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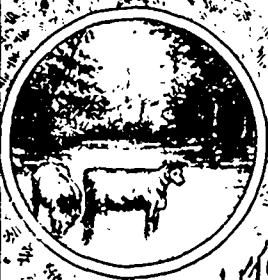
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While Agriculture is the First & Noblest of the Sciences  
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# CANADIAN

FEBRUARY

1890.



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Devoted Mainly to the Interests  
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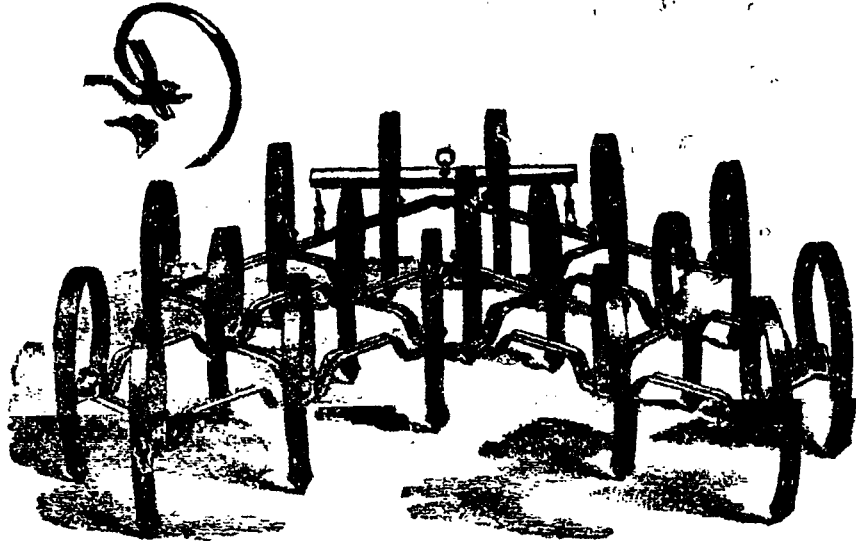


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## OUR SPECIALTIES FOR THE YEAR 1890

10/299



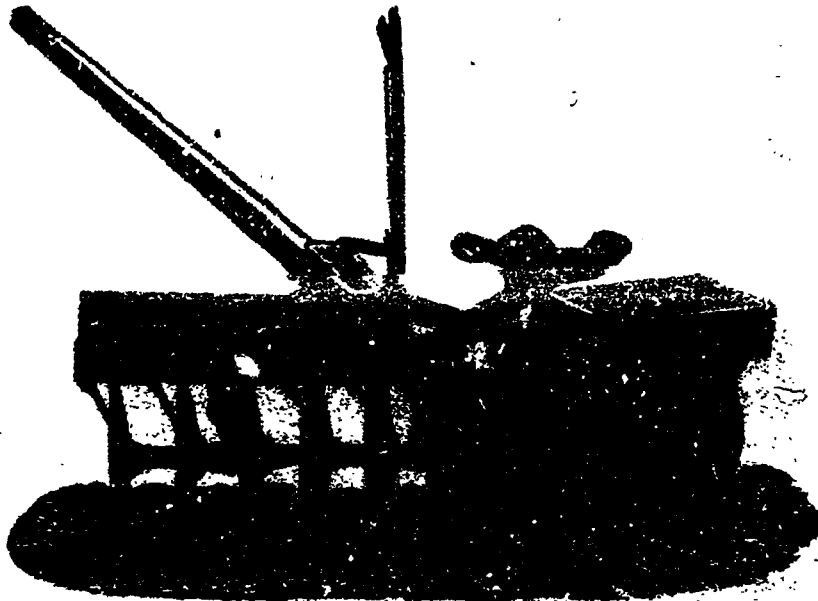
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THE STEVENS PATENTED ALL STEEL ARCHED FRAME SPRING TOOTH HARROW  
STRONG, DURABLE, HANDSOME

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THE "NEW MODEL" ROTARY DISC JOINTED PULVERIZING HARROW, WITH PATENT AUTOMATIC SCRAPERS

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Effective in Work, Simple in Construction, Durable in Wear, Convenient in Handling. Progressive farmers say that it is the very best farm implement ever produced.

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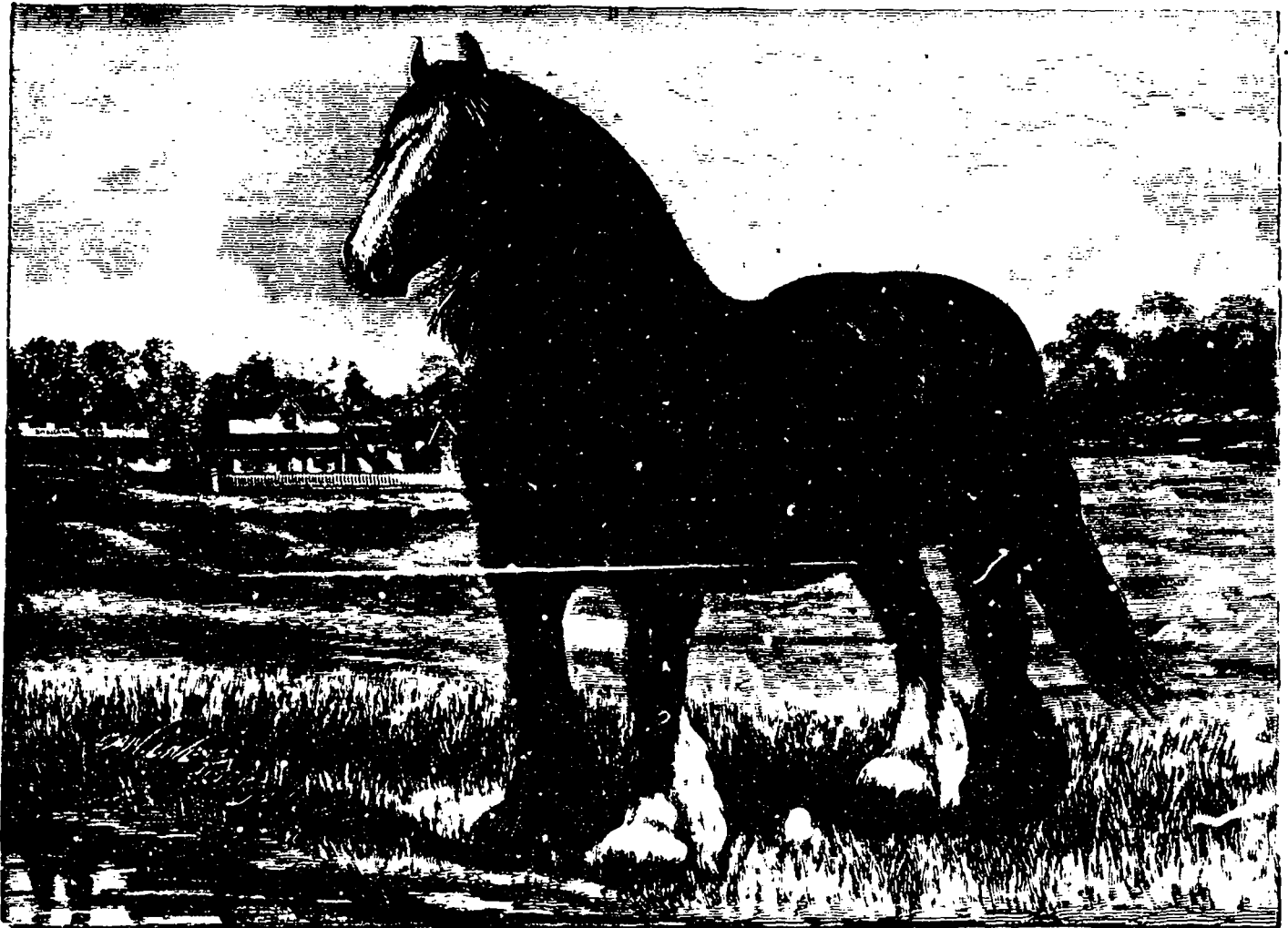
# THE CANADIAN LIVE STOCK AND FARM JOURNAL

Devoted to the Interests of the Stock-Raisers and Farmers of Canada.

VOL. VII. No. 4.]

TORONTO, FEBRUARY, 1890.

[WHOLE No. 6



THE CLYDESDALE STALLION MacNEILAGE (2992),

Imported and owned by Graham Bros., Claremont, Ont.

## Our Illustration.

To our mind there is nothing so impressive of enduring strength and active power than a spirited, fully developed, and matured draught stallion, and as we scanned the massive structure, powerful build, and giant muscular development of our first page embellishment, and at the same time noted his activity, this thought gradually merged into a reality. In type MacNeilage, as his groom very appropriately and clearly put it, is "thick at both ends with a middle to match." He is blocky and muscular, and close to the ground. About his head there is not a tittle of coarseness, and in size it is in perfect harmony with the rest of his structure. A grand top, and nicely moulded neck merges at its base into a chest and shoulder, that for power we could not ask for a better. Broad chested, clean limbed, with large joints and excellent pasterns, and the best of feet, he presents a front that, though it may be equalled, cannot be surpassed. From such development to the fore, one would naturally look for a shrinkage under the elbows resulting in a lessened girth, but such is not the case as he

still keeps up that massiveness, and carries it back in a capacious, strongly-ribbed barrel, great breadth of beam, and muscular quarters. Feather he has to abundance, and that of the best of quality.

If the Clan MacGregor numbers on its roll many more such stallions, the powerful prestige they already have in Clydesdale circles will soon gain a world-wide notoriety. As may be presumed MacNeilage is by the illustrious MacGregor (1487), long noted for his famous conquests in the leading show-rings of Great Britain, and also for getting of stock amongst the most successful in like circles. It would encroach too much on our space to review the winnings of a few of his get or even give a synopsis of his own trophies. The dam of MacNeilage is Jess (1295), sister to Damsel that sold for £525. Jess was by Crown Prince (207), a winner at the H. and A. S., and also at the Glasgow Agricultural Show. From the foregoing it will be noticed that this stallion comes well by his excellent qualities and this in turn gives strength to the assertion that he is a sire that throws just such robust and blocky stock in most demand for purposes of draught. As to his own doings MacNeilage was awarded first as a yearling

at Dumfries, and second at Kirkcudbright. As a two-year-old he was first at the Royal held at Shrewsbury, and as a three-year-old he was yet again given first at the Royal at Preston.

## Our Scheme.

Already in answer to our solicitations for "Original Plans, Devices and Ideas," we have to hand quite a few that we think our readers will find very acceptable. We have at present a number of plans of barns, farm dwelling-houses, and poultry houses, and in this issue we publish the first article sent us. As soon as we can prepare the engravings the plans shall be published. We would just say here to our draughtsmen: Give ample specifications, embodying measurements of all kinds. We are pleased to have our readers support us so heartily in this move, and trust that every one that can will aid us, favoring us with any plans or devices that they think may benefit their fellows.

THE  
Canadian Live Stock and Farm Journal

PUBLISHED MONTHLY BY

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All communications should be addressed THE J. E. BRYANT COMPANY (LIMITED), 58 Bay Street, Toronto, Canada.

TORONTO, FEBRUARY, 1890.

Original Plans, Devices, and Ideas.

Knowing that there are many original plans and devices pent up in the minds of our readers, and feeling that the publication of such would be of immense benefit to all, we have drawn up a scheme through which we hope to stimulate our friends to help us in the good work of lessening the labors and increasing the profits and pleasures of the farmer. We trust that the offers we append will show that any efforts put forth to aid us in this matter will be warmly appreciated. Not only do you who meet our request add materially to your own store of knowledge through the perusal of the books obtained, but there is the more pleasant feature attached to it of helping your brother farmers to increase the returns from their labors and better their condition. To make clear what we want, and what we will give, we have divided our scheme into three parts:

No. 1.—This division includes plans and specifications of any of the buildings numbered below:

1. Barns, suitable for general farming in any of the Provinces.
2. Barns, suitable for dairy farming in any of the Provinces.
3. Barns, suitable for the raising of breeding stock in any of the Provinces.
4. Farm houses.
5. Poultry houses.
6. Pig pens.
7. Sheep pens.
8. Ice houses and cold storage rooms.
9. Milk houses and farm dairies.

For an accepted plan of any of the above mentioned buildings we will, as soon as your contribution is published, give you your choice of any of the following books, or any of those mentioned under the second and third divisions:

Dairyman's Manual.....	Stewart	\$2 00
Insects Injurious to Fruit.....	Saunders	2 00
How Crops Grow.....	Johnson	2 00
Cattle and their Diseases.....	Murray	2 50
American Fruit Culturist.....	Thomas	2 00
Practical Poultry Keeper.....	Wright	2 00
Horse Breeding.....	Sanders	2 00
Feeding Animals.....	Stewart	2 00

No. 2.—This division includes devices for the saving of labor in performing any work of the farm, or anything that may add to the comfort and pleasure of farming in its broadest sense. Such, for instance, as devices for saving labor in feeding or caring for any of the domesticated animals, in fencing, in any phase of orchard work, and the many other departments of work on the farm that will at once come to mind.

For any device accepted by us we will, as soon as your contribution is published, give you your choice of any of the following books, or any named in No. 3:

Swine Husbandry.....	Coburn	\$1 75
Shepherds' Manual.....	Stewart	1 00
The Standard of Perfection in Poultry.....		1 00
The Soil of the Farm.....	Scott and Morton	1 00
Farm Drainage.....	French	1 50
The Chemistry of the Farm.....	Warrington	1 00
Practical Forestry.....	Fuller	1 50
Fences, Gates, and Bridges.....		1 00
Silos, Ensilage, and Silage.....		50
Barn Plans and Outbuildings.....		1 50
One Year's Subscription to THE CANADIAN LIVE STOCK AND FARM JOURNAL.....		1 00
Farm Conveniences.....		1 50

No. 3.—This division includes articles expressing original ideas or experiences in regard to any feature of stock-raising or farming in its many departments; such as, methods of growing the different crops of the farm, especially those used for soiling purposes or as grain food for stock; the breeding, feeding, and management of any of the domesticated animals; the care of the orchard—in fact, anything is a proper topic that comes under the scope of farming and stock-raising in their widest sense. The articles should be short—in fact, the shorter they are the better we shall be pleased.

For any accepted article conforming with the above we will, as soon as your contribution is published, give you your choice of a year's subscription to any of the following publications:

The Canadian Horticulturist.....	\$1 00
The Canadian Poultry Review.....	1 00
The Canadian F. Journal.....	1 00
The Poultry Monthly.....	1 25
The Canadian Honey Producer.....	40
The Northwest Farmer.....	1 00
The Maritime Agriculturist.....	1 00

NOTE.—Any article, or the reading matter accompanying any plan or device, should not exceed one of our columns in length, and the shorter it is the better. A writer may adopt any *nom de plume*, if he desires that his name be not published. Remember, this is not a competitive scheme; all that is required to give you a choice of any book, as stated above, is that your contribution be published in our JOURNAL. The contributions must bear the stamp of originality. We want to bring to light these plans, devices, and ideas, and if you are fortunate enough to have all the books and papers mentioned above, by all means let us hear from you for the benefit of your fellows. Be brief and clear. We want the kernel and not the shell.

Take Care of the Young Lambs.

The season is now approaching when young lambs will come to hand. They are very delicate creatures when they first reach the world, and because of this the mortality amongst them is very great, especially when they come early in the season. The remedy for this is *care and closest attention* on the part of the shepherd, where the protection is not of the best and the weather is cold, they must be helped to some of the milk of the dam soon after they appear. When too feeble to help themselves this may be given them with a spoon, the milk having been drawn into a cup from which hot water has just been emptied out. They should get this at intervals not far apart. But when strong enough to help themselves they should not usually be interfered with, if the dam is kind and attentive. Cow's milk should not be given them when so young unless none can be got from the dam as it oftener destroys than saves lives in those early stages, owing to its constipating tendencies. If the lambs are brought safely through the first twelve hours they can then usually fight their own battle safely. The attention required by young lambs that come early should be given ungrudgingly, as the results that hinge upon the nature of the attention are very important.

Give the Breeding Sows Liberty.

More sows and litters of young pigs are lost through mistaken kindness than through neglect; where the dams are confined in close pens and fed highly it will be strange indeed if both sow and litter are not lost. The sow wants liberty and must have it if she is going to be profitable. There is no way of providing this so easily and naturally as by giving her access to a barn-yard. No other place will answer so well, for when the snow is deep she will not wade through it. In the barn-yard she loves to root in the straw and manure, which is good for the manure and excellent for the sow. The most simple form of enclosure will answer for a sleeping place, providing the other stock may not have access to it and it is warm. A corner of an open shed will do, or some simple structure in the yard. When at

the farm of J. G. Snell & Bro., Edmonton, we noticed that some empty crates had been laid down in the form of a rectangle with one end open. Some rails had been laid upon these and a small stack built on and around them. This was the sleeping place of the famous show sows owned by the more famous showmen of those sows at our leading exhibitions. The feed of the sows should be simple, and should consist of a variety of foods. A large proportion of carbonaceous food such as corn should be avoided.

Milk Fever.

Milk fever is becoming of increasing frequency amongst the dairy breeds of cattle. Unless taken in the early stages and prompt remedies are applied, it is almost certain to prove fatal. It occurs in winter and summer alike, but is perhaps of more frequent occurrence in summer, when the pastures are abundant. It usually attacks cows of the freest milking qualities, and therefore those of most value. If preventive measures are of more value than remedial ones anywhere, it is here, owing to the very fatal character of the disease. Usually these consist of keeping the cows in a loose box-stall for a week or more prior to parturition, and feeding them dry food, with the object of lessening the quantity of the milk secretion. It is an additional safeguard when the cow is given a pound of Epsom salts within the first day after calving. Milk fever is not common amongst the beefing breeds, and never happens in the case of poor milkers amongst dairy cattle, in which instances the precautions stated above are less necessary. Usually it comes on suddenly, the subject of the attack becoming restless and losing the power of using her limbs, more especially the hind quarters. Soon struggling ceases and the animal lies in a state of stupor until death, which sometimes comes soon, but at other times not for some days. It is one of those diseases incident to an improved condition of the live stock interest, and is likely to increase with the improvement of the milking properties of the various dairy races. It is therefore highly important that preventive measures should be used as a safeguard.

A Demand for Stallions.

An esteemed correspondent, formerly of Brant County, but now of Dakota, writes us: "You want to encourage your horsemen to keep a few full-blooded mares, and raise stallions for this great west. We could handle one hundred annually and pay from three to five hundred dollars each for them, when from two to three years old. I bought a carload of eighteen from about Toronto last spring." The above contains a suggestion that is worthy of the best thought of our farmers. Undoubtedly, here is a field for the expansion of our draught horse industry which imported stallions cannot fill, owing principally to the smallness of the price. Home-bred horses would, however, satisfy the want that now clearly exists, and at a price that would certainly prove paying, for it would cost but little more to raise them after one was once started and not a whit more than to raise the "general purpose stallion" which are a drag on our horse industry. The carrying out of the idea of our correspondent would demand the purchasing of a couple of roomy and large-framed brood mares as weighty and strong-boned as possible, for it is clear that it is the ever working tendency of our conditions to decrease the substance and increase the quality of the progeny of imported draught horses. This being secured, a well-bred sire of

draght stamp only should be patronized, and the breeding year after year should be continually and steadily along the one line, and not diverge with every whim that the different seasons may breed.

### The Value of Pedigree.

It is not our intention to speak of the intrinsic value of pedigree in this paper, but rather of its commercial value. To a people whose business it is to a large extent to export breeding cattle, it is simply invaluable. Of all the thousands and tens of thousands of living animals that Great Britain has exported to the different countries of the world, but few, indeed, of these have been without recorded pedigrees. The same remark holds true of the stock that Canada exported so largely to the United States in past years for breeding purposes.

When a foreign buyer comes into a country to look up stock, his first business is to get a list of the individuals who own recorded animals in that line, along with their addresses. In such instances we find the value of advertising. We have not unfrequently been requested by strangers to give them the addresses of persons engaged in a certain line of breeding. It has been our custom to answer those requests by handing them a copy of THE LIVE STOCK JOURNAL, pointing out to them the place where the breeders' cards were inserted. Individuals who have good stock, but unrecorded, are not found in this list, and for this and other reasons have little or no chance to sell what is to go abroad to reproduce its kind.

To this there may be some few exceptions at the present time, as in the case of some of the breeds of sheep and swine, but the day is evidently very near when the successful exporters of these will be compelled to register them, if they are to be successful in making sales.

When Americans come into Canada to purchase Cotswold or Shropshire Down sheep, they will invariably ask for the pedigrees, and will now purchase none that are not recorded or eligible for recording in the records for these established in their own country.

We would advise our breeders whose reputation has become established in these lines, and yet have unrecorded animals, to introduce into their flocks and herds such as can be recorded. This need not be done at great expense. But a few individuals can be introduced at once, which along with their progeny, will gradually supplant those with non-pedigrees.

It is a matter for the consideration of the directors of exhibitions as to whether they will continue to give prizes indiscriminately to recorded and unrecorded animals of any particular breed. Is it fair, we ask, to the enterprise of those who record them to do so? It is our firm conviction that the day is not far distant when prizes will cease to be offered for animals that are called pure and yet unrecorded. It may be too soon yet to take that stand, but it is not too soon to talk about it, and so give our breeders time to set the house in order and thus prepare for the inevitable.

As things are, a large margin of room is left for granted. We were told but the other day, by a prominent American, that the live stock interests of Canada have suffered severely at the hands of unscrupulous dealers. Men have come over to Canada and purchased unpedigreed stock, in many instances indifferent grades, and taken them to different of the States and sold them as purely bred. The results of course to the purchasers have been disappointing in the extreme, and Canada has been the sufferer.

Now, if all our stock so called pure were recorded, there could be no gainsaying the fact. When sales of stock are made, the certificates can accompany them, and in time the unscrupulous dealers referred to above will find their business gone. All America would come to know in time what some Americans know now, that Ontario possesses more good stock of many breeds than any other Province of Canada, or any one State of the great Republic.

### Shall we Grow Grain or Stock?

If there is any one thing that THE JOURNAL has advocated from the first more than another, it is that Ontario farmers, at least, should sell less grain and keep more stock. We have many reasons for believing that large numbers have taken our advice, and of those who have done so, we make free to add, that but few, if any, can be found who regret the step thus taken.

A large number, however, have not profited by the advice, and to-day they find themselves in a plight far from satisfactory. The prices of grain are almost unprecedentedly low, and there is no immediate prospect of very much of an advance. It is not strange, then, that financial pressure should brood over the land in an unwonted degree, and that there should be a consensus of opinion amongst grain-growing farmers.

In the Toronto market during December wheat was quoted at from 80 to 85 cts. per bushel; barley from 39 to 48 cts.; peas from 54 to 60 cts., and oats 31 to 33 cts. per bushel. These prices are fully ten per cent. higher than what is paid in most parts of Ontario, which reduces the quotation very considerably.

Farmers cannot grow and sell grain at a profit at these figures, as they themselves very well know. And that they should not make a vigorous effort to get out of this old-time rut, which is getting deeper every day, is strange indeed. The outlook for the future in respect to better prices for grain is not very encouraging. The wide plains of the North-West has reserve capabilities that will enable the farmers there to grow wheat and oats as sand on the sea shore, so that the hope of successfully competing with them in this respect is out of the question.

If we were necessitated thus to compete with them it would be just cause for legitimate regret, but we are not so necessitated. We have a field in which we have nothing to fear from them or from any one else. We can grow a variety of stock in the Province of Ontario such as can be produced by no one State or Province on the continent. The great variety of our soils and their rare fertility conduce to this end. The unwonted healthfulness of our climate, the abundance and accessibility of our water supplies, and the predominance of the persevering Anglo-Saxon element, are other leading factors that bear in the same direction. We would then that our farmers should all arise and take possession of their rare heritage to the full extent.

There should be no difficulty in increasing the supply of heavy horses for sale, nor indeed, that of light ones. We can produce a larger number even of first-rate beefing cattle. The number of sheep and lambs reared and fattened for the markets to the south of us might easily be trebled or quadrupled, and it would not be safe to place a limit on the production of butter and cheese in a province that is soon going to be filled from end to end with silos. Then the production of fowls may be greatly extended, and always with an encouraging profit, when the work is carried on in a judicious manner.

The outlook for stock-keeping is quite reassuring. The prices of beef, pork, mutton, butter, cheese and poultry, compared with those of grain, are relatively high, so that this year, at least, the farmers who are engaged in any of the above lines of production are sure to fare far better than their grain-growing brethren.

We regret very much the stringency that is pressing upon our fellow-farmers who find themselves in the difficulty we have pointed out. We know full well how disheartening it is to toil through all vicissitudes of weather in preparing our land for a crop of barley, to reap it in the torrid heat of summer, pitching it onto the waggon our vision almost blinded with sweat and dust, to thresh it in torment, and after winnowing it, to have the sample right, and drawing away to have to sell it for forty cents a bushel in a heartlessly indifferent market. The same may be said of wheat at 80 cts. a bushel, and oats at 25 cents. Well, fellow-farmers, cease to do this any longer. Let the year 1890 mark a new departure in your system of farming. Adopt some rational mode of stock-keeping, and make more money. Whatever line of this you adopt, make the change gradually and with much caution, but *make the change*, for you cannot live by selling barley at 40 cents per bushel.

When you sell barley at this price, you not only sell your labor, remember, but you sell a large amount of nitrogen, phosphoric acid, and potash, and other precious substances, which your lands can no more do without than you can do without the money for your barley.

There are many ways of escape from this crushing bondage. You can grow horses for the Western States, beef and cheese for Englishmen, butter for Canadians who are clamoring for an improved quality, lambs for the Buffalo and Boston markets, poultry products for New York, and pork for the good markets of our growing cities.

### Lambs for Fattening on Rape.

In the farm department of this issue will be found an article on the growth and uses of rape. In that paper we dwell upon the advantages of rape culture for cleaning the land, and on its value for fattening purposes. But as we have said nothing in the article referred to as to the kind of lambs suitable for the purpose, and the source of the supply, we shall do so now.

And here we desire to say that we hope we are not indulging in any extravagant statements regarding the value and uses of rape. Such is far from our desire. Men seldom become greater fools than when they get on some agricultural hobby and advise the farmers to ride it along with them, until ridden to death. We believe that in this province enough rape may be profitably grown to fatten ten lambs for every one that is fattened now, and we ask our farmers to give this matter their intelligent consideration, now that the prices of grain are discouragingly low.

One of the difficulties that is already cropping up is to obtain lambs at suitable figures. And this difficulty will increase as time advances. The practice now is to go and buy lambs in August as soon as weaned, wherever they can be got, to bring them home and put them on the rape in September, and to sell them about Christmas time or sooner.

When the growing of rape becomes pretty general in the localities adopted to its growth, the same difficulty will arise in reference to obtaining a supply of lambs as has been experienced in securing a supply of steers suitable for to feed for shipping purposes. It



is true that large sections of country will never grow rape profitably, especially clays, and from these supplies may be purchased, but notwithstanding this, more attention must be given to the growth of pure and high grade or cross-bred sheep.

Scrub lambs will no more answer to fatten on rape than scrub cattle to fatten for export. It is therefore, a prime necessity to use only pure-bred sires and of the best quality, even in localities where rape may not be grown, as lambs for feeding will very extensively be drawn from such sections.

The supply of lambs may be largely supplied by those who grow the rape. They may keep a large flock of grade ewes and mate them with an excellent ram, and grow lambs of a prime quality much better than they can usually buy them. The price obtained for this class of lambs will, of course, depend upon the markets, but it will usually be at least one dollar per head more than for those purchased where they may be got.

Farmers with but small flocks may as well fatten their lambs on rape grown for them, as have any one else do this with them. There is no reason why they should not turn them off at \$6.00 per head, instead of \$3.00 to \$4.00, the averages now paid. One acre of rape grown in drills and properly cared for will fatten twelve lambs.

There is much difference of opinion thus far, as to the class of lambs most suitable for fattening on rape. On this important question we desire to express ourselves with the utmost caution, as even the most experienced in the work are not agreed as to which class of lambs are the most suitable. All are agreed that only lambs from a pure-bred sire will answer, but as to which breed there is no unanimity of opinion. What better work could the Ontario Experimental Farm take up than that of trying to solve this problem?

We visited the farm of Mr. James Laidlaw, Esq., M.P.P., at Guelph, about the middle of December last. Mr. Laidlaw had some 280 beautiful lambs of various crosses, and we looked at them with a critical eye, though we did not attempt to handle any. The Leicester grades were to us the most beautiful looking, owing to their symmetrical proportions. The Cotswolds were strong. The Shropshires were good and apparently compact, but the Oxford-Down crosses appeared uncommonly large. Whether this was owing to the fact that the wool may have drooped less than in the case of the Leicester and Cotswold, we cannot say, but they looked exceptionally fine. The Southdown crosses appeared small, but we were told they were "leady" little fellows. The probabilities are that sires from any of the pure mutton breeds will produce suitable lambs, but it will be ascertained after a time that some will be more suitable than others.

The snow was on the ground at the time of our visit. The lambs were then being kept in sheds from which they had access to a field, and were being fed oats, peas, and hay. The whole lot were shipped a few days after and averaged considerably more than six dollars per head.

Our advice to farmers is—look seriously into this question. If your land is suitable, grow some next season in a tentative way, for there are many little things about any crop that can only be learned perfectly by experience. If you don't succeed, try and ascertain the reason why, for what others have done in this direction you can do. If you do succeed, go into it more largely next year, as we are satisfied there is money in it. We also desire to ask the further favor that you will give the results of your

effort to the readers of THE JOURNAL after you have made the trial, for their future guidance. Be sure please and read carefully our paper in the farm department, and if you wish to learn anything more about rape culture, make your wants known in THE JOURNAL and we will be at your service.

### Raising Grades.

In deciding what breed to make use of in grading up his herd, the stockman should consider well the value of the male representatives of that breed for grading purposes. It is one thing for a breed to possess valuable characteristics as a breed, and it is another of perhaps more importance for the male members to be able to get good grades when used on animals of inferior breeding. The Shorthorn amongst cattle, the Thoroughbred amongst horses, the Leicester amongst sheep, the Yorkshire amongst pigs, perhaps illustrate this most forcibly. The Leicester sheep as pure breeds, do not meet the requirements of the mutton market, but the progeny of pure-bred rams on the ordinary grade ewes of the country, is such as to meet nearly all requirements. This is further shown in the case of light horses. For the raising of good strong drivers serviceable under all ordinary conditions, perhaps no breed will give a better cross upon the ordinary half breed Clydesdale mares of our country, than the Thoroughbred. The grades resulting being strong-bodied, clean, well-limbed, and with an abundance of ambition to go. In this case the grade would be far more serviceable than the pure-bred. Now, with the American Trotter, for instance, the reverse is the case, as the pure-bred and highly-bred individuals are the ones that make the best drivers in appearance and performance. This question is one that should receive the careful consideration of every stock-breeder, for on its true solution success more or less depends. To be able to come to a sound conclusion in a matter of this kind, the best method is to make a point of seeing some of the grades of the different breeds, noting carefully the sires and dams. It will be found after due observance, that some breeds give the best returns when kept pure, while the grades of others, it will be noted, surpass those purer bred.

### A Crack Shire Stallion.

Last month we gave our readers an illustration of a famous Clydesdale stallion, and this month we present an engraving of an equally famous Shire stallion, Prince William 3956 (for the original of which we are indebted to the *Live Stock Journal*, of London, England).

Prince William 3956, the property of Lord Wantage, K.C.B., Lockinge Wantage, Berks, whose stud he heads, is sired by William the Conqueror (2343), and out of a mare by Champion 457. He combines two of the best strains of Shire blood in England, and as a result his show yard career has been almost phenomenal. Foaled in 1883, he began by winning 1st at the London Show in 1884 as a yearling, where he was sold by his breeder, Mr. W. H. Potter, Lockington Grounds, Derby, to Mr. John Rowell, Bury Hunts, for 240 guineas. In 1885 he took 1st at London as a two-year-old, as well as two special cups, and the Elsenham Challenge Cup as the best animal in the show, and was again sold this time for 1,500 guineas to his present owner. By him he was again shown at London in 1886, when he took 1st in his class, being beaten for the Elsenham Cup only by his half-brother, the famous horse Staunton Hero, now five years old,

and like Prince William, a Derbyshire horse. In 1887 he was not shown. In 1888 he again won 1st in his class, the Elsenham Cup, another 50 guinea cup for the best stallion in the show; while last year, although not shown at London, he won at the Windsor show of the R. A. S. E. the Queen's gold medal for the best Shire stallion. It may also be noticed that the famous mare Blue Ruin, winner of 1st in her class last year and the year before at the London Shire Horse show, is a full sister to Prince William.

### Cotton Seed as a Food for Stock.

As a rule food can be grown more cheaply on the farm than it can be purchased, and when suitable varieties can be grown there, adapted to the wants of the stock man, this should always be done, all things being favorable to the adoption of such a course. But this must not be pressed too far, for it may so happen that the farmer has not sufficient ground available some particular season, to enable him to grow sufficient of some one kind of food for use that year. It may so happen that same year that that kind of food can be purchased cheaply. It would be unwise in the instance supposed for the farmer not to buy.

Again, he may have abundance of food in certain lines but not of all the kinds adapted to his purposes, while such foods, perhaps not grown in the country at all, can be purchased at reasonable prices. It is clearly his duty then to purchase these, but he should first have a very correct idea as to their worth.

Cotton seed is one of those foods. It has come into prominence only during recent years, but now its use is very extensive in the United States, and even in this country it is used in large quantities in the form of meal. It is not subject to duty and this has encouraged its use, as the price a Canadian pays for it more than a Southern, is the cost of carriage plus the dealers' charges here.

Until very recently no use whatever was made of the hull as a food, but now it is getting to be looked upon in the South as being of but little less value than hay. Although it is not probable that the hulls will ever be used in this country for food, it may be interesting to our readers to know something of its uses in the land where the cotton is grown. The seed is crushed along with the hull enclosing it, and the meal is separated from the hull by means of a system of sieves and screens. The hull when thus separated consists of fragments of seed-coats not exceeding one-fourth of an inch in diameter, a dark brown in color, tough and leather-like, and entangled in a mass of cotton fibres which the ginning process is unable to remove. Judging from its appearance it is about the last thing in the world that one would think of feeding to cattle or that cattle would think of eating. But we are told that they soon get fond of it, and that thousands of cattle are now fattened in the southern cities entirely on cotton seed meal and hulls, and that the same food is a favorite with the dairyman of the South. It has also been found useful in fattening sheep, but has not as yet been much tried in feeding horses or swine. The hulls cost \$2.50 to \$3 per ton in the mills at Memphis. Professor W. E. Stone, chemist at the Agricultural Experiment Station of Tennessee, to whose bulletin on this subject we are largely indebted for our information, gives the average ration of hulls as  $\frac{3}{8}$  and of meal  $\frac{1}{8}$  lbs. per day to a cattle beast of ordinary size.

The surprising feature is that the cotton fibre does not derange the digestive functions of the animal. A large number of experiments all point in this direction. No single instance has yet been cited in which death or even injury has resulted from this cause.

The hulls and meal when fed in conjunction are the complement of each other and so form a perfect ration. Twenty-four pounds of hulls and four pounds of meal fed daily give a nutritive ratio of 1:5.6, which is a proper ration for an animal over 700 and under 1,000 pounds.

While the hulls are not likely to be ever fed in this country, the meal is already fed in large and increasing quantities. Indeed the struggle now is between cotton seed meal and oilcake. The former is in favor with dairymen, but the latter with stockmen feeding for the block. Oilcake is always likely to have this advantage, that it is manufactured in our midst, and can be got at a less cost for carriage, but the trade is controlled by but few persons, and as a consequence has the fumes of monopoly hang about it.

Some caution is required in feeding the meal at first, as it has a tendency to induce scouring, but soon the quantity may be so increased, that as high as ten pounds of the meal may be fed per day to an animal fattening. In feeding the meal to young calves, especial care must be exercised as to the quantity to be fed, or scouring will be induced. The manure obtained from feeding cotton seed meal is of the highest order. No other form of food can equal it in this respect, although oilcake is not far behind. This is an important element in all feeding experiments and in all feeding. It should be applied to the soil as soon as consistent after obtaining it, or the ammonia, in which it is particularly rich, will have a tendency to escape.

It is one of the cheering indications of the present, the disposition manifested to utilize nature's supplies which in other years were thrown away. Prior to 1870 all the cotton seed hulls were burned under the boilers of the oil mills as a cheap means of getting rid of them. Now it has been discovered that they are of value to the country equal to that of tens of thousands of tons of hay. The splendid triumphs of scientific research and experiment are thus enabling us to make the most of the supplies that nature in her profuse beneficence has placed within our reach, and thus it is that mankind are more and more enabled to observe that beautiful injunction for all time, which reads, "Gather ye up the fragments that nothing be lost."

J. G. DAVIDSON, Kinnoul Park Stock Farm, sends in his stub for another year and remarks as below. "I am sure I do not know how to express myself concerning the good your paper has done during the year that is past, and permit me to wish you even a greater measure of prosperity during the year that is to come. We shall begin with the January number to send you details of our operations here."

### Gairnbrogie's Clydesdales.

Those who have even only casually followed the steady and rapid progress of the Clydesdale in the estimation of the American horse-loving fraternity, must be fully aware of the fact that this estimation has been heightened in no small degree through the selections of stallions, high in merit and rich in breeding, that are yearly landed on our shores by the energetic and enterprising firm of Graham Bros., of Claremont. Rare, indeed, are those members of this stud that have not won laurels of honor on their native heather, and the more critically we peer into the archives of the American show-rings the harder pressed home is the fact that the selections of this firm, always carefully and uniformly made, have been chosen with a thorough knowledge of the type that finds most favor with

sturdy MacNeillage (2992) would justly claim first rank, but on our first page he is fully described; next in years is Royal Lawrence, a doughty four-year-old get of the already renowned St. Lawrence (3220), a son of the yet more famous Prince of Wales (673). This stallion is a horse that pleases the most critical eye, being of good substance, with a strong shoulder and back, clean legs, and enduring feet, and in moving he commands his limbs in capital style. Another thick, toppy, full-quartered stallion is MacNicol (6055), a foal of '86, by MacMaster (3823), a get of one of Scotland's best stock horses, Macgregor (1487). MacNicol, though weighty, is yet full of activity, and is a easy and quick mover. He is evenly balanced at both ends, presenting, as he does, an excellent frontage, as well as a strong and heavily rounded hind-quarter. MacMaster, his sire, was imported in

'85 by the Messrs. Graham, and was the winner of many prizes under their guidance.

The crack stallion of the two-year-olds is the well known MacClaskie (6996). Those who saw this very promising young horse at Toronto's Spring Stallion Show will vividly remember his fine appearance, and many good qualities. The many encomiums showered upon him as well as the many forecastings made as to his future, have been amply verified. The ideal of a draught horse is here crystallized into a living model, as far as we are justified in expecting absolute perfection. In his appearance, his intelligent countenance and clean cut features; in his strong neck that with a graceful sweep gains a shoulder and front of impressing strength; in his full deep barrel, muscular loin and quarter, we see the



**THE RENOWNED SHIRE STALLION PRINCE WILLIAM (8756),**

Winner of the Queen's Gold Medal, 1889, and many other champion prizes.

America's horsemen. As a voucher of such a strong statement let us follow the career of one of their importations of '86, the unparalleled McQueen. He entered on his wonderful series of prize-winnings by securing first at Toronto Spring Stallion Show in '87; then under the ownership of Mr. Ogilvie, of Wisconsin, the same year he gained first at Chicago's great American horse show; there again in '88, after winning first and sweepstakes for best Clydesdale, he wrested the grand sweepstakes from strong competitors of all breeds, and to this already unequalled career of victory he added, at the late American horse show, the first-prize in aged class and sweepstakes over Clydesdales of all ages exhibited, and, what is most surprising, captured the Association's plate for the best stallion and three of his get; thus proving himself to be not only the best individual draught horse on our continent but the getter of the best stock as well.

In reviewing the present members of his stud the

true essentials of the draught horse of first merit. But his action! He steps with sprightly pride and vigor that reflects abundance of ambition and spirit, and when he is given play he uses his feet with all the accuracy, finish and lengthy stride of the natural trotter. For this stallion we unhesitatingly predict a glorious future if nothing occurs to mar present promises. Already his career has been ushered in with many winnings, the most noticeable, among which is the honour he won in being first at the Royal in England, in 1888. Analysis of the breeding of MacClaskie gives a stronger prestige to his rare merit. He is from the great MacGregor (1487), and out of a famous prize winning mare, Kelpie (2034), also a direct descendant of the most famous Clydesdales.

Kincraig (6879), another brown stallion that has made vast improvement since his importation, is also a two year old, sired by the Prince of Airs (4641), a noted prize winner from the famous horse Good



Hope (2146); while his dam Mantfielda (6618), was by the well known Mantied (1758). Kineraig has many qualities to commend him, being a muscular horse with shoulders of strength, body compact and feet that are serviceable. By looking into his pedigree it will be seen that Kineraig is of excellent breeding. A beautiful dark bay two year old is Chairman (6573), sired by Claymore (3522), out of Lady Salisbury (4479). Chairman is a robust colt of strong build and good breeding. He is well turned in all his parts, and possesses a full quarter, nice pasterns and feet, while his body is snugly ribbed and compact. He is a heavy colt and no doubt will mature into a stallion of strong and nicely balanced proportions. Viewed from in front, it would be hard indeed to beat Douglass (6702), a snugly built brown two year old, sired by Lord Douglass (2961), dam, Belle IV. of England (5010). He is of excellent form, with a deep rib and strong back, and gives every promise of developing into a valuable sire. Gilroy (6787), also a foal of 1887, is a worthy grandson of the great Darnley (222), as his sire was the Master of Blantyre (2283), a horse that has won many premiums besides being noted as a superior breeding horse. In form, Gilroy is smooth and nicely adjusted in all his parts. He is rangy in appearance, well muscled and strongly bodied; while he possesses the prime feature of excellent legs, feathered so beautifully that he could not fail to captivate the eye of every Scotsman, no matter how "canny." The making of a grand horse is to be found in Main Top (7033), a foal of 1887, sired by Main Mast (4570), exported to Australia in 1886, though not before winning a number of prizes in England. This stallion, though compact without much daylight under him, carries himself in such an excellent manner as to give rise to the conclusion that he must mature into a superior stallion for the show-ring; while his great girth, heavy loin and full quarter, has readily given birth to the thought that he will undoubtedly prove a vigorous breeding stallion. A gay brown colt of good promise is Honest John (Vol. XII.), a foal of 1887, out of Belle of Sypland (7087), sire Macrovie (5202), by MacGregor (1487). This is a muscular colt, and is all that could be desired, in body and shoulder. He is smoothly moulded in all his parts, and is a capital mover. He possesses such frame and muscle, that one is free to say that he will make a very heavy horse, and his spirit is at present such as to warrant the augury that he will never lack in activity. Prince of Lothian (Vol. XII.), another colt of 1887, is an excellently built youngster. He has the typical Clydesdale head with a beautiful eye, while he is very muscular in appearance. In bone he cannot be found wanting, while his legs are right in structure and feathered nicely. Maturity will bring with it great weight, for he is now of such a build and form as to be able to carry much more substance. This youngster was sired by Aird (4217), dam, Queen Margaret (4694), and from this it may be gleaned he has breeding to add lustre to his individual merit.

Among the yearlings, particular notice is due Arbitrator (Vol. XII). His future is bright with promise. In him are combined, to a great degree, the two important essentials of choice breeding and personal merit. His sire was Walwin (3284), a get of the well-known and famous stallion, Boydston Boy (111). The dam of Arbitrator is Belle, by Hawkhead, by the justly celebrated Prince of Wales (673). Arbitrator is well jointed, and possesses feet and pasterns that must satisfy the most critical, while in his other parts, he attains to a high standard of merit. Hornbeam (Vol. XII.) is also a yearling of excellent

merit, and of good stock. He is a big colt, but without coarseness, being smooth in appearance, and his legs are embellished with fine silky feathering. He possesses those true Clydesdale characteristics that make the breed so valuable in their underpinning, while in quarter and body he is equally meritorious. Hornbeam is by Castlereagh, a son of Darnley (222), dam Holly (7482), by St. Lawrence (3220), by the Prince of Wales (673). It will be seen from this that Hornbeam, through both sire and dam, traces to the two of the greatest of Clydesdale sires. Cecil's Heir (Vol. XII.), is a well turned and growthy colt, close to the ground and not without strong structural qualities. He comes of good stock, being a get of the Marquis of Salisbury (5108), who traces to the Prince of Wales (673), while his dam Black Sally is by Top Gallant (1850), one of the best get of Darnley (222). This is a colt of excellent promise, though his color, which is a chestnut, may find disfavor in the estimation of some.

Though the number of mares now kept in this stud is not so large as formerly, yet the quality is as high, as those there present are vouchers for the assertion that great carefulness has been observed in the choosing of mares of the best constitution and choicest breeding, so as to be of worth for brood purposes.

In Hackneys, Donington II. well represents this stud. He is in fine fettle and yet possesses that symmetry of form, cleanliness of limb, and superb knee action, that impressed us so favorably when first we saw him. He is a get of Denmark, well-known in Hackney circles as a noted stock horse, and out of St. Giles (687).

Cairnbrogie is more than worthy of a visit from any Clydesdale adherent. It is easily reached by the C. P. R., and interested parties are always accorded a warm welcome.

### Leading Herds of Manitoba.

(From our own Correspondent.)

In my last budget, I closed referring to the stock farm of Mr. Glennie.

Next neighbour to this gentleman is an old timer, Mr. Walker, whose speciality is high grade Shorthorns, of which he has usually over one hundred, and suckles only one calf to each cow. This is about the finest herd I have yet seen, not a mean beast in the lot and all young, many of them three year old heifers in calf, and picking all their food up to New Year's day from the rairie with the aid of a stack of wheat straw. The great increase of the agricultural area to the south has so far hemmed in these grazing men, but the lake margin is miles in width, and so low that it can never be plowed. This stockman winters nearly all his cattle in a low shed some 80 feet square, and having a straw roof supported on poles about 12ft. apart each way, and closed in round the sides with slabs and straw. Hay is thrown out on the snow around daily and eaten up clean. It costs about three tons of swamp hay to winter a full grown beast in this way. Glennie, with the help of a little chop, makes half that quantity do, and in my simple judgment it is rather the thriftiest way. There is a still older way of wintering cattle than that, and rather easier for the farmer, though not for the beast, viz., by building ramshackle log erections with one side always open, and bearing evidence that they were once chinked up and plastered. In a snowy year there is rather more snow inside than outside this sort of buildings, and the beasts move around any stacks or buildings that happen to be wind-proof, keeping always on the lee side.

Just a few miles beyond the Walker ranche, in the bush formed by Rat Creek, is the house of Walter Lynch, the pioneer Shorthorn man of the North-West. He has, in his day, had well up to a score of herd diplomas running all the way from 1870, when he came in there one of the very earliest pioneers, down to the last Portage Show. His herd bull Duke of Colonus (9282), is of very high aristocratic lineage, got by 54th Duke of Oxford, by 4th Duke of Clarence, and he has about forty head eligible for the new herd book. But his most famous bull, and his first, has done more to stamp the character of the grade Shorthorn in this, the best cattle country of the whole North-West, than any single beast ever brought here. I could see a score of these high grade heifers on the Walker farm, for example, of uniform type, rich dark roan in color, broad in the beam, deep in the waist, mellow to the touch, and mild in the eye, the very picture of old Robin Hood, the pride of the early settlers of Westbourne.

Close alongside of Mr. Lynch, Mr. Paxley has about thirty Shorthorns and Herefords, and only a mile or two further up on the White Mud is the very extensive cattle and horse ranch of Senator Sanford, under the able management of Mr. Davey.

Mr. Sorby has on his Plain farm a few very good Galloways, but the centre of the Plain will for years be devoted to wheat; and this lot is likely to go out before long. It is surprising to find the number of little breeders of pure bred animals. Mr. McLennaghan at Portage, for example, has half-a-dozen of choice Jerseys, headed by Fubister, 19158. I find Mr. J. E. Smith at Brandon has over fifty head of pure Shorthorns, while the Binscarth herd is already known to all eastern men and needs no mention of mine.

Crossing the Assiniboine to the north side, I may name round Rapid city the Shan's Brothers, with twenty-five head of Shorthorns and fifteen prizes last fall; Mansfield Nisbet, with good herds of stock, some very well-bred; S. L. Head, a noted Clydesdale owner, at Minnedosa; R. P. Frazer, a live man, with prize-winning Shorthorns and stallions; Barren, of Carberry, with another lot of well-bred Shorthorns and high grades; and Adam Mackenzie, son of the veteran breeder, Kenneth, of Burnside. Adam's collection is a wonderful one. Ponies, mules, cattle, pure and graded, but he always takes prizes whenever he has time to drive them in to the fair.

We are, of course, little better than beginners in first-rate stock breeding, but we have begun well. I have, within the week, seen two Jersey bulls, strong in the best blood of Canada; and at Portage la Prairie, where I went on the 15th, to attend the Manitoba Dairy convention, I saw in one stud stable four Clydes, including Granite City and Bounding Willow, one good Shire, two Suffolk Funches, a Yorkshire coach horse and Firefly, perhaps the finest Hackney in Canada. If there is any mistake here, at present, it is rather in the direction of having too many good stallions.

Our Dairy Conventions are very useful as a means of bringing out valuable practical information, which, by means of the press can be afterwards spread in the most effective way. But they don't draw crowds of actual listeners, and just now everybody is in the fangs of La Grippe and wants to stay at home. But some of our most far-seeing men realize that dairying must be an important branch of industry, and that by providing skilled inspection to detect fraudulent practices among the patrons of factories, and advise the really skillful makers we already possess, that industry can be most effectually fostered. This year's experience will help the factories a good deal. The

merchants who took butter in trade find it now almost unsaleable, except at heavy loss, while creamery has made 12 cents, and it will soon come to the point that we must either make a uniform brand or make only what we can sell at home. Government does nothing yet to encourage reform in this particular, but will be pushed to do so in the coming session of parliament.

Winter of a very decided character has come with the new year, and business is very flat, our wheat being very much out of the farmers' hands. In some cases government aid will be required to provide seed for the sufferers from last year's drouth.

### With the Stockmen.

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THE COMMENTS OF A RAMBLER.

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WILLOWS STOCK FARM.

For the last decade or so, the Messrs. Dawes & Co., of Lachine, Que., have been large importers of Herefords, Aberdeen-Angus, and Jersey cattle, as well as extensive breeders of thoroughbred horses. The Hereford herd at present numbers about 55 head. The stock bull mostly used by them is Monarch 3rd 29435, bred by John Price, of Herefordshire. He was sired by Monarch, considered the best son of the great Lord Milton, dam Spott 6th by Horace 2nd. Spott 6th was also the dam of Hotspur that sired the pair of Elkington shield bullocks. This bull has proved a getter of superior stock, judging from the number of lusty, well-fleshed calves he has sired that are now at this farm. The cows are all that could be desired in breeding, and as for individual merit, it would require just something extra nice to beat them. They have been carefully selected, and are a uniform good lot, of a vigorous type, with mossy hides and nice handling qualities. They have a large collection of young bulls, of excellent beef form and sturdy constitutions.

The Polled herd includes about 30 of the nicest of "doddies." This firm have taken great pains in choosing only animals of the best strains for their foundation stock, and as a result they now may justly take great pride in the descendants of these now in their herd. They have on hand at present a number of young bulls of excellent quality, mostly descendants of their imported stock bull Hannibal 6775, sired by Proud Viceroy (3156), dam Wooley (6700), by Pompey (3120). They endeavor to keep all their young stock in good growing condition only, and for this reason largely animals from this herd have not been shown much. With the exception of the young bulls, the members of their herds have been direct importations.

The Jersey herd, numbering in all 50 head, is one of a rare order, being made up of as good a collection of well-bred milking cows as could well be gathered together. The leading strains of Jersey blood are represented, but the predominating blood is that of Welcome. It is a principle that has guided this firm in their selection to only purchase of those strains that gave a good account of themselves in the dairy, independent of their fashionable breeding. As a result, they have a milking herd of cows that are all excellent dairy animals. As an instance as to what some cows of this herd have done, it may not be amiss to mention that Badger Bess 30001, a fine-looking cow, by Farmer's Glory, gave in a private test 18 lbs. 1 oz. of butter in 7 days. Another excellent milker, Flora Noble 2nd, by Wolseley, by Farmer's Glory, had for her dam Flora Noble that gave, when 3 years old, 14½ lbs. of butter in a week. The most of the Jerseys are direct descendants of or related to Farmer's Glory,

Welcome (366), and Angela's Joy. The latter is out of the Queen of Darkness, a renowned cow, noted for her butter qualities. Wolseley 4019, a descendant of Farmer's Glory, has been used in this herd. He was the first prize bull of the Jersey Isle in 1883, first as a two-year-old and also winner of the champion cup in 1884. The cream from the cows is sent to Montreal, where it finds a ready sale.

The breeding of thoroughbred horses is a department of the work here in which Mr. James Dawes is particularly at home, while Mr. Thomas Dawes is manager of the herds. Mr. James Dawes is a great believer in the using of thoroughbred stallions on half-bred Clydesdale mares for the raising of strong, serviceable drivers for the market. He is more than a theorist, however, as he has several horses at present drivers on the farm that strongly bear out his belief in the efficacy of this method of breeding. From the thoroughbred they get that ambition and staying powers that are so characteristic of well-bred thoroughbreds. Most of the young thoroughbreds now on the farm have been sired by their stallion Moccasin. He has given them some superior fillies of high quality, and of the stamp and form that catches the eye of the horseman.

### THE STOCK FARM OF THE "HARAS NATIONAL" COMPANY.

For some time past this company, under the presidency of the Hon. L. Beaubien, of Montreal, has been doing excellent work in the way of importing Percherons and French coach stallions of high quality. They are associated with the Percheron and Arabian Horse Importing Company and the Societe Hippique d'Exportation et d'Elevage of Paris, France, and through these influential connections they are able to secure, on the best terms, stallions of the richest breeding and individual merit. About three miles from Montreal, at Outrement, their stables are situated. To see the stable alone is well worthy of a visit. It is 150 feet long, 50 feet wide, and 60 feet high, being three storied. It is splendidly furnished inside, and provided with large, roomy, and well-lighted box-stalls. Under the guidance of the obliging manager, R. Angus Turenne, I had the pleasure of inspecting the stallions at present at these stables.

The first to be brought out on the stable floor was a beautiful black Percheron, July 15165, a horse of fine appearance, standing fully 16 hands high, and weighing not less than 1900 pounds. He was imported by the present owners in May, 1888. He is a get of Myrama (151666), dam Garotte (15167), by Vidocq. Joly possesses abundance of quality, and shows to an eminent degree those prized attributes of the Percheron as a breed, and especially is this true of his excellent limbs and feet. Since coming to this country, this stallion has gained an enviable reputation as a prize winner. He won first as a two-year-old at Hochelaga in 1888, as best draught stallion of any breed; and the same year, at the Ottawa Central was successful in securing diploma and first as the best two-year-old Percheron shown. As a three-year-old, he was placed first at Sherbrooke in 1889.

In an adjoining box-stall was Bontemps (20828), a rangy black three-year-old, standing 16½ hands high, and weighing about 1700 pounds. He was imported this summer, and was sired by Coco (5754), dam Coquette (17923). This stallion, though tall, is nicely proportioned, with strong quarters, well-turned body, and serviceable legs. The many prizes he has won at Sherbrooke and other exhibitions are indications of his worth.

Roi de Bignon (1499) was the next to pass under review. He is a dapple gray, nearly 16 hands high,

and weighs about 1600 pounds. Coco was his sire, and Franchette his dam. He is an excellently topped horse, with a splendid neck and beautiful head, of active disposition, and full of quality. At Hochelaga, he was successful, as a five-year-old, in winning first prize as the best heavy draught horse of any breed.

Beguín (20829), another inmate of these stables, is a coal black three-year-old of stylish bearing, and excellent finish. He was imported last summer, and was sired by Bayard (2376), dam Cheir (5657). From his build and the quickness of his movements, one would judge him to be a splendid mover, and this assumption is verified by the comment made upon him as being the "best Percheron trotter in the Haras."

Passing down into the basement, we were treated to an inspection of a trio of Percheron brood mares of capital stamp for breeding purposes. Franchette (15107), one of these, is a dapple gray in color, tall and heavy, being over 16 hands high and weighing close on 1700 pounds. Her form is excellent for a brood mare, as she has a very wide, thick loin, strong quarter, and deep barrel. Her sire is Marquis (6411), and dam, Mariette. Before her importation in May, 1888, she received the honorable distinction of being made the recipient of the grand diploma and first prize from the Societe des Agriculteurs de France in 1888, as heavy draught breeding mare. The two others, Parquerette (17777), a low-set sorrel of good quality, and Georgette (20567), were winners of the first prize at Hochelaga as best team of Percheron mares. Georgette is a chestnut, close on 16 hands high, and weighing 1400 pounds. She is a roomy mare of good constitution and quality.

There are at present three French coachers at this stud. Holopherne is a stallion of magnificent appearance, a rich bay in color, tall, of good weight, and smooth in all his parts. In his excellent finish and quality, he shows his breeding to be of the best. At Ottawa's last exhibition, he was awarded first prize as a carriage stallion; and at Sherbrooke, last year, he won a similar trophy as a four-year-old Norman. Another coacher here, the Marquis de Puisaye, is a grand horse, a beautiful bay, of good height (being 16 hands), and possessed of plenty of substance. Among the many prizes of distinction that this horse has won, I may mention the first and diploma he secured at Sherbrooke last year as three-year-old, and also first at Laprairie as French coach stallion of any age. General Fisette is of a more compact type than any of the others mentioned. He is close on 16 hands high, and weighs about 1450 pounds. He is low set, stout in body, and well-limbed. His sire is the Government stallion, Circeron II.

This company are also breeding Ayrshire cattle and Berkshire pigs. They have a fine silo in their new stable, and are enthusiastic advocates of silage as a food for milch cows.

### MR. COCHRANE'S HEREFORDS AND ABERDEEN-ANGUS POLLS.

The live stock establishment at Hillhurst, carried on so successfully by the Hon. M. H. Cochrane for so many years, is certainly one of the best conducted live stock establishments in the Dominion. The buildings, though not expensive, are well-adapted to the purposes for which they are designed. The stock is all kept in a good breeding condition, and is presentable at all times. It is characterized by an entire absence of culls, every animal about the establishment being good, and a considerable number of them superlatively so.

There are nearly 200 head at the present time in the two herds, the Aberdeen Polls having the advantage in point of numbers. The young bulls are pretty well sold off at present, though a few good specimens are

n hand The young heifers of both breeds are plentiful and excellent in quality. Old Casso still leads the Hereford herd, and with all his wealth of flesh, is still useful. Sometime he may yet have an opportunity of being pronounced the sweepstakes bull of any breed in America, a place to which he has strong claims if my judgment is not in fault. There are two show herds of Aberdeen-Angus Polls that would be hard to beat anywhere, in any country. They reflect much credit on Mr. Cochrane's skill as a breeder, for notwithstanding that his herd rests upon imported foundations finely pedigreed, nearly all the animals in the herd at the present time, for show purposes, were bred at Hillhurst.

I would that all our breeders were as particular in excluding culls from their premises. Careful breeding will reduce their number to a minimum, but now and then one will come, so long as the laws which govern breeding remain as at present. But when they do come, there is no profit in retaining them. The unsightly, unattractive things should be early consigned to their rightful destination, the butcher's stall, where an oblivion that is fitting awaits them. Why should breeders suffer the days of culls to be prolonged, in the hope that some cull of a breeder will some day come along and pick them up to add to his herd because he can get such rubbish cheaply?

Hillhurst has a historic past as well as a successful present, as anyone at all intimately acquainted with the live stock history of the country must know. It is not my purpose at present to refer to that past, further than to say that any live stock establishment that has won Dominion sweepstakes' medals of gold and silver to such an extent that they are made into and worn as girdles by the ladies of the household, cannot but have a history that will live as long as the chroniclers of live stock lore shall be sought for by the student and the antiquarian of long ages yet to come.

#### MR. DRUMMOND'S AYRSHIRES.

There can be no denying it: Mr. Drummond, of Petite Cote, just below Montreal, has one of the best herds of Ayrshires in the Dominion to-day. They number about 60 head. Some of them are wonderful milkers, and all are in fine, serviceable condition. As mentioned in the November number of THE JOURNAL, this herd carried the day at the Toronto Industrial, and came back from Ontario laden with honors.

Mr. Drummond is very chary about selling his best animals, and so he should be, so long as he intends to breed Ayrshires. Many of our breeders make shipwreck here. They sell because the price is tempting, forgetting that the best can seldom be produced from what is inferior, or from what is only fairly good. There is a limit to the price offered which a breeder should refuse for any animal, however good, but those who possess the best will find that very generally it takes a large sum to replace animals of this class which they may have to sell. Even in common herds or flocks, it is miserable policy to be frequently selling the best.

This herd gives evidence of the most careful breeding and attention. The animals comprising it are all good, and I am told the herd has proved a source of much profit to the owner.

FOR THE CANADIAN LIVE STOCK AND FARM JOURNAL.

#### The General Purpose Cow.

For years there has been no question which has been more fully discussed and which is less near to a satisfactory answer than as to which is the most suitable breed for the every day farmer. As a general rule those who have a partiality for a particular breed

are decided in their opinions that their breed is the most suitable, and claim it to be infinitely superior to any other breed. There is little doubt that the cow that is most sought after is that which is called "the general purpose cow," an animal which yields a good supply of milk and which, when dry, will also lay on flesh easily and rapidly, and it is for this reason that the Shorthorn has been so great a favorite with the large majority of English agriculturists. Many breeds have in turn each claimed the position of the general purpose cow, an animal which some have gone so far as to say has no really good points, a statement which has a certain amount of truth in it, for it is not often that the two conditions of beef and milk are combined in any very superlative degree. In selecting a breed many matters require to be taken into consideration, such as climate, soil, location, and other minor points, but perhaps not the least important is the quantity of food consumed, for this particular item may just determine whether the balance be on the Cr or Dr. side. A few years ago, during a visit to the Quebec Quarantine, a discussion arose as to which breed consumed the least food, and it was considered that a rough average as far as the beef breeds were concerned, for none of the milk breeds were represented at that time in the quarantine, could be obtained from the books of one of the principal feed merchants who supplied the quarantine. An inspection of his books revealed that the Hereford came first in point of consumption of food, next came the Polled Angus and Shorthorn, with a trifle, but very little, in favor of the Polled Angus, the Galloway consuming more than any of the other three breeds. This, of course, can only be taken as a rough estimate, the Galloway and Polled Angus being chiefly yearlings, while some of the Herefords and Shorthorns were older, and in addition were being pushed on as fast as possible. From it we may, however, safely assume that the Hereford will fatten on less food than any other beef breed, but owing to the deficiency in milking qualities neither it nor the Polled Angus can be included under the definition of a general purpose cow. Comparing the Shorthorn with the Ayrshire we may glean some information from an experiment made some time ago on a farm in Ayrshire, where a number of both breeds were kept and fed together for the purpose; weight for weight the Shorthorns were about 50 per cent. heavier than the Ayrshires and they required about one-third more food, for it is a commonly known fact among those who have made tests in feeding cattle that an animal that is 50 per cent. larger than another does not therefore necessarily require 50 per cent. more food. At the same time in the case in point it was found that the Ayrshires yielded quite as much milk as the Shorthorns. The difference in favor of the latter being that they maintained more flesh than the Ayrshires, kept their money value better together, and could be finished for the butcher with greater ease and more satisfactory results. Another interesting experiment as to the relative cost of feeding large and small cattle was made by Baron Ocket between the Ayrshire and the Holstein; the animals weighed in the former breed 806 lbs., and in the latter 1,016 lbs. each; the Ayrshire consumed for every 100 lbs. of live weight 3.3 lbs. per diem, whereas the Holstein consumed 2.8 lbs. Subsequently, two Holsteins weighing 2,112 lbs. were pitted against two others scaling only 1,537 lbs.; these two pairs were fed in the month of June for 16 days in separate stalls, the whole of the food being accurately weighed. The heaviest pair consumed 492 lbs. of green lucerne, or 14.6 lbs. per 100 lbs. of the live weight, and yielded 340 quarts of milk which gave 7.4 quarts per 100 lbs. food; the lighter pair only consumed 3,859 of the same food, which, however, was

16 lbs. per 100 lbs. of live weight, while their yield in milk was 240 quarts or 5.5 quarts per 100 lbs. of live weight, and in both instances the original weight was maintained. Experiments made by Caspari to ascertain what quantity of hay or its equivalent was required to produce 100 lbs. of milk corroborate the previous one. He found that 100 lbs. of hay given to the Oldenburger cows of North Germany produced 25.4 quarts to Holstein cows 26.10 quarts, to common cows 23.65 quarts, and to the Allgauer cows 30 quarts. The last named race, although bred and kept extensively in South Germany under that name, is almost essentially the same as the famous Schwyzer breed of Switzerland, which upon hay and grass alone yield as much milk as any known race, not excepting the Holstein. The above figures were taken by Caspari from no less than eleven Saxon dairies, the common or mongrel cow being the smallest in size, and the Allgauer the largest. From these tests it would appear that the largest animals are the most economical, having a less surface of body for the radiation of heat in proportion to weight than the smaller ones, and consequently a larger quantity of the food is available for conversion into milk: hence it is evident that the Shorthorn is superior in its claims to the Ayrshire as a general purpose cow. The Holstein is the latest claimant as an animal of general ability, and its merits as a milk producer, especially in some instances, is undeniable; but as a beef producer we are rather in the dark, as at no fat stock show of any note in this country has a fat steer or even a grade, as far as I am aware, been shown, and it is surprising that no breeder of Holsteins has had sufficient enterprize to exhibit a fat Holstein steer at one or other of the large shows, and thus practically demonstrate the right of this breed to occupy the position which has been claimed for it. But the breeders of Holsteins are not the only men who are backward in bringing forward their especial favorites. The other breeds are almost equally unrepresented. Where are the Hereford men, the Polled Angus, the Galloway, the Devon, etc? Rarely, if ever, do we find exhibits of their breeds in the fat classes, and the competition appears to be almost entirely confined to the Shorthorn and its grades. This is not as it should be, and such lack of enterprize on the part of breeders does not contribute to enhance the popularity of any breeds. Among our cousins on the other side we see representatives of all breeds, victory crowning the brow of one and sometimes another, and materially adding to the interest of the shows, besides enabling farmers to form an opinion as to the respective merits of the different breeds, and perhaps contributing in a measure to decide that vexata questio as to the best general purpose cow.

Appropos of dairying, in the XIII. bulletin issued by the Cornell University, is a report of an interesting experiment which, if correct, is of much importance to milkmen. It is a test as to the value of a grain ration on cows at pasture. Two lots of cows were fed, one on grass only in the pasture, the other beside the pasture receiving a grain ration of 2 lbs. of cotton seed meal and 2 lbs. of wheat bran per cow per diem; the pasture, it should be remarked, being at the same time excellent. The result would be somewhat surprising were it not a confirmation of a previous one made by Prof. Shelton, of Kansas, which plainly showed that grain in the case of corn meal bran and oats was fed at a loss, the grain fed added materially to the milk yield; corn meal showing the greatest increase but the grain did not nearly pay expenses, while Prof. Roberts' results were scarcely as favorable to a grain ration as Prof. Shelton. One feature in the experiment is pregnant with importance to milkmen, viz.,

there was one day when the milk from one lot fell below the legal requirements of 12 per cent. total solids, and several others on which the percentage of total solids came dangerously near the "dead line." From this it would appear that either the legal standard is too high or else that the method is not a correct manner of ascertaining the purity of the milk; evidently Prof. Roberts is of this opinion for he concludes his report in these words: "It seems to us that no law can be just that fixes an arbitrary standard for the purity of milk which may depend upon the result of a single analysis."

AGRICOLA.

### The Devons.

Editor CANADIAN LIVE STOCK AND FARM JOURNAL:

DEAR SIR,—I thank you for that article on the Devons in the December number of THE JOURNAL. It was just what I have been seeking after for a long time. I am a great admirer of the little Devon, and was very glad to learn something of their history. I started a herd about three years ago, and am well satisfied with my venture so far.

Bury Green, Ont.

THOMAS HOWIE.

### Long Island Black Hawk.

Editor CANADIAN LIVE STOCK AND FARM JOURNAL:

DEAR SIR,—Could you tell me in what year Long Island Black Hawk died, and his age? Also if he ever travelled in Canada, and if so, in what part?

Sutherland's Corners.

P.

Long Island Black Hawk died in Montgomery, N. Y., in 1850, at the age of thirteen years. As to whether he ever travelled in Canada or not, we are unable to give our correspondent any definite information. If any of our readers know, we would be pleased to hear from them.—[Ed.]

### Stallion Services.

Editor CANADIAN LIVE STOCK AND FARM JOURNAL:

DEAR SIR,—I own an imported Clydesdale stallion that will be three years old in May next. How many mares should I allow him to serve without any danger of making him an unsure foal getter? By favoring me with your opinion you will oblige,  
SUBSCRIBER.

There is much difference of opinion amongst horsemen as to the number of mares a stallion should be allowed to serve in a season, and this difference becomes the more marked when the question of how many a two or three-year-old should serve is considered. The consensus of opinion, however, is, that a three-year-old Clydesdale of good physical development, should not be allowed to serve over seventy-five mares at the most, though this limitation must be more or less modified according to the growth, constitution, and condition of the stallion, as well as the sureness of the stallion as a getter, for if he is not sure it would give him too much to do to get that number of mares in foal. The principal evil that is likely to follow too much work of this nature, is a stunted growth and undeveloped form, and not as our correspondent infers, the loss of procreative power. A young stallion not matured in all his parts, or of weakly constitution, will not attain to the physical development he should, if too frequently used when young.

### A Good Word for the Devons.

Editor CANADIAN LIVE STOCK AND FARM JOURNAL:

I was pleased to see in your JOURNAL, your sketch of the history and qualities of the Devons. It was a correct one, but I hope you will allow me, as a breeder of Devons for over thirty years, to offer a few facts that will in part verify your article as well as correct some of the statements made: in regard to the question of maturity and weights given. I sold a steer some four or five years ago, to Messrs. Gray & Snell, for the British market. He was three years old, and weighed 1500 lbs., and I received for him 75. per pound. He was raised on skim milk, and never tasted hay or meal until put up to feed five months before he was shipped. Mr. Gray went with the cattle, and saw it killed. He was pronounced the best carcass in that market that season. Some years ago we fed a pair of steers three years old, for the Christmas show, and with them we won 1st and 3rd prizes, and they weighed over 1800 lbs. each.

Hartland 363, at four years old, weighed 2500 lbs. Duke 947, two years old, weighed 1600 lbs., when starting for exhibitions this Fall. In regard to maturity, I consider a Devon is always matured; if it has proper care it will be ready for the block at any time. Notice that a Devon steer took sweepstakes over all other breeds at Smithfield, England, last year, and also that we are keeping up the reputation of their milking qualities, as was shown by their taking sweepstakes over all other breeds, for quantity and quality this year, at Provincial, London and Industrial, two years ago.

W. J. RUDD,  
Eden Mills P.O., Ont.

### Breeding Dairy Stock.

AN EXPERIENCED BREEDER FAVORS US WITH HIS VIEWS ON BREEDING FOR THE DAIRY.

Editor CANADIAN LIVE STOCK AND FARM JOURNAL.

Knowing that you are desirous of placing before your readers the results of the experience of those breeding live stock I have written the following which I hope may be of some benefit to your readers.

In selecting a dairy sire for breeding I always choose one that has been bred for such purposes, having a number of crosses (the more the better) of other so bred. Bulls of this kind are most likely to throw after themselves. If from a good strain of milkers the females of his get will, with very rare exceptions, be excellent milkers. In respect to handling bulls I have always found that it is by far the best plan to be kind to them. When over two years old they should always be handled with great care as you cannot rely very much on their friendship after that age.

My experience with milch cows leads me to say with certainty that they require to be bred especially for that purpose. I have had cows that were good milkers from no particular breed, but their offspring rarely, if ever, proved equal to their dams unless they were from bulls of good milking strains. A cow of a first-rate milking strain, through bad choice of bull, may produce a calf that does not become a good milker, but the stock from the latter may turn out to be first-class milkers. I will cite you one case in my experience: The cow Rosebud (145 Vol. II.) was out of a good milk cow, but her sire was not from a good strain and as a result she is not a good milker, but every one of her heifer calves have turned out excellent dairy cows.

In regard to the management of calves intended for 1<sup>st</sup> dairy my experience bears me out in saying that they should be allowed to suck their dams only for a very short time after calving as it appears to me to make them stronger and inclined to be coarse, and I believe that a calf fed from the pail will prove by far the better beast in the end. I find that Ayrshire heifers do better when kept apart from the aged cattle until after they have dropped their first calf. I advise this as they sometimes come in heat when seven months old, and the cows jumping on them are apt to strain them or injure them in other ways. I find that all my largest milkers have dropped their first calf when three years old, and I am always careful not to have them in high flesh when they calve, and in this way prevent swollen udders or milk fever. I might mention that when I find an udder swollen and hard I foment it with warm water and soap, and rub it with a mixture of alcohol and camphor (two ounces of camphor to eight of alcohol). I always attend to our heifers myself being as kind and gentle with them as possible; as a result of such treatment they become quieter and more gentle as cows.

In rearing calves I am always careful never to over-feed them when young or for the first year, and this has always to my mind accounted for their finer appearance and better dairy form when they become matured. In my experience there is no feed equal to turnips for young stock. I tried small experiments during the winter and spring with some of my calves making the difference in food as follows: to two I fed turnips and hay, and to two others hay and chopped grain. In the spring the grain fed ones were away ahead, but when they were put on pasture the ones that had been fed turnips left the others far behind, and were much better calves when eighteen months old.

I might say in respect to the milking qualities of the Ayrshires that I have found them heavy milkers. From cows on pasture I have got from 40 to 55 lbs. per day with no other food but grass.

Rockton, Ont.

Yours truly,

JAMES McCORMICK.

We are much pleased with the LIVE STOCK JOURNAL. Since it moved to Toronto we see a decided change for the better, and we can unhesitatingly say that it stands head and shoulders above any other agricultural and stock paper published in Canada. Its lofty tone, sincere devotion to our best interests, hearty support of every movement having in view the benefit of the farming community, its inspiring words and cheerful encouragement in difficulties, cause us to take pride in its existence. Yours truly, W. H. & C. H. McNish, Ltd., 16th January 1890.

## Veterinary.

### Difficult Birth.

(Continued from January number.)

In making an examination as to the state and position of the foetus we should do so carefully in order to avoid error. We should carefully guard against getting hold of the legs of different foetus, in case of twins, by following up each leg to the body, and making sure which body each leg belongs to before any traction is exerted.

Awkward mistakes have been made by confusing a hind for a fore leg, and *vice versa*; and consequently of drawing on a hind and a fore, when of course no progress is made.

By only examining the fetlocks it is almost impossible to discriminate between a hind and fore leg, but reference to the knee and hock respectively will lead to a correct conclusion.

It has already been stated that when the presentation is normal, and there is difficulty in delivery, simply aiding the expulsive throes of the mother by properly applied traction is all that is necessary. The same may be said when the foetus is turned around in the womb and the hind legs presented. Simple traction usually suffices, and there are cases recorded where spontaneously delivery has been accomplished with the foetus in this position. But, as a rule, it is only expelled as far as the hocks, and progress there arrested. The other not unusual malpositions: re depicted in the following cases, accompanying which are the usual directions given for rectifying wrong presentations and effecting delivery.

1. Anterior Presentation: For Limb Crossed the Neck.

Take hold of the fetlock, raising it and pushing it gradually backwards so as to flex the knee, and incline the limb to its proper side; then extend it, and if necessary assist birth by traction on both fore limbs.

2. Anterior Presentation: Fore Limbs Bent at Knees.

Secure the head by cord and return it back to the womb, then seek for the fore limbs, and extend the limbs into their natural position by putting a loop of rope on the knee and shoving it down to the fetlock. An attendant should draw on the rope while the operator forces the knee upwards and backwards into the womb. In this way the legs can be straightened into their natural positions. When traction is applied by a rope the operator should be cautious that no injury is inflicted to any part of the passage by the leg becoming caught, especially as it is passing over the prominent border on the front part of the floor of the passage. It is not always necessary to use a rope in order to rectify such a presentation; especially in case of a calf, the legs being short in comparison to those of a foal. By simply grasping the shank and forcing the leg upwards and backwards, the leg can be brought forward into its proper position.

3. One Fore Limb Completely Retained.

Deliver as in preceding case; exceptional instances may require amputation of presented limb at the shoulder, which will make more room to rectify the position of retained limb, or else admit of the foetus being extracted by drawing on the head. In case of retention of both fore limbs proceed in the same way.

4. Downward Deviation of the Head.

Deliver by passing the hand between the fore legs down the face of the foetus to the nose. Put the fingers in the nose, place the repeller—fig. 1—between the shoulder and neck, and shove backwards while drawing on the nose. Failing this a rope may be attached to the upper jaw, and traction applied

repelling the same way as before; or in urgent cases a hook may be fixed in the lower jaw, or if the head is considerably doubled back, within the orbits.

A blunt hook should be used if there is a chance of delivery alive.

A *repeller* is a crotch shaped instrument made of an iron rod, five-eighths of an inch in diameter. It should be about four feet long with a hand piece, and a crotch shaped end, as depicted in Fig. 1.



FIG. 1.

#### 5. Deviation of the Head towards the Side.

Secure the feet and head with a rope round the former and the lower jaw of the latter, draw on the rope of the lower jaw and press the body back. If this fail a blunt hook may be placed in the orbit and traction used. In the foal it is occasionally possible to extract the foetus without changing its position, by just putting a cord round the neck and feet and drawing, but with the calf this is seldom possible, but it is easier to rectify the position of the head in that animal. Removing one or both of the fore extremities at the chest will aid very much in accomplishing this.

#### 6. Twin Fetus in Different Presentations.

Disengage the interlocked limbs, then return one foetus—the lower and most backward—into the womb during the extraction of the other.

#### 7. Hind Legs Presented. Traction without alteration.

#### 8. Hock Presentation. Hock Corded.

Repel the foetus into the womb to a sufficient extent to reach the limbs. Pass a cord round the hocks and draw them forward; then pass the cord down below the fetlocks. Now press the body and hocks back, while traction is applied to the feet, taking care to bend the toes well forward, especially as they are passing over the brim of the pelvis, as they are liable to bruise or tear the womb.

There is seldom much difficulty in accomplishing this with the calf, but owing to the greater length of leg in the foal it is sometimes impossible; then the limb must be separated at the hock.

#### 9. Thigh and Croup Presentation.

Press the foetus well forward, then pass a cord round the thigh, shoving it down as low as possible, so as to get the hock pulled back; then proceed as in hock presentation.

It is sometimes very difficult to accomplish this, and cases are recorded in which it was found necessary to cord both thighs, and draw the foetus away without rectifying its position.

Cutting through the cords above the point of the hocks facilitates its extraction. Cases sometimes occur in which the foetus lies crosswise in the womb, either with the back or belly and legs presented. Judgment must be used to determine whether it is better to convert such presentations into anterior or posterior ones. If the head can readily be reached, it is as a rule better to convert into an anterior presentation; but otherwise, and if the hind legs can be reached, it is better to make a breech presentation of it.

The cases described are the commonest causes of *difficult birth*, but there are a number of others of a more complicated character, that it would be impossible to make very clear in a short treatise of this kind.

Cases of difficult birth are much more frequently met with in the cow than in the mare. Fortunately, however, it is much easier to afford relief in the cow, for the following reasons: She is less active and violent than the mare, and the foal's legs and neck being

longer than those of the calf there is greater difficulty in turning them, if their position requires rectifying.

### Rubbing the Tail.

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL:

DEAR SIR,—An accident occurred to one of our driving horses. In going along the road, he kicked and struck the rig, cutting his leg between the gamble joint and the fetlock, which caused his leg to swell up, and in healing, it left a callous on the left side of the leg. (1.) I would like to know what would take it off. Also, he rubs his tail, although it is kept clean. (2.) What could be got to prevent this, and make the hair grow. Sutherland's Corners. P. M.

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

1. Rub in a little Iodine Ointment once daily, for several weeks. If the skin gets sore and roughened, withhold the ointment for a few days, until the soreness disappears, then reapply.

2. To stop rubbing the tail, keep him in a stall, so arranged that he cannot succeed. If he is kept in a box stall, put in a wainscoting two feet and a half high, and slanting out at the bottom about a foot and a half. This prevents the animal from getting close enough to the wall to be able to rub. *Very small* quantities of blue ointment rubbed in the root of the tail, at the part rubbed, occasionally, is often beneficial.

If the digestive organs are not in good order, or if the presence of worms is suspected, a dose of purgative medicine may afford relief.

## The Farm.

### Our New Premium.

We question whether there is another Canadian crop that has attached to it more importance than the oat. Recognizing this, we think we have made a happy selection in choosing that grain, and especially the Banner variety, to offer as a premium. We feel sure our offer will meet with a generous response, and that no one may overlook this splendid opportunity to secure some of this variety for seed grain, we would direct their attention to another department of our journal where full particulars are given.

### The Growth and Uses of Rape.

The growing of rape is most extensively practised in the more immediate vicinity of Guelph. At present the area devoted to its growth is considerably circumscribed. That it should be so is not a necessity, for there are many sections in the Province where it will grow quite as well, and indeed better, than in the neighborhood already referred to.

Any soil that will grow good turnips will grow good rape, as its habits and requirements of growth are almost identical with those of the turnip. It will also give fair crops on humus soils in valleys where turnips would grow largely to leaves. Like the turnip it takes very kindly to large quantities of manure, and will bear well almost any amount of forcing.

As one of the first objects in growing it is that of cleaning the land, fields that are foul should be chosen for the purpose. It is well when they can be given autumn cultivation with a view to destroy weeds. In the spring the cultivation may be exactly the same as that given to a summer-fallow, or to a field intended for roots, up to the middle of June. The ground should then be drilled about the same distance as in the case of turnips, say twenty-six to thirty inches, and then be sown at the rate of not more than one pound of seed to the acre. It has been found that the best results are usually obtained when the seed is sown about the first of July.

It is then cultivated with the horse-hoe as often and as long as it is possible to do this work, the hand-hoe-

ing being similar to that given to turnips, with the difference that the rape requires no thinning. At least so it is supposed, but it may yet turn out that moderate thinning will far more than repay the labor. Sometimes rape is sown in the autumn and pastured in the spring time, and the ground is then sown to rape. This is an excellent practice, as the rape may be sown as early as August, and then it affords an excellent bite both fall and spring.

The uses of rape are two-fold. It serves to clean the land without the necessity of resorting to bare fallow, and it is found to be unequalled for fattening sheep and lambs and cattle in the fall of the year, particularly the two classes first mentioned.

The time of turning on will depend largely upon the time of sowing. Usually the rape is ready about the 1st of September, and it serves for pasturage on to the time of snow. Sometimes it is sown broadcast, but this does not serve to clean the land so well.

The stock should never be turned into the field unless after a full meal, lest they should become bloated or scouring should be induced through over-eating.

After being turned on they should not be removed, but if a pasture field at hand is accessible, it affords a fine place for them to lie in, especially in damp weather. They should be visited twice a day or oftener, as sheep are inclined to lie down between the ridges and get on their backs and so die.

Rape has wonderful fattening properties. Lambs feeding upon it soon become plump and solid and heavy. In common phrase they are said to turn into "lead." It is a kind of lead, however, that is much coveted by the butcher.

When the work is properly done the land is thoroughly cleansed, and may be followed by barley sown to grass as in the case of roots. Cleaning land in this way is much to be preferred to the method of doing this by means of a summer-fallow only, as in the latter instance there is no crop for the whole season. Rape-growing may be said to be supplementary to a bare fallow, as where the preparatory work has been well done prior to the sowing of the rape the labor of keeping the rape clean will not be grievous.

We fail to see why there should not be a magnificent future for this crop in the Province of Ontario. Large and fertile sections may be devoted to its growth. Lambs fattened upon it last fall brought readily from five to six cents per pound, live weight, which ran the price fully up to an average of six dollars each for good lambs.

Another important use of rape-culture is to lessen labor in handling the crop grown. The whole of the crop is fed in the field without an hour spent in the harvesting. Even though rape could be cured ever so perfectly in a silo, it will not pay to do this, owing to the labor of harvesting it.

It also tends greatly to enrich the land. It draws its food largely from the air, and being fed on the land it becomes manured in a most effective way, and at a minimum of cost.

Why should not the farmers of our Province prepare thousands of lambs in this way for the winter markets, since by so doing they would nearly double the returns they get for their lambs? There need be but little doubt as to the demand for long years to come. Buffalo eagerly catches up our lambs thousand after thousand. No doubt Boston is ready to do the same, and other great American cities in New England, and our own towns, many of them rapidly increasing in population, will want an ever-increasing number. Fallow-farmers, cease growing so much barley at forty cents a bushel, and try the experiment of growing lambs and fattening them on rape.



For the CANADIAN LIVE STOCK AND FARM JOURNAL.

**The Nitrogen Question and its Importance to the Farmer.**

By C. C. JAMES, M.A.,  
Ontario Agricultural College, Guelph.  
(Concluded from last issue.)

Who are the patient scientists who have been searching out an answer to this question? France gives us the names of de Saussure, Bous-singault, Pasteur, Joulic, and Ville; Germany those of Liebig, Schloesing, Muntz, Wolff, Hellriegel, and a host of others; England those of Lawes, Gilbert, Pugh, and Warington; while America is represented by Atwater. Surely if such men are engaged in the scientific pursuit of agricultural questions no one can say that there are not within the province of the work principles of a high and important nature.

The conclusions of Hellriegel and Atwater are among the latest to come before us. For a long time the balance of opinion has been towards the conclusion that no plants are able through their leaves to take in or assimilate any of the free nitrogen of the air. These two men are somewhat opposed to this. It has for years been accepted by all that the cereals, such as wheat, oats and barley, could obtain their nitrogen only through their roots, and that they must feed upon nitrates. With this Atwater still agrees. But he says that his experiments, as well as those of Hellriegel, clearly prove that the legumes, such as clover, peas, beans, lucerne, and tares, have the power of taking up much free nitrogen from the air direct. He says: "The ability of legumes to gather nitrogen from the air helps to explain the usefulness of clover, alfalfa, peas, beans, vetches, and cowpeas as renovating crops, and enforces the importance of using these crops to restore fertility to exhausted soils."

We are perhaps warranted in waiting for further confirmation of these conclusions, hoping that they may be proven to be correct; for if we can thus by legumes gather up nitrogen from the air, which upon the decay of the stubble give up food for the succeeding cereals, we shall have made a great stride forward in profitable agriculture. Dr. Wiley, in a paper read before the American Association for the Advancement of Science, reviewing the work done on this subject takes the following safe and reasonable ground; he says, "In the light of investigations of the last few years, it may be well to admit that the opinion held by the vast majority of agronomists and agricultural chemists that the free nitrogen of the air never is assimilated by the growing plant should be held open for revision." To this statement we must ourselves subscribe. The farmer, however, is warranted in taking advantage of the doubt or of the possibility of help; he certainly should, if at all possible, have some of the legumes in his rotation. Clover may or may not feed upon the nitrogen of the air, certainly it does feed deep in the soil and upon nitrogen compounds that the cereals are unable to reach or handle. It is the searcher or accumulator of food for the other crops, giving a good supply in its day, and leaving in the stubble still more richness. In many farms the clover crop, well and judiciously used, has been the turning point in the success of the farming by its indirect and perhaps unperceived action rather than by its direct returns. The farmer who is wise will by his deep-rooted, broad-leaved legumes draw for his interest upon the subsoil and the air as well as upon the surface soil.

One more conclusion. If the nitrogen must first pass through and into the soil, is there not a lesson here to be learned? The air is full of plant food, it is

laden with the elements and forces so instrumental in making soil, therefore the farmer should thoroughly underdrain his land to let in this food, and to let in these soil-producing forces and elements. If we could enforce one point only it would be this: let the air into the soil. It will feed the soil and convert the rocky constituents of the soil into soluble plant food, therefore let it in. We have said that the cereals feed upon the nitrogen of the soil in the form of nitrates. The nitrogen of the soil, or of the air, must be worked over in the soil into nitrates, and the entrance of the air helps to produce the necessary conditions for the production of these nitrates; in fact without the air nitrification will not take place, therefore let in the air with its oxygen and its nitrogen, with its carbonic acid gas and its ammonia.

We must close, and in closing, the important conclusions, so far as this nitrogen question is at present understood, to be carried away and put into practice, are that we should use the legumes to gather food from the subsoil and air for our surface soil feeders, and we should open up the soil by drainage and tillage to let in the air with its riches and ameliorating influence.

**Duty on Corn.**

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL:

Now that Parliament is in session, we hope THE JOURNAL will bring all the pressure it possibly can to bear on that body to remove this injustice to the farmers; it is no doubt true that the duty may help a few who raise corn to sell, but such number only about one in a thousand of the farming population of Canada. The removal of the duty on corn would in a small measure help to remove us out of the great depression which exists in agriculture, and lighten the load of the farmer, upon whose back all burdens seem to fall.

Lyn, Ont.

W. H. McNISH.

**Oats.—A Gate Fastener.**

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL:

DEAR SIR,—I forward you herewith, a small sample of white oats, grown from seed received from England. As there was no description sent with them, I shall be glad if you can tell me the name by which they are known.

As a subscriber to your JOURNAL, I take great interest in your articles. I have tried the gate fastener mentioned in your number of the last month, page 362, and I think your readers will find that the fastener will work better if they use two staples instead of one.

I am having them fixed to all my gates, and personally must thank you for the sketch. Yours truly,  
Creelside Farm, Princeton, Ont. J. E. RICHARDSON.

Through the kindness of Mr. Rennie, of Toronto, we are enabled to identify the sample of oats sent us as the Early Cluster, or as sometimes called, the Early English White. It is gratifying to us to know that Mr. Richardson has found the gate fastener to work so well. The suggestion he makes of using two staples will commend itself. We are always exceedingly pleased to have our friends comment or suggest improvements upon any plan or device we offer.—[Ed.]

**The Ontario Agricultural College.**

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL.

DEAR SIR,—I, along with the other members of the Wellington County Council, had the pleasure of visiting the Agricultural Farm and College in December.

The new buildings there are a credit to the province, they are very convenient, and are the most substantial structures of wood and nails I have seen.

The barn is a most handsome building, but I think it would have looked better if the walls had been four feet higher; it would have increased the capacity at a very small cost. The workmanship reflects great credit on the builder, Mr. Schwendimann.

The live stock, though not equal to what I have seen there before, are looking thrifty. The steers, which were bought this fall for feeding, are well selected, and show good judgment on the part of the Professor.

But, Mr. Editor, what took my attention the most was the construction of a road through the farm. The grade seemed to me to be what is required, not only at the Experimental Farm, but on concessions and side roads. The knowledge that will be obtained by the young men who are engaged on it will be a great benefit to the country at large. Our roads at present are a blot in many respects, not intentionally, but because our road masters in many cases do not know how to grade a road.

I hope the Professor will instruct the students in road-making along with the farm operations.

I am, yours respectfully,  
Pilkington, Ont. W. L. GORDON.

**A Troublesome Insect.**

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL:

DEAR SIR,—We have been troubled very severely this year in this part of the country (Keat County), with a nasty insect on the turnip crop. I have seen them before in small patches, but never to affect a whole crop as they did this year. Some fields were nearly destroyed with them, the insect was of greenish color, and in some places completely cover the leaves which would wilt down as soon as attacked. If you or any of your readers can give us a remedy you will confer a favor, otherwise we will be compelled to give up growing them.

Highgate. Yours etc.,  
A. J. STONE.

Feeling that this question should be entrusted to a more competent pen, we wrote Prof. Fletcher in regard to this insect, and in answer received the following generous reply:

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL:

MY DEAR SIR,—In reply to your letter, I beg to inform you that the insect which Mr. Stone forwards for identification, are the Cabbage Aphis, which occasionally attacks the turnips as well as the cabbage. These insects belong to the large and injurious family of plant lice, which attack almost every known plant. They are all small insects, very few species being known which are  $\frac{1}{4}$  of an inch in length, and most of them less than half this size. They are soft bodied insects, frequently of a green color, which cluster around the young shoots of plants, and suck out the juice by means of a slender tube, into which their mouth parts are modified. When perfect, they possess wings, with which they migrate from plant to plant. They are characterized by being exceedingly prolific. As a rule, it may be said that plant lice pass the winter in the form of eggs, familiar examples of which may be seen upon apple twigs in winter, where they will be found as minute shining black objects, like small grains of gun powder. From these, in the spring, are hatched wingless females, which give birth to fully formed but small plant lice. These are full grown, and again bear other young ones by a process which is analogous to budding in the vegetable kingdom. No males are born until late in the fall, when pairing takes place, and as a result, the winter eggs above mentioned, are laid. The cabbage plant louse is sometimes very injurious to cabbages and turnips. I have noticed this most particularly in dry seasons. They are, however, seldom developed in these large numbers, and it is not often that remedial measures are required for. These plant lice are about  $\frac{1}{10}$  of an inch in length, of a greenish yellow color, more or less covered with a pale bluish white powder. The eyes and some spots along the sides are black. There will be found both winged and wingless individuals upon the plants at the same time which differ slightly in appearance.

Several remedies have been proposed, such as drenching with soap-suds, tobacco water, lime water, and brine; but these are difficult of application when the insects are attacking a field-crop. The most useful remedy known against plant lice is undoubtedly a kerosene emulsion; but for the proper preparation and application of this remedy, a force pump is necessary. This, however, is a most useful instrument for every farmer to possess, and the good results by ridding his plants and fruit trees will soon more than pay for it. To make a kerosene emulsion, dissolve  $\frac{1}{4}$  lb. of soap in a quart of soft water, by heating it to the boiling point. Take from the fire when boiling hot and turn in 2 quarts of kerosene (coal oil), and churn briskly for about ten minutes, when the whole will be in a frothy creamy mass. When cold, this emulsion will be in a gelatinous mass, that can be diluted in water without the kerosene separating. For the cabbage aphis, one part of this emulsion may be diluted with 12 to 15 parts of water, and this must be sprayed by means of a spray nozzle over the parts of the plant where the plant lice are clustered. Every one it touches will be killed. This is the most economical remedy which can be applied, costing about one cent per gallon as above recommended.

Chasing the crop from the ground which was infested the previous year is, of course, a wise precaution to prevent the attacks of insects which injure any given crop.

I am sir, yours obediently,  
Central Experimental Farm, Ottawa. JAMES FLETCHER.



## The Banner Oat.

### A NEW PREMIUM.

No grain is more important to the stockman than the oat. He needs it for his horses and other stock, and wishes to grow it as economically and as carefully as possible. Therefore, he wants the best, the most prolific, the hardiest sort he can find.

Every reader of THE LIVE STOCK JOURNAL has heard of the now famous Banner Oat, first brought into notice by Vick, the seedman of Rochester, and two or three years ago introduced into Canada by Mr. John Miller, of Markham.

These are the points of merit claimed by the growers of the Banner Oat:

1. That it is less liable to rust than other varieties.
2. That it is a much better yielder.
3. That it is stronger in the straw, and therefore not so liable to be blown or knocked down.
4. That it is a superior oat for the making of meal.
5. That it ripens earlier than most other varieties.
6. That where other oats fail the Banner oat does well.
7. That it is a hardy variety, and therefore suitable to our northern and north-western districts.
8. And that while it has these merits, it is also as good for feeding stock, both in the grain and in the straw, as any other variety.

Here are a few items of interest concerning this oat that Mr. Miller has given us:

1. When he first sowed the Banner oat, he planted 1 lb., and his yield from that 1 lb. was 35 lbs.

2. A neighbor of his this last year had 17 acres in all of oats, of which 5 acres were sown with the Banner oat. From these 5 acres he obtained 470 bushels, or an average of 94 bushels per acre. He sold these all in one sale at 60 cents a bushel. From the remainder of his 17 acres, which in every respect as to soil and treatment were like the 5 Banner oat acres, he reaped only 30 bushels to the acre.

3. In the several competitions open to the whole continent of America, established by the *American Agriculturist* for the best returns from one acre sown with oats, Mr. Miller with the Banner oat stood third, having a yield of 91 bushels. Mr. Miller is confident that had his acre been in one of his ordinary grain fields, and not in an exposed place in a field devoted to root crops, his yield would have been 20 bushels greater (which would have placed him first in the competition), for his acre was so much exposed that a great deal of the grain on it was knocked down and became lodged.

We have made arrangements with Mr. Miller by which we can supply our stockmen and farmers with sufficient seed of this valuable oat with which to make a start, and at little or no cost to themselves.

(1) To any stockman sending us two (2) new subscribers for THE LIVE STOCK JOURNAL and \$2.00, we will ask Mr. Miller to send 1 bushel of these oats.

(2) Anyone sending us three (3) new subscribers and \$3.00 shall receive 1 1/2 bushels.

(3) Anyone sending us four (4) new subscribers and \$4.00 shall receive 2 1/2 bushels.

The above includes the cost of the bag, but it does not include the cost of carriage. This must be defrayed by the receiver. Upon examination, it will be found that these premium rewards are very liberal.

Three trial orders will count as one regular order. All orders should be written only on our blank forms, and these we shall be happy to supply on application. For further particulars as to "Trial Orders," "How to Send Money," see the "Publishers' Column."

## Young Stockman's Department.

### Grand Sweepstakes Essay.

True to promise, boys, we have a very important announcement to make this month. We shall offer a *Solid Stake*. Watch, of excellent finish and workmanship, that will be worth at least Fifteen Dollars, for the best essay on some subject we shall set later on written by any one of our boys that wins a prize in our ordinary monthly essay competition. We shall announce the subject in good time, and we shall publish the successful essay in our *Holiday Number of next year*. What you should do now, boys, is to first secure a prize in our ordinary competition, and having then gained an entrance into the lists, put forth your best efforts to secure the grand sweepstakes prize. Do not be backward, or too modest but write us at once.

### Our Prize Essays.

To deepen the interest of our farmers' boys in the work of the farm, and so strengthen their love for a life in the country, to awaken their slumbering talents and stimulate their efforts for self-improvement, we offer the following book-prizes as inducements for the boys to write on such subjects as we shall announce each month:

1. *The Soil of the Farm*, by Scott & Morton.
2. *The Crops of the Farm*, by Scott & Morton.
3. *The Chemistry of the Farm*, by Warrington.
4. *Handbook of Agriculture*, by Wrightson.

The conditions to be observed by competitors are:

1. The writer must not be over 17 years of age.
2. The essay must not exceed one column in length.
3. The essays for competition for the prizes to be given in any month are to reach us on or before the 15th of the preceding month.

The subjects for the March competition are as follows:

(1) The feeding, care, and management of pigs, from weaning time until ready for market in the fall.

(2) The training of colts, both driving and draught.

Essays for our April competition:

Corn Ensilage: Best method of making, and its value for feeding stock.

How to raise the draught horse our market requires.

## A New and Very Liberal Premium.

**Boys, this is for You.**—Hundreds of boys have been at work getting new subscribers for THE LIVE STOCK JOURNAL on our watch premium plans, and very many have been successful. But so many have tried to get the full number of ten and twelve and have not quite succeeded that, in order to reward them, we have devised a new premium, which in liberality, "takingness," and usefulness, cannot be surpassed.

**What Our New Premium Is Like.**—It is intended expressly for you, boys; that is, for you rather than for your elders. You are all anxious to get information; but you want to get it in an agreeable form, and upon topics of current interest. So our new premium is a *book*, a *new book*, a book of great interest, of most useful information, upon a topic now uppermost in the thought of everybody—the great continent of Africa.

**What Our Premium Is.**—It is entitled: *Fictorial Africa, its Heroes, Missionaries, and Martyrs; containing Stirring Narratives of their Perils, Adventures, and Achievements, together with a Full and Descriptive Account of the Peoples, Diet, Arts, Forests, Rivers, Lakes, and Mountains of the "Dark Continent."*

**Further Description.**—The above is the title, but it gives one a very poor and meagre idea of the book. We may say further that the work consists of 400 pages of heavy white paper, handsomely printed and bound, and moreover contains 115 beautiful engravings, many of them full-paged, and a fine copper-plate map of the continent, showing the latest discoveries.

**What the Work Is About.**—We give even a summary of the contents would require this whole page; all we can say here is that the work comprises a history of all the great exploring expeditions made into Africa, and full accounts of the great explorers themselves—Bruce, Mungo Park, Burton, Speke, Grant, Murchison, Baker, Moffat, Livingstone, Gordon, Stanley, and many others. Besides, the work is very full in its accounts of the travels of Livingstone, Gordon, and Stanley, particularly. In fact, it contains everything of importance that one wants to know concerning this most wonderful country up to the very latest times; its peoples, animals, fruits, grains, trees, scenery, climate, resources, products, etc., etc.

**How the Work is Illustrated.**—The illustrations are not only very numerous, but very interesting and beautiful. They comprise portraits of Livingstone, Gordon, and Stanley, and many other explorers; hunting scenes, war scenes, and domestic scenes; landscapes, mountains, waterfalls; native races, native animals, native forests; pictures of the slave trade, of caravan traffic, and of local traffic; in short, everything of interest that needs illustration concerning the whole continent, and that in great fulness.

**The Value of the Work.**—This book has been only just recently published in England. We control the market for Canada, and copies can be secured only from us. So the price is just what we say it shall be. But it would be considered a very desirable book at \$3.00 in any bookstore; and we shall not sell a copy at a less price. The postage alone on the book when we send it out as a premium will be 13 cents.

**What We will Give this Premium for.**—We will send this beautiful book, post paid, to any young stockman who will send us three new subscribers at \$1.00 each. As in all our premium plans, three trial subscriptions will count as one regular subscriber; but in every case the subscriber must be a new one, and not one already upon our books.

**This is a Liberal Premium.**—Now, boys, this is a LIBERAL PREMIUM. We know what we are saying when we tell you that in working for us to obtain new subscriptions in order to get this book, you will be earning larger wages than you will make at any other employment for a long time to come.

**How to go to Work.**—First make up your mind to do so. Then send us for sample copies, blank orders, return forms, return envelopes, etc. Then set right about the work, and do not rest till you have secured the requisite number of names. For further particulars see our "Publishers' Column."

**Finally.**—Finally, we are so satisfied that this book will give pleasure to you that we say to you: If, when you receive it, you do not find it just as we have represented it to be, we will return you your money, and yet send you THE LIVE STOCK JOURNAL if the subscribers you have secured. Address—

THE J. E. BRYANT COMPANY (LIMITED),

Publishers,

58 BAY STREET, TORONTO.

## The Feeding, Care, and Management of Calves, Intended for the Dairy, from time of Birth, until two-and-a-half Years Old.

By ADDISON H. BAIRD, Chesterfield, Ont.

[PRIZE ESSAY.]

In regard to the above mentioned subject, I will simply give you our method. The first thing we do is to find out the most profitable cows from which to raise calves. We do this, by regularly weighing each cow's milk once a week during the season, also by

testing for butter occasionally. We keep a winter dairy and raise winter calves, as we can raise better calves in winter than during the summer. About a week before the cows calve they are put into a box stall, but so soon as the calves are licked dry, they are removed from the cows' sight. The calves are allowed to run loose in a warm, dry box-stall, being tied up when they are fed milk, and left for a short time afterwards, so that they will not suck each other. By brushing and combing them occasionally, they become quiet and are much easier handled. The calves are fed on their mother's milk three times daily for the first ten days, when it is gradually changed to warmed sweet skim milk. As soon as they begin to eat, dry bran and chopped oats are placed before them, so as they grow older they get all the coarse feed they care to eat, such as cut mangels and clover hay. The calves are weaned at four months of age and fresh water placed beside them, and the quantity of coarse food increased, the object being not to fatten them but to increase their capacity, and to grow bone and muscle. As soon as the grass is ready for them they are ready for it, and if kept on good pasture during the summer they will grow very rapidly. The second winter they are tied up and fed on fodder-corn, cut roots and straw, with a small quantity of hay once a day. They are bred when they are fifteen months old, so as to have their first calf at two years old. The second summer they are put on good pasture the same as the first. After they have dropped their calf they are fed on corn-fodder, one half bushel of mangels and seven pounds of bran, chopped oats and barley. They are fed this way until about the 25th of May, when they are put out to pasture. Our heifers give an average of about 3,000 lbs. of milk for the first six months, after dropping their first calf.

## Feeding and Care of Veal Calves for Spring Market.

By STANLEY EVERALL, Chilliwack, B. C.

[PRIZE ESSAY.]

Soon after your cow calves, take a handful of common salt mixed with a spoonful of Epsom salts, and sprinkle it all over the calf, the cow will lick the calf perfectly dry, and in so doing will circulate the blood from head to foot, which will sometimes save a very weakly calf, and I think the cow gets rid of the after-birth very much better. Now be sure and let the calf have the first milk that the cow gives, as there is something in it of the greatest benefit to the calf. Our way is to let the calf remain with the cow till it has gained some strength, and had his fill of the first milk. You now remove the calf to a dry clean pen, where there is good ventilation (not draughts), and make a good bed of wheat straw, don't put a handful or two, but make a good comfortable bed, and shake it well up each time the calf leaves it, and remove all that becomes wet and dirty. Let the pen be in the quietest place you have, of course the nearer the stable the better. Make this pen nearly dark, and allow no more room than the calf can well turn around in. You don't want a big race that he can run the flesh off himself, and you want it quiet and dark, so he can sleep well, and not be bothered with the flies, and I think they are better loose than tied, if the pen is made small. Now the secret of making good veal in the shortest time, is to prevent scours. If a calf gets to scour he loses flesh instead of gaining it, and yet consumes the food. If you see any sign of scouring give the calf a dose of strong coffee, but mind there is no chicory

with it. Prevention is better than cure, therefore don't let him run about the stall after taking his meal, or he will pick something up. Let him have his meals regularly, not a feed and a fast. Don't keep changing his food to force him. I let the calf suck the cow three times a day for the first four days, and see that he has his fill every time. After the fourth day I leave him with the cow morning and evening, and milk the cow quite dry each time. I then find out what milk she has to spare, and if she runs short, give him another cow's, but if milked quite clean she will do her best to provide for the calf. At noon I give some balls, made as follows:  $3\frac{1}{2}$  lbs. of wheat flour, a handful of ground linseed, and a pinch of salt mixed together; warm a good handful on the stove and beat up an egg, and use enough milk to make it into a thick paste. Make this into balls about as large as walnuts, and give to the calf. After the first two or three times there will be no trouble in getting him to like them. As the calf gets older increase the quantity of the balls. Some farmers mix a spoonful of gin with each lot, but I think it good enough without. If you do not like to let the calf feed upon the cow, see that it gets plenty of milk from the pail, but give it as quickly as you can after drawing it from the cow.

### Thoughts From the Boys for the Boys.

Each month as the essays come in our confidence in the abilities of our young stockmen grows stronger. Though we estimated highly the capacities of our young friends, yet we must acknowledge that we were not prepared for such an outpouring of wisdom and sound common sense as that which monthly reaches us from our boys on questions that even many older stockmen would hesitate to write upon. Boys, we are indeed pleased to find you taking such a very active interest in this department. Do not, however, feel bound to discuss only those questions that we set from month to month, for if you have any experiences in stock or farm matters that you think would benefit others to know by all means let us have it. The object of this department is to stimulate our farmers' boys to give more attention to the stock of the farm so that they may grow up well informed stockmen deeply in love with their work. Sit down and write us at once.

ANDREW GOODCHILD, OF CRAIGLETH, ONT., sent in an essay on the care and management of fowls during the winter months, throws out some thoughts that we think worthy of being reproduced. He writes: "The fowls must be fed three times a day in the morning, with grain; at noon with scalded bran sprinkled over with a little black pepper, boiled potatoes, and scraps left over from the table, also a little boiled meat; at night with grain. They should also have a good supply of nests, so that any of them may lay without being disturbed." Though this essay came too late to hand for our competition yet owing to its excellence we have reproduced part of it.

LAURENCE HOGARTH, OF BROOKLIN, ONT., in an essay on the feeding and care of veal calves strongly advocates the feeding of clover hay for this purpose. This we endorse for there are few foods that will give better results than this either for calves or milking cows. Clover hay is a rich food, and not only that but cattle are very fond of it. Of course a great deal depends on how successfully it was cured and saved. If cut when just nicely in blossom it will be more eagerly eaten by cattle, and will give better returns than that cut after the blossoms have disappeared. Our essayist has done well to recommend that it be kept before the calves for they will early learn to eat it, and they will start to nibble at it long before they could be induced to eat any quantity of hard and dry timothy.

HENRY HOGARTH, OF BROOKLIN, ONT., (age 19 years), favors us with his views on the question of raising calves for the dairy. The essay is written well for one of that age, and contains many good ideas. He says: The first thing necessary to be done is to select a calf of a good milking family. There is more in this advice than many think there is. By careful selection of the bull, seeing that he also is of a good milking strain, by inquiring into the milking powers of his dams and also looking carefully into the records of the cow, we greatly increase the chances of the calf becoming a first-class milker. It is folly to

expect to raise a good dairy cow from a calf that is by a sire and out of a dam that are not of good milking strains. Our essayist has not given this feature too much prominence. We are prevented by want of space from giving more of this thoughtful essay.

ROBERT HENDERSON, OF ROCKTON ONT., (12 years old) writing on the care and feeding of veal calves for the spring market says in respect to the method of feeding them just before marketing: They should have a few pulped turnips with salt and chopped peas and oats, the latter mixed in equal quantities. This would be a good course as there are few foods that are more often used for fattening purposes than turnips, peas and oats, and experience has shown them to be amongst the first for fattening calves or steers. The turnips, though not a rich food, are very valuable for fattening purposes as they have a peculiar effect on the animal, keeping the digestive organs in excellent running order. Their value does not consist in being a nutritive food, as 100 lbs. of them often contains as much as 90 lbs. of water. Peas and oats, however, are very rich, and for this reason it is well to feed the mixture with such a food as turnips as advised by our essayist.

R. D. W. HUBBARD, BURTON, SUMMERY CO., N.B., gives expression to many sound ideas in discussing the question of raising calves for the veal market. He makes the statement: The stockman's first care is to have his cows in proper condition before calving for the offspring's vigor depends principally on the health and condition of its mother before its birth. It is generally admitted by all observant breeders that the dam has most to do with the constitution and healthiness of the offspring whether it be a calf or colt. This being so it is necessary in the first place to breed only from well matured cows that are robust and healthy. In the second place, as our writer says, it is important to have the cows in good healthy condition at the time of calving. It is a question whether we attach enough importance to this. To give abundance of rich milk a cow must be in good condition and healthy, and to nourish a calf rightly it is necessary that the milk flow be abundant and of good quality. It is true that the milk may be made so by adding flax seed, etc., but at the same time if the cow giving it is not robust and healthy the milk is apt to effect the calf materially in its growth.

W. D. ATKINSON, OF AMHERSTBURG, ONT., sent us an interesting essay on the feeding, care, and management of the foal during the winter months which we cannot let pass without noticing. From his we take this note: "As to the feed they must have food that is adapted to forming bone and muscle, and the more of these a young horse possesses the better he will be prepared for the work he will have to do in after life. One of the best foods for growing colts is good wholesome oats and bran about equal parts, with the addition of a little oil cake, which may be fed twice a day, or still better three times, and at regular hours. Begin with a small quantity at first, and gradually increase until the feeder thinks that he is feeding enough. The reason why I do not state the amount to feed is that all horses do not require the same feed to keep them in good growing condition; give them good wholesome hay, which if cut is much better." There is a great deal of good practical common sense in the foregoing. First, he speaks of feeding colts foods good for the production of bone and muscle. There is a great deal in that. Sometimes colts have what is known as "rickets," or weakness of the bones, which is due to the fact that they have not been fed such bone-producing foods as oats, or bran, etc. The course of feeding given in the forementioned essay is as good, if perhaps not better, than any we have received in that respect alone. The foods recommended are good, and the hint thrown out to increase the quantity gradually according to the wants of the colt that is being fed is sound practice, and one which those who are fond of fixed rules overlook to their sorrow. All colts vary so much in their peculiarities and capacities that the feeder must show his skill by feeding each such quantities as he thinks best for them.

## The Dairy.

### Notes on the Convention of the Creameries' Association.

The fifth annual convention of the Ontario Creameries' Association opened in the thriving town of Seaforth on Tuesday, Jan. 14th. It fell to my lot to deliver an address at its close, summing up its work. In compliance with your request for a brief report of the proceedings, I send you the gist of that speech.

President Derbyshire had taken pains to provide for the reporting of the meeting in the large daily papers. His example in this respect commends itself, and should be copied by others in charge of important gatherings.

Mr. McFarlane, the chief analyst of the Inland Revenue Department, read a useful and interesting paper on "Dairying in Denmark." The main points brought out were the benefits of co-operative or partnership butter-making; the advantages of winter butter-making; the payment for milk according to its butter-making value, and the payment of a premium above wages agreed upon to a butter-maker whose product brings the highest market price.

Governor Hoard of Wisconsin gave two of his inimitable "talks" on "The Dairy Temperament in Cows," and "Cheapening the Cost of Production." He advised breeding for a special purpose, and ridiculed the practice of breeding a large cow of small profit-making capacity. The capacity of the cow can be enlarged by careful feeding on the cheapest suitable rations. He cited the experiments made at one of the American stations which proved that the best cow on the best ration produced milk at a cost of  $1\frac{2}{3}$  cents per quart; the best cow on the poorest ration produced milk that cost  $5\frac{1}{2}$  cents per quart; while the poorest cow on the best ration made milk at a cost of  $4\frac{1}{2}$  cents per quart. At the Fort Atkinson creamery, he had paid one patron in 1888 at the rate of \$70 per cow for the butter-fat of the milk of each of 30 cows in his herd, and had offered the same patron \$15 besides for the skim milk of each cow. Another patron received only \$40 per cow for the butter-fat. When the market price comes down, the capacity—the milking talent of the cow—should be enlarged. When he found a cow ambitious in the wrong way, he sent her to the butcher. He was more ambitious to have the cow make butter worth 25 cents per pound than beef 3 cents. He recommended the feeding of hogs, to have them fit for the market, at about 160 to 200 pounds live weight. Up to a weight of 50 pounds live weight, a hog makes the largest increase for the feed consumed; up to 100 pounds, 10 per cent. more feed is required for every pound of increase; up to 150 pounds, 17 per cent. more feed will be consumed; up to 250 pounds, 24 per cent. more feed will be used for each pound of increase; up to and over 300 pounds, from 34 to 48 per cent. more feed is eaten for each pound of increase. He found skim milk to be worth 22 cents per 100 pounds for making pork when hogs sell for \$4.50 per cwt. By the use of corn ensilage, the cost of feeding a milking cow may be reduced from 24 cents to 9 or 10 cents per day.

Prof. Robertson, in a talk on "Winter Dairying," said the popular conception that dairying is concerned only with the production and manipulation of milk, and the manufacture of butter and cheese, is an erroneous one. Dairy husbandry is an occupation of wider range, and has for its aim the production of fine food of concentrated quality. The three-fold aim of the dairyman's work is to produce and manufacture food, to maintain fertility in the fields, and to provide occupation at remunerative rates. He should dispose of his product at the time when the terms of market exchange are most in his favor. That is, the winter time for butter, the summer time for cheese, and the whole year for beef and hogs. The cow's earning season should begin between October and December. Corn ensilage of excellent quality can be provided in Ontario at a total cost of \$1.75 per ton in the silo, and every two tons of it will feed as far for milk or beef as one ton of hay. Butter can be made in creameries at one-sixth the expenditure of labor required in small dairies. The quality can be made uniform, and thus

large and profitable export trade may be developed. The British markets import twice as many dollars worth of butter as of cheese annually. The factory system has given us reputation and place for our cheese; it can do likewise for the butter for export. The transportation facilities make it possible to ship butter during the winter without deterioration of quality. Ontario is less than 1 cent per pound distant from the best markets of Britain. When \$1,000,000 worth of wheat is shipped from the country, \$240,000 worth of the substances of fertility have been removed; when an equal value of fine butter is exported, the soil of the country is impoverished to only the extent of \$850. The oil-test-churn is a useful apparatus for the equitable distribution among the patrons who furnish cream of the proceeds of butter sales. The samples of cream should be allowed to soar thoroughly before they are tested by churning. To a member who complained that if everybody went into winter dairying the price would come down and the profits disappear, Prof. Robertson quoted, "Strive ye to enter into the strait gate, for strait is the gate and narrow is the way and few there be that find it."

The citizens of Seaforth were most cordial in their hospitality to the members in attendance. J. W. R.

**Despatch in Buttermaking.**

Both milk and cream are so easily tainted by all kinds of odors and smells, that may exist in an impure atmosphere, that it is a very important matter to hurry forward the whole process of buttermaking, as rapidly as consistent with good management. As J. I. Carter aptly expresses it in *Hoard's Dairyman*, "waste no time from the milk pail to the butter plate, if you wish to make good butter." This is advice of the right kind, and it must be followed, to get the best results in quality, and the greatest returns in quantity. Combine despatch and cleanliness, in all its forms, and thus doubly guard the milk and butter against any outside influences that may mar the product. Leaving the milk for any length of time exposed to an atmosphere that is laden with any variety of smell, is sure to give it an abnormal flavor, and this will be reproduced to some extent in the butter. In the hurry of other work, or perhaps through sheer carelessness, the milk is very often put outside and allowed to stand a half hour or so before being set away. This not only exposes it to different odors in the atmosphere, but allowing it to stand lessens the chances of thorough separation, as demonstrated by Prof. Henry, who found the loss from delaying the setting from 20 to 30 minutes, to be from 4 to 7%. Such a loss is considerable, and the prevention of it is surely worthy of the thought and care of every buttermaker. In the matter of churning, speed has a fixed limit. If the butter is brought too quickly, it is sure to be of inferior texture, being greasy in its nature, and no amount of skilful after management, will restore to it that peculiar grain, which is ever the striking feature of a butter of good quality. From twenty to thirty minutes to bring the butter in, is a good speed, when the cream is in proper condition as to ripeness and temperature.

**The Dairy Test at London.**

**AYRSHIRES VS. JERSEYS.**

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL:

DEAR SIR,—Most of your readers, I think, will be surprised at the report of Professor Robertson, who conducted the dairy test at London, especially at the great disparity he makes out between the two breeds, placing the Jerseys on this occasion so

far ahead of their opponents, when the Ayrshires on so many former trials of this nature, have been declared the victors. The one great object that interests the public at these trial tests, is, I presume, to ascertain, if possible, which breed of cattle furnishes the material for the best general purpose dairy cow. The pedigree of such an animal is of minor consideration, and it will be my object in this letter to show that had the test at the late Provincial exhibition been conducted on correct and approved principles, and according to the rules and regulations that governed such tests at former exhibitions, when such gentlemen as Professor Brown, Mr. Chesman, and others, were the judges; rules, in fact, that take precedence in Great Britain as well as with our neighbors across the line, the Jerseys would have fallen in the rear, and the Ayrshires would have been proclaimed the winners. Professor Robertson does not say in his report how he estimates the percentage of profits in favor of the Jerseys. Evidently, quantity was not taken into consideration, only the quality of the milk produced. I protest against this manner of judging as incorrect and absurd, and I think the public in general will view it in this light also. Ought not milk to be estimated at a given value per quart as well as butter at so much per lb? Will a small quantity of Jersey milk produce as much cheese as double the quantity of Ayrshire milk? We will not dispute the point that the Jerseys give the richest milk of, perhaps, any other breed, but at the same time we know that the great majority of them produce only a very small quantity, and the problem that wants solving is, which is the most useful and profitable animal, the one best adapted to fill the requirements of the general public—this little fancy butter cow, or the larger general purpose animal, giving a fair quantity of butter, and furnishing at the same time much more milk for family use and the general requirements of the farm? We submit, therefore, that in a test of this nature, both quantity and quality ought to be taken into consideration, and a certain number of points be allowed for each.

The *Ohio Farmer* furnishes the rules and regulations which take precedence in the United States and were adhered to at their late State Fair, where different breeds of cattle competed against each other. Here it is—"One point shall be allowed for every pound of milk, twenty points for every pound of butter, four points for every pound of solids, other than butter, counting twenty days after the date of the last calving of each cow, one point shall be allowed for every additional ten days thereafter up to the time of the test." Here I remark, on behalf of the Ayrshires, that one of them had been in milk for over twelve months, and another eleven months, and that two of them were only three years old, and a certain number of points ought to have been allowed on that account, as they could not be considered to be at their best, while their opponents were over five years old, fully developed, and comparatively speaking, recently calved and in full flow of milk. These facts should be all considered, but, even then, with all this in their favor, had they been judged by the standard above quoted, and Professor Robertson's own report taken as to the amount of product yielded by each three cows, in the aggregate they would have stood thus:

The Ayrshires gave:	The Jerseys gave:
245 lbs. milk at one point per lb..... 245 00	175.75 lbs. at 1 point per lb..... 175 75
8.44 lbs. butter fat @ 20 points per lb..... 168 80	14.12 lbs. butter fat @ 20 points per lb..... 282 40
26.09 lbs. solids @ 4 points per lb..... 104 36	27.27 lbs solids @ 4 points per lb..... 108 88
639 days calved, one point for 10 days..... 63 90	136 days calved, one point for 10 days..... 136 60
582 06	580 63

Here we find a balance in favor of the Ayrshires, instead of a large one against them, and had their milk been converted into cheese, which all must acknowledge to be the great dairy export of Canada, and which manifestly attracts the attention of the great majority of those engaged in this industry throughout the Dominion, the balance in favor of the Ayrshires would be very much larger. Allowing 10 lbs. of milk to every lb. of cheese and allowing 3 points for every pound of cheese as Mr. Chesman did at Toronto in 1885, we have:

Ayrshires.	Jerseys.
245 lbs. of milk giving in points..... 73 50	175.75 lbs. milk giving in points..... 52 72
639 days since calving 63 90	136 days since calving 136 60
137 40	66 32

There is a small account of some twenty-eight cents placed against the Ayrshires for the amount of food consumed while the test was in progress. This, however, may be easily accounted for from the fact that the Jerseys, though highly fed before, were stinted in their food when it was going on. This was well known and freely spoken of at the time, and it was suggested to

me to do the same, but I declined to practice such tactics, preferring a fair and honest test, both for my own information and satisfaction, as well as for that of the public. We considered it best to feed our animals while on trial, just the same as they had been before. Had we withheld the feed as proposed, the debtor account might have been on the other side, for anyone, I think, who has kept both Ayrshires and Jerseys as I have, will be fully convinced that the Jerseys will take the largest amount of food of the two. I therefore, contend, that had those two lots of cows been judged according to their merits and by these acknowledged correct rules, the prize, as on most other occasions, would have been won by the Ayrshires.

The letter of your correspondent R. A. G., on the late Provincial Dairy Test, in your December issue, is well to the point, and treats this question in a clear and common-sense manner. I hope all your readers who are the least interested in this question, will read and ponder it well, and I feel certain they will easily decide which cow is best for all practical purposes, and as such would "prefer to take home with them."

Similar prizes to that contested for this year, may be offered again next, but unless the standard for judging is changed, and quantity as well as quality is considered, I venture to predict there will be very few entries, in fact, none except Jerseys, for the rules at London were most decidedly one-sided and unjust towards any other breed.

Yours etc.,  
Sydenham Farm, Oshawa, Ont. THOMAS GUY.

**American Show-Yard Dairy Tests.**

EDITOR CANADIAN LIVE STOCK AND FARM JOURNAL:

Those who have been watching the public tests of dairy cattle on the "other side," must know that the "battle of the breeds" has been waged in every dairy State of the Union. Many thousands of dollars have been offered at the various State fairs, until it may be said that the American stock papers have been kept busy giving the results, and the outcome is that in summing up, at least nine-tenths of all the prizes offered either for milk or butter have been won by the Holstein-Friesians. We would think that if anything could decide which breed deserves the supremacy these tests should do it. But do they stifle all cavilling? not much, there will still be plenty of "ifs" floating around.

R. A. G.

**Poultry.**

**Equalizing the Prices Paid for Eggs.**

It has been the complaint in all the past, that there is no encouragement to grow large eggs for sale, since small ones sell for the same price, and in this complaint there is a large measure of truth. The simple remedy has been proposed of selling them by weight, but simple as is the remedy, the difficulty of persuading men to adopt it is very great. While awaiting legislation on this matter, which is we believe, sure for us sometime, another plan may be adopted. If the farmer would but sort their eggs, they would be able to make the grocer or consumer vary the price paid for them, and the grocer in turn, could compel the customer to do the same. This is the plan adopted in Britain, and on the continent of Europe, and in several countries. The injustice of getting only so much for the eggs of the large Brahma as for those of the Game is very apparent, and yet it is an every day occurrence in Canada. It would require but a little persistence on the part of the seller to introduce this custom, the justice of which is so apparent that it could not be objected to on any reasonable grounds.

FOR THE CANADIAN LIVE STOCK AND FARM JOURNAL.

**Raising Chickens.**

NOTES FOR FARMER AND FANCIER.

By W. B. COCKBURN, Greenhouse Farm, Aberfoyle, Ont.

If poultry cares become drudgery, better give them up at once, for as it becomes distasteful, just so soon you will begin to neglect them, and your fowls suffer

accordingly. A poultry keeper must take an interest in what he is doing, if he wants to make it a profitable and pleasant occupation.

Farmers may hatch all the chickens they have range and time to care for, when they raise for market only. But whether fancier, or farmer, breeder for fancy feathers and form, don't undertake too much.

Hatch all chickens you want before May 1st if possible, as the pullets will then begin to lay early in the fall, when eggs command the highest price.

Skim milk is excellent for young chickens, either used instead of water for drink, or in mixing with soft feed.

If the mother hen has free range, lice give little trouble: we hear little complaint from farmers' wives as to the destruction of chicks by lice.

The purpose of not giving roosts to chicks before four months old, is to prevent crooked breast-bones, caused by roosting and resting the breast-bone on hard roosts while young and pliable. Make nests deep, have them so constructed that the hens must get down into them, and they cannot then eat their eggs. A hen only attempts to eat eggs when she can get at them conveniently, and she wants plenty of room for that purpose. Darkened nests will do much toward preventing the egg-eating habit. The use of plenty china rest eggs is an additional aid. Farmers, one hundred well cared for, well fed, well grown, healthy, hardy, handsome chicks is better than three hundred scrubs—scrubs because half fed, poorly attended, and crowded for range by day, and roosts by night.

ROBT. CRAWFORD, Canboro, Ont., writes:—I intend to do all I can for the CANADIAN LIVE STOCK AND FARM JOURNAL. I read every number and study its pages thoroughly. The JOURNAL is a book which every farmer should take.

## Horticultural.

For the CANADIAN LIVE STOCK AND FARM JOURNAL  
The Garden of the Farm.

By Mrs. ANNIE L. JACK.

A lady of an observing turn of mind once said to me, "Show me the dooryard and I will tell you the character of the inhabitants." We were passing, at the time, through a village where gay flower beds told of the taste, or want of taste of the different families, and I answered: "Show me the fruit and vegetable garden and I can tell the *cuisine* of the family."

It is for this reason that I am about to write for the benefit of many readers how a farmer may have a garden without much extra labor, and enjoy all the luxuries in their season. There is surely a piece of land near the house suitable for this purpose. It can be plowed as for an ordinary field, harrowed and marked off into rows—wide enough apart to be worked by single plow and cultivator. We have ours twelve feet apart, divided by fruit trees or bushes every twenty-four feet. Vegetables and fruits thrive just as well in rows as in little square beds, that require digging and constant hoeing, besides, the former are more easily managed with little more trouble than field culture. I do not think any one would care to put field peas on their table after eating the "American Wonder"—or field corn after the toothsome "Early Minnesota." Does it look afar off while the frost is in the ground, and the snow

covers the earth? Then prepare by studying the best methods of culture, the best seeds and plants suited to your climate and conditions. There are many catalogues to be had by application, and one can spend some profitable time comparing them, and deciding on their respective merits. To begin with vegetables, one has wide range of choice, and has only to select the best "early" and "late" to keep up a supply of peas, beans, and corn. Wethersfield onion-seed, "Egyptian turnip" beet, "Student" parsnip, half short carrot, "Sandringham or Turnees" dwarf white celery, which can be planted on the ground after early peas come off. A bed of herbs may be made where thyme and sage savory and marigolds with a bordering of parsley will furnish garnishing and soup flavoring for the season. The "Beauty of Hebron" is the best early potato—I have tried them side by side with other early kinds, and find them an advance of three days over all except the old kidney potato, now rarely met with. Cauliflower, cabbage, tomato and egg plants are better raised in a hot-bed. It is not much labor where manure is plentiful, to place a cart-load or two in some sunny protected corner—let it heat for three days, then sift on some earth, and have a sash ready to put on. When the earth feels warm to the touch—just as you would like to put in seeds in spring out of doors—put in your seeds. A little attention to watering and airing will give you a full supply of these vegetables to set out in the latter part of May. I have grown all these things, however, in a garden row, sown just at the time of putting in onion seed, filling the ground with turnips in May after the plants were all transplanted, but they are rather late. Squashes are a treat, but take up a great deal of room for the vines to spread. I know an old lady who grows them successfully every year behind the little stable where she keeps her cow—the ground there being very rich and warm, and hence well suited to the needs of this riotous vegetable. If there are children in the house let them each take a vegetable to make a specialty, and if there is a county fair, let them enter for prizes whether they win or not. A little nine-year old girl at my elbow showed beets last year, and her second-prize money of one dollar is more valued than if it had been a gift to her, for it is prize money and she earned it. And here I would speak a word for the children at our shows and larger exhibitions. Surely something might be done for them to inculcate a taste for horticulture among them, and to encourage in them a love for flowers and other products of the soil, that would help them to a higher appreciation of nature's gifts, and how best to cultivate them. Window gardening should be encouraged, and all attempts to beautify and adorn a home. I should not like to live in a house, and call it a home unless the "dooryard" had some shade trees, and a bit of lawn, be it ever so small, that the children can call a play-ground, where one can sit at eventide, and enjoy the sunset, and the fresh sweet summer air. Land is so cheap, and trees grow so rapidly—flowering shrubs of such beauty and fragrance can be had for a mere trifle, that it is a wonder one sees so often the bare denuded houses without even a "laylock" bush to send forth its sweetest fragrance in May time.

As to fruit, of which I will write later, no farmer can enjoy the full benefit of his privilege, as landholder, unless he has a crop of the daintiest, and most perfect fruit of all varieties, for his table. A centre piece of luscious strawberries, grapes or pears, rosy apples, or other fruit in its season, is a better appetizer in hot weather than the "stalled ox." So in this, as in subsequent articles, when I may write of "fruit," my advice and motto is "*plant*."

## Farmers' Daughters' Column.

### Our New Department.

So gratifying has been the success of our "Young Stockman's Department" that we have been led to believe through this experience that a department devoted to a practical way to the interests of our farmers' daughters would be as warmly appreciated and encouraged by them; for it is an opinion of ours that they are fully as enthusiastic in other matters of the farm and garden as the boys are in their special spheres of work. Our idea conforms with the wave of public opinion in favor of the practical education of the girls of the day, which now so strongly sweeps over all civilized lands. It is not our intention to pander to present vanities, but to be an agent in reform, and at the outset we wish it to be understood that this department is not to be devoted to the discussing of the latest fashions and other like material, which abound so lavishly in most other periodicals, but it shall be founded and conducted on the principle that our girls of the farm are capable of grappling with the questions of the garden and the farm. We hold that it is no more the province of an agricultural paper to keep its lady readers informed on the latest styles of dresses in Paris than it is to keep the brothers and fathers posted on the latest cut of coat in Toronto.

This idea of conducting a department on such lines is original with us, and it has grown out of the principle at all times in our minds of making our paper an energetic business periodical, that all may find within its pages matter that has to do with the various questions that crop up in a useful every-day life, and not such as may appeal to the frivolous phases of our work. We rely freely on the good sense of our farmers' daughters to enable us to make it a complete success, and we, in turn, hope to supply them, through themselves, with wholesome mental food, which, if digested, will nourish their minds so that they may have a stronger grasp on the different phases of their work, and live a more useful and more enjoyable life.

As before stated, we shall conduct this column on like lines to that of the "Young Stockman's Department," offering prizes for essays on such practical subjects as we think our farmers' daughters are or should be well informed upon, as, for instance, the treating of the different questions that arise about poultry, or those of the garden.

For next month's competition, the following are the subjects from which to choose:

(1) The feeding and care of chickens from time of hatching until prepared for market.

(2) The growing of strawberries for home use.

For our April competition, the following are the subjects from which to choose:

(1) The feeding and care of turkeys from time of hatching until ready for market.

(2) The making of butter on the farm.

For the best essay on any of the above subjects, we offer any of the following as a prize:

The Canadian Queen, one year.....	\$1 00
Seeds, cuttings, or bulbs of any kind, selected from the catalogues of any seedsmen advertising in our columns to the value of.....	1 00
Vick's Illustrated Floral Magazine.....	1 00

This list will be added to.

The essays for the March competition should reach us as early in the month of February as possible, but we shall not close the entries, owing to the shortness of notice, before the 20th of that month. For the April competition, essays must reach us on or before the 15th of March. Now, girls, let us hear from you. Prove yourselves to be possessed of as strong an ambition and of as good abilities as the boys.



## Jottings.

**Selected Farms.**—Edward Harris, 23 Toronto Street, Toronto, has a fine list of farms for sale. Those on the lookout for farms should correspond with him.

**Farms for Sale.**—Parties desirous of obtaining farms, either for dairy, stock-raising, or general farm purposes, will do well to send for "Lake's Land List." See their advertisement in another column.

**Standard Windmills.**—Those proposing to erect windmills for next season should write to the Ontario Pump Company, Toronto, for catalogues and prices. Nowadays a good windmill is an almost indispensable adjunct to a stock-yard.

**A Pushing Firm.**—The J. B. Armstrong Manufacturing Company, of Guelph, renew their advertisement with us for another year. They appreciate THE LIVE STOCK JOURNAL as a medium for bringing their cutters and other conveyances under the notice of the better class of farmers.

**Investments Proposed.**—Many people are desirous to invest in Toronto real estate property, but do not always see how to do so. Messrs. J. B. Boustead & Co., in an advertisement in another column, propose to exchange Toronto real estate for farm property. Those interested in making such an exchange should write to them.

**Canadian Store Cattle in Aberdeen.**—A lot of 340 Canadian steers, heifers, and cows which arrived in Aberdeen 20th November from Montreal, were sold by Mr. Middleton. Prices for steers ranged from \$59 to \$77, for heifers \$55 to \$65. Cows met a brisk market and brought from \$75 to \$117 each. John Swan & Sons had 240 Canadians the same day which brought from \$50 to \$85, average about \$60.

**A Good Farm Truck.**—Perhaps no single article on the farm is of more importance than the farm wagon. The "Farm Truck" manufactured by the Bain Wagon Company of Woodstock, Ont., is claimed to be one of the most satisfactory wagons for every sort of farm work that the inventive genius of this continent has produced. We are glad to learn that the business of this company is prosperous, and their sales large.

**Good Seeds a Desideratum.**—We would call the attention of our readers to the timely advertisement of Messrs. Robert Evans & Co., seed merchants, of Hamilton, which appears in another column. The Messrs. Evans pay particular attention to the needs of farmers, and they have a variety of mangels, the "Saw Logs," that they are especially proud of. Indeed, their list is full in every sort of field and garden seeds. Write to them for a catalogue.

**A Useful Farm Implement.**—Good farming is impossible without good implements, but no implement on the farm is so frequently badly made as the roller. Those, however, who want a real good roller should write to the Gowdy Manufacturing Company of Guelph, Ont. Send to them for their catalogue, at any rate and get information, not only concerning land rollers, but straw cutters, root pulpers, furnaces, and many other sorts of useful farm appliances as well.

**Vick's Floral Guide.**—This interesting catalogue issued by Jas. Vick, of Rochester, N. Y., reaches our tables as bright and comprehensive as ever. It contains a number of fine plates of all kinds, besides giving in the reading matter descriptive titles of the varied productions of this firm, much information of value. It is a complete catalogue of all kinds of seeds for the garden and field, and among these are to be found the latest novelties of the day. It is well worthy a careful perusal.

**Market Gardeners, Attention!**—Messrs. John A. Bruce & Co., of Hamilton, Ont., well-known as extensive dealers in garden and field seeds of all kinds, again place with us their advertisement relating to the spring trade. This long-established firm have issued a catalogue which will be gladly sent to all applicants. They are particularly careful in sending out the cleanest seed, true to name, and in this way they have secured the confidence of purchasers. See their advertisement.

**Seed Catalogue of Steele Bros.**—We have received from the Steele Bros. Company (Limited), of Toronto, their catalogue for 1890. It is one of the most elaborate and beautifully gotten up catalogues we have seen. It contains a full list of every kind of seed required for the farm, the vegetable and flower garden, the greenhouse, and the window garden besides lists of bulbs, garden tools, etc. Its illustrations are very numerous, and no one can turn over its pages without acquiring a great deal of information.

**Canada Coach Horse Society.**—This association convenes at London on Tuesday, Feb. 4th, 1890. Those who have our light horse interests at heart should exert themselves as much as possible to be in attendance. As the association has been but lately formed, it is in need of the hearty encouragement and substantial support of everyone interested in this line of work. Various matters within the scope of the association will be discussed. An advertisement giving particulars will be found in our advertising columns.

**Helderleigh Farm Nursery.** The proprietor of the foregoing farm, Mr. E. D. Smith, of Winona, Ont., as usual, advertises with us a varied lot of nursery plants, which he offers to fruit-growers and others. In grape vines, Mr. Smith makes a specialty of the Concord and Niagara; in raspberries, the Golden Queen and Marlboro, while in all other fruits, vines, and plants, he keeps a complete stock of the best and leading varieties. Mr. Smith has earned a reputation as a nurseryman, as he handles only reliable varieties.

**Live Stock Meetings.**—The Ayrshire breeders meet on the 4th of February, at the Albion Hotel. The Shorthorn

breeders meet on the 5th of February, at Shaftesbury Hall. The Draught Horse Breeders' Association meet on the 4th of February, in the office of Mr. Henry Wade, Sec'y. On the 6th, the annual meeting of the Clydesdale Association meets at the Albion Hotel. The Dominion Dairymen's Association meets at Ottawa on February 17th, 18th and 19th. The Dominion Fruit Growers meet at Ottawa on February 19th, 20th and 21st.

**Nova Scotia Dairymen.**—We are indebted to the kindness of Mr. Paul C. Black, of Falmouth, Nova Scotia, the secretary of the Nova Scotia Dairymen's Association, for the report of the proceedings of their annual convention. Many suggestive and thoughtful papers are contained in it, not only from local authorities, but from some of the best in the Dominion as well. The whole trend, however, shows that the problems with which our Maritime friends are wrestling, are almost identical with those claiming the attention of the other Provinces. In the worthy field before it we wish our society of brethren down by the sea all possible success and speed.

**Harrows.**—Messrs. J. S. Miller & Son, of Morrisburg, Ont., have been long before the farmers of Canada as manufacturers of farm implements, and each year has added to the degree of confidence reposed in their integrity, and the estimation in which they are held by the farmers in the Dominion. Their special features for the year 1890, are the Steven's Spring Tooth Harrow, and the "New Model" Disc Harrow, both of which are fully shown and described in our advertisement columns, so that no comment of ours is needed further than to say that any farmer needing harrows will do well in his own interest to examine fully these implements, and weigh well the testimony of his fellows. They have met with a warm reception and have given the best of satisfaction wherever fairly tried.

**Coloring Butter.**—In winter time, the deep yellow color we all like to see in butter is apt to disappear, and an unpleasant paleness takes its place, much to the butter-maker's regret, who, on that account, misses a cent or two or more per pound in price. Some are of the opinion that with the right cows, proper feeding, and proper attention to all the niceties of the dairying art, the standard yellowness of butter could be secured all the year round; but seeing that, in practice, such is not the case, an artificial coloring has to be employed. We know of no better coloring matter than the "Improved Butter Color" advertised in these columns, as well as in those of nearly all dairying journals throughout the States, this fact alone bespeaking a large sale and a very general use.

**Manitoba.**—We understand that there is considerable progress in Manitoba at the present time, and that more land will be under cultivation this year than ever before in the history of the Province. This news is of special importance to Ontario farmers. The latter should also not fail to lose sight of the fact pointed out by Mr. McMillan, the Manitoba Government agent, when addressing several of our Institute meetings this winter, that it is not only in grain raising that progress is noticeable, but that there is a marked increase in the number of cattle, sheep, horses, and pigs. The figures given by the Government show very mistakenly that this is so. This year it is said there will be over 1,000,000 acres in crop in Manitoba alone. There is food for reflection in this for Ontario farmers.

**Catalogue of the Greenwood Herd.**—We have to hand, through the favor of the proprietor, Mr. Arthur Johnston, of Greenwood, Ont., the annual catalogue of this well known herd. Mr. Johnston is a breeder, and extensive importer of Shorthorns and Clydesdales, has always been held in high estimation by his fellow importers, and has proven himself worthy of the full confidence of purchasers; and these have been gained through the importations of just such animals as now figure in the catalogue lately issued. Though strong in Scotch Shorthorns, this herd is not without other strains, to meet the varied wants of many customers. Prime animals of all ages and both sexes in number give to the purchaser every chance to make a happy selection. Those interested should not fail to drop a card to the proprietor for this catalogue.

**Conservatism vs. the Rago for Novelties.**—The Seed Annual for 1890, issued by D. M. Ferry & Co., of Detroit, Michigan, has reached our table. Its cover this year is especially artistic and attractive, and its contents, as usual, interesting and instructive. Ferry's seeds are thoroughly reliable and always come true. The directions given in the Annual for the cultivation of both flowers and vegetables are so full and explicit that no one can fail of success who uses their seeds and follows their instructions. D. M. Ferry & Co. are very conservative, both in offering new sorts and in their claims for them when offered; but they take pains to inform themselves as to the true character of all new varieties, so if some much lauded novelties are not found in the Annual, the probability is they have tested them and found them of no value. A request sent to the firm at Detroit, Michigan, will bring you a copy of the Seed Annual for 1890 by return mail.

**Feeding Unripe Roots to Sheep.**—The loss from scour when sheep are first put on Swedes is generally attributed wholly to the change of food, whereas, it is more often owing to the unripeness of the root. The loss during first few days of Swede-feeding is due to unripeness, for it is noticeable if the Swedes are not fed until they have matured there is very rarely any serious result. It is more noticeable, too, because sheep like a change or variety of food, and the great growth of the Hampshire sheep is not a little due to the larger choice and change of food provided for them. Doubtless the change of food has something to do with the upsetting of the system when they first go to Swedes in autumn, but it is because of the unripeness, and it has to adapt itself to the change. If sheep must go on the roots while they are unripe they should only be allowed a limited quantity, and the necessary bulk should be made good by the addition of dry food, such as hay or chaff, to which malt dust or other savoury flavoring is added to make them clean it up. Dry food is the great safeguard to sheep under any unfavorable circumstances, but though this is realized by most people they very often will not start to use it until they see the sheep suffering for the want of it.—*Mark Lane Express.*

## Publishers' Column.

**Our Watch Premium.**—Our *Watch Premium* has been more successful than we anticipated, and we have sent out many watches to our young friends which, we are glad to say, have given great satisfaction. We could print pages of testimonials in reference to the good opinion which our young friends have of the watches and of THE JOURNAL, but our space is too valuable, and so we must content ourselves with one or two.

**Testimonial from Douglas Campbell.**—DOUGLAS CAMPBELL, of Corwin, Ont., writes: "I am now in receipt of watch No. 2 from Messrs. Kent Bros., and of my guarantee for the same, all in sound condition and in good running order. I am delighted with it, and think you have acted very honorably in the matter."

**Testimonial from Albert Junkin.**—ALBERT JUNKIN, of Fenelon, writes: "I received the watch to-night. It is all right. I am perfectly satisfied with it. I think it is as good as you represented it to be."

**Testimonial from Henry Morphy.**—HENRY MORPHY, of Stratfordville, Que., writes: "Watch to hand, and in reply I would say I am perfectly satisfied."

**Testimonial from Hugh McAlpine.**—HUGH McALPINE, of Aughrim, Ont., writes: "I have received the watch, and in return I give you many thanks. The watch is a very handsome one. It is just the size I was wishing for. I may say that THE LIVE STOCK JOURNAL did not recommend it equal to its appearance. My subscribers think the L.S.J. an excellent paper. You may rely on them as being permanent."

**Testimonial from Robert Crawford.**—ROBERT CRAWFORD, of Cansboro, Ont., writes: "I received my watch No. 1 yesterday, Monday, Dec. 23rd. It is all, and more than all, that I expected. It is a strong and nice-looking watch, running and keeping splendid time. I wish THE JOURNAL every prosperity."

**Testimonial from W. H. McCallum.**—W. H. McCALLUM, of Forest, Ont., writes: "I received watch No. 2, and write to say I am well pleased with it. It is a very handsome watch, and is much better than I expected. It is all that it was represented to be. I wish THE LIVE STOCK JOURNAL great success."

**Testimonial from Walter Cross, and Others.**—WALTER CROSS, of Beeton, writes: "I received the watch all right on the 22nd inst. I am very well pleased with it. I think I am well paid for my trouble."

T. T. BROWN, of Tilsonburg, Ont., writes: "The watch to hand all right. Many thanks."

JOHN CUMMING, of Lancaster, Ont., writes: "I received the watch all right, with many thanks."

**Many More Testimonials.**—We could add many more testimonials, some of them very laudatory, but our space is too precious.

**Two Watches to One Family.**—In several instances where one member of a family has obtained a watch, another member has at once set to work to obtain one also. ALFRED VANCE, of New Hamburg, having obtained one of the silver watches, his sister, Miss Josephine Vance, immediately went to work and obtained enough subscribers to procure a beautiful silver hunting-cased lady's watch. What one has done, others can do. We shall be glad to supply our young lady friends with very pretty time-pieces whenever they send us clubs of ten or twelve.

**Satisfaction Guaranteed.** These watches are guaranteed to give satisfaction. We do not send them out ourselves. They are all shipped by the responsible firm of Kent Bros., Toronto we never seeing them. If there is any defect in the watch Messrs. Kent Bros. will make it right. We have heard of only one watch among all that we have sent out that has not given perfect satisfaction. We at once wrote to send it back, and it was immediately replaced by another.

**These Watches are Good.**—These watches are good. Several of the young men in our office have provided themselves with them, and carry them constantly. They are perfectly pleased with them, and declare them to be good, honest time-keepers, and in every way satisfactory.

**Watch No. 1.**—Watch No. 1 (a solid, strong, hunting-cased, stem-winding watch) is given for ten new subscribers to THE LIVE STOCK JOURNAL at the regular rate of \$1.00 a year.

**Watch No. 2.**—Watch No. 2 (a beautiful solid silver watch, stem-winding, and either open-faced or hunting-cased) is given for twelve new subscribers to THE LIVE STOCK JOURNAL at the regular rate of \$1.00 a year.

**Trial Subscribers.**—We will send THE LIVE STOCK JOURNAL for six months, on trial, to any address for 25 cents. All trial subscriptions must be written out on our blank order-forms provided for that purpose.

**How Trial Subscribers Count.**—Three new trial subscribers count as one new regular subscriber in all our premium plans.

**Description of Our Watch Premiums.**—If any of our young friends want to go to work to earn one of these good watch premiums, let them write to us and we will send them full descriptions, order blanks, return forms, sample copies, and all necessary information for going to work to form clubs.

**Why Cannot You, Young Friend, Obtain a Watch?**—Why cannot you obtain a watch, as so many others of your comrades have done? Have you tried? If not, set to work at once.

**The Banner Oat Premium.**—The Banner Oat Premium, described in another column, is a most liberal one. Read the description carefully. If you want to get possession of this most excellent variety of oats, this is the best chance you can have.

**Our New Premium.**—In another column, under our "Young Stockman's Department," we describe a new premium. We took a great deal of pains in devising this premium to secure one that should be liberal, attractive, useful, popular, and easy to obtain. We think we have obtained all this in our "Pictoria"

Africa Premium." For three new subscribers, boys, we will send you a book of 400 large and handsome pages, 115 beautiful engravings, and a copper-plate map, replete with information of the most valuable kind concerning that most interesting of continents, Africa. Read the description of the premium, and take advantage of the offer at once.

Sample Copies, etc.—We shall be glad to furnish sample copies, Blank Order Forms, and all other necessities for the securing of subscriptions, to anyone desiring them.

Commissions.—We will pay liberal cash commissions to anyone who will send us new subscribers; but we say frankly that these commissions are not and cannot be so liberal as those which we pay otherwise, for these latter are the most liberal ever offered in Canada, and are the fruit of much care on our part. Still, our cash commissions are quite liberal, and we shall be glad to quote them to anyone desiring to work for us on that basis.

How to send your money.—Send it by Registered Letter. This is a perfectly safe and satisfactory way. If the amount is large send by Post Office Money Order. Never send money in an unregistered letter. There is no means of tracing it if it be lost, and losses are sure to occur now and again.

Keep your eye on this column.—Keep your eye on this column. In it every month you will find something to interest you, and also to profit you, as we hope. Now, send in your orders as fast as you can.

The picture of the Ontario Agricultural College.—We have received from the late managers of the JOURNAL a number of fine lithograph pictures of the Ontario Agricultural College. It is a beautifully colored plate, 14x27 inches, giving a good view of the College and the surrounding buildings and grounds, and quite suitable for framing. To every present subscriber sending us money, either for arrears or for renewals, we will send a copy (if requested) of this picture until the stock is exhausted.

How to address your letters.—Address all correspondence to THE J. E. BRYANT PUBLISHING COMPANY (Limited), 58 Bay Street, Toronto. Put all matter intended for the editor, all items of news, stock notes, and matter intended for publication, on separate sheets. Please bear this in mind; it saves a good deal of trouble.

Advertisements.

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 make one inch); for three months, 15c. 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, \$1.50 per line per annum. Copy of advertisements should reach us not later than the 25th of each month (earlier, if possible). If later, it may be in time for insertion, but often too late for proper classification. Transient advertisements payable in advance. No advertisement inserted for less than 75c. Contracts broken by insolvency or otherwise will revert to the casual rate of 18c. per line each insertion. Advertisers desiring to obtain extra copies of the JOURNAL may do so at the following rates: Per dozen, \$1.00; per 100, \$7.50 (in lots of not less than 25). A reasonable number of copies will be sent at these rates to any address supplied by an advertiser, with the advertiser's own advertisement marked, and a notice on the wrapper calling attention to it. In this way the advertiser will be saved the trouble and expense of addressing and mailing.

MISCELLANEOUS.

NOTICE TO BREEDERS OF COACH HORSES!

The Annual Meeting of the CANADA COACH HORSE BREEDERS SOCIETY

Will be held at the City Hotel, London, on

Tuesday, February 4th, 1890,

beginning at 11 o'clock, a.m. All parties interested in promoting the breeding of this class of horses are cordially invited to attend.

JAMES MITCHELL, SECRETARY. JOHN GILLSON, PRESIDENT.

For Sale or Exchange

GOOD CHINA MILL AND PRESS, nearly new. Would exchange same for good night Brahmas or Plymouth Rock Poultry.

W. W. VOLTARS, 17 York Street, Toronto.

The Canadian Live Stock and Farm Journal is your friend; be a friend to it.

IMPORTERS AGENTS.

NOTICE TO IMPORTERS!

CHARLES CHABOUDEZ,

Hotel de France, et de Suisse, 1 Rue de Strasbourg, Paris, Franco,

Agent for the National Line. Information of all the horse districts given at the office. Charges strictly moderate. Correspondence solicited.

CHARLES CHABOUDEZ, Proprietor.

To those importing stock from Scotland. For Forage and other supplies address

JAMES CLARK,

Hay, Grain and Straw Merchant (Forage Contractor), 401 Parliamentary Road, GLASGOW, Scotland, One Hundred yards from Buchanan and Queen Street Stations. Forage of best quality supplied to shippers of stock on shortest notice. References by permission to MR. JOSEPH VANCE, New Hamburg, Ont., and other Canadian Importers.

TELEGRAPH, "FODDER," GLASGOW.

FARM PROPERTY.

FARMS FOR SALE.

FARMS for Sale in Ontario. "LAKE'S LAND LIST" No. 10, with Provincial and County maps, is now ready, and contains descriptions and prices of stock, grain, dairy and fruit farms for sale and exchange. This is the largest list published in Canada. Money to Loan at low rate of interest on Farm property.

E. LAIRD & CO., Land, Estate & Financial Agents, 18 King St. East, TORONTO.

FARM PROPERTY!

SELECTED FARMS from \$18,000 to \$15,000 in the best Ontario Counties. Call or write

EDWARD HARRIS, 23 Toronto St., Toronto.

POULTRY FOR SALE.



STILL TO THE FRONT.

Pekin Ducks, Plymouth Rocks, White and Brown Leghorns, Light Brahmas.

Eggs for Hatching from birds scoring 90% to 95; \$1.50 per 13.

W. B. COCKBURN, ABERFOYLE, ONT.

MAKE YOUR POULTRY PAY.

AND SUBSCRIBE FOR THE "POULTRY MONTHLY," The Best Poultry Paper Published.

Send One Dollar and get it from now to end of 1890.

CHAS. BONNICK, Toronto, Ont.

W. C. G. PETER,

Importer and Breeder of Light Brahmas, Silver-Laced Wyandottes, Banded Plymouth Rocks, Rose-Comb Brown Leghorns, Rose-Comb White Leghorns, Single-Comb White Leghorns, Langshans, B. Red and Silver Duckwing Game Bantams.

Eggs, \$2.00 per Setting; 2 Settings for \$5.00. Stock for sale at all times. Send for Circular.

ST. GEORGE POULTRY YARDS, ANGUS, ONT.

AWAY AHEAD AGAIN.

PRIZE WINNING BIRDS FOR SALE.

Light and Dark Braumas, Plymouth Rocks, Langshans, W. F. Black Spanish, Mottled Colored Dorkins, Bronze Turkeys, Golden and Pekin Ducks, Toulouse Goose. Upwards of 116 prizes at the recent Poultry Shows.

EGGS FOR HATCHING IN SEASON From the highest-scoring birds in the Dominion. Send three cents for circulars. Birds and prices night.

Wm. Hodson, Box 12, Brooklyn, Ont.



Stock Notes.

Horses.

Box 44, ORCHARD, ONT., offers for sale, a trotting-bred stallion, and some registered Ayrshires.

MESSRS. D. & O. SORBY, GUELPH, ONT., make a change their advertisement this issue; kindly notice.

MESSRS. J. B. JICKLING, OF CARGILL, ONT., offer for sale some fine Percheron and Carriage stallions. See their advertisement.

THOMAS TAYLOR, HARWICH, ONT., makes a change in his advertisement this year. He has sold out all his Cleveland Bays, and intends for the future to confine himself to Clydesdales.

THE HARAS NATIONAL, MONTREAL, the well known importers of Percherons and French Coach horses, make a change in their advertisement this issue, which our readers should notice.

W. BROWNLEE, HEMMINGFORD, QUE., writes: "We have eight registered Clydesdale all doing well. We lost one of our imported mates with colic. We have eighteen other horses and colts which are all in good health; also our cattle and sheep are doing well."

MR. W. H. GRAHAM, OF ST. MARVS, left Glasgow, 13th December, with four Clydesdale stallions. Two of these were from Mr. John Lindsay, Eastfield, and the others from Mr. James Weir, Sandilands.

THOMAS GOOD, OF RICHMOND, ONT. (20 miles from Ottawa) increases his advertising space in THE LIVE STOCK JOURNAL this issue. Mr. Good makes a speciality of Clydesdales, and offers for sale a number of mares in foal to Little Jock Elliott and Sir William Wallace and, his two stud stallions. Read his advertisement.

MESSRS. SAVAGE & FARNUM, OF ISLAND HOME PARK, Detroit, Michigan, are making a change in their business, which necessitates their selling a large number of their stock. Possessing as they do, fine specimens of pure bred stallions, Coach stallions, Shetland and Exmoor ponies, and Holstein cattle, which they are determined to sell, they are in a mood to offer bargains.

GEO. G. STEWART, ROSEBANK FARM, HOWICK, QUE., writes: My stock of pedigreed Clydesdale horses here is wintering in a way that leaves nothing to be desired, and I have pleasure in informing you, and through my many patrons, that Mr. Thos. R. McLagan, Perthshire, Scotland, has reported further purchases of young Clydesdales of high pedigree for my account, to be sent over next Spring. Mr. Stewart places a new advertisement with us in this issue.

MR. JOHN GILMOUR AND MR. HIRAN MILLER, MOORESVILLE, ONT., shipped a lot of useful horses to Canada, including the second-prize two-year-old colt at Milngavie, a superior yearling got by Lord Erskine, and bred at Killcarn House, and the successful breeding horse Laird of Clarendon, purchased from Mr. Macdonald, Boquhanran, Dalmeir. Another shipper to Canada was Mr. John McQueen, who exported seven head purchased from Mr. Cameron, Lochgown, Inverness, and Mr. W. Robertson, Linkwood, Elgin.—London Live Stock Journal.

MR. ANDREW BOA, OF St. Laurent, Que., has launched well into the breeding of Clydesdales. Mr. Boa. it is stated, has two especially fine stallions, both imported and registered. The one Caerlaverock Vol. X., was sired by Claymore (3522), by Macgregor (1487), dam Lily of Orkney, the famous prize-winning mare, as she has been placed first at the H. and A. S. and G. A. S., on several occasions. Captain Cook Vol. X. the other stallion, was sired by Jordanshaw (3343), dam Mary (5532). Mr. Boa is to be congratulated on securing stallions so well bred as these, descended as they are from some of the oldest authentic strains of Clydesdales in Scotland.

Notwithstanding the lateness of the season Clydesdales continue to be exported. Mr. W. H. Graham, St. Marys, Ont., sailed on Friday last with four head of well-bred stallions, two of which were purchased from Mr. James Weir, Sandilands, and two from Mr. John Lindsay, Eastfield, Thankerton. It is an indication of the briskness of the demand that, although the last shipment taken out by Mr. Graham, with one exception, succumbed in the gale of September last, he has come back so soon to supply their places for the spring trade. All will wish him a more favorable voyage this time, although it be the depth of winter.—N.B. Agriculturist.

Many of the leading Clydesdale Districts of Scotland have long since hired their stallions for 1890. Formerly much of this was left till the Glasgow Spring Show where most of it is still done, but now the best sires are secured far in advance. The prices paid are large. The best horses get \$5,000 per season, guaranteed by the local society through their district. Lately there has been secured Macgregor (1487), for the Kirkcudbright District, which will make his fourth season in this district. The Berwick District of Migtoshire, have hired Dictator (7643) a black horse sired by Westfield Chief (6390), and Clackmannanshire has engaged young Duke of Hamilton (4122). The terms of these are not published.

MR. E. B. TOLZ, OF BLENHEIM, has sold to Dr. E. F. Lowry, of Mason City, Iowa, his two year old standard-bred trotting colt, Billy Swift, (No. 8,966), for \$500. This is a very promising colt, having shown his ability to trot in three minutes without any professional training. He has taken first prize wherever shown, beating seven two year olds last Fall, at Chatham. He was sired by Mr. Tole's Hambletonian horse, Royal Rysdyk, (No. 8,964); dam, Minnie's Swift, by Old Rooker (No. 7,475). Mr. Tole believes in breeding only from the best animals obtainable, and has the satisfaction of being able to sell



## Stock Notes.—Continued.

at remunerative prices on that account. This colt is entirely of Mr. Tole's own breeding, as he also bred both his sire and dam.—*East Kent Plain Dealer.*

The fastest three-year-old trotter that far bred in Canada is Albani a chestnut filly that this season made a record of 2:29½, lowering the best previous Canadian record by nine seconds. She is by Hermit son of Harold, her dam being by American Clay Hermit, although by a trotting sire and himself the sire of speed at the track a pacer, and this year made a record of 2:29½ at that gait. He is but six years old, and to have a three-year-old that has beaten 2:30 to his credit is quite a feather in his cap. Of late years there has been a great influx of American trotting stallions into Canada, and the results have been more than satisfactory. The number of trotting tracks has increased wonderfully, and as trotting meetings have become popular, the runners have gone down hill until now the interest in the thoroughbred has about died out.—*Rushville Graphic.*

At the Hillside Farm, Drumbo, Oxford Co., Mr. Jas. Bowlin hiner sells by public auction on Feb. 19th his entire herd of Shorthorns, and five registered Clydesdale horses, of which two are stallions, two Suffolk Punch mares, and also a number of pure-bred Berkshire sows. This gentleman writes us: "The Shorthorns are of the fine old Bates' strains, and many of them of Bow Park ancestry, notably Adeliga 25th, and Adelia 26th, and Rose of Bleheim; and in their ancestry such sires as Duke of Oxford (38172), pure Oxford, imported as a calf at a cost of \$7,500 (sire of the Duke of Brant, one of the leading bulls of Bow Park herd); 5th Duke of Holker (51082); the \$3,000 bull, 4th Duke of Clarence (33507); Earl of Mar (478151); Constance Duke (7753); Oxford Lad (5056), a provincial show prize bull, of whom Mr. Page said that he was the best he ever saw; Waterloo Duke 16th and Waterloo Duke 18th, bred at Bow Park, also pure Waterloos, by 54th Duke of Oxford 55733, grandly bred. Horses having in their ancestry such sires as Laird o' Logan imported [1240] (2928), the Douglas imported [1220] (5395), Just in Time imported [1218] (1166), Ontario Chief imported [155] 398 (1776), King of the West imported [185] (69006), Tam o' Shanter [146]. The stock have been wintered as usual, and nothing has been fed for the occasion. They will be found in good breeding condition—nothing more."

MR. THOS. GOOD SHAMROCK AVENUE STOCK FARM, RICHMOND, P. O., writes that he has been fairly successful with his travelling stallions the past season, Little Jock Elliot (3798), is still gaining favor; and Doncaster 2371 so much so that he doubled his business of previous seasons. Sir William Wallace [2496], for his first season in a territory hitherto unknown to Clydesdales was particularly successful; Duke of Argyle [4342], is coming to the front, his stock proving large useful looking colts. At the Central Exhibition held at Ottawa, Duke of Argyle took 3rd place in the aged class; the yearling Sir Walter [937], took 1st in his class and bids fair to be a superior horse, he is a get of Little Jock Elliot and out of Belle of Richmond, a combination of Darnley and Prince of Wales blood. The two-year-old filly Queen Vic [410], was winner of 1st in her class and diploma as best mare any age. Queen Vic is perfection itself and is grandly bred, being a get of the famous Montgomery (3234), and out of Belle of Richmond (3543). Belle is proving to be a first-class brood mare, her foal The Marquis is also a promising colt.

"My Durhams are doing splendid. Burnside Lady having a grand bull calf by Kossuth, he is a dark red, and named Wilkie Collins; Bright Eyes has a splendid heifer calf by same sire. The yearling bull Royal Shamrock I sold to R. A. Wallace, Calgary, N.W.T.

This has been my most successful season in South Downs and other grades. I found a ready sale for all my ram lambs and most of the ewes.

My Berkshires are doing splendid. I expect a fine crop of sucklings for sale in early spring. I found ready sale for all spare stock.

I have a fine show of Plymouth Rocks, which I believe to be the farmers' fowl. I find a ready sale for both birds and eggs.

My imported Colleys (black and tan) are doing fine. I find a ready sale for all my pups at fair prices, no farmer should be without one." In this issue our readers will find an advertisement of Mr. Good's which should be noticed.

## Cattle.

W. D. REESOR, MARKHAM, ONT., offers a bargain in a Jersey bull, and bull calf.

E. GAUNT & SONS, ST. HELENS, ONT., advertise for sale some fine young shorthorn bulls, got by their prize-winner, Lord Lovell.

MR. WILLIAM SUHRING, OF SEDRINGVILLE, ONT., a new advertiser in the LIVE STOCK JOURNAL, offers for sale some young Holsteins, both bulls and heifers, at reasonable prices

The Countess of Carlisle, who is founding a herd of Galloways, has bought a fine young bull from Mr. James Cunningham, Tarbreoch, Dalbeattie. The yearling is very well bred, being sired by the celebrated bull Harden (1151), out of Moss Rose.

F. LOWELL & SON, OF WEST MONTROSE, ONT., write: We have sold recently to Mr. Henry Peterson, of Hawksville, Seraphina, 22nd Red Bred at Montrose by Court Bismark = 1557 = dam Sanspareil 18th by 5th Duke of Montrose, 2 dam Sanspareil 11th, by Windsor = 1168 = also Isabella L. 11th Red Bred at West Montrose, by Grand Duke = 3265 = dam Isabella 10th, by Court Bismark = 1157 = 2 dam Isabella 9th, by Windsor = 1168 =. Also to Mr. I. Barber, of Guelph, Ont., Seraphina 20th, bred at West Montrose, by Court Bismark = 1157 = dam Sanspareil 17th, by Royal Oxford = 2391 = 2 dam Sanspareil 12th, by Crown Prince = 455 =. These 3 cows weighed in ordinary breeding condition, a few pounds short of 4100 lbs., averaging nearly 1700 lbs. a piece. Our cattle are in nice order and we will soon have nearly 37 head, but have abundance of feed

GRAHAM BROS., BELVEDERE FARM, AUSA CRAIG, ONT. write: "Our stock are doing nicely; we have made the

## NOTICE.

TO BREEDERS OF  
DRAUGHT STOCK

NOTICE is hereby given that the receiving of Entries for Registration in Vol. B of the Dominion Draught Horse Stud Book will close on March 1st, 1890, after which the standard of registration will be raised to

## Three Crosses for Stallions and Mares

Dams with two Crosses will then require to be also registered to admit of entry, but mares entered alone must have three Crosses.

## NO ENTRIES ON THE PRESENT STANDARD

will be received after that date, and parties interested would do well to govern their lives accordingly.

Blank entry forms and all information will be promptly furnished on application to the undersigned.

By order of the Council

JAMES MITCHELL,

Secretary, Goderich, Ont'

## SWINE FOR SALE.

## Berkshires and Yorkshires a Specialty.

WE are now prepared to book orders for choice Pigs of the above breeds for Spring Delivery.

We have also for sale a few Fall Pigs.

## Ayrshire Cattle, Southdown and Shropshire Sheep.

Call or write for what you want to

W. H. & C. H. McNISH,

LYNN, Leeds Co., Ont.

**FARMERS' PRICES.** Pure Suffolk and Berkshires Pigs all ages from imported stock. Also 3 young BULLS 12 months old. Registered pure Bates. Clyde Fillies and Sows, various ages for sale. Stock Bull (Imp) for sale or exchange. F. J. RAMSEY, Dunnville P.O. myme

## Young Berkshire Sows.

I have still on hand

## CHOICE LOT OF YOUNG SOWS

from 8 to 12 months old. Also a choice lot of young pigs just fit to wean, out of Huron Daisy (756).

Huron Daisy has been in the show ring 3 seasons and taken

## Eighteen First Prizes.

Some of the above were sired by imported Real Briton (488) and the rest by Huron Chief (915). Address

R. DELBRIDGE, - - Winchelsea, Ont.  
jam.



**CHESTER WHITES** originated in Chester County, Pa. If you send to me I can give you stock that will please you and benefit you. My stock make hogs weighing 800 lbs. at maturity. Walter 4553 is a noted hog valued at \$600.00. Write me. I guarantee my stock and satisfaction. C. E. MORRISON, Londonderry, Pa., U.S.A

factory. C. E. MORRISON, Londonderry, Pa., U.S.A  
novme

## CHESTER WHITE PIGS

are now Booking Orders for spring pigs.

This is the time to order and secure first choice.

R. & J. GURNETT,

jam. Ancaster, Ont.

## JERSEYS FOR SALE.

## JERSEY BULL FOR SALE.

10 months old, a very fine one; also BULL CALF, few weeks old. NORTH CHEAP IF TAKEN AT ONCE.

Address, W. D. REESOR, Elm Park Farm, Markham, Ont.  
fe

## JERSEYS FOR SALE.

Several fine Jersey Heifers, choicest strains. Prices low. Sepmc. Write W. D. REESOR, NAPANEE, ONT.

Don't forget that if you don't improve your stock, you will go to the wall.

## Stock Notes.—Continued.

following sales since last month: yearling bull, Bertha's Oxford and = 11215 = to McDonald Bros., of Woodstock, Ont.; cow, Lady Elvina = 6596 = to Robert Ford, Kimball, Ont.

JOSEPH REDMOND & SONS, PETERBOROUGH, ONT., make a change in their advertisement, well worth looking at. The Messrs. Redmond claim that their stock comprises some of the finest strains in Canada, and that their prices are right, and that they will deal with all comers in such a way as to give satisfaction.

MR. ISAAC FISHER, OF GREENHURST FARM, GODERICH, ONT., places with us an advertisement setting forth that it is his intention to sell by public auction his entire herd of pure-bred Shorthorns. Do not fail to notice his advertisement, and if it strikes you that he has something you want, write for catalogue.

THE WYTON STOCK BREEDERS' ASSOCIATION, as customary, have a number of pure-bred Holsteins to offer at their seventh semi-annual auction sale, to be held at Wyton, March 27th. To the progress of this breed in the estimation of stockmen, Messrs. Scratcherd have contributed in no small degree. This is a good chance to start a dairy herd. Notice their advertisement.

MR. JOSEPH ERNST, OF DRIFFIELD, YORKSHIRE, ENGLAND, advertises in this issue an important auction sale of Shorthorns and Leicesters, that is to be held in England on March 11th, and April 5th. A number of Bates' Shorthorns are included. Among the 300 Leicesters to be offered, will be found a number of prize-winners. All interested should look up this advertisement.

MR. THOS. GUY, SYDENHAM FARM, OSHAWA, ONT., writes: "I have made some sales of Ayrshires lately, namely, a two-year-old heifer, Tulip, to a Mr. Gourley, near Ottawa, and a bull, Rifleman, and a two-year-old heifer, Violet and, to Mr. Clow, of Prince Edward Island. Ayrshires are getting more in demand, we never had so many enquiries as we have of late. Our stock are all in good trim."

FRANK R. SHORE AND BROS., OF WHITE OAK, ONT., announce a dispersion sale which is advertised in another column. We understand that two members of this firm have made other business arrangements, which necessitate their giving up farming. Therefore breeders and others wishing to purchase will have an opportunity of buying anything they may want of this herd or flock.

If you want a Bates' bull of breeding, kindly notice th advertisement now running with us of J. Y. Reid, of Hillside Farm, of Paris, Ont. Mr. Reid, well-known as a breeder of first-class Shorthorns, has decided to sell by public auction, the cream of his herd, including leading representatives of the Waterloos, Knightleys, Duchesses, and other choice strains. A number of horses and farm implements will also be disposed of. See their advertisement.

MR. HENRY K. FAIRBAIRN, OF THEDFORD, ONT., recently purchased from Mr. Arthur Johnston, of Greenwood, an excellent young bull of the famous old Lancaster or Leander tribe. He was sired by the imported Golden Drop bull, Albert Victor (55250), and out of imported Mary Anne, of Lancaster 13th, by Victory (48871). He is at present in fairly good breeding condition, but with good care, he will make a show bull of very high merit.

JOHN DRYDEN, OF BROOKLIN, ONT., writes: "I beg to report the sale of four young bulls from my herd: one to J. Leask, Greenbank; one to W. Moffatt & Bro., Paw Paw, Ill., U.S.; and two to M. A. Neousholder, of Kansas. The three latter were sent forward in the same car, and are all show animals, one of them being taken expressly for that purpose. Accompanying these went a young Cruikshank cow and red heifer calf, and a prize-winning yearling heifer. The demand for the best Shorthorns is good."

JAS. S. SMITH, OF MAPLE LODGE, ONT., writes: "During the past month we have the following additions to our herd by birth: From the Cruikshank cows Lovely Queen 3rd and Lovely Queen 4th we have a heifer and bull respectively, both red and got by Conqueror. From Duchess Jane 5th, a dark roan heifer, from Princess Constance Ninetzin and, a red bull; Rosy Queen 2nd, a red heifer, and from the Bates heifer Constance of Maple Lodge, a very fine red heifer calf. Three of the latter got by Duke of Colonus, and one by Conqueror. Our stock are wintering well, and we are offering some good ones for sale." Mr. Smith makes a change in his usual advertisement.

A. HAGAR, OF PLANTAGENET, ONT., writes: "We have had so far a very mild winter, with frequent rain storms, altogether different from the winters as I remember them forty years ago. Crops in this section, except hay, the poorest in my remembrance. All kinds of stock doing well. My imported Cruikshank cow Oakfern, 4 years old, has proved a good breeder, and is now carrying her third calf. Imported Cruikshank bull Erik, now my stock bull, is developing all the characteristics of that popular Shorthorn family. I have a number of fine young bulls, from 9 to 24 months old, for sale which, I now advertise with you, all sired by Soldier Boy. The demand for Shropshires has been good. They have come to stay and multiply. Sold two yearlings and one three-year-old ram to the Agricultural Society of the township of Osgoode; one yearling ram to G. W. Monk, M.P.P., Carleton; two yearling ewes and one ewe lamb to R. Blackwood, Martintown; two ewe lambs to J. A. McCallum, of the same place; and one two-shear ewe to Wm. Smith, also from Martintown. Could have sold more ewes had I wished further to reduce my flock. Berkshires are still popular in this end of the province, and sales have been numerous. All my surplus stock is now disposed of."

GEORGE THOMAS, ALTON, ONT., writes: "Our Shorthorns are doing nicely. I have sold during the last six months one yearling bull to Mr. Henry McDonald, Manilla; one yearling bull to Mr. Peter Blair, Belfountain; one cow and calf to Mr.

Stock Notes.—Continued.

Isaac Green, Killburgh; one cow to G. & W. Gier, Grand Valley; two heifer calves, two yearling heifers, and one three-year-old cow to Mr. John Watt, Salem. Imported Baron Camperdown is our stock bull.

Mr. ARTHUR JOHNSTON, of GREENWOOD, ONT., reports his herd wintering in good shape. A few sales have already been made—the present winter, and inquiries are coming in rapidly. Not a bull had been sold from the Greenwood herd until March last year, and they were every one gone by the eleventh of April, excepting one late calf. New catalogues for 1890 now ready, and they will be mailed to anyone wanting to see them. "No business, no harm," is my motto. Send for a catalogue.

The two-year Shorthorn bull, Baron Waterloo, recently purchased by Prof. Shaw for the Experiment Station, Guelph, was released from Point Edward Quarantine, and is now at Guelph. He is a beautiful animal; a red roan of magnificent proportions, and in every respect a model. At the show at Detroit he was placed first in a continental contest of all the breeds, beating Cupbearers, which was victorious at Buffalo in a similar contest. The price paid was \$600, and \$750 might have been taken for him had he not been sold.

MESSES. CHASE, CORNWALLIS, NOVA SCOTIA, write us: "We are working in the rank of Shorthorn breeders, raising ten calves a year. Our stock bull for four and a half years was Marquis of Lansdowne—5455—purchased from Messrs. J. & B. Watt, Ontario, and was a grandson of their famous Bampton Hero. He was replaced last June by Prince Fritz—11079—another purchase from the same men, but no relation to our first bull. Sales for breeding purposes are few and prices comparatively small, the standard of pedigree in Nova Scotia for pure-bred Shorthorns, being a great hurt to the improvement of stock in our province.

Mr. ARTHUR JOHNSTON, GREENWOOD, ONT., has just sold to Mr. Samuel Johnston, of Fordwich, Ont., the young Shorthorn bull Vice Consul, of which Mr. Johnston says: "Vice Admiral is probably one of the best Shorthorn bulls to-day in the Dominion; thick, deep, heavy-fleshed, and near the ground, in fact he is thoroughly typical of the best Scotch Shorthorn. He was sired by the imported Cruikshank bull Vice Consul, winner of first-prize and the sweepstakes at the Toronto Industrial Exhibition in 1888. His dam, imported Clara, was bred by the well-known breeder of prime Shorthorns, Mr. Sylvester Campbell, of Kinellar, Aberdeenshire, Scotland.

MESSES. A. & R. SHAW, of BRANTFORD, ONT., breeders of Galloways, report their stock as wintering very well. Their calves, Ailie Anderson and Countess of Brant, are especially promising. It is usual with pure-bred Galloways to allow the calves to run with their dams, but they are milking the cows and feeding the calves. They are more than pleased with the milking qualities of the Galloways. Mary Aderson, (11201) a three year old, had her first calf in April. All through the summer she gave a heavy yield, and in November gave 7 lbs. of butter per week. She was first prize two year old at Toronto in 1888.

JAMES GIBB, of SUNNYSIDE FARM, BROOKSDALE, writes: I have sold to Hugh C. Masse, Alcorn P.O., Man., one Shorthorn bull and one heifer; to Robert Morehouse, Newbury P.O., one bull and one Leicester ram; to John Roxburg, Avonbank P.O., one bull and one ram; to James Innes, Brookdale, one bull, to Charles Youngs, Brookdale, two high grade steer calves, and one Berkshire sow; to Mr. Liphard, Tavistock, thirty head of fat cattle. Our imported bull, Baron, is doing well, he took 1st prize and diploma, for best bull of any age, at our show. We also took 3rd on cows, 1st on yearling heifer, and heifer calf, and on bull calf, and diploma for the best herd of Durham cattle. We have one fine heifer calf from imported Baron, and expect more soon.

R. RIVERS & SON OF SPRINGHILL FARM, WALKERTON, ONT., report having received numerous enquiries for stock and seed grain, owing to their advertisement in the holiday number of THE JOURNAL. But they hope the gentleman who wrote from Belleville, inclosing their advertisement clipped from his JOURNAL, but forgot to sign his name, will kindly write again and his wants will be gladly attended to, otherwise they cannot reply to his letter. Since last report Lady Mortimer, one of the plums of their herd, has given birth to a fine red bull calf, and Seraphina, a roan heifer calf, making four births for the last month, all sired by Victory. Silver King 4th, (a grandson of the old 4th Duke of Clarence), bred by F. Lowell & Son, of West Montrose, Ont., is now in use at Springhill.

E. GAUNT & SONS, OF ST. HELENS, P.O., ONT., write: "Our Shorthorns came into winter quarters in good shape. Cows are beginning to drop their third crop of calves to our stock bull, Lord Lovell—2030. We are beginning to receive enquiries for young bulls, of which we have only three on hand for this year's trade. Our Leicesters have been reduced by sales to a point at which we had to refuse all inquiries. There seems to be a real boom in Leicesters. We have made sales as follows at good prices: to R. Frazer, Lanes, one ram; to Jno. Webster, St. Helens, one ram; to Jas. Drennan, Lanes, one ram; to Jno. McLean, Dunganon, one ram; to Wm. Barber, Whitechurch, one ram; to A. Ross, Lucknow, one ram; to D. Milne, Ethel, aged ram; to Robt. Hastings, Wingham, twelve ewes.

Aberdeenshire farmers have a grievance. They largely supply London with beef and now complain that their own bred and fed beef is injured by being mixed up with Irish and Canadian store cattle fattened in Aberdeenshire. Some of them propose forming a syndicate to establish an agency in London, where only guaranteed strictly pure Aberdeen beef will be sold. It is difficult for Canadians to see where well-bred Canadian steers can fall behind the best Aberdeen in quality. Let the Canadian breeder see that he raises only well-bred ones, and discard the scrub. The talk about inferior Canadian beef will then totally disappear. There has been during the last summer a very large export trade in Shorthorns from Britain to South America. Whole herds have been taken en bloc and the trade still continues, a very few have gone to Australia the past quarter, and

SHEEP FOR SALE.

LORRIDGE FAM. SOUTHDOWN SHEEP.

Flock first established 1857. Commenced exhibiting 1867. Since then have taken 200 prizes, including a large number of medals and diplomas.

Imported Rams used only. Stock for Sale. ROBERT MARSH, PROPRIETOR. Richmond Hill, Ont.



Imported and Canadian-bred Shropshire Sheep

For sale, respectively, at the lowest prices. Agent for Dana's Sheep and Cattle Labels. Wm. DUNKIN, Brucefield, Ont.

HOLSTEINS FOR SALE.

Two Holstein Bulls!

I HAVE FOR SALE Two Holstein Bulls and one Heifer nine months old, at reasonable prices. WM. SUHRING, Sebringville, Ont.

Holstein Cattle and Improved Yorkshire Pigs

I have for sale a Holstein cow (registered) rising four years, dropped second calf 12th Nov.; a Holstein heifer (registered) 18 months old, and a Holstein heifer dropped 12th of November. Above are all bred from stock of Messrs. Smith Bros., of Churchville. Any one wishing to keep a family cow I shall sell either cow and calf or the heifer and calf. Also, I hold for sale 5 sows and 3 boars of improved Yorkshire pigs littered 31st Aug. last. Bred from stock of Messrs. Ormsby & Chapman, of Springfield. Can ship on G. T. R. or by Canadian Express. AARON WENGER, Ayton, Ont.

SHORTHORNS FOR SALE.

Young Shorthorn Bulls

We have for sale young bulls of fine quality and good individuals, sired by the prize winning Matchless Bull LORD LOVELL—2030. Write for particulars or come and see. We have also a quantity of American Banner Oats for sale. E. GAUNT & SONS, Lucknow Station, G.T.R. St. Helens, Ont.

For Sale,—Shorthorn Bull.

SOVEREIGN COMPARELL—0058—Campbell and Cruikshank's blood straight. A grand Bull, fit to head any herd in the Dominion. Will be sold reasonable. 3 miles from Makon S. C. P. R., 4 miles from Woodbridge S. C. P. R. Address William Porter, Humber P.O., Ont.

YOUNG SHORTHORN BULLS

FIVE young Shorthorn Bulls and a lot of Berkshire Pigs FOR SALE. All first class and will be sold cheap. Send for catalogue and prices to EDWARD JEFFS, Bond Head.

SHORTHORN BULLS FOR SALE

I have several Shorthorn Bulls for sale from 15 to 22 months old. All registered in Rom. S. H. H. B. Address WM. TENNANT, Falkland P. O.

Shorthorn Bulls.

1 Bull, aged 5 years; 1 Bull, aged 19 months; 1 Bull, aged 14 months; 1 Bull, aged 12 months. All of Rom. S. H. H. B. registry, except the bull aged 19 months, which is eligible to N. S. H. B.

A. C. BELL, Trout Brook Farm, New Glasgow, N.S.

SHORTHORN BULLS.

From first class Scotch Bred Stock. Prices Moderate. Send for catalogue to Exeter Station, 1/2 Mile. H. & W. D. SMITH, HAY P. O.

The L.S.J. is read by 10,000 of the best farmers in Canada. Remember that when advertising.

Stock Notes.—Continued.

only one is entered for Canada, viz., Gem, bred by D. A. Green. Prices have been better than last year and a good advance has been made at the regular fall sales. 2085 animals averaged \$176.

JAS. TOLSON, WALKERTON, ONT., writes: "A list of Shorthorn cattle sold since last September. Two Shorthorn cows to Wm. Scarrow, Esq., township Derby, Grey Co.; one Shorthorn cow to Jas. Moore, Esq., township Greenock, Bruce Co.; three Shorthorn heifer calves to Pilker Bros., township Carrick, Bruce Co.; Shorthorn bull calf to A. McDonald, township Greenock, Bruce Co.; Shorthorn bull calf to Robert Johnston, township Sydenham, Grey Co.; Shorthorn bull calf to P. Ritchie, township Greenock, Bruce Co. List of Oxford Down sheep sold since last June: Two Oxford ewes to Geo. McEerrow, Esq., Sussex, Wisconsin, U.S.; two Oxford ewes to Henry Brigham, Esq., Allanpark, Grey Co.; shearing Oxford ram to Wm. Dickson, Esq., township Carrick, Bruce Co.; four shearing Oxford ewes to Mr. Murphy, Michigan, U.S.; two shearing ewes, two ewe lambs, one ram lamb to Mr. S. DeHarm, Penn., U.S.; one ram lamb to Mr. Elroy, township Carrick, Bruce Co.; one ram lamb to Mr. Hillis, township Bentinck, Grey Co.; one ram lamb to McGillivray & McLeod, township Bruce, Bruce Co. The demand for Oxford sheep through the fall, and so far this winter, seems to have been unlimited, both from Ontario and the United States, but more particularly from our neighbors on the other side of the line."

Rich. Gibson, Delaware, Ont., sends us the following list of births in his herd:

Table with columns: NAME OF COW, SEX, COLOR, DATE, BY WHAT BULL. Lists various cow names and their offspring details.

JERSEY.

Flora Pink. C. C. Fawn, Mar. 21 Lord of Mt. Brydces.

ALEX. WOOD, EAST MISSOURI FARM, ST. MARYS, ONT., writes: "I have been receiving letters of enquiry from different parties lately that are in want of young stock, and they did not know me but they stated they saw my card in the JOURNAL; and two years ago I was in want of a young Shorthorn bull when I saw an account of one you gave in the JOURNAL, I was not satisfied till I went all the way to John Millar's, Brougham, and purchased the young Strathallen calf by Vice-Counsel, who by the way is pronounced by good provincial judges as the best bull in the Dominion. Be that as it may, I am more than pleased with the calves I have from Strathallen. Are not some families surer breeders than others? My first cow was raised by Mr. Laing, St. Marys, a veteran breeder, and he told me the family were very sure breeders, and they have proved so to me. It is nine years since I started. I have sold three head, six came dead and now I have nineteen head, and I never missed getting pure Shorthorns in calf. Some times the calves come a little later than I would wish but no blanks in any year. I see some one is writing in the JOURNAL about certain parties letting their stock go back, simply because prices have been low for some time, I consider that too bad, as there has been quite a boom this fall in good cattle of all classes, and the better the class the bigger the boom; now that is encouraging to those who have pure bred stock, as we cannot keep up a supply of good grades long without the use of pure bred sires. Some are complaining of the Shorthorn as a milkier, and no doubt there is a large proportion of them not so good for various reasons. If you or I or any one else buy a cow or heifer at a high price we are very loath to sell her or her progeny to the butcher, whereas with a common cow we would fatten her at once. Let us weed out the Shorthorns a little closer and not run our heifer calves too much to fat and the Shorthorn will always stand as the best general purpose cow in the world."

Sheep.

J. & I. SMITH, BRANTFORD, ONT., make a change in their Breeder Card. They claim to have a fine lot of Shropshire.

Canada won the premium for the heaviest fat sheep at the Chicago show. It was a Leicester weighing 367 pounds, and owned by John Rutherford, of Roseville, Ont.—Sheep Breeder.

The demand for long-wools has this fall been much better than for some years past. Prices are fair, and prospects good. There are fewer ewes in the hands of breeders, that could be counted surplus stock, than for some time, and some breeders have sold more than they had intended. The wool market for long lustre wools is looking up. Prices have advanced in England, and buyers in Canada have all done very well with the last clip. Stocks in Canada are smaller, and what is left is held at an advance in price.

J. CAMPBELL, JR. FAIRVIEW FARM, WOODVILLE, ONT., reports having sold an excellent lot of ten Shropshire ewes to Mr. Isaac Johnston, Ravenna, Ont. Among them are two imported Mansell ewes, and several Canadian-bred ones, which have figured more than one year as first prize winners at our large shows. Those ewes have been bred to the imported rams

Stock Notes.—Continued.

Duke o Wellington 14498, and Royal Patron 14496, (4192). The latter a "Rector" ram which Messrs. Evans, of Uffington, England, used in their flock as a lamb in 1888, with marked success.

ORMSBY & CHAPMAN, SPRINGFIELD-ON-THE-CREDIT, write: "We have found the demand for registered Shropshires very brisk this fall, indeed we could not begin to fill the orders we received for ewes and lambs. Among our sales were the following: Jas Hall, Edmonton, one shearing ram and two shearing ewes; R. Stein, Streetsville, one shearing ram; Henry Binkley, Ancaster, one shearing ram; M. Devine, Streetsville, one shearing ram; John McCauley, Britannia, one ram lamb; S. Wolf, Springfield-on-the-Credit, one ram lamb; Wm. McHenry, Humeston, Iowa, U. S., two ram lambs; Wm. Copeland, Teeswater, one ram lamb; Thos. Webber, Glanford, the imported ram Hercules. We also bought from Mr. John Campbell, of Woodville, a very fine ram lamb to take the place of Hercules at the head of our flock."

W. H. BEATTIE, OF WESTMINSTER FARM, WILTON GROVE, ONT., writes. I enclose report of my sales of Shropshire sheep, from Sept up to date. To A. O. Fox, Oregon, Wis. 2 imported rams, 1 shearing, Canadian bred, 4 shearing ewes and 4 lambs; to Mr. Lafeldt, Billings, Montana, 74 rams; to Mr. Jas. Charlton, Ilderton, 1 ram lamb; F. J. Ramsey, Dunnville, shearing ram; to Mr. T. D. Hodgins, London, 1 ram lamb; Mr. Beattie, Milestown, 1 ram lamb; to Geo. E. Casey, St. Thomas, 1 ram lamb; Mr. Dunn, Mosley, ram lamb; Joseph Bowers, Lockport, N. Y., 2 ewe lambs; Samuel Milson, Glanworth, 10 imported ewes; W. E. Wright, Glanworth, 2 imported ewes; Angus Beattie, Pond Mills, 9 ewes. My flock is looking splendid, the last imported ones are a fine lot, with Corston Pride, (11530) at head of flock, should expect some good lambs for next season

W. B. COCKBURN, GREENHOUSE FARM, ABER JYLE P.O. writes: "We have made the following sales up to date this season, one Shropshire ram lamb to Thos. Welsh, Puslinch; R. A. Wood, Toronto, twelve Plymouth Rock Pullets; C. H. Hamersmith, Buffalo, pair Black Javals; Alex. S. McDiarmid, Fingal, two Light Brahma cockerels; Colin Campbell, Crosshill, pair Plymouth Rocks; J. R. Morrison, Carleton Place, a trio of Brown Leghorns; J. D. Robertson, Guelph, a pair Black Javals; W. C. Moffat, Guelph, five Brown Leghorns; Addison H. Baird, Chesterfield, one Light Brahma cockerel and one Brown Leghorn cockerel. We were very successful at the shows this fall, our yearling Shorthorn bull winning 2nd at Guelph, 1st and special at Aberfoyle, Nassagawaya, and Freelon. He is a thick, low set fleshy animal, straight and level on back; he was bred by J. I. Hobson, Mosborough, sired by McDuff. At three of above shows our Shropshires won twelve first and six seconds, our fowls won at Toronto, Guelph, Aberfoyle, Nassagawaya, Freelon, eleven firsts, two seconds, and three thirds. Cattle all doing well, feed very plentiful, lots of hay, grain, and straw. Shropshires doing excellent, carrying a very heavy fleece of close fine wool. Fowls although selling so many have some fine birds yet to part with, which will score away up. I find the JOURNAL the best advertising medium."

ANDREW GILMORE, OAK DALE FARM, HUNTINGDON, QUE., writes: "I have made the following sales the past season in Oxford Down sheep: One ram aged to Thomas A. Higgins, St. Anicet, Que.; one aged imported ewe to J. W. Brown, Huntingdon, Que.; one ram lamb to Joseph Davis, South March, Ont.; one ram and two ewe lambs to W. Neilson & Sons, Lynn, Ont. In Improved Yorkshire swine, Ontario sales, one boar and two sows to W. Keough, Owen Sound; one pair to John Watson, Dresden; one pair to R. A. Fowler, Emerald; two sows to D. S. Robertson, Wyoming; one pair to Robert Baird, Chesterfield; one sow to G. B. Hood, Guelph; one boar to Henry Chesterfield, Dundonald; two sows to Thomas G. Smith, Rosemont; one boar and two sows to S. L. Tucker, Clarence; one boar and two sows to Dougala McMaster, Laggan. Quebec sales, one boar to S. J. Osgood, Cookshire; one pair to Clark Bros., Trout River; one pair to Wm. Dawson, conductor G.T.R., Montreal; one boar to Mrs. E. Donnelly, Demitville; one sow to J. Donnelly, Athelstan; one sow to Charles Sheriff, Huntingdon; and one pair to Coté Bros., St. Philomee; one pair to Duncan Munro, Bay View, Nova Scotia; also one Polled Angus to the same firm. The demand for Yorkshire swine and Oxford Down sheep has never been so good as the past season, would have sold as many more. The Improved Yorkshire pig, the bacon-curer hog, as Mr. Wm. Davies, of Toronto, puts it, has come to stay, the Yorkshire is the favorite in this section of Canada."

W. S. HAWKSHAW, GLANWORTH, ONT., has recently landed one of the finest lots of Shropshire breeding ewes which have been imported. Fourteen ewes are out of the noted flock of Mr. J. E. Farmer, of Ludlow, and are by Felton Oak (3483), Prince Perfect (3183). Most of them are in lamb to that grand shearing ram bred by Mr. Andrew Mansell, which was winner at the Royal Show at Windsor, at the Bath and West of England, and West Midland. He has always taken first honors wherever shown. Eighteen ewes are out of the Old Onibury flock of Francis Bach, which has been established nearly a century, and are by such sires as Double R. 172 and Chief Choice, winner of 1st prize at the Shropshire and West Midland Show. Eight ewes are in lamb to that grand sheep Ashby Star, winner of 1st prize at the Shropshire and West Midland Show in 1889. Eight ewes, six ewe lambs, and three rams are from the flock of Richard Bach, which is descended from the Old Onibury flock; six of these ewes and three of the lambs are 1st prize winners, and most of them are by that wonderful stock-getter Woolstaple the Second 2420 and Rebel Chief 1676, and are in lamb to Ashby Star and Rector Prince. The last named is by the noted Rector, which was let for \$1,000, after taking first honors at the R. A. S. E. at Shrewsbury. The remainder of the ewes are out of the flocks of Mr. C. Bright, of Broom, and Mr. W. M. Dawes, and are very fine breeding ewes. Also, he purchased three Cotswold sheep viz. 1 ram lamb and one pair of Shearling ewes, from the noted flock of Mr. Russell Swanwick, of Cirmaster. The ram is by a son of the famous Donner, who, when five years old, was sold for 70 guineas. The ewes are by that grand stock-getter "Jacob," that Mr.

HORSES FOR SALE.

DO YOU WANT A BARGAIN

In a Heavy Draft Stallion, In a Well Bred Trotting Stallion, Or in some fine registered Ayrshire Bull Calves or young Cows due to calve in March and April. Will sell cheap for Cash or would exchange for good trotting bred mares. For particulars address

Box 44, Orchard P.O., Ont.

Imported Stallions for Sale.

1 CLYDESDALE, 6 years old, with registered pedigree 1 PERCHERON, 2 years old, with registered pedigree

Both of these horses are sound and gentle and sure foal getters. Both have been prize winners. Will sell cheap to make room for fresh stock.

FRANCIS RUSSELL, Mount Forest P.O., Ont.

FOR SALE.

CLYDESDALE STALLION, Bred from imported stock, 6 years old in May, good animal.

ALSO 4 SHORTHORN BULLS, Ages ranging from 2 months to 3 years.

Or will exchange for good Clydesdale Brood Mares or Fillies. Apply to

John Idington, STRATFORD, ONT.

Choice Stallions For Sale.

1 Carriage Stallion, bay, 7 years old, weighs 1450 lbs. 1 Grey Percheron Stallion, weighs 1900 lbs. 1 Black Percheron Stallion, weighs 1800.

PRICES REASONABLE. J. B. JICKLING, Cargill, Ont.

FOR SALE.

3 Imported Clydesdale Fillies, also 7 choice yearling Shorthorn Bulls.

All from imported Campbell Cows and a Cruickshanks Bull, also a few Heifers.

JOHN ISAAC, Markham P.O., Ont.

FOR SALE.

Standard Bred Trotting Stallion WESTERN SPRAGUE 2289

Sired by Governor Sprague, 444 Dam by Allie West, 745. Record 2142 Record 2125

He is a sure winner and his stock are very promising. Will sell him cheap, and a reasonable offer will be refused.

THOS. J. KELLY, West McGillivray P.O., Ont.

"Clear Grit" AND "John A"

Two "Clear Grit" Stallions, coming five and four years old for sale. "Clear Grit" took four first prizes and two seconds at the International and Provincial Exhibitions. "John A" took two seconds at same exhibitions.

I have also for sale best Dederick Perpetual Hay Press for Steam or Horse Power, and Three-Ton Hay Scale. All bargains.

Address JOHN A. MACKENZIE, Presque Isle P.O., Co. Grey, Ont.

To sell lambs or sheep, or any other species of live stock at the highest obtainable prices should be the aim of every farmer. You cannot secure the highest prices unless you breed the finest qualities. You cannot breed the finest qualities unless you know how. To know how you must keep abreast with the times. To keep abreast with the times you must read THE CANADIAN LIVE STOCK AND FARM JOURNAL.

Stock Notes.—Continued.

Swanwick used for five years, and which made him so successful in the shows, as he won 1st, 2nd and 3rd prizes at the Royal Show 1889, in the largest class of Cotswolds shown for twenty years. These sheep are the property of Mr. George Weekes Glanworth, who has a choice flock of Cotswolds.

Swine.

W. M. SMITH FAIRFIELD PLAINS, ONT., writes: "Our cattle, sheep, and pigs are doing very well, having sold nearly all that we could spare. We could not supply the demand for young boars."

MR. JOSEPH WATSON, GREENBANK, ONT., renews his advertisement for another year, and offers Berkshires as well as Shorthorns for sale. His new stock bull, Baron Kinellar, is of fine descent.

C. E. WHIDDEN, ANTIGONISH, N. S., writes: "My pigs are wintering well, and I hope to have a choice lot of young Chester Whites and Berkshires to offer for sale through your JOURNAL in a few months."

E. D. GEORGE, PUTNAM, ONT., one of the most enterprising of our home-breeders, makes a change in his advertisement this issue, to which we would call attention. Mr. George reports satisfactory sales the past season.

MESSRS. McNISH, OF LYNN, ONT., are now making a specialty of Yorkshire and Berkshire pigs, and are now booking orders for the Spring trade. They are also breeders of Ayrshire cattle, Southdown and Shropshire sheep. See their advertisement.

R. & J. GURNETT, OF ANCASTER, writes: "Orders for spring pigs are beginning to come in, besides numbers of inquiry letters, showing that the Chester Whites are pushing themselves to the fore, owing to their quiet disposition and their easy keeping qualities."

E. D. GEORGE, PUTNAM, ONT., writes: The demand for pedigreed Chester Whites is still increasing; have shipped 48 lots to order, past six months, extending from Nova Scotia to British Columbia, and are giving splendid satisfaction to my patrons. Prospects for Spring trade is most favorable.

The statement has been repeatedly made that there is no profit in keeping pigs, but such, however, does not seem to be the opinion of Mr. G. L. Dodds, of Melita, who came into Deloraine this week to receive per express a pair of purebred Berkshire pigs, which he had bought from J. G. Snell & Bros. the noted breeders of Edmonton, Ont., who have won a whole string of medals and prizes with their Berkshires. Mr. Dodds believes in getting good stock whenever possible, and these latest additions to the purebred stock of the elite district, will in all likelihood be yet heard from next fall at the shows. As an instance of what has been done, Mr. Dodds says he has sold nearly \$50 worth of young pigs from one grade brood sow in two years, and if he can sell fair common pigs for such an amount of money he is sure there will be sale for better stock, and has invested accordingly.—E.E.

R. GIBSON, BELVOIR FARM, DELAWARE P.O., ONT., writes: "The imported Berkshire sow Newport Maid, though very fat, having been successfully shown in England, produced eleven pigs, of which nine were raised pretty good for a first-prize winner and first litter. Mr. A. Fraser, Vanneck P.O., secured one boar, and Mr. John Ackland another, they are very promising, and cannot fail to do both gentlemen credit in their selections. Mr. F. Baker, Detroit, bought the choice of sow pigs, also the choice of litter from Souvenir 25 and by Moriner, bred by J. Snell's Sons. Sold to the Government Central Experimental Farm, Ottawa: Waterloo, bull calf, by imported 8th Duke of Leicester, out of imported Waterloo 4811, also the cow Wild Flower, and heifers Flower of Berkeley and Duchess of Guelders; to W. Medcraft & Son, an imported shearing Shropshire ram and two imported ewes; to J. D. Vinson, Centralia, Mo., three imported Shropshire ewes; to S. J. Murphy, Detroit, Mich., one imported Shropshire ram; to A. O. Fox, Oregon, Wis., three imported Shropshire rams, forty imported ewes, and two Canadian-bred ewe lambs."

MR. J. C. SNELL, EDMONTON, ONT., writes: It is with pleasure I have learned that at the Christmas Fat Stock Show, of the Smithfield Club, the Championship prize for the best pair of pigs of any age or breed, was won by Mr. N. Benjafield, of Motcombe, Dorset, with two young Berkshire sows, 8 months and 3 weeks old, which are own sisters of our imported boar, Royal Star, himself the winner of seven first prizes and a championship, at leading shows in England last year. These are said to have been a wonderful pair of pigs, weighing quite 20 scores each at the age named, and were sold to a Reading butcher for £29, or about \$145. The London Live Stock Journal commenting upon the show, says that "of the pair which won first prize in the older class, and also the breed cup, one died immediately after that award was made, and so could not come up for the champion contest," and adds, "this is a feather in the cap of the breeders of Berkshires, having two pens at least, good enough to win champion prize." (See issue Dec. 13, page 583). To this Mr. Snell adds they had at least three pens good enough, as the prize list shows that the reserve number was also a pair of Berkshires.

J. & T. MacKENZIE, HEATHERDALE FARM, SCOTCH BLOCK, ONT., writes: "Our pigs are all doing well this fall, one of our Poland China sows had eight nice pigs two weeks ago, and are all doing well at present writing, our sales during 1889 are as follows: one Yorkshire hog, one Poland China hog to John Henderson, Sodom, one Poland China hog and sow, to James Wilson, Knatch Bull, one Yorkshire sow to Pat Thompson, Brookville, and Poland China sow, to William Beatty, Omaha; two Poland China boars, to Thomas Prest, Tottenham; one Poland China boar, to Samuel Brice, Whitby; one Poland China boar and Poland China sow, to Captain Robert Reesor, Cedar Grove; one Berkshire boar, to Dr. D. M. C. Reesor, Hutinvale; one Berkshire sow Silver Bell, to Woodhall McLean, of

Stock Notes.—Continued.

Scotch Black; one Suffolk boar, to Mat Farries, of Oanes P.O.; one Suffolk sow, to John Spindler, of Lanes P.O., Huron County; one Poland China boar, to Levi Pollard, of Iona, Elgin County; one Berkshire sow, Prince's of Campbellville, to D. & J. MacKenzie, Campbellville; one Durham bull, to D. & J. MacKenzie, Campbellville; one fine pair of light Brahmas, to John Holmes, of Georgetown; one pair of Golden Polands, to D. & J. MacKenzie. We were very successful at the shows this fall, taking a number of first and second prizes at Georgetown, Acton, Brookville, Freelon, Milton, and Brampton shows.

MESSES. W. H. & C. H. McNish, of LYN, ONT., write: "From the very favorable reports given by our most extensive pork packing establishments, regarding the quality of the meat of the large Yorkshires, together with our own observations in regard to producing a class of pork more suited to the demands of the present day, we have decided to give the breed a fair trial, and we have got together a herd of 14 head, 7 of them is breeding sows in farrow, 4 of them being imported from the herd of Sanders Spencer, England, and we must confess that what little experience we already have had with the breed, we like them very much, and think they have come to stay. We have to choice Berkshire sows safe in farrow, (the best lot we ever had), and we expect to be better able than ever the coming season to meet the demands of those wanting either Berkshires or Yorkshires of the highest quality. Below are our sales since last reported: Ayrshires, 1 bull calf, to Jas. Gillroy, Springfield; 1 bull calf, to Henry Robison, Lyn, Ont.; 2 cows, to Ed. Boyd, Kars, Ont.; 10 cows and 2 calves, to Jas. Neil, Collingwood; Shrops, 1 ram, to Chas. L. Hydon, Morristown, N. Y.; 5 ewes, to W. S. Cuthbert, Hammond, N. Y.; 2 ewes, to Byron Blancher, Addison, Ont.; 10 ewes and 6 rams, to Robert Miller, Brougham, Ont.; 1 ram 8 ewes, to S. E. Humphry, Dixville, Ont. Berkshires, Pat Donovan, 1 boar, Escott, Ont.; Hon. Jas. Smart, Brandon, Man., 1 boar 3 sows; Alex. Stuart, Ottawa, Ont., 1 boar; Lin Edward, Jasper, 1 boar and sow; Geo. Campbell, Elphin, Ont., 1 boar; W. H. Martin, Warden, Ont., 1 boar; John Mulvina, Sherbrook, Ont., 1 sow; R. G. A. Murphy, Elgin, Ont., 1 boar; Thos. Sands, Elginburg, Ont., 1 boar; Robert Faskin, Fergus, Ont., 1 boar; Geo. Green, Fairbairn, Ont., 1 boar and 2 sows; J. C. Snell, Edmonton, Ont., 2 sows; J. G. Snell & Bro., 2 boars, all made at fair prices. Could have sold a good many more pigs if we had them.

JOSEPH FEATHERSTON, PINE GROVE FARM, SPRINGFIELD-ON-THE-CREDIT, writes: My stock never looked better than they do now at this time of the year; young pigs growing as if it were in the month of May, and orders still continue coming forward for Yorkshires and Suffolks; the following is a list of sales: 7 Essex, to E. Patchet, Clarkson, Ont.; 3 Esse, to Wm. Patchet, Clarkson, Ont.; 1 Yorkshire boar, to George Sheridan, Inkerman; 2 Yorkshires, boar and sow, R. Pattison, Amherst Island, Ont.; 2 Yorkshires, boar and sow, O. E. Shoup, Cheapside, Ont.; 2 Yorkshire boars, Charles Cuthbert, Portage la Prairie, Man.; 1 Yorkshire Boar, W. A. Hamilton, Sand Hill, Ont.; 2 Yorkshires, boar and sow, R. R. Booth, Wisconsin, Ont.; 2 Yorkshires, boar and sow, George Armstrong, Guelph, Ont.; 1 Yorkshire boar, John Master, London, Ont.; 1 Yorkshire boar, W. G. St. John, Sunderland, Ont.; Yorkshire sow, Alexander Wark, Wanstead, Ont.; 1 Yorkshire boar, John S. Koch, Fergus, Ont.; 2 Yorkshires, boar and sow, Robert Shortreed, Guelph, Ont.; 1 Yorkshire boar, Wm. Shortreed, Drexton P.O., Ont.; 1 Yorkshire boar, John Breckenridge, Werswood, Ont.; 1 Yorkshire sow, Wm. Curtis, York, Ont.; 1 Suffolk boar, Wm. Curtis, York, Ont.; 2 Yorkshires, boar and sow, A. N. Pray, Tilsonburg, Ont.; 1 Yorkshire boar, George Fearnley, London, Ont.; 1 Yorkshire boar, John Whitton, Thamesford, Ont.; 2 Essex, boar and sow, A. Cameron, Ashburn, Ont.; 2 Suffolks, J. & L. McKenzie, Esquesing, Ont.; 2 Suffolks, A. Lorill, Wolfe, Ont.; 1 Suffolk boar, W. H. Hammill, M.P.P., Breton, Ont.; 1 Yorkshire boar, J. Monkman, Albion, Ont.; 2 Yorkshires, George Cranes, Pollard, Ont.; 1 Suffolk boar, Mr. Campbell, Grimsby, Ont.; 2 Yorkshires, S. Gable, Showerville, Ont.; 2 Suffolks, one Yorkshire sow, John Mills, Brampton, Ont.; 2 Yorkshires, boar and sow, George Reeder, Ridgetown, Ont.; 1 Yorkshire boar, Wm. Richardson, Hagerville, Ont.; 1 Yorkshire boar, John L. Little, Walkerton, Ont.; 1 Yorkshire boar, John Linklater, Dunlop, Ont.; 1 Suffolk boar, Joseph Fletcher, Oxford Mills; 3 Yorkshires, C. W. Kerr, Oil City, Ont.; 1 Yorkshire sow, J. & L. McKenzie, Scotch Black; 1 Yorkshire sow, W. J. Mason, Oliphant; 1 Yorkshire boar, W. G. Nicholson, Harriston, Ont.; 1 Yorkshire Boar, James Grills, Elora, Ont.; 1 Yorkshire boar, Wm. McCloy, Oneida, Ont.; 1 Yorkshire sow, Ed. Lover, Etobicoke, Ont.; 1 Yorkshire boar, Alph Hunen, Asprings, Ont.; 1 Suffolk boar, L. F. Bogart, Gosport, Ont.

Poultry.

WM COLLINS, UNION, ONT., changes his advertisement, and announces many varieties of fowl for sale; also Suffolk swine.

W. B. COCKBURN, OF ABERFOYLE, ONT., in his advertisement now running, states that he is prepared to supply the spring trade with eggs from high scoring bird. He breeds Pekin Ducks, Plymouth Rocks, Light Brahmas, White and Brown Leghorns.

W. B. COCKBURN, OF ABERFOYLE P.O., ONT., writes: "At the Milton Poultry Show Dec. 30th, 31st, and Jan. 1st, my birds won the following prizes: Partridge Cochon cockerel, 1st, 92½; Plymouth Rock cock, and, 90; Plymouth Rock hen, and, 92½; Plymouth Rock cock, and and 3rd, 92½, 92½; Black Leghorn hen, and, 91; Black Leghorn pullets, 1st and 3rd, 95, 92; White Leghorn pullet, 3rd, 93½. Pekin Drake, bred in 1889, 1st; no ducks shown. Since writing last I have made several sales: To Thos. Chisholm, Mansewood, a Plymouth Rock cock and cockerel; T. A. Greenius, Britannie, one Black Spanish cockerel and three pullets; J. A. Waldie, Milton, trio Black Leghorns; T. Brownridge, Brampton, Plymouth Rock cockerel; T. Cockburn, Hamilton, Pekin drake; Dewar and Mitchell, Milton, Black Leghorn pullet."

HORSES FOR SALE.

PERCHERON HORSES AT BARGAINS!



We mean exactly what we say. We have 148 Head Imported and Pure Bred Stallions and Mares, 6 French Coach Stallions, 36 Head of Grade Stallions and Mares, 20 Shetland and Exmoor Ponies, and 27 Head Registered Polstela Cattle, must be disposed of during this season, owing to changes in our business. If you think of buying write us (describing what you want) for our Catalogue and Prices, and we will convince you that it will pay you well to buy of us.

Island Home Stock Farm. SAVAGE & FARNUM, Detroit, Mich.

AUCTION SALE OF GLYDESDALE HORSES AND MARES.

At MITCHELL, on WEDNESDAY, FEB. 12, 1890, the splendid stock of high class Pedigreed Imported Clydesdale Horses and Mares, embracing ten Stallions and three Mares, WILL BE SOLD BY AUCTION. For Catalogue, Address— THOS COLQUHOUN, Proprietor, MITCHELL, ONT.

PONIES FOR SALE.

One dark brown, 14 hands, from V. B. mare and half Arab stallion, the light brown, 13 hands, 600 lbs, from a minute trotting Exmoor pony mare, and a 14½-hand Phil Sheridan Stallion, 12.40. With very kind and nicely broken to saddle. Address— JAMES MOONIE, Pine Grove Stock Farm, CHESTERVILLE, P. O., Dundas Co., Ont. Dec. 9th.



JOHN GILMOUR, Proprietor of pedigreed Clydesdale Stallions, Black and Grey, Toronto. Stock on hand for sale. Write or call.

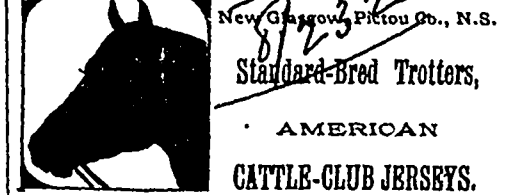
English Shire Stallions CHEAP

WE have a few very nice colts left rising two, three, and four years old. We want to sell and as we have facilities for breeding in England that cannot be surpassed, we are able to offer stallions and fillies at exceptionally low figures to parties buying before Spring. We have first and second prize winners at Buffalo, Toronto, and Hamilton in our stable. ORMSBY & CHAPMAN, Springfield-on-the-Credit, Ont. STATIONS—Streetsville on the C.P.R. Port Credit on the G.T.R. jats.

CLEVELAND BAY STALLIONS FOR SALE.

BRED FROM PRIZE-WINNING STOCK. For further particulars apply to W. C. BROWN, Meadowvale. Farm is three-quarters of a mile from Meadowvale Station, on C.P.R. jad.

BROOKSIDE FARM,



New Glasgow, Pictou Co., N.S. Standard-Bred Trotters, AMERICAN CATTLE-CLUB JERSEYS.

AUCTION SALES. (See also next page.)

DISPERSION SALE Shorthorn Cattle, Shropshire Down Sheep

And High Class Agricultural Brood Mares and Fillies, ON WEDNESDAY, MARCH 19TH, 1890, WE WILL SELL BY Public Auction at our Farm, 5 Miles south of London, Ont., 60 HEAD OF SHORTHORN CATTLE,

Comprising two Imported Cruickshank Bulls, and Cows and Heifers of similar breeding, with representatives of families as bred by Silvester Cambell, Kenellar and W. S. Marr, Upper Mill. Also a beautiful lot of Imported Shropshire Down Sheep, and a fine lot of (in foal) Brood Mares and Fillies. On account of other business arrangements the proprietors are giving up farming, and will therefore sell without reserve. Teams will be in attendance to take out visitors to the farm the morning of and the evening previous to the sale.

A Credit of eight months on approved paper. See Catalogues.

FRANK R. SHORE & BROS., White Oak, Ont.



# The Seventh semi-annual Auction Sale of the Wyton Stock Breeder's Assn,

—WILL BE HELD AT—  
**WYTON, ONT., MARCH 27TH, 1890.**

THERE WILL BE OFFERED FOR SALE

**40 Head of Pure bred Holstein Cattle, Bull and Heifer Calves, Yearling Heifers and Bulls**

**ALSO OLDER CATTLE. All animals guaranteed Pure bred and Registered.**

TERMS.—Twenty-five per cent. down; balance three and six month's joint notes, where parties are satisfactory.

—HOUR OF SALE 1.30 P. M.—

Wyton is situated on the St. Mary's Branch of the G. T. R.R., ten miles from London. Trains arrive at Wyton from London at 8 a.m. and 2.30 p.m. From Stratford and St. Marys 11 a.m. Trains leave Wyton for London at 5.50 p.m., and for Stratford and St. Marys at 6.30 p.m. For further particulars and Catalogues address **W. B. SCATCERD, Sec'y, WYTON, ONT.**

## Greenhurst Farm, Township of Golborne.-- Important Auction Sale.

### IMPORTANT AUCTION SALE

### PURE-BRED REGISTERED SHORT HORNS

—ON—  
**WEDNESDAY, MARCH 5, 1890.**

As it is my intention to give up business, I will sell without reserve on the above date my entire herd of pure bred Shorthorns, all registered animals. Catalogues will be ready for distribution on February 1st and mailed to all applicants. Greenhurst Farm is situated 3 miles from Goderich, in the County of Huron. Parties will be met at the Railway Station on the evening of the 4th and morning of the 5th. Address

**ISAAC FISHER, GODERICH, ONT.**

## Important Auction Sale.

There will be sold on

**WEDNESDAY, FEB. 19TH,**

—AT—

### Hillside Farm, Blenheim

One mile west of Drumbo, on the C.P.R. and G.T.R.

Eleven Pure Bred Shorthorn Cattle, registered—10 females and 1 male; and 3 head of Durham Grades. Five young Clydesdale horses, registered—3 mares and 2 stallions; 2 Suffolk Pigs, Mares and other good young Horses.

**ALSO FINE BERSHIRE SOWS.**

The above stock is a superior lot with sound and reliable pedigrees and will worthy the attention of the public. Sale to begin at 11 A.M. Eight months' credit on all sums over \$50. Catalogues will be ready on February 5th. Conveyances will meet morning trains in Drumbo. LUNCH at noon.

The entire lot of Farm Implements on above farm will also be sold on same date, as the proprietor is giving up farming. Every animal offered will be sold.

**JAMES BAWTINHIMER,**

Proprietor, DRUMBO.

**T. IRVING, Auctioneer.**

### DISPERSION SALE

—OF—  
**Pure Bred and High Grade Shorthorn Cattle,**

Horses, Machinery, Implements, &c.



**J. Y. Reid, of Hillside Farm, 2½ miles south of Paris,**

Announces that he will sell

**By Public Auction on Thursday, March 13th,**

Commencing at 10 a.m., the whole of his valuable stock of

**PURE BRED AND HIGH GRADE SHORTHORN CATTLE,**

Being representatives of the Waterloo, Knightly, and Roan Duchess Families,

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**IMPORTED GLYDESDALE STALLION,**

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**ONE IMPORTED GLYDESDALE MARE,**

GEORDIE Vol. XII., foaled June 1887; Color, dark brown, two white legs and white face. Sire, Sir Archibald Buchanan, (540), Vol. XI.; Dam, Jess of Southton (7952), Vol. XI.; Sire of dam, Campsie (119), Vol. I.

Horses can be seen at stable, EAST STREET, GALT. Full particulars by post. Address,

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 100 JERSEYS**

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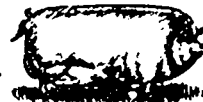
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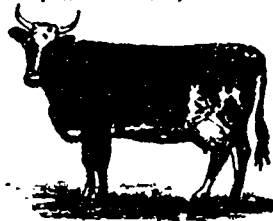
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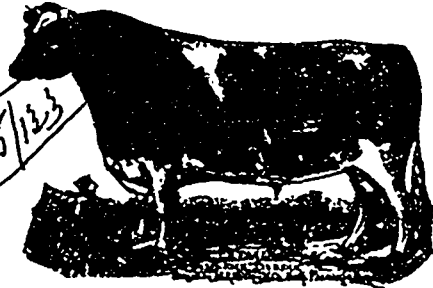
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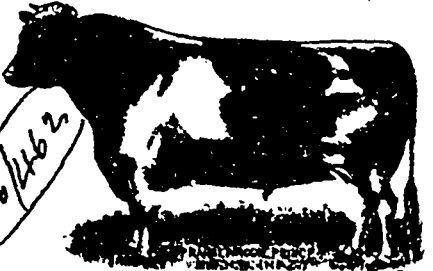
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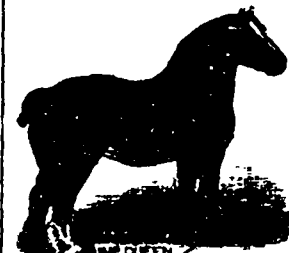
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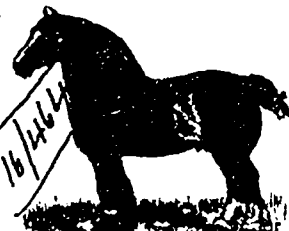
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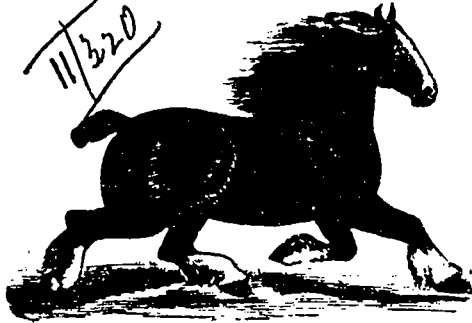
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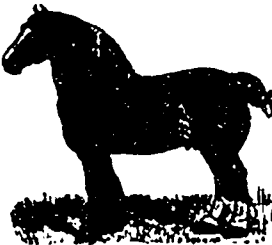
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VICK'S BANNER OATS

These Oats, during the past season have had a thorough trial throughout the Canadian provinces, and the universal testimony of those that have grown them, is highly in favor of this variety as may be judged from the following, selected from many

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These are just a few of the number received lately. On our own farm we harvested 91 bushels, 6 lbs. cleaned oats from a measured acre. The whole averaged 70 bushels per acre.

DESCRIPTION

The grain is white, large and plump, ripens easily, has a stiff straw and an open and branching head. It tillers freely and so can be sown thinner than is customary. I take special care and give every attention to keeping the seed free from all foul seeds.

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In quantities under Five bushels, \$1.00 per bushel and 20 cents for bags.  
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I can ship either by G. T. R. or C. P. R. Intending purchasers will do well to order early. All orders promptly attended to.

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Market Gardeners will find it to their advantage to sow our Seeds  
John A. Bruce & Co.  
Hamilton, Ont.  
FOR 1890.

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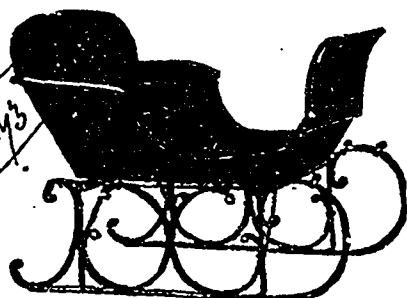
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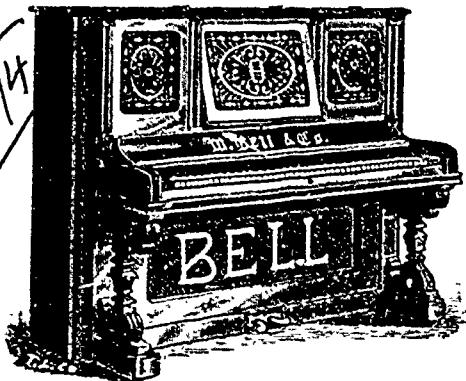
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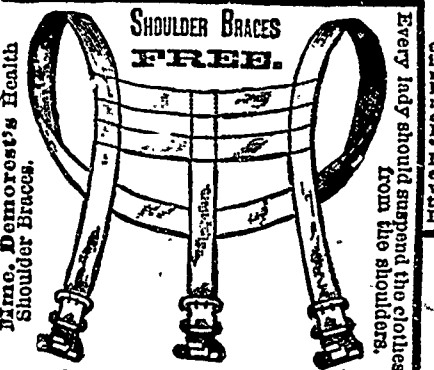
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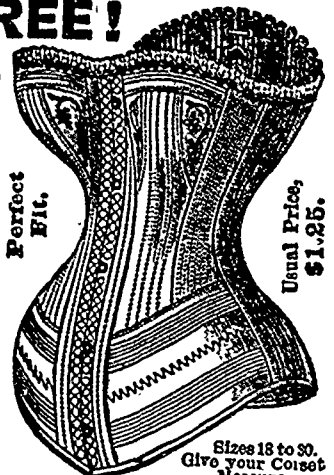
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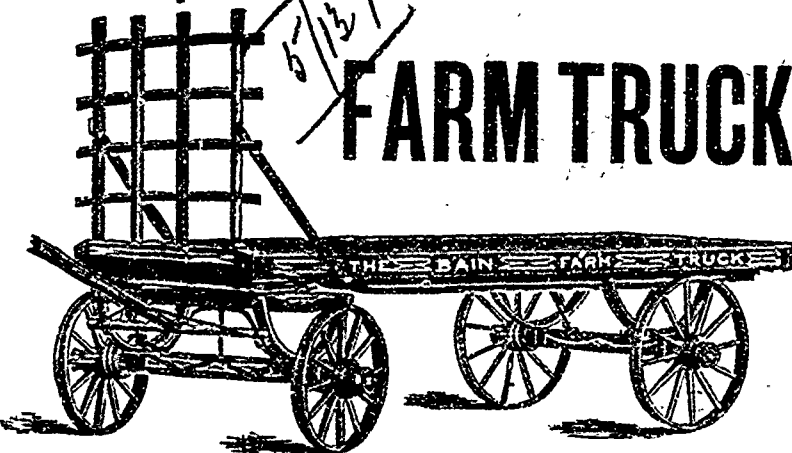
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**JOHN SNELL'S SONS**, Importers and breeders of Shorthorn P. O., Improved, Cotswold, Berkshire hogs and Cotswold R. R. Stations, Shropshire sheep. Stock for sale; shipped to on G. T. R. and C. V. R.; satisfaction guaranteed. Write Edmonton, C. V. R., for prices or come and see our stock.

**J. G. SNELL & BRO.**, Edmonton, Ont., bred for sale Berkshire pigs, Cotswold sheep and other stock. 12 head of Berkshires imported in the last season. Write for prices. Station, Brampton, C.P.R., and G.T.R.

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**H. CRAWFORD & SONS**, Guelph, Ont., importers and breeders of Cotswold sheep, and pure bred Berkshire and Shire Swine.

**G. & B. HICKSON**, Stock Farm, New Sarum, Ont., breeders of pure bred Merino sheep. Stock for sale.

**SMITH EVANS**, Gainsborough, Ont., import and breeder of pure bred Oxford Down and Berkshire pigs.

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**D. G. HANMER**, Vernon, Ont., breeders of registered pure bred Berkshire sheep. Stock for sale.

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