 and 42 pounds per day respectively, making 7, 9 and 12 pounds of butter per week each, by actual tests. Also.

**20 Long-Wool Breeding Sheep and two General Purpose Horses.**

Lot 55, Talbot Road, Westminster, 6 miles north of St. Thomas, 2 1/2 miles from Glanworth Station, where a team will meet parties for the sale. Sale at 2 p. m.

TERMS, 12 months credit, without interest. Catalogues of cattle on application.

J. F. DAVIS, GLANWORTH, ONT.

GLANWORTH, Feb. 15, '85.

mar-2

**AUCTION SALE**  
—OF—  
**Shorthorn Cattle and Clydesdale Stallions**  
I will sell at my residence "Kinellar Farm," East Nissouri, six miles from the town of St. Mary's, a station on the Grand Trunk Railway,  
**On Thursday, April 8th, 1886,**

about twenty head of Shorthorn cattle, eight of them bulls and bull calves, and two imported Clydesdale stallions, one rising six and one three years. Catalogues on application.

ROBERT THOMSON,

ALEX. BROWN, Auctioneer. Drawer D, St. Mary's P. O., Ont.

mar-1

**DON'T BUY A BULL**

Until you have written for prices to the undersigned. We have the best lot of young Bulls we ever offered, mostly by imp. DUKE OF OXFORD, 60th, which we will sell at prices to suit the times.

RICHARD GIBSON,

DELAWARE, ONT.

**ARTHUR JOHNSTON,**  
Greenwood, Ont.

Offers for sale four very superior home-bred Short horn bull calves, from imported cows and imported bull. Prices very low, to make room for the coming calves by Eclipse. Also a very fine lot of  
**YOUNG IMPORTED BULLS.**

**IMPORTANT AUCTION SALE**

**SHORTHORN CATTLE**

On Wednesday, April the 7th, 1886,

at my farm, 4 miles from Brampton, G. T. R. and C. P. R., and 2 miles from Edminton, C. P. R., I will sell at PUBLIC AUCTION, without reserve, 45 head of pure bred Shorthorns, thirty-five females, and ten young bulls. These cattle have been selected and bred with care, and with a view to combining good pedigrees with individual merit. The sale will include good representatives of the Kinellar, Cruickshank, Torr, Waterloo, Seraphina, Lady Blanche, and other well known families. A large proportion of the cows will have calves by their side, got by imported Waterloo Wander (4722), and Royal Irwin—3573—and will be served again by first-class bulls.

Having given up a rented farm, I am short of grass land, and being about to rebuild my barns, I will sell my entire herd, except a few aged cows not in condition to sell. These cattle have not been pampered, but will be in real good condition.

In addition to the above, Mr. A. R. Gordon, Cooksville, will offer two yearling bulls and two yearling heifers from his herd.

Catalogues will be ready by 1st March, and will be sent on application. Applications may be sent at any time, and will be booked and responded to as soon as the Catalogue is out.

TERMS.—Seven months credit on approved notes, or a liberal discount for cash.

J. C. SNELL,  
Edmonton, Ont.

fe-2

**FOR SALE.**

**4 YOUNG SHORTHORN BULLS** and some COWS and HEIFERS, all registered in the B. A. H. B. The Bulls are a good lot, all reds, one from imported cow and imported bull, Scotch Rose, page 194, v. 3, B. A. H. B., and the rest from Starlight Duke, page 216, v. 2. The cows and heifers are all reds and roans—good ones. Will sell at prices to suit the times.

R. R. SANGSTER,

Lancaster, Ont.

mar-1

**COLDSTREAM STOCK FARM,**  
Whitby, Ontario.

We have on hand and for sale a superior lot of imported and home bred

**Clydesdale Stallions**

and mares. Several of them were prize winners at the leading shows in Scotland and Canada.



**ALSO A FEW CHOICE SHETLANDS.**

Prices to suit the times.

Address,

JEFFREY BROS.,

Whitby, Ont.

**FOR SALE.**



**CLYDESDALES**—1 stallion, 8 years, imported; 1 stallion, 2 years, imported; 1 filly, 2 years, imported; 3 fillies, 3 years, imported; 2 fillies, 3 years, Canadian bred, four crosses; 11 fillies, 2 years, Canadian bred, three to five crosses, and two fillies, one year, Canadian bred. Several of them prize-winners.

**SHROPSHIRE SHEEP**—11 rams, one and two years old, bred from imported stock, and very choice.

H. H. HURD, Oakwood Farm, Hamilton, Ont.

**A. C. BELL,**  
Cold Spring Farm, New Glasgow, N. S.  
IMPORTER AND BREEDER OF  
**Clydesdale Horses,**



Shorthorn Cattle,  
**BERKSHIRE PIGS,**

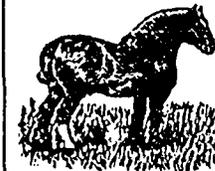
Light Brahma and Plymouth Rock Fowls and Pekin Ducks.

**D. & O. SORBY,**  
GUELPH, ONT.

Breeders and importers of registered

**CLYDESDALES.**

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



stallions. The above are

**FOR SALE,**

along with a few Canadian bred.

VISITORS WELCOME.

**FOR SALE.**

**FOUR**

Imported Clyde Stallions

Rising three years old.

First-class animals, registered in the 7th vol. Scotch Clyde Stud Book, and from the most noted sires and dams in Scotland. Apply to



**RICHARD HICKINGBOTTOM & BROS.,**  
WHITBY or BALSAM P. O., ONT. dec-6

**IMPORTED CLYDESDALES**



For Sale

For Sale

ON REASONABLE TERMS.

**18 IMPORTED** registered Clydesdale Stallions and Mares, among which are a number of prize-winners at the leading shows of Scotland and Canada. For further particulars, send for catalogue, to

**ROBERT BEITH & CO.,**  
BOWMANVILLE, ONT.

**Just Imported and for Sale.**

**ONE THREE-YEAR-OLD CLEVELAND BAY** Coach Stallion, 16 hands high. One one-year-old Stallion, pure Cleveland and got by a thoroughbred horse. One four-year-old mare, pure-bred Cleveland. One two-year-old mare, pure bred Cleveland. One one-year-old mare, pure-bred Cleveland. Apply to

THOMAS R. SMITH,  
New Hamburg, Ont.

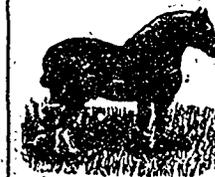
**JAMES GARDHOUSE & SONS.,**  
MALTON, ONTARIO, CAN.

Breeders and importers of  
**CLYDESDALE & SHIRE**

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

**JAMES GARDHOUSE & SONS.,**

MALTON STATION,  
Highfield P. O., Ont.



fe-1f

W. G. PETTIT,  
BURLINGTON, ONT., CANADA.



**BREEDER OF SHORTHORNS,**  
Has on hand and for sale, at moderate prices, six choice young bulls, from 10 to 20 months, sired by Mr. Fothergill's noted show bull Prince James -95-, also several cows and heifers in calf to my Sheriff Hutton bull The Premier 4757  
SHEEP.—15 well-bred Leicester ewes, in lamb, 1 and 2 years old, for sale.

Bates Shorthorns.

**THE BELVOIR HERD.**



To this herd belongs the honor of having made the highest average at public auction in 1893,

Of any Herd, of any Breed, on this Continent.

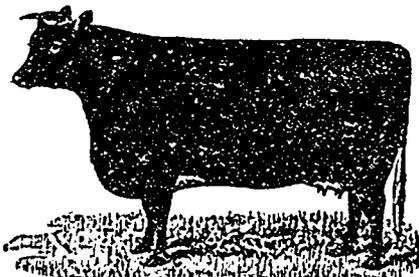
The Proprietor intends to fully keep up this high standard, and invites all interested to call and see for themselves.

Prices to suit all. Young bulls will be sold for less than they can be got elsewhere, of similar breeding and merit.

Richard Gibson

Komoka Station, G.W.R., three miles. Delaware.

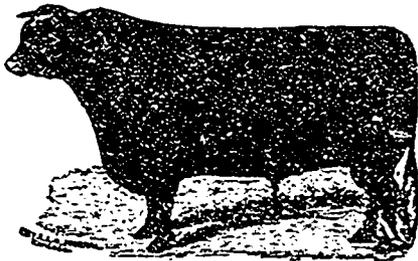
**FRANK R. SHORE & BROS.**  
R. R. STATION, LONDON, P. O., WHITE OAK.



BREEDERS OF

**SHORTHORNS AND SHROPSHIRE**  
Have one capital yearling bull still for sale, a red, of Dec., 1893, from imported sire and dam, first at the late Co. Middlesex Spring Show, also a very choice lot of heifers, now in calf to the imported Cruickshank bull Vermillion (50587). Prices moderate. Terms easy.

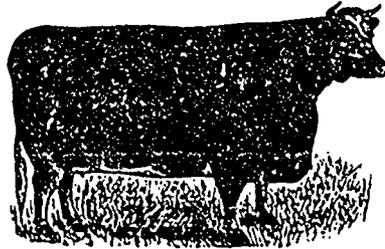
**MOULTONDALE STOCK FARM**



2 fine Shorthorn Bull Calves for sale, cheap, 12 mos old, bred from imported Statira Duke 12th pure Gates Cows and Heifers for sale also, same strain. Berkshire and Suffolk Pig, Leicester Sheep. Some very fine Light Brahmas and Brown Leghorn Cockerels for sale. Brahmas, McKay's strain, \$2 each Leghorns, \$1.50 each

F. J. RAMSEY, Prop., Dunnville P. C., Ont.,  
On the Grand Trunk, CO. HALDIMAND.

**BOW PARK.**



**THOMAS NELSON & SONS,**  
Have always on hand a very fine selection of  
**BULLS AND BULL CALVES.**

Parties on business will be met at the Depot. For further information apply to

JOHN HOPE,  
Bow Park, Brantford, Ont.

**RUGBY FARM**



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

BREEDER OF  
**Shorthorn Cattle and Berkshire Hogs**

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

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

**JOHN DRYDEN.**



BROOKLIN, ONT.

BREEDER AND IMPORTER OF

**Shorthorns, Clydesdales, and Shropshire Sheep.**

Last importation of bulls and heifers arrived in Dec., 1895. Send for Catalogue.

**Clydesdales, Shorthorns, Shropshires, Cotswolds and Berkshires.**



THE oldest and most extensive importing and breeding establishment in Canada, have on hand a very superior lot of Shorthorn heifers, two-year-old registered stallions, and Shropshire yearling rams and ewes. Stock of all kinds and both sexes for sale at all times. Our station is Claremont, C. P. E., 30 miles east of Toronto, where parties will be met at any time by notifying us. Prices low. Terms easy. Correspondence invited.

John Miller & Sons,  
Brougham, Ont.

**KINNOUL PARK STOCK FARM,**

HAY & PATON, Proprietors,



Importers and Breeders of

**Polled Aberdeen-Angus**

SHORTHORN CATTLE,

CLYDESDALE HORSES,

Berkshire and Suffolk Pigs, Etc.

Our herd of Aberdeen-Angus Cattle has, during the two years of its existence, carried off no fewer than 25 first prizes, besides five medals and diplomas.

Very superior young bulls and heifers always for sale at reasonable prices. Also a very choice lot of Shorthorn bull calves and yearlings, sired by our splendid stock bull Pretender, out of the Richmond Hill Champion cow Isabella III.

For further particulars apply to

MESSRS. HAY & PATON,

New Lowell, Co. Simcoe, Ont.

**WYTON**

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We have the only pure breed of Aaggie Stock in the Dominion, the head of our herd being Sir James of Aaggie, No. 1452, H.H. B., Vol. 6. Also Aaggie Ida, No. 2600, H.H.B., Vol. 6. This family is noted for its exceptionally fine milk producers.

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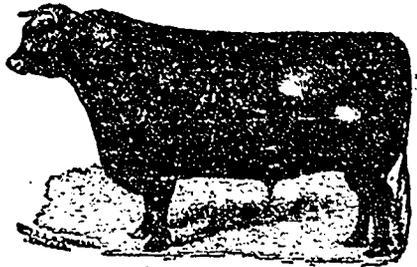
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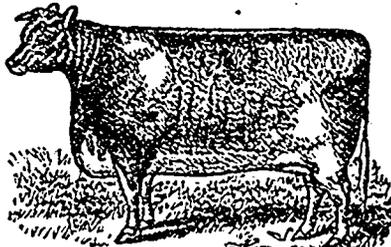


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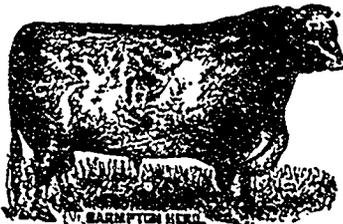
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(VERY FINE)

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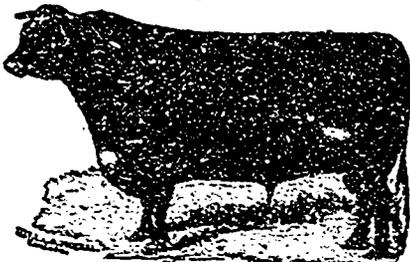
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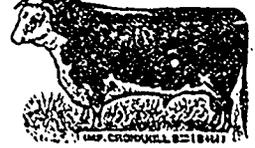


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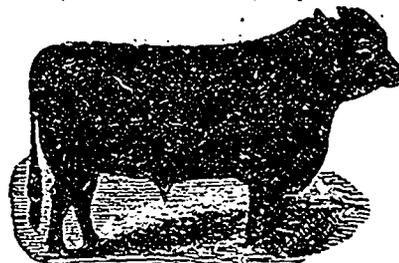
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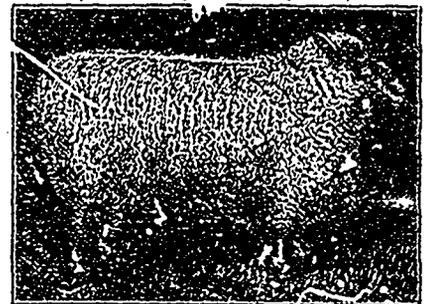
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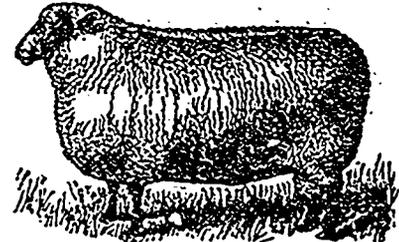


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 Dam, Kristje, with a milk record of 96½ lbs. per day, and  
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All stock for sale. No reserve.  
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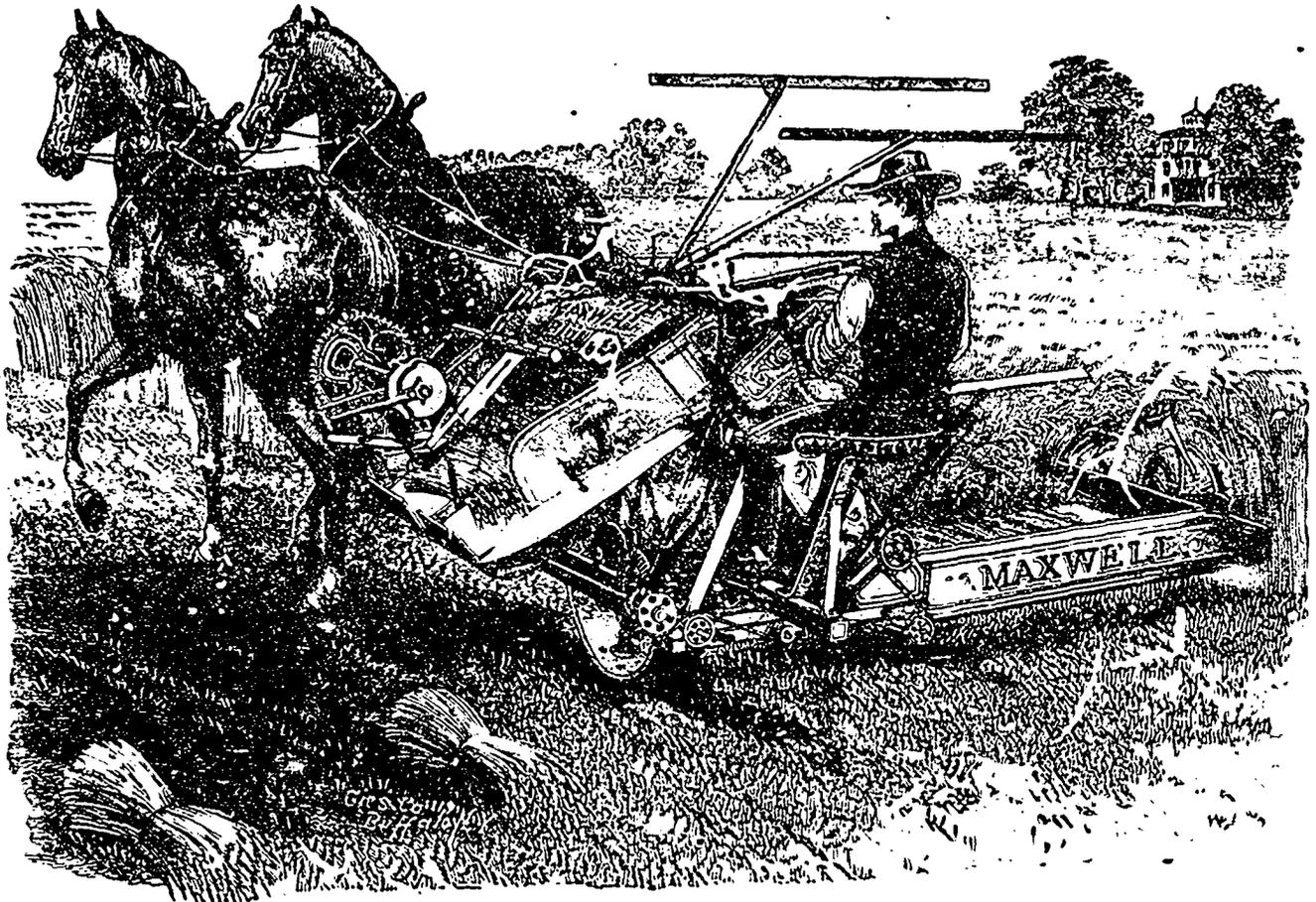
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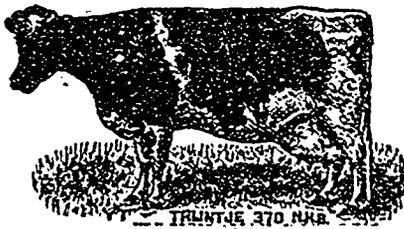
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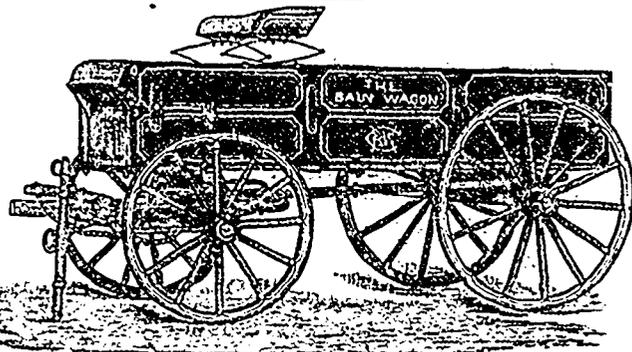
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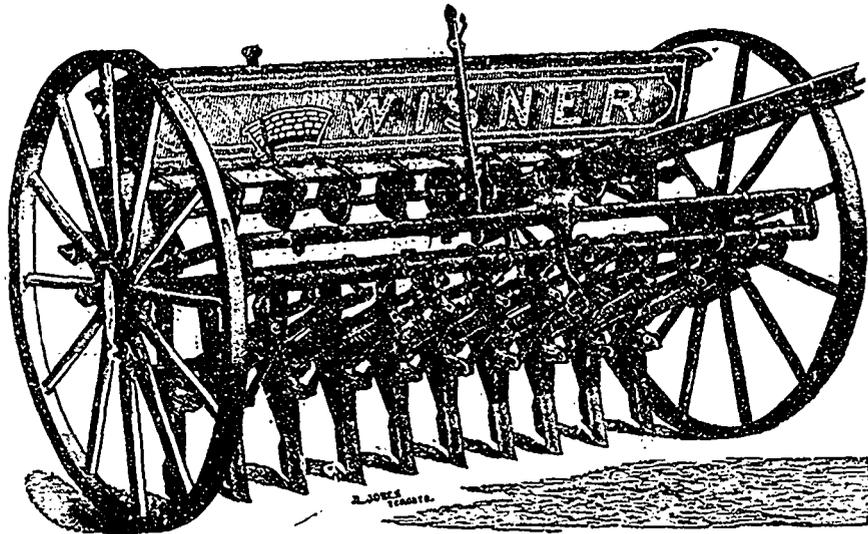
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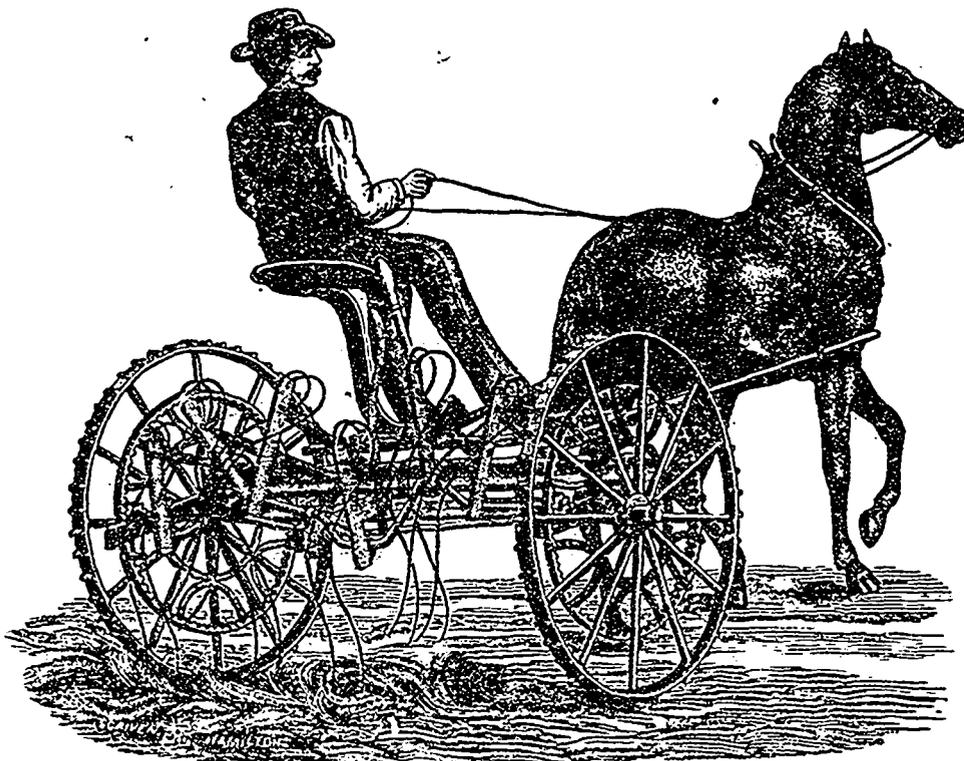
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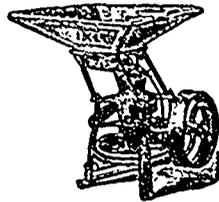
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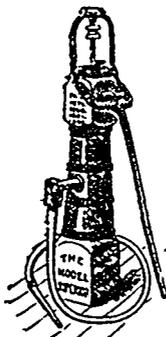
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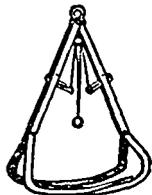
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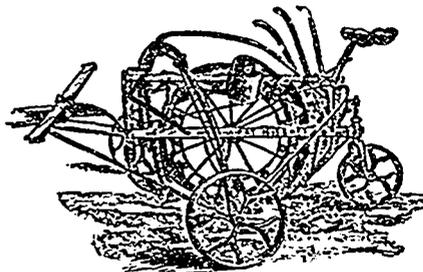
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**WELLAND CANAL ENLARGEMENT.**

**NOTICE TO CONTRACTORS.**

SEALED TENDERS addressed to the undersigned, and en-  
dorsed "Tender for the Welland Canal," will be received  
at this office, from mechanical, skilled, practical contractors,  
until the arrival of the Eastern and Western mails on TUES-  
DAY, the NINTH day of MARCH next, for raising the walls of  
the locks, weirs, &c., and increasing the height of the banks  
of that part of the Welland Canal between Port Dalhousie and  
Thorold.

The works throughout will be let in sections.

A map showing the different places, together with plans and  
descriptive specifications, can be seen at this office on and after  
Tuesday, the 23rd February instant, where printed forms of  
tender can be obtained. A like class of information relative  
to the works will be supplied at the Resident Engineer's Office,  
Thorold.

Parties tendering are requested to examine the locality and  
bear in mind that the reason and circumstances under which  
the works have to be done render some of them of an excep-  
tional nature.

Tenders will not be considered unless made strictly in ac-  
cordance with printed forms, and in the case of firms, except  
there are attached the actual signatures, the nature of the  
occupation, and place of residence of each member of the  
firm, and further, a bank deposit receipt for the sum of Two  
Thousand Dollars or more—according to the extent of the  
work on the section—must accompany the respective tenders,  
which sum shall be forfeited if the party tendering declines  
entering into contract for the works at the rates or prices  
stated in the offer submitted. The amount required in each  
case will be stated on the form of tender.

The deposit receipts thus sent in will be returned to the  
respective parties whose tenders are not accepted.

This Department does not, however, bind itself to accept  
the lowest or any tender.

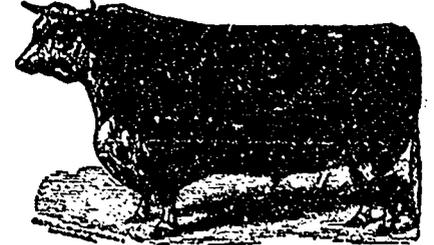
By order,

A. P. BRADLEY,

Secretary.

Department of Railways and Canals,  
Ottawa, 17th February, 1886.

**POINT CARDINAL HERDS.**



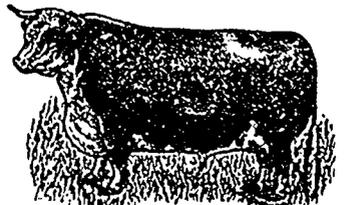
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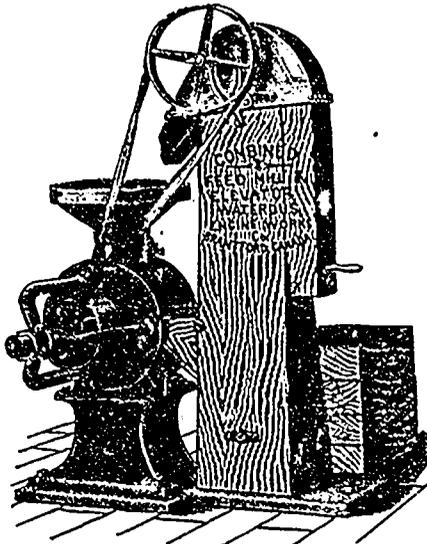
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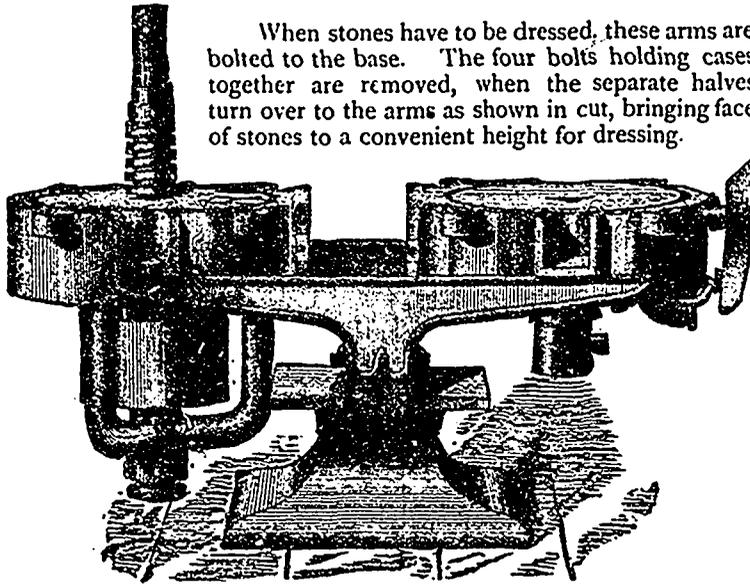
**Great Simplicity** { *Being readily worked by any intelligent man.*

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**The Stones** { *Will last many years with ordinary care.*

**Great Capacity** { *For its price and size, this Mill cannot be equalled as a GRINDER. Thirty-five bushels of Chop per hour is not an infrequent output for a 20 inch Mill and 12 Horse-power Fire Proof Champion.*

When stones have to be dressed, these arms are bolted to the base. The four bolts holding cases together are removed, when the separate halves turn over to the arms as shown in cut, bringing face of stones to a convenient height for dressing.



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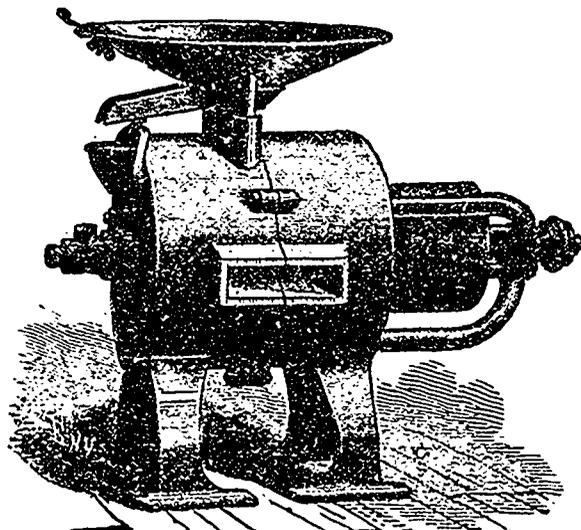
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