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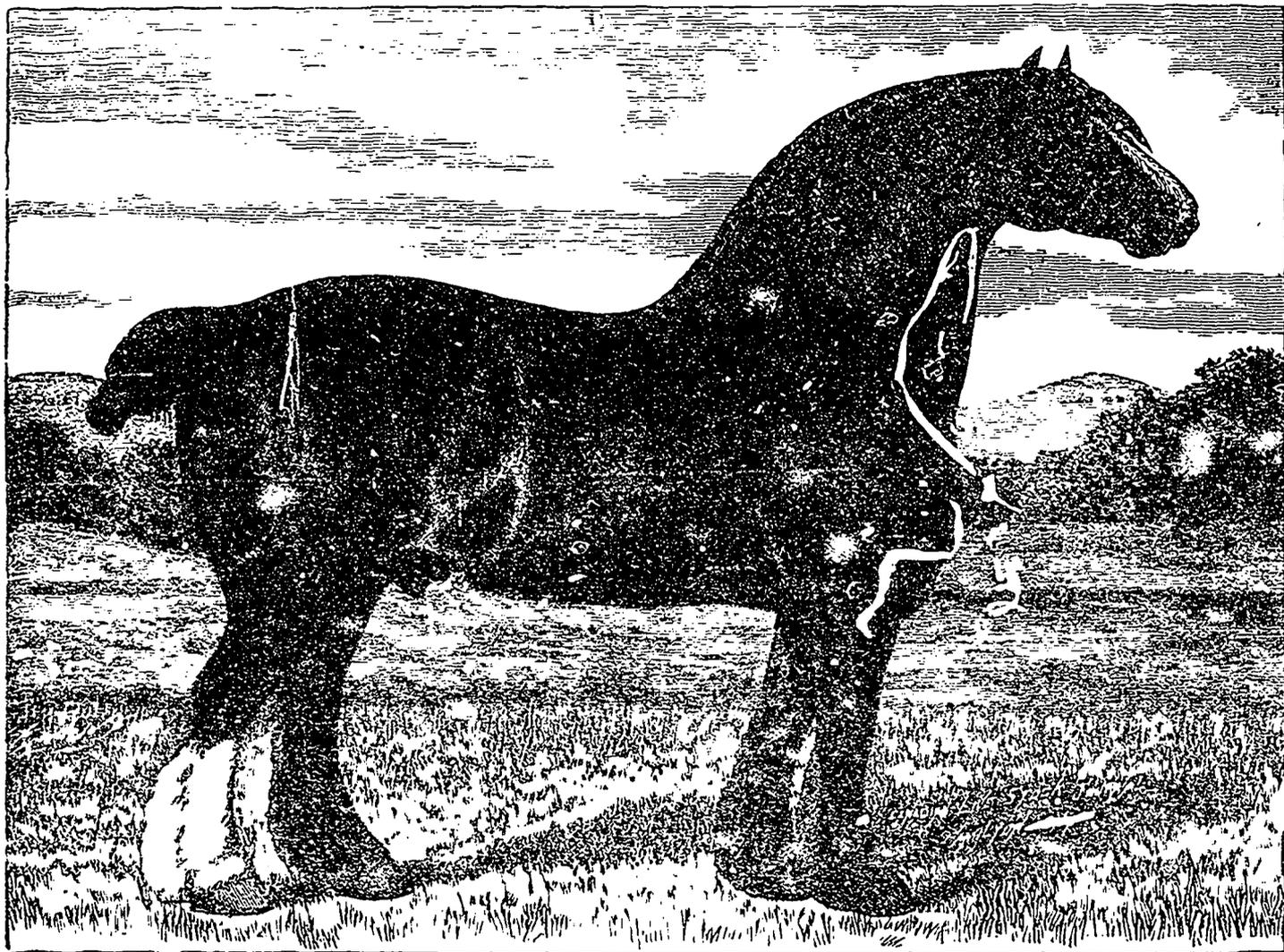
# CANADIAN LIVE-STOCK JOURNAL.

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

VOL. II.

HAMILTON, CANADA, SEPTEMBER, 1885

No. 9



THE CLYDESDALE STALLION SOUTH-WESTERN.

*Imported by Mr. C. M. Acer, Montreal.*

## South-Western.

This Clydesdale Stallion was imported into Canada by Mr. C. M. Acer, of the Horse Exchange, Montreal, and has since been sold to that land where so many good things in the stock line go—the Western States. It is very surprising the large number of purebred sires that have been absorbed by the meadows of the prairie, and the question now and then forces itself upon the thoughtful mind—What is the end to be? Will the day ever come when the traffic in purebreds will move from West to East, the New World repaying the old with a better class of sires even than she has got from beyond the Atlantic? Or will the march of improvement turn Southward till the immense lands of Venezuela and Brazil shall become dotted with descendants of pure breeds of every line?

If fully alive to their own best interests our countrymen would not allow so many good horses to go

across the line when the need for the using them at home is so great.

As team draught-horses, the Clydes with their strength and robustness, which have stood the test of long years with more and more of acceptance, are yet without a rival in the estimation of the general public, unless it be in the English Shire, which, with their greater compactness of build, have found themselves any day equal to the task of a Hercules.

There is always a market for good grade colts raised from stallions of the above breeds, and the trouble of breaking, owing to the nature of the work wanted of them, is reduced to a minimum.

Mr. Acer writes as we go to press: "I have also disposed of the remaining five stallions, and have now only The Bent Laird. He is a very fine stallion—in fact, the best of the lot. He stood this season in my stable for mares, and was very much admired by horsemen." Bent Laird is 3 years old; sired by

Prince of Wales, dam The Bent Lass. Mr. Acer has been for some years engaged in business in the Horse Exchange at Point St. Charles, Montreal, and many are the good horses which have passed through his hands during this period.

## Clubbing Rates.

The favorable season is now upon us when clubs for the ensuing year may readily be secured. A little effort at the fairs and other autumnal gatherings on the part of our friends, and the work is done. The JOURNAL will be sent from this date until the end of 1886 in clubs of five for four dollars. It will be sent in clubs of ten for seven dollars and fifty cents. The names may belong to different offices.

INDIVIDUALS subscribing for the JOURNAL now, will receive the same until the end of 1886 for one dollar. Sample copies free. Remit in registered letter.

## Canadian Live-Stock Journal,

PUBLISHED MONTHLY BY

THE STOCK JOURNAL COMPANY,

48 John Street South, Hamilton, Ont.

Terms, \$1.00 per Annum in Advance.

THOMAS SHAW, RIVERSIDE FARM, EDITOR.

**To Subscribers.**—Subscription price, \$1.00 per annum in advance. Single copies, 10 cents each; sample copies free. No names will be removed from our subscription list when in arrears and without we receive instructions to that effect. Those in arrears will be charged \$1.50.

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

**To Advertisers.**—Advertisements of an appropriate nature will be inserted in the JOURNAL at the following rates: For a single insertion, 12c. per line, nonpariel (12 lines make one inch); for three months, 15 cents per line each insertion; for six months, 13c. per line each insertion; for one year, 10c. per line each insertion. Cards in Breeders' Directory, not exceeding five lines, \$1 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.

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

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

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

HAMILTON, CANADA, SEPTEMBER, 1885.

A WRITER in the Chicago *National Live Stock Journal*, speaking of mistakes in the purchase of Jerseys, says "selecting an animal for breeding purposes because of a certain color of hair, to please the fancy, is one of the most serious mistakes." This remark might, we think, be truthfully extended to other breeds as well as Jerseys. A Shorthorn bull, if only red in color, will be chosen by a majority of purchasers, though cramped in dimensions and covered with a tight-fitting hide. So potent has this power of fashion become that the scrawniest scrub male that picks up his living on the highway must be orthodoxly red. To be sure a certain respect is to be had to color, inasmuch as it is an indication of the purity of the breed. But when different colors and shades of color characterize the same breed, as is the case with the Shorthorns and Jerseys, the shade of color should certainly occupy a most secondary place. In a beefing breed the character of the breast, back, barrel, bone, loin and handling is infinitely more important than the shade of color, and in the milking strains the same may be said of the udder, the milk veins, the escutcheon, etc. If the breeder has a hankering after a certain color and can gratify it without the sacrifice of essentials much more important, let him do so, but otherwise, *never*; else it will be done at the grim expense of the deterioration of the race. If the color of any breed can be rendered uniform and of a given type without loss in any of the more important essentials, good and well, but never under any other circumstances.

SHEEP-RAISING of late has not been the most profitable branch of stock raising, but like everything else it will have its time. Those who have good flocks of well bred sheep cannot be too chary about dispersing them altogether. It may be prudent not to keep very large flocks, but in most cases a remnant of the choicest should be kept, good breeding ewes with youth upon their side, to be ready for any change that may come. Nor should they who have

no pure-breds give up raising sheep. A small flock are of much use as scavengers of stray morsels that may grow about the fences in, the summer fallow, or on the broken ground bordering on the little rivulets. Even though not one of them be sold to the butcher, every farmer should have a number, and kill one now and then for home use. Those who have ice-houses will usually be able to take care of a whole carcass even in warm weather. Mutton makes most excellent food. Compared with it, the fat salt bacon usually used on the farm in summertime is far inferior. In the fall of the year, before the time arrives for killing the beeve intended for winter, a sheep now and then is indeed a luxury. Many in the United States are going out of sheep rearing, as well as a number in our own country. Just as surely as the passengers on ship board all rush to one side, there is a lurch which impels them to the other, and so it is in all the branches of stock-keeping. Keep only those that are choice and patiently wait with all the canvas hung out for the propelling breezes that may already be on their way.

THE Shorthorn herd book question is waxing somewhat warm, yet on the whole there has been a good deal of respect shown for personal feeling. This is as it should be, and if the discussion continues to be carried on in the same spirit good cannot but come out of it. It is when deep personal stabs are made that that hatred is engendered between men which sleeps only with the last sleep. We rejoice to see the thorough earnestness displayed by the respective writers. It is surprising how thoroughly earnest individuals may be in the advocacy of views that are diametrically opposed. Such utterances are always entitled to a measure of respect, however faulty the basis on which they stand. On the other hand there is usually an echo of betrayal in hollow-hearted statements that stand on a pedestal ever so secure. The man who is earnest is always a power in his circle, while he who is not can only endure for a brief season. That the discussion is necessary, few will deny. That good has already come out of it in the increased attention drawn to herd books from the listless and in other ways, few will gainsay, and that it will result in still greater good must be the devout wish of every person interested. It is well that it be looked at from every standpoint, and therefore thoroughly discussed. In this way the sure lessons that emanate from the mistakes of the past may be learned by all. As stated heretofore, we would like now to learn more as to the shapings of the future in reference to the herd books.

MR. G. LAIDLAW, of "The Fort," Victoria Road, is certainly right when he states in a communication on another page that "without good feeding and stabling, thoroughbreds become scrubs in the hands of thriftless farmers, or thrifty farmers, whose circumstances or premises preclude necessary warmth." Without these conditions all improvement of stock upon a proper basis is hopelessly impossible. Without suitable winter accommodation results cannot be attained that will be at all satisfactory. Instead of advance there is more likelihood to be retrogression, where that is possible. While we freely admit that the number of our farmers may be large who are not yet convinced of the wisdom of grading up their stock by using pure bred sires, surely not one of them will argue that it is either humane or wise to winter stock amid privation. It is almost unexplainable that *self-interest* does not set every man to work to provide suitable accommodation for his stock in winter. To do this

it is not absolutely necessary to build new and costly buildings. The laborers' cow is often fairly comfortable in the slab and straw-thatched stable. The buildings already in possession may be vastly improved at small cost. They may be lined, and the space filled with some substance as straw, etc., to keep the cold at bay. Just *now* is the time to attend to it before the winter comes on. Farmers should get rid of the delusion that comfortable quarters are absolutely necessary only for pure bred stock. They are quite as necessary to the well being of the scrub, unless he is to be kept at a loss which the owner cannot afford, as under the most favorable conditions he brings the farmer a very doubtful gain.

We fear that individuals not a few do not rightly apprehend our position in reference to the proposed tax on males, judging from the tenor of some references that have appeared of late in the JOURNAL. We do not advocate a tax on the scrub bulls simply, but that all males be taxed that are kept for service, whether pure bred or scrub of the quadruped kind. In such a case the end must be "the survival of the fittest." If a scrub male is a better investment than the pure bred, then the government will have adopted a course that must ultimately benefit the whole farming community by assisting in the banishment of pure bred from the land. If the scrub pass through the ordeal unharmed, then his owner cannot have a shadow of ground for complaint, as the owner of scrubs are as yet vastly in the majority. If, on the other hand, the pure bred hold the fort, then also the owners of scrubs will still have reason to rejoice, for it is only on the ground of *merit* in such a case that victory can be achieved. The fact must not be overlooked that virtually the Government has placed a tax already on males when it said they should not be allowed to roam at large without the hazard of certain penalties. When that act became law it laid a tax upon every farmer who had hitherto kept a male running at large to the amount of the cost of his pasture and extra fencing required to keep him in. We simply ask an increase of a tax already in existence, though in a different form. The question now is not one of *principle* as to the imposition of a tax, but of *degree* in regard to the amount. Did it ever occur to those who say that our farmers would not submit to a tax of this nature, that they are submitting to it now.

BEFORE the present number of the JOURNAL reaches our readers a large proportion will have weaned their lambs. When these have come early this should be done not later than the middle of August, which gives the ewes time to take on flesh and get in condition for the approaching winter or for slaughter, as the case may be. When put on good pasture after the lambs are weaned and the ewes thoroughly dried, the latter will breed earlier than under other conditions and will go into winter quarters scarcely feeling the change. The lambs, however, in addition to getting good pasture should have a supplement of grain once a day. For ordinary purposes oats fed whole will answer perhaps better than anything else. A small quantity will suffice, from half a pint to a pint for each lamb. If fattening is the object aimed at, some linseed cake can be added, but in very moderate quantities. In selecting the ewe-lambs to be retained for breeding purposes, make size only one consideration. General symmetry should figure largely in the choice but should not be too cramped in its dimensions. Long legs should be avoided, as also a lean, bony carcass. Whatever else is lacking, it should not be a good square, deep

chest, broad back and well-wooled belly. The very choicest of the flock should be saved, even in the very face of tempting offers from breeders. To sell the pick of the flock to the butcher where it is intended to continue breeding is a crime that ought to be punished by law. Where there is not adequate room to winter the lambs for sale, they should be disposed of before its approach, even when sold at a low price, as sheep will not bear crowding. Two boards, 1 inch by six inches, nailed together at right angles make a sufficient trough for feeding in the fields when supported on legs similar to those used in the construction of a saw horse, used by the ordinary cutter of cordwood. A strip should be nailed across the bottom of the feet even with the ground to keep the trough from being upset.

### Making the Most of Opportunities.

(TO THE YOUNG MEN OF THE FARM.)

Mr. C. H. F. Major, the author of the stirring and exceedingly pointed papers on the subject, "To be or not to be, to act or not to act," which appear in the August and September issues of the JOURNAL, makes the following pregnant statement in the department treating of agriculture and education. "Most of the matter of this paper was thought out between the plough-handles and put in shape when work was done." The brain-power that is wasted on the farm because it is not utilized after the plan adopted by Mr. Major, who can estimate? The magnitude of the loss, which clever finance minister shall put it into figures? Indeed, it cannot be reduced to figures, for the most precious part of it—the deprivation of that deep, true enjoyment which comes from mental culture, is of a nature so subtle that even the mathematical brain of a finance minister cannot grasp it. The human mind is like a machine which feeds itself. Except it may be on its spiritual side, it is the main-spring of its own enjoyments; and like the produce of a cultivated field, these are usually in exact proportion to the care bestowed in its cultivation.

We have heard it remarked that the truest happiness in rural life was to be found in the cot of the farm servant, who, after his day's work is done, gathering with others of his guild in a little knot or group, wile away the evening hours with simple neighborhood talk, quite unconcerned as to whether there shall be either rain or sun to-morrow.

We have read somewhere in reference to the distinctions between the different forms of life, although we cannot give the exact language, that while vegetables grow and live, animals grow and live and feel. Does not the next step in the ascending scale bring us to the farm laborer, as already referred to, utterly unconcerned as to whether his condition will ever be better. Of him we may say that while he has grown, and while he lives and feels, he also eats and sleeps—attributes that do not yet lift him above the lower animals, for they do likewise. Like some of them, too, he labors much after the fashion of a machine, moving as it is moved. There is this difference, however, that while they apparently tell no tales, he finds his deepest enjoyment in canvassing the petty locals of the neighborhood. Who will say, who dare say, that this is the goal of mere earthly bliss, that the highest plane of human happiness lies so very near the border line of the lower orders of plant life, that we can scarcely tell in many instances where it is? While man's physical powers are susceptible of improvement from the cradle to matured life, his mental powers are capable of expansion from the cradle to the grave, and this fact in the absence of any evidence to the contrary is a presumptive proof that they may still ex-

pand in the eternity beyond. But it is a law of life that the moment progression ceases, retrogression commences; so that the intelligent being who does not continually try to improve his intellectual nature, is suicidal to the best interests thereof.

Nay, if this were the goal of intellectual bliss, may we reach it the last. And "may we reach it the last" impromptu comes the echo from a thousand of the youthful followers of the plough. Like air and water, the properties of the human mind are wonderfully expansive. So much so, that who can make himself believe, even in the absence of proof to the contrary, that these powers of expansion shall have exhausted themselves within the narrow limit that men call *time*? Nay, will not the avenue into the unseen be but an opening into the boundless realm where intellectual development will be gloriously unfettered, and where intellectual improvement will commence an eternal forward march?

But laying aside this mightiest spur to human effort, and confining ourselves to arguments shut in by the ancient gates of time, what abundant reason is there that farmers' sons should think out profitable problems between the plough handles, and put them in shape during those seasons when the birds have sought their perch.

*Agricultural representation* in the Legislature calls for it. The clamor for this is a favorite theme of demagogues on the hustings in every rural district. The very fact that there is room for such a clamor is a stigma on the farming profession. If the merchants raised the clamor that they were not sufficiently represented, we would take a similar position; we would hold its existence as a stigma on mercantile life. If a sufficient number of farmers had so cultivated their minds, that on the platform they could hold even a lawyer at bay, they would certainly be elected as the representatives of the people in rural districts in preference to the other. Farmers should not be blamed for electing a capable professional man in preference to an incapable farmer. The men of no calling would like to choose a legislator who, though he might be successful as a money-maker on a farm, would be nothing more than an old woman in the halls of the legislature. When a larger number of our farmers engage in the working out of problems while following the plough, and putting them in shape in the evening, we shall have less and less of the professional element representing us in the Legislature. Many of the farmers who now represent us are men of this class. They have not reached their present positions by some lucky revolution of the wheel of accident. We venture to assert that, if the whole story of their lives were known, many and many a day while following the plough, when the very air was resounding with the song of singing birds (which they heard not), they were thinking out some useful subject which they put in shape when other farmers were talking by the half hour about nothing, or, if possible, *something less*.

Ye former fathers, whose sons have a predilection for putting their thoughts on paper, do not be hard with them for the little time they spend in this way. What though they do for you a half hour's less labor in the day? Many a man, whose aspirations lie very near the border-land of vegetable life, can make that up for you at a comparatively small outlay. Give the boys a chance. Far too few of the entire number have fallen in love with the pen to justify turning cold water upon their efforts. We say again, give your sons upon the farm who love the pen a chance, and it is not at all improbable that you will soon find them where every farmer father must love to see his boy,

standing high on some Laurentian height, looking down upon the multitude who labor in the valley.

The wants of the *agricultural press* demand it. Take up an ordinary agricultural newspaper, examine it carefully, and you will find that most of the articles are either clippings, or what is more contemptible, a re-hash of clippings palmed off upon an innocently unsuspecting public as the shoddy store palms off old clothes for new, which have merely undergone a polishing-up process. Wherefore is this dearth of matter? Not because of the *poverty* of the subject. The Alexandrian library itself might be outnumbered in the volumes that could be written on agriculture. Nearly every practical science has its foundation or cope-stone in this infinitely grandest of the sciences. Nor because of the *needs* of the subject. Amazing progress has been made of late years in the march of improvement, but this is as nothing in comparison, with the triumphs yet to be.

So long as hand labor has to be done, discovery in the line of agricultural improvement will be an unfinished problem. Then there are the rich experiences of practical farmers going down with them to the grave like the crops of an ungathered harvest, because there is none who may chronicle them for the benefit of those who shall live after. The history of our flocks and herds as yet but lives mainly in a tradition more uncertain than that of the bards and druids. Defects in the practice of whole sections abound, because that which is more advanced in others has never penetrated the darkness. And even the foremost of our scientists have scarcely wet their foot-prints in the search for diamonds on the shores of this unbounded sea.

Nor does it arise from lack of *inherent brain-power* among the farmers. Nothing of the kind. They have more of it than would drive the machinery of the nation, though the professions were bound hand and foot, if they would but use it. Notwithstanding the tremendous drain that is drawn off by the professions, there is a rich supply left; but too often it is left as farmers frequently leave their implements—outside—to corrode and decay. Like the organic properties of deep rich soils, it is inert, never having been disturbed by the subsoil ploughshare of a laudable ambition. Like the hibernating squirrel lying dead in its nest, they feel none of the awakening influences of a spring sun calling upon them to arouse and get ready for the labors of summer.

The great educator of the farmer in the arts of his profession is the agricultural press. True, other newspapers do something—yea, a good deal, but only in so far as they dwell upon agriculture. It does not assist the farmer in his work to be told of an awful murder in New York, or even to know which candidate has got a place in the newly elected council. Farmers themselves are slow indeed to perceive these distinctions, but a brighter morn is breaking.

It is exceedingly important, then, that agricultural papers be well sustained. We do not now speak of a strong subscription list, but of the *abundance, the originality and superiority of the contributions that should come from the farmers themselves*, and things as they are, this cannot be, without the sons of the soil think profoundly while at their daily avocations, and put their thoughts in shape during intervals of labor, owing to the intimacy of the relation between sound theory and practice.

We understand perfectly the strength of will which such a course requires; indeed, so much so that very many will not give it. They would rather lie down in the grave content with the sentence upon their stone, "There lived a man," to perpetuate for a little

a remembrance that had almost died before them. But others will. We know that some young men will read this article who value brain-power far too highly to hand it over to the custodianship of an inglorious ease, with all its paralyzing influences.

We know full well the difficulty of the highest attainment under the conditions mentioned. Although muscle and brain-power are bosom friends, it is only when they are kept in due balance, or one will rob from the other the substance requisite to its well-being. And so mysterious and exact is the relation between them, that the moment this perfect balance is lost the other suffers. Toiling all day is a hindrance to the highest powers of thought. In some cases it may be a necessity, but where it is not, that mind possessing a consciousness of inherent vigor should try and curtail the number of hours spent in manual labor. If but one half the day could be spent in the fields and the other half in mental pursuits, it would enable the active mind to overtake a tremendous amount of effective work. The brief history of the CANADIAN LIVE-STOCK JOURNAL would reveal strange secrets in reference to this matter, but we forbear. It is enough for us, if but coral-like, we build from materials gathered in the Canadian deep, where other men shall occupy.

The farmer labors in a field where food for sublimest thought is turned up by every furrow of his ploughshare, when, while giving his beast a forkfull of hay, he may be conscious that his foot-prints are in the great sea of the undiscovered. The origin, progress, and development of plant life around him may any day throw down upon him an avalanche of problems greater than ever descended Alpine slope. With stores of material for thought so rich and so abundant around him on every hand, what young man on the farm is worthy of the name who does not die by day arise and take possession?

### High Feeding.

"High feeding at length impairs the reproductive powers and is opposed to robust constitutional health." This sentence is taken from the Chicago *National Live-Stock Journal*, and like so many of the sentences contained in every number of this grand monthly, carries with it the evidences of care and thought in its construction. It is a fact that very high fed animals are less reproductive than those kept on a more moderate fare. A scrub sire is sure to possess strong procreative powers—the only good thing about him, we had almost said, while the truth is, it is a great misfortune that such is the case. Again and again we find owners of costly animals complaining that they do not breed as do other animals, which, of course, results in disappointment and loss, just in proportion to the extent of the feeding.

Wise men always look straight at the truth, though it rest upon a shading dark as midnight. Just so soon as our stockmen rivet their attention upon the fact with a view to its removal, it will be removed. The laws of generation do not vary with either the centuries or the seasons, only in so far as they are made to vary by the ignorance or avarice of man.

Animals intended for the block cannot easily be pushed on too rapidly till they have fulfilled their intended end, nor can they easily be made too fat to find a ready market. It is different with those intended for breeding, as it has been demonstrated over and over again that not only certain kinds of foods, with nutrition very concentrated, are injurious, but that excessive quantity is also a hindrance to high procreative development.

It is not that stock is pure-bred that it is less fruit-

ful in reproducing its kind. Under proper conditions we can conceive that it will even be more productive, on the principle that a beast properly fed will certainly possess more of strength of constitution than one half starved, as scrubs so often are.

The evil does not always arise from too high feeding—nor from giving excessive quantity of a suitable kind of food, but quite as often from conjoining with these a lack of exercise that is quite at variance with the laws of nature.

It is very well to have box stalls in which males may have a certain measure of freedom in the earlier stages of their growth, but they should have in addition paddocks stoutly fenced, in which they may exercise themselves to the fullest extent.

Parties about to build should bear this in mind, and make it a part of their plan to have oblong paddocks and numerous radiating from the barnyard. In one end of each, strongly partitioned, shade trees for future use should be planted; and if the system of waterworks extend to each of these, so much the better. We never saw this put into practice, but we do not see why those paddocks would not form adjuncts of a building plan of the highest utility.

Young bulls are usually kept confined in a box-stall till one-year-old, almost unaware of the existence of earth or sun or sky. When sold for service it is not so surprising that some of them do not answer the purpose well, which is too often laid to the breed rather than to the treatment of the breed.

Those who are fitting breeding stock for show purposes in the lines used for beef production will do well to count the cost. If this can only be done at the hazard of interfering with the usefulness of the animals in future, then those only should exhibit them who can afford it, as winning prizes in this way must be an expensive luxury. While it is true that some animals can be dealt with thus and their usefulness as breeders remain unimpaired, it is equally true that others cannot, and in all instances it is attended with a measure of hazard, which they who show should weigh well. To be sure it is of great moment to win prizes at leading fairs, but it is also important that an estimate be made of the sacrifice that may require to be paid for them, as the price of success.

### Lord Lansdowne.

It is something new for a Governor-General of Canada to show the interest in agriculture and live stock displayed by His Excellency the Marquis of Lansdowne during his recent progress through the western part of Ontario. To find an English nobleman, educated at Eton and Oxford, fond of horses and field-sports, is not surprising; but when as in the case of our present Governor-General there has been a special preparation for the career of a statesman, it is peculiarly gratifying to find that he has had leisure to take a practical interest in farming pursuits. His intelligent speech at the Guelph College was characterized by the same keen power of observation and happy knack of putting things that has marked all his Excellency's utterances in Canada. From Guelph he went for a three days' visit to Mr. T. C. Patteson, at Eastwood, where the Shorthorns and famous flock of Shropshire Downs were reviewed under conditions not long since described in this journal. The rains had enlivened the pastures and foliage, and Mr. Patteson's place must have given his visitors a very agreeable impression of "farming in Canada." A visit to the neighboring estate of Mr. F. Green, near Innerkip, and an inspection of the herd at the head of which stands the noble Earl of Marr, must have strengthened the idea that our

leading stockmen had plenty of choice material for the use of farmers bent on breeding steers for the English market. We understand that his Lordship for the first time saw one of Rennie's ditchers at work at Eastwood, and also a hay-loader, and we believe intends, on his return to England, to try both these recent improvements on hand labor. The drive from Eastwood to Brantford via Burford is for the most part through a country well wooded and well-cultivated, with numerous substantial farms dotting the landscape. And then half an hour's more drive brought the owner of Bowood to the renowned pastures of Bow Park. Here there was a chance to see such a herd of magnificent Durham cattle as the world over cannot be surpassed; while through the long years since Mr. George Brown first established himself on the spot the constant high feeding of such a number of animals has resulted in an enrichment of the soil, which renders the Bow Park crops proverbial throughout the Province. One of the first things his Excellency did on his arrival in this city was to drive over and see Mr. Valancey Fuller's herd of Jerseys, and bringing with him the lesson he had learned at Prof. Brown's Guelph creamery, he no doubt benefitted by the further illustrations afforded by the unrivalled excellence of Mary Anne of St. Lambert and her highborn associates. Coupled with the intention of His Excellency to visit London for the express purpose of opening the Provincial Exhibition there, his patient and careful inspection of some of the principal herds and flocks in Ontario denotes an interest in the farmers' pursuits which cannot but be flattering to a class not too often patronized in this country by the powers that be. The name of the Marquis of Lansdowne will henceforth be dear to our subscribers, and they will feel sure that so far as in him lies no opportunity will be lost of extolling and advancing the business of Canadian farmers.

### Amongst our Friends.

"I gave up taking the *Farm, Field and Stockman* for your journal. I hope your paper may soon visit us twice a month."—Wm. Maxwell, Folly Mountain, Colchester Co., N. S.

Mr. Jos. Youill, of Carleton Place, writes: "I am really well pleased with your paper."

"I must say the JOURNAL has developed into a first-class live-stock paper. It has improved faster than I had any idea of, and is doing a work in this Canada of ours which in a few years will be worth hundreds of thousands to the country. I very much like the way in which you have managed the breeders' cards."—W. H. McNish, Lyn, Ont.

"I take other agricultural papers, but think most of the JOURNAL."—J. L. Powers, Kirby, Ont.

Mr. Jonas B. Saldor, of Waterloo, writes us: "As long as you keep your journal up to the useful points for us farmers as you have during last year, so long will I subscribe for it."

Mr. Jos. M. Peitz, of Fountain City, Wisconsin, U. S., writes us, "Am highly pleased and satisfied with your journal. It is suited to every class interested in stock-raising—the inexperienced beginner or the enterprising, practical, go-ahead farmer, while the successful breeder can learn much from its pages, even the go-as-you-please farmer, by reading its pages, always full of practical, reliable and instructive matter, may in time be convinced that it doesn't pay to raise scrub stock for anybody."

"As to the results of advertising in your journal, we received many communications from all over Ontario and Quebec, and sold all our dogs at good prices, from which we infer that the LIVE-STOCK JOURNAL is an excellent advertising medium. It is also the most welcome and readable of a number of agricultural journals we receive both from Canada and the United States."—E. Grant, St. Helens.

"Am pleased with the JOURNAL. The noble defence of Canada as a stock-raising country left a good taste in my mouth."—Jas. Asher, Caistorville.

For the CANADIAN LIVE-STOCK JOURNAL.

### Our Quarantine.

BY E. RENNIE, HAMILTON.

Our attention has been directed lately to the report of the Select Committee appointed to obtain information as to the agricultural interests of Canada; and among the various queries there is one which should be more ventilated, viz: "Would it be desirable to extend the duties of the present system of veterinary inspection in quarantine, and if needful, the staff also, with the view to deal with the local development of infectious diseases among farm stock and poultry throughout the Dominion, and the best means of stamping them out?"

We most sincerely believe that a more thorough ventilation in regard to the above question is necessary:

I. In consequence of the vast importance of this question to the Dominion.

II. On account of the gross injustice it received at the hands of the honorable gentlemen examined by the "Select Committee."

1. The importance of this consideration cannot be gainsaid.

The health of the live-stock of this Dominion is momentous, and is surely worthy the consideration of the best minds of this country. If the bare fact of its importance be not striking and self-convincing as an axiomatic truth, we might go further, and enlarge.

Can it be considered a light thing, if the health and well-being of the live stock of a country which has an extent from east to west of 3,500 miles, and from north to south of 1,400 miles, be in jeopardy? Is it a consideration in which levity should form an element, when we speak of the freedom from disease of cattle on a "thousand hills?"—yea, the cattle that live on an extent of 3,333,000 square miles, an area of no small extent, being more than  $\frac{1}{4}$  part of the land surface of the globe?

Can we afford to let fact hibernate and not be brought into the full light of noonday when the life of animals valued at \$156,318,111 (as reported for '83) is at stake?

Can we allow the live-stock interest, which originates an import in produce in a single year reaching the sum of \$19,196,820 (as shown by navigation returns, '83), to languish?

Let the quarantine be ineffective and let Government allow infected animals but reach our shores and live. Let the contagion spread. Let it be whispered abroad. The result will be that our stock will be decimated, and our cattle scheduled. The embargo which we have escaped thus far gives our cattle an advantage in England of from \$8 to \$10 per head; this on the 65,000 head sent last year sums up to from \$520,000 to \$650,000.

Take \$156,318,111 as our live-stock capital, \$19,196,820 as our export, and add thereto the immense but uncalculated produce home-consumed, and we reach a sum total so startling that there will be no "doubting Thomas" found to gainsay the importance of the consideration. This is but one side of the question as to its magnitude, for we have ourselves to protect.

Our country is exceptionally free from disease, and our cattle are of such a high standard that Mr. G. F. Frankland, the pioneer exporter of the country, has felt himself justified in saying that "no finer cattle can be found on earth, according to their number, than are to be met on the broad fields of Ontario."

Then should we not protect these cattle? From what? From infection from other lands. The annual report of the Agricultural Department, Privy

Council office, Great Britain, for 1884, gives the number of animals attacked by a single contagious disease as 28,221.

The gist of this portion of the subject—protection against infection—is found in embryo in the old adage, "An ounce of prevention is worth a pound of cure." Theories are vague; bring forth facts, says the practical man. Then should this question be lightly put aside, when there is just proof that if prevention be not maintained the Dominion will suffer an incalculable loss?

Those who have the means of knowing are positive that Pennsylvania has suffered a loss of fully \$500,000 from pleuro-pneumonia. This loss, it is averred, has fallen mainly on the farmers. According to the *London Times*, the extermination of pleuro-pneumonia has cost Great Britain and her colonies \$500,000,000. Add to the above the fact that the all-absorbing problem in the legislative halls of Belgium is the eradication of the same disease. Then ask whether our Parliament is willing to hazard a disaster which, occurring, would be so difficult to confront.

2. We push the question of quarantine, secondly, because we believe it received injustice at the hands of the gentlemen examined by the "Select Committee."

There is an almost unqualified answer of praise in regard to our quarantine regulations in that report. This uniformity of view is due doubtless to most of the parties having received their information by hearsay. The majority, therefore, receive their impressions of the quarantine in one of the following ways:

1. By simply reading rules and regulations, which are good and proper in their way, leaving the imagination to infer the rigor, severity or laxity of their enforcement.

2. Parties making cursory visits of inspection.

3. Parties importing animals.

4. Those viewing the actual work of attendance on the cattle while there.

1. Of the first there is little to be said.

2. Of the second and third, we could say much, but will try to be brief.

Jones wishes to see quarantine. He, after some difficulty, obtains a permit from Ottawa. On arrival is received and treated courteously; he is taken here to see Mr. Fatt's Shorthorns, worth £000,000; Mr. Whiteface's Herefords; Mr. Fancy's Jerseys; Mr. Cheese's Ayrshires; Mr. Oxman's Devons; Mr. Foretop's Cotswolds; Mr. Goodbodie's Leicesters; Mr. Qualitie's Southdowns; Mr. Quantity's Oxford-Downs, etc. Thus he is led, and shown. This good regulation is pointed out, the defects of other quarantines cited, etc., until Mr. Jones' time, which is limited, is up, and he goes away.

Of course all parties inspecting are not to be satisfied with stain and varnish. Some penetrate so deeply that even a veneer will not withstand their scrutiny. Among the foremost of these was Mr. Weld, of the *Farmers' Advocate*, who some years ago detected foot-and-mouth disease (Apthous fever), and laid information before the proper authorities. He also drew attention to the defects of the quarantine at Point Levis, Quebec, and the Government, in consequence, took steps for its improvement.

4. Parties doing the actual work are the best critics. Then why are defects not explained? Because closed lips are politic; for a little disagreement might cause an exporter unnecessary expense. Then why not when his cattle have passed and are gone? He may wish to import or work with cattle on future occasions.

There are others, again, who do not see the good of quarantine. Is it not true that for their own profit

they had selected their animals judiciously in buying, and therefore think the restrictions an unwieldy burden, and thus try to slip and dodge, getting through it as best they can.

Then another party, somewhat analogous to the last, sometimes sees through the defects, considers the whole thing a perfect farce, and thus feels satisfied that he may slip rules and regulations, and do as others can do best and cheapest, and have a good time. Therefore we feel that parties who should, do not understand, and that parties who do understand, do not make public. Improper things, under a misnomer, are called sitting; sour—sweet; night—day.

We are commanded by special authority to have pure stock belonging to various individuals crowded together, as it were, all at one point (Point Levis), so that if by a mishap a diseased animal happen to be there, there would be a good chance (under the present management), to disseminate the germs of disease. Disseminate them where? Why, over the small area of 3,330,000 square miles. Yea, more! For in some way we are praised and flattered with cattle going across the border.

There is still another class who might see the faults of the place, viz., those in charge. But no! they discussed the matter in the beginning, and have decided on what they think is a good plan—a sufficient safeguard—and therefore they do their duties daily, and exchange compliments with the owners of the cattle in the place.

Then are we alarmists, or is there cause for alarm? In the evidence we see such answers to the question as—"I think the present system of veterinary inspection of stock in quarantine efficient." Add to this the statement below, found in the new report of the Ontario Agricultural College and Experimental Farm, "Our neighbors are wise enough to take advantage of our admirable quarantine—climatic as well as in transit, ere taking home what they purchase in other countries."

After such words what shall we say? We shall simply give a plain statement of facts, "that those who run may read." Take them for what they are worth. We shall "hew to the line, let the chips fall where they will." Who would do more is unjust; who less—negligent.

(To be continued.)

For the CANADIAN LIVE-STOCK JOURNAL.

### Where Shall We Obtain Our Breeding Rams?

(First Paper.)

At the present time sheep are at a discount, not only in Ontario, but over the greater part of North America. Only a few years ago they were in good demand, wool and mutton brought a fair price, and sheep were quite extensively bred; especially was this the case in the United States; but for some years the products of the flock have been gradually declining in price, until now we should think the very bottom has been reached. The sheep-growing States of the American Union have given up breeding them to a great extent. Where there were hundreds formerly there are not now tens: the demand has fallen off wonderfully. The same state of things exists in Ontario in a less degree. With the decrease in the demand the interest has also abated. This is a dangerous state of things; one which has and will still further lead to the deterioration of our flocks. Ontario has become noted (on this continent) for the superior quality of her sheep; though her flocks were small, the quality was superior to that found in any other part of America. From us the Americans, in a

large measure, obtained animals which renewed and kept up the quality and vigor of their own flocks, and I believe we will always stand in this relation to them.

While it is true sheep are at a discount now in America, the depression is certainly only temporary, and will be followed by increased demand and higher prices, and that in the near future. While high prices may not long be maintained, I believe we will settle down to a healthy trade at fair prices. But at the present time our farmers, and in some cases our breeders, are far too careless concerning the kind of ram they use, and where they get him. The time has come when each farmer or breeder should consider carefully which is the best breed for him to turn his attention to. The locality, the demand, and his own tastes, should govern this (in my mind his own tastes should be governed by the prospect of profit the separate breeds present).

#### SELECTING THE BREEDING EWES.

Having determined which breed he wishes to produce, he should then select the best of his ewes, whether grades or pure-breds, always keeping a certain type in view. The animal which will pay best is the one which will give the "greatest quantity of the best quality" of wool and mutton for the food consumed. While the wool should always be considered, the quantity and quality of carcass should be the prime consideration. In every flock there are sheep which, under exactly the same treatment, fatten much more readily than their fellows, and frequently produce more and a better quality of wool. In comparing these sheep with the others, to use Mr. Youatt's words, "we observe there is an evident difference in their conformation, a fitness of bone, a roundness and compactness of form, a condensation of substance and a beautiful proportion of every part. We find by observing, that there is more or less of this conformation in every sheep that outstrips the others," and by due thought and consideration we find that the rams which have "possessed most perfectly this peculiarity of form and accompanying aptitude to fatten," have produced us our most profitable sheep.

On a closer examination of all such finely proportioned sheep, we find that in handling they present as great a difference as they do to the eye. Mr. Youatt has aptly said, "That there is a softness, a springy, elastic softness, in distinction, from the hard, harsh, unyielding nature of the skin and the texture immediately beneath in the others, which, once impressed on the mind, can never be forgotten." Animals possessing these qualities are certain to mature early. The head should also be considered in weeding and selecting sheep. In Mr. Youatt's valuable work on sheep he says, "The head of the sheep constitutes one of the principal points by which his quality and profitableness may be judged of. Compared with its general size it should be small, and particularly not wide between the eyes; too great width of forehead is an invariable proof of inaptitude to fatten, at least externally. The sheep with a large head will be a favorite with the butcher, because in proportion to the slowness with which he gets into condition will be the accumulation of fat within, even if there were no natural tendency to produce tallow; in other words, there will be more profit to himself than to the grazier or consumer. The head should be small, thin and short. It is possible, yet not probable, that this may be carried to too great an extent; but that head must be disproportionately small which can be considered as a proof of too great delicacy of constitution." There is considerable danger in lambing when the head of a ram is large, for the lamb will

generally possess the characteristics of its sire. Next to the carcass and constitution is to be considered the wool. A sheep of whatever breed, to have a good fleece, must have one abounding in *yolk* (that is, the yellow greasy substance found in a greater or less degree in the fleeces of all sheep, but especially abundant in the merino). The fleece should be of even quality throughout, or as nearly so as possible. All fleeces are divided into four qualities, but let these qualities be as near alike as possible. We always like a short leg well woolled down, and in nine cases out of ten such a leg will carry a hardy, profitable sheep. Select sheep with coats which look very oily and yellow when you open them. When there is a deficiency of yolk the fibre of the wool is dry and harsh and weak, and the whole fleece becomes thin and hanging; but where the required quantity is found, the wool is soft, oily, plentiful and strong, and among the Downs there is far less likelihood to peel or shed the fleece, as age approaches.

#### SELECTING A STOCK RAM.

Taking the above conditions as a standard, to which many good qualities might be added, having selected our ewes, rejecting all poor ones, and all over eight years old, let us procure a ram fully up to the standard. Let him be pure-bred, of the kind which we have determined to breed. Some farmers have so few ewes that they feel the expense of a pure-bred ram a burden. In such cases it is a good plan for two or three neighbors to join together and buy and use one. A plan we have known adopted, and it has worked well, is to thus buy one: No. 1 keeps the sheep during the first year, and his neighbors ewes during the time of service; next year No. 2 takes the ram to keep, also No. one's ewes during the breeding season. Three or four can unite and buy a good sheep, and thus materially and at small expense greatly improve their stock. Those who are breeding grades should buy a good and suitable sheep with a good pedigree for \$25. When I say a good pedigree I mean an animal purely-bred, one whose dam and grand-dam, sire and grandsire, at least, were good animals individually, with good pedigrees. Not only this, but be sure that your sheep is bred by a reliable man, a man of integrity and moral worth. I have had a good deal of experience with pure-bred stock, and have learnt from sore experience the necessity of only dealing with honest men. So much depends on the ram, the greatest care should be taken in selecting. Get your ram, if possible, from a soil and location as near like your own as you can. Do not let the change be too violent. If you procure a first-class sheep, and he proves himself a good getter, if he is in no way related to the ewes he is serving, you will bring your sheep faster to a certain type of excellence without injuring their constitution by keeping him three or four years in your service. He may serve his daughters and sometimes his grand-daughters with splendid results. The writer has had considerable experience in this line. Some of the best sheep we have ever seen have been produced in this way.

We think many of our leading breeders (we mean men who make a specialty of producing pure-bred stock for breeding purposes) often make great mistakes in going to the end of creation to buy their breeding rams.

Every one of us who have established flocks should have some, if not all, of our ewes descended directly from first-class animals selected from the flocks of leading British breeds; in fact, many of us have animals selected from such flocks; and in the flocks of Ontario may be found many prize-winning sheep at the leading British shows.

#### SECURING UNIFORMITY IN OUR FLOCKS.

Now, presuming these have been selected with care as to *quality* and pedigree, breeders possessing such males and females can produce their own breeding rams, and from them obtain, in nine cases out of ten, better results than they will get from imported animals obtained at heavy cost. This has been the experience of some of Ontario's foremost breeders. By judiciously selecting our rams from our best breeding stock we will build up flocks of more uniform appearance and higher collective, as well as individual merit. When buying an imported ram we may perhaps know something of his sire, but of the type of his dam it is seldom we know anything more than that she was bred by a certain breeder. She may be of the type we wish to produce, or she may be the very reverse. The same objection may apply to his sire also, for all the buyer knows generally speaking; but when we produce our own rams, while they are exactly the type we wish, we have the satisfaction of knowing that their ancestors for generations possessed the qualities we desire to impress on our flock. Considering these facts, is it not next to impossible to produce a uniform flock where we are continuously buying our males from different sources? while on the other hand, with the exercise of good judgment, a uniform and profitable flock can soon be built up by selecting from our own flock rams and carefully weeding each year our ewes and ewe lambs. There is no better authority than the author referred to previously. In his splendid work on sheep, page 109, he speaks of the above plan as follows: "On this principle of selection the breeder will continue to proceed, . . . and will ever be jealous of the introduction of foreign blood. The good qualities of his sheep, transmitted from one generation to another, are no longer accidental circumstances. They have become a part of the breed" (or family) "and may be calculated upon with the greatest degree of certainty. . . . It would be long ere the good qualities of a stranger would form an identical part of the sheep; and no animal will elsewhere thrive so well, or improve so rapidly, as on the pastures on which they and their ancestors have, generation after generation, been accustomed to wander. But after a while, with a considerable degree of certainty, in a small flock, and too frequently in a larger one, the sheep will continue to arrive early at maturity, and to fatten as kindly as before, or even more so; but they evidently are decreasing a little in size. They have also become less hardy. These are notes of warning; breeding has been carried on too long from close affinities; a little different yet congenial blood must be introduced. A race must be selected from a soil and kind of food not dissimilar to that on which the flock to be imported has been bred, although from a distance as great as convenience will admit. His points should resemble the home flock as much as possible, but should be their superior in as many points as possible, and their inferior in none. By dismissing the home-bred rams and using this stranger the purpose of the breeder will be completely answered—he will have infused tone and vigor among his sheep; while they keep their propensities to fatten, they regain their health, vigor and hardiness. The farmer can now go on breeding from selections from his own flock for a certain number of years. When experience will tell him that a little fresh blood is again needed. . . . selection with judicious and cautious admixture is the true secret of improving a breed.

"The errors to be avoided are too long-continued and obstinate adherence to one family; and on the other hand, and even more dangerous, is violent crosses, in

which there is little similarity between the soil, the pasture or the points or qualities of the animals to be brought together."

The question is often asked, "What age should our breeding rams be?" A large, strong lamb may be used to twenty ewes without injury, a yearling to forty or fifty; and one ranging from two to six years may safely serve seventy to eighty. Dr. Manning says, in the *Illustrated Stock Doctor*, that a ram properly managed may successfully be allowed one hundred to one hundred and fifty ewes; but we think this too many.

#### AGRICULTURA.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

### Causes of Disease Among Animals of the Farm.

BY F. C. GRENSIDE, V. S.

(Second Paper.)

#### DIET.

The diet or fare allowed animals is by no means secondary in importance to the surroundings, in considering the influence it has upon the health, as well as upon the economic results.

In order that the health of an animal may be duly maintained it is necessary that it shall receive a sufficiency of food, and that of good quality. It is also necessary that it shall contain at least three classes of constituents:

1st. Nitrogenous matters, or those substances most fitted to form flesh and other tissues.

2nd. Hydrocarbons, or those elements that produce heat, thereby keeping up the temperature of the body.

3rd. Salts of various kinds not only build up the solids of the animal frame, but they exercise an important influence on the process of nutrition.

The chemist has determined for us the extent to which these constituents are present in the various aliments, and practical tests have demonstrated, that the proper constitution of a fodder can be with greater certainty procured by allowing an admixture of food. It may be asked, why, if we select a ration in which these indispensable constituent elements are present in proper relationship to one another as regards quantity, should not such food be certain to be followed by the best results; but we know from experimentation and practical observation that such is not the issue in many cases. The reason for this is that there are other points in the selection of a fodder of much importance, and these are the qualities of digestibility, readiness of assimilation, absence of unduly heave properties, as well as others.

It might seem that the selection of an economic fodder is rather irrelevant to the subject of "Causes of Disease," but such is not the case, and we often find that those who have pursued the use of some pet form of regimen for a time have their attention abruptly called to a condition of ill-health amongst their stock, and when asked for a logical and reasonable explanation of their process can only answer, this is our first mishap, but if this answer were only qualified by saying, the first one that was palpable to us, it would be nearer the mark. We all realize, and are apt to take advantage of the fact that great liberties can be taken with the animal economy, without immediate serious consequences.

Wheat is a grain that contains the essential nutritive elements in about the proper ratio, but it is well known that it cannot be fed in any quantity with safety on account of its indigestibility, which is the result of its physical unfitness for solution, due to its glutinous character opposing the entrance of the

digestive fluids into a masticated mass of that grain. It is essential that the fluids of the stomach shall permeate the contents of that organ before solution can take place, and subsequent absorption. But one can readily understand moistened wheat, with a tenacity approaching dough being very tardy in undergoing the necessary digestive change, and if these changes are not undergone progressively and promptly we have indigestion of greater or less severity following with certainty. This same tendency exists, but to a less extent with some other grains, as peas and barley, this not resulting so much from their stickiness, as from the lack of coarseness of the hull, which coarseness gives porosity to a masticated meal, hence the suitability of oats as a fodder for the horse, and their use in forming a mixture for cattle, with the heavier grains. Oats do not as a rule form such a large proportion of the grain fed to stock as their suitability warrants. There is a slight deficiency in the proportion of flesh forming to that of heat producing material, but this can easily be made up by adding one-fourth part of pea-meal, and then we have a wholesome diet and no waste of food.

#### EXERCISE.

The habits of the different species of our domesticated animals vary so much, as well as the ultimate objects of feeding and producing them, that no one set rule can be prescribed that is applicable to the management of all of them in this. The purposes for which horses were destined by nature, as well as the habits generated and encouraged in the prosecution of their office, have endowed them with a disposition to activity, and it is only by allowing a full opportunity for practising what is natural to them in this way that the fullest state of healthy vigor can be brought about. It is essential to the proper development of the fibres of which the muscles are composed that they get a sufficiency of work in order that they may be capable of accomplishing efforts of either strength or speed. It is not only to these organs of locomotion that exercise is essential, but other organs, or those which have for their functions more vital offices.

In this way it is beneficial to those animals destined to be consumed, for their flesh to just have sufficient exercise to produce a bracing effect upon the system generally, and to act as a stimulus to the appetite, but not for the purpose of exciting the development of the fibres of which the muscles are made up, which is the object desirable to attain in a great measure in the horse. Cattle, sheep and pigs can maintain a perfect state of health, and stand high feeding with a very limited amount of exercise, at the same time producing the most desirable kind of meat, for we all know that the tenderest, consequently the most digestible and nutritious flesh is produced for us by the stall fed ox, and that a grass fed animal cannot be compared for bestowing these desirable qualities to its flesh.

As previously stated the system of a horse differs from meat producing animals, and he is so constituted that there is a large provision made for the waste that must necessarily occur when he is subjected to hard work. If this demand is not created either by work or exercise, there must necessarily be an accumulation of nutritive material in some form where a full diet is allowed, and the result of this is a departure from what is normal to a greater or less extent, or at least there is an absence of that vigor which should characterize a horse if in good condition. The unfavorable effects of a want of exercise are more apparent in horses that have previously worked hard. The assimilative functions, becoming inured to the de-

mands made upon them, continue to create a pabulum that has to be got rid of, and the only means of accomplishing this consistent with a perfect state of health is to allow exercise. In looking at this question from a more practical standpoint, it may be asked what losses are sustained amongst horses from an insufficiency of work. In dealing with this point we may conveniently consider it under two conditions. First, when the amount of food allowed is small or in a measure proportionate to the state of idleness. Under such treatment there is no great likelihood of any fatal or severe affection occurring, so long as the same course is pursued, or there is no sudden increase of food, or inordinate work demanded. Horses treated in this way frequently show plenty of spirit when taken out of the stable, so as to mislead those who have control over them into thinking they are in good condition, and capable of undertaking a great amount of exertion. But such a manifestation of strength is short-lived, and the debility which is actually present soon evidences itself by a corresponding depression, and if compelled to continue this undue exertion, untoward sequels follow, taking the form, it may be, of congestion of the lungs from a weakened heart's action, or what is of equal frequency, inflammation of the feet, usually called Founder. If these direct effects do not show themselves, less immediate ones frequently follow in the form of acute indigestion, colic, or some abdominal trouble. These latter affections are more liable to appear if there has been any indiscretion in watering, feeding, or keeping the animal dry and warm; but the over-exertion is of itself quite sufficient to bring them about. Secondly, when no work is given, and a ration suitable for a working horse is allowed, there also follows serious consequences. This latter mistake is continually being made by farmers, immediately prior to the commencement of the spring work, when a bare maintenance is abruptly superseded by a full diet, before any exercise is given to create a demand for the increase of nutritive material supplied. The same procedure is adopted in feeding up for sale.

This mode of management is followed by conditions more or less serious; a loss of food is always sustained, and even, if no palpable diseased condition presents itself, the object is seldom or never attained. Swelling of the legs, grease, scratches, eruptive skin diseases, weed, azoturia, with various digestive disorders are the acute affections frequently engendered by such treatment, while fatty degenerative diseases, such as produce roaring, and convert the very important gland called the liver unto fat, are among the chronic ailments resulting from idleness. Idleness has also to answer for such vices as cribbing, windsucking and weaving. One of our best Canadian veterinary authorities was heard to venture the opinion that two-thirds of the deaths occurring frequently in the heavy stallions of this country, resulted from irregularity of exercise.

When it is necessary to tax a horse's power of endurance to the utmost, in order to accomplish a piece of work, it is customary in many cases to allow afterwards a few days for recuperation. The benefit derivable from such treatment is to some extent destroyed, by making the rest absolute, for gentle exercise would hasten the restoration to health and activity, and ward off any reactive illness.

Acknowledging, as everyone of experience in such matters must, that exercise is beneficial, yet it would not do to lose sight of the fact that it is not always practicable. In this country, where for the work of the summer more horses are kept on the farms than

can be conveniently utilized so as to admit of all these animals being used enough for health's sake, it is safer to prescribe a moderately low diet, especially of grain, say not more than a third of that given when work is demanded. The secretory and excretory organs are more active in working horses than in those at rest, as the skin, kidneys, liver and bowels, so that an effort should be made to overcome any undue torpidity by proper treatment, the nature of which will be indicated further on.

(To be continued.)

### Bli Bro and Keillor Lodge.

In 1882 the Messrs. Geary found that the four hundred acres of rich lands which they owned and tilled at Bli Bro were not sufficient to sustain the vast numbers of Aberdeen-Angus cattle which they had brought to its magnificent pastures, notwithstanding the large drafts that were sent off from time to time to enrich the herds that feed upon the prairies that are watered by the melting snows of Rocky Mountain ranges. As they have found them from the first with scarcely an exception the most unfailing breeders, the certain reproduction of their kind called for more room and a wider pasture range. Thus it was that they determined to build the spacious structures at Keillor Lodge which afford accommodation for so large a herd.

The work those gentlemen are doing affords another illustration of the advantages that result from stockmen of the same household pulling together, even after the stern work of individual responsibility has to be faced. Without unity of aim and the united concentration of effort, very many of the achievements of our Canadian stockmen had never been attained, and the country had been so much the poorer. For this and other reasons we are always particularly pleased to find the term "Bros." the concluding word in the designation of a stock firm in our land.

The style of the firm at Bli Bro is simply "Geary Bros.," where Mr. John Geary resides; at Keillor Lodge it is designated "Geary Bros.," Canadian Importers and Breeders' Association," where the vast and complicated work in that comparatively new land is under the direct supervision of Mr. Geo. Geary.

The Messrs. Geary spent their early years in the vicinity of Bli Bro, and have been more or less identified with farming all their days, so that when they launched out so fearlessly in the purchase of the sleek-coated blackskins, and their magnificent flocks of Lincoln and Shropshire Down sheep, which they now possess, they were not trying a venture which they did not understand. Though engaged in farming more or less for so long a time, it is only within the last ten or twelve years that they have given prominence to the stock interest.

#### THE FARMS.

"Bli Bro" comprises 300 acres of choice rolling land some three and a half miles north from London, and since coming into the possession of the present owner has become so enriched by stock-raising and careful tillage that it would readily command \$100 per acre and upwards. The one hundred and fifty acres of hay upon it have yielded more than three hundred tons this season, and the crops of oats and wheat and corn that we saw growing upon it were simply immense. The cultivation is of the most careful kind, as weeds and every kind of noxious vegetable life meets with summary vengeance at the proper season.

The pastures of Bli Bro are not cumbered with shade, although they have a plentiful supply, and many of the trees possess rare individual beauty. To

give an adequate idea of the richness of the soil we may mention here that the present season fifty-seven head of milch cows have been kept upon the pasture of forty acres, with the supplemental food which grew on two acres of winter rye and two and one-half acres of peas and oats. What have the graziers of the exceedingly fertile pastures of Ailsa Craig to say to this, in that favored region where grasses sleep only in the winter and the waters never weary in their onward flow? Mixed grasses have been tried at Bli Bro with very gratifying results. The aftermath we saw on one of the meadows covered it ankle deep, and with a coat that was simply a mass of thickness.

Underdraining has been done where necessary, although the subsoil is of that open nature which requires less of this than the soil of many localities. On the day of our visit we crossed a large pasture with a wide depression running across it. Here the waters from a spring had taken a strange delight in saturating the lowlands of the valley with superabundant moisture, a work in which those from the bordering hills had malevolently lent a helping hand. Here the cattle poached the land where only coarse grass, water-loving grass would grow, and sheep left the domain undisputed as the favorite feeding ground of the frog and the snake. Mr. Geary cut the valley in twain by an open deep ditch, adown the channel of which a delightful rivulet runs on with unceasing flow. On either side of this, three-foot tile drains were laid where needed, which have wrought a transformation that is most wonderful, though but three or four years laid. The valley now is covered with a thick bottom of June grass and white clover, without any seeding other than that by nature, and is the favorite feeding ground of the heavy-bodied Lincolns, and the thick-coated Shrops that we saw partaking of its pastures.

At Bothwell, where the subsoil is more or less sandy in its nature, drainage operations have not been so successful as yet, owing to the quantities of silt that flow in and choke the drains; but it is hoped in time to obviate the difficulty. We think that tiles at least two feet long and laid with collars would prove of immense service, and hope that our tile-makers will at once set about the manufacture of these, which have answered the purpose so well in other countries.

"Keillor Lodge" is in the immediate vicinity of Bothwell, in the county of Kent, some forty miles westward from London. The steading is but half a mile from the station on the Great Western branch of the G. T. R. It embraces some 1,550 acres, of which 1,350 acres are in the vicinity of Bothwell in the township of Zone, and 200 acres are in the township of Euphemia, some nine miles to the northward and beautifully situated on the bank of the Sydenham, the murky waters of which speak of wealth stolen from a clay country. The lands near Bothwell are comparatively new, or entirely so, which are being cleared, however, to the extent of say 100 acres a year.

The axe of the vandalic lumberman made havoc of the giant oaks and the whitewood of former days, so that the smaller growths only are left to be cut away. The extent of the pastures is very great for an arable country such as ours; 300 acres in one cattle run in the heart of a cultivated region is, we think, only to be found at Keillor Lodge. A day, therefore, spent in examining the flocks of such an establishment is sure to be rewarded with that certain heritage of the farmer, a splendid appetite, in which he has the advantage of every other class.

The soil is sandy loam, in some places, we think, just light enough, but in others presenting the blackish appearance which always speaks of fertility. It

has proved itself good for pasturage, fine for the growth of oats and potatoes, splendid for the production of corn, and magnificent for growing roots, all main factors in the making of either flesh or milk. The capabilities of such a soil for sustaining stock are very great, and in the days that are coming, when the beech and chestnut make way for the mixed grasses of more modern practice, no one can now safely estimate the magnitude of the future developments of the stock interest at Keillor Lodge.

Bothwell was the scene of strange turmoil in other days when men sunk fortunes in the rush for riches to be pumped up in fancied streams of oil that would continue to flow from the bowels of the earth. The trade in crude oil has almost entirely ceased. Keillor Lodge, too, embraces the reminiscence of another burst bubble, in the form of a very large low barn, erected by the late Hon. George Brown, in his futile attempt to carry on a successful dairy before the excitement in oil had begun to allure. This old building, if it serve no better purpose, makes it very clear that while a man may be able to clearly plan and construct an attack upon the ministry of the day, he may at the same time have no better idea than a child of the planning and constructing of a suitable dairy barn. Peace be to the ashes of the mighty legislator, but in whatever his followers may see fit to imitate him, let it not be in the construction of a dairy barn.

#### THE BUILDINGS.

The dwelling house at Bli Bro—of recent construction—is imposing and stately, a relief to the stereotyped style of architecture so painfully common in farm life in Canada. The outbuildings are very well adapted to their purpose, but were mostly erected some years ago, and therefore lack a few of the advantages of more modern practice. Those at Keillor Lodge were erected in 1883 and are on a scale worthy of the magnitude of the interest which they are intended to accommodate.

The main barn faces the west, from which side it is entered. It is 46 feet wide and 150 feet long, not including the five box stalls that are at either end. The posts are 18 feet high and rest upon a brick basement, as stones are not to be found in the locality. The stalls run crosswise with a tramway and car at one side, and turntables where the two easterly wings are entered. These are 30 by 100 feet; one of them contains box stalls and the other double stalls for feeding cattle. Water-troughs run in front of the stalls. The main building contains chaff-room, meal-chamber, and mixing room. A run of stones with a capacity to grind 60 or 70 bushels of grain an hour is on the grain-floor. A twenty-five horse-power engine drives the whole, which includes chaffing, grinding, etc. In front stands the granary, engine house etc., and in the rear is a stable for horses, and paddocks for them, and also for cattle. Beneath the entrance is the apartment for roots.

#### THE STOCK.

This is of course the great interest at both establishments. In fact they owe their existence to the desire to grow superior stock, and in the various steps taken to further this object the Messrs. Geary have acted very wisely. They have built upon a proper foundation, which they brought from beyond the Atlantic. The different classes of stock imported by them comprises Aberdeen-Angus cattle, Shropshire Down and Lincoln sheep, and Shire horses. To the breeding of these they have added the dairy interest and the breeding of grade cattle sired by their Aberdeen-Angus bulls, in which work they are very enthusiastic, and in the results of which we feel so deep an interest that we cannot refrain from referring to it

somewhat in detail. Formerly light horses of the Hambletonian strain were raised in considerable numbers, but now they are not giving much attention to this line of breeding. Amongst others they still retain a pair of very beautiful roadster blooded mares referred to in the June number of the JOURNAL.

#### SHIRE HORSES.

Of these they have two most magnificent specimens—stallions—four years old, both imported, and are now held for service at Bli Bro and Keillor Lodge respectively. Lord Warwick at Bli Bro has had a splendid season and has proved himself not only a sure but also a grand sire, as we had opportunity of judging in the specimens of his colts that we saw—one from a blood and the other from a general purpose mare, which were very excellent indeed. This horse was bred by Mr. John Hemmet, Thomey Fen, near Peterborough, England, and was sired by Triumper (2136), dam by England's Glory (733). He is a dark bay (imp. in 1883), and is very closely coupled, with shortness of limb and great strength of body. Last year at London he took first and diploma in his class, and also first at several other fairs. Shire Lad, of Keillor Lodge, (imp. same time) is certainly a splendid beast with plenty of bone, plenty of muscle and plenty of action. His shoulder is tremendous. He has a 27-inch arm, measures 12 inches below the knee, 14 inches below the hock, and girths 7 feet 2 inches. He weighs 1,900 lbs., and has also been abundantly patronized.

The two imported shire brood mares at Keillor Lodge are well chosen specimens, and their one-year colts are very fine. The two-year-old Canadian bred stallion weighs 1,500 lbs., and has plenty of body and lots of life. The imp. Clyde stallion Cecrops is also a fair specimen of his race.

#### LINCOLN SHEEP.

These strong-bodied sheep, which latterly have more than refunded the debt which they owe to the Leicesters, were first imported to Bli Bro, where they are still kept, in 1875. Although other breeders in Canada have some good specimens, we think we are safe in saying that Geary Bros. have brought more of them into the country than all other breeders combined. At that time 15 ewes and two rams were selected from the flocks of Mr. Garfit, Scothern, near the town of Lincoln, in Lincolnshire, and Mr. C. B. Robson, Bunker's Hill. The second importation took place in 1882, when more than 100 head were selected from the flocks of Messrs. Wright, Garfit, Robinson, Harrison, Smith, Young and Clarke, all in Lincolnshire. These men are all noted breeders of this long-wooled family. The flock numbers today 180 head, and fine specimens they are, with their long fleecy wool, even quite underneath in the aged ones as well, strong bodies and large faces, with the typical short top knot. Without a doubt the present stock ram is the best specimen of the breed in Canada, and this place has been assigned him at the Industrial, Provincial and Western Fairs of 1883, and at the Industrial and Western in 1884. He is now three years old and weighs 390 pounds.

The precaution was taken when the purchases were made to have the certificates of breeding sworn to before a magistrate on the occasion of every purchase, both of the Lincolns and Shrops, and this along with the individual excellence of the animals purchased and since bred, accounts for the uniformly good prices realized for the Lincolns of Bli Bro.

The Lincolns sold have been used in a great measure for crossing on Merinos and Merino grade ewes by western flock-owners, which results in the

growth of a very large amount of wool, almost equaling that of the Shrop, both in fineness and quantity. In a letter recently received from Montana the writer was unqualified in his preference of Lincolns, even over Shrops, for crossing on merino ewes and their grades.

We were shown several samples of wool which were measured in our presence. No. 1, taken from a first-cross Lincoln-Merino lamb dropped in April and selected in October, measured 4 inches. These lambs at the latter date averaged 90 pounds, although they were only suckled by dams which weigh from 75 to 80 pounds. No. 2 was that of a three-quarter Lincoln grade taken from a sixteen months old "hoggett" in New Zealand by Mr. William Watson 19 years ago. It measured 18 inches. No. 3 was taken from Mr. Geary's shearling Shrops last spring and measured 9 inches.

A local manufacturer who purchased last year's wool crop at Bli Bro demonstrated by actual test that the *one-third* deduction for unwashed wool, where the sheep are carefully kept, as here, is the correct one. Many of our buyers insist upon the deduction of *one-half*—which shave it seems was introduced by the American buyers after the imposition of a duty upon our wools. The farmers should not submit to it.

The Messrs. Geary complain, and we think with reason, of being necessitated to show Lincolns against sheep that are tainted with a Leicester cross. They argue that certificates of breeding should be sought and furnished when deception of this nature is likely to be practiced, and when it is not easy of detection on the part of the judges. There is certainly room for reformatory legislation here.

The first importation of Shropshire Down sheep was made in 1882, when 75 choice specimens of the breed were drawn from the splendid flock of Mrs. Barr's and Messrs. Instone, Bird, Meredith, Faulkner and Williams. Later, the same year, 80 head were imported, making 155 head in one year. In 1883, 16 head came from Mr. Instone, and in 1884 two rams were selected from the flock of the same noted breeder. The Shrops sold have all gone into the American "Shropshire Record," and the lambs of this year are all of course eligible for registration in that work which contains a record of their dams. The system of private registration adopted with the aid of ear labels renders the record absolutely reliable, which has no doubt aided the Messrs. Geary in their sales. Not one single Shrop ram of last year's breeding remains unsold, although the prices realized have ranged from \$30 to \$40 and upwards. Nearly all the Shrops sold have also gone westward. About one hundred certificates for registration have been sent away this present season. The flock now numbers some 50 breeding ewes and 71 lambs. The average lamb crop is about one and one-half to each ewe, and is quite as strong numerically from the Lincolns as the Shrops. These also are kept at Bli Bro.

#### THE ABERDEEN-ANGUS POLLS.

From 1882 to 1884 the Messrs. Geary brought over the most numerous lots of Aberdeen-Angus Polls that have ever been brought to Ontario by one firm. They numbered more than 100 head, and came from the herds of such breeders as her Majesty the Queen, Sir George Macpherson Grant, Owen Wallis, Findlater, MacGregor, Geo. Wilken, Scott, Farquharson, A. E. Stevenson, Sir William Forbes, Duff, Major Ramsay, Strachan, Ferguson, Milne, Major Godman, Clement, Stephenson, McCombie—in fact, from all the most noted breeders in Scotland. They are now mostly kept at Keillor Lodge, and not-

withstanding the large drafts made from time to time at the date of our visit (Aug. 4th) there were more than 100 purebreds roaming over the wide pastures around Bothwell. Of these nearly 50 head were imported cows of a uniformity of type and purity of breeding that is rarely equalled in any herd of any breed. Every animal of this breed, over one year, now in possession, has been imported, save the beautiful Donside Lass (7,443) bred at the Ontario Experimental Farm from the sire Gladiolus (1,161) and the dam Lochiel Lass 4th (1,864), by Hero of Boghead (417). Where so many animals uniformly good are congregated at one place it is not easy to give the distinguishing individual excellencies, but it would be an injustice to so fine a herd not to make the attempt. Flower Girl of Eastertown (6,464), bred by Mr. Jas. Durno, Old Meldrum, Eastertown, and Victoria 12th (5,672), bred by Mr. Geo. Hamilton; Skene, Skene House, Aberdeen, drew our attention by the symmetry of their proportions. The former sired by Viceroy of Balquhain (3,338), carries largely the blood of Black Prince of Tillyfour (366), and the latter sired by His Excellency (1,271), goes back on the dam's side to the famous Black Meg (766). We were delighted with the great bodies of Tibbie of Greystone 5th (7,523), bred by Mr. James Reid, Greystone, Alford; Tibbie 3rd of Bridgend (5,215), bred by our warrior correspondent, R. C. Auld, formerly of Bridgend, White House; and we were much pleased with those of Ruby 18th (vol. ix.) bred by the dauntless James Scott of Easter Tulloch, Stonehaven, and Nightingale 18th (vol. ix.), from the same herd. Of the famous family lineage were Pride 6th of Greystone (4,743), and Pride 7th of Greystone (5,945), both bred by J. Reid and from the same sire, Major 3rd (662), and they certainly do no dishonor to the ancestry which have won for the strain so great renown. But it was around Flora's Farewell (6,463), bred at Oldmeldrum, Duchess of Greystone 4th (vol. ix.), bred at Alford, and the queenly Waterside Blackcap (6,293), bred by G. Wilken, Waterside of Forbes, that our interest was even more concentrated. The last named cow was sired by Julius (1,819), and from the dam Blackcap (4,042), by St. Clair (1,160), and is of Montblotton descent. It required the splendid bribe of \$2,000 of Canadian gold to bring her away from the Waterside of Forbes' meadows, for which she has already paid a most handsome interest, as for her one-year heifer, to be referred to below, \$1,000 of American coin were offered in vain.

With only one solitary exception every cow in the herd was either suckling a plump, fat, big, lubberly calf after having done duty in nursing last winter. Hear it, ye Shorthorn and Hereford men, and bring a parallel if you can. We doubt if any scrub herd in Ontario can equal this, notwithstanding that they are so beat on filling the land with their ill-omened progeny.

The bulls are kept in very moderate flesh, which in part accounts for the happy result, but it is certainly a great matter, as it must be confessed that *failing to breed* in their herds is the great sorrow of breeders of fine-bred stock.

Of these Viscount 2nd (1,743) is still the king. The old veteran along with Kabul, since sold, (2,178), have sired the 40 pure-bred calves which fare so well at Keillor Lodge. Viscount 2nd was bred by W. Duff, Hatton Castle, Turriff, and is now five years old. He is an Erica bull, sired by Vanguard (1,445) from the dam Erica 3rd (1,249), by Trojan (402). Kabul was bred by Mr. Owen C. Wallis, Bradley Hall, Ryton-on-Tyne, and is of rare lineage. Sired by young Viscount (736) from the dam Khiva

(4,188) by Editor (1,460); he traces back through such dams as Pride of Aberdeen 3rd (1,168), and Charlotte (203) to Black Meg (766). Emu (2,720), sired by Sea King (2,334), is also in service, with one or two younger bulls.

The one and two-year heifers are as fair a lot as one would wish to see. Those one-year will readily turn the scale at 900 to 1,200 pounds, and the absence of culls in the herd is most complete. A few of them are being fitted for the coming fairs, and we shall be disappointed if they are not favorably heard from. Of these, Blackcap of Keillor Lodge, sired by Knight of St. Patrick (2194), and from the dam Waterside Blackcap 4042, is very choice. Tibbie of Bothwell (vol. ix.), sire His Highness (2150), dam, Tibbie 3d of Bridgend (5215), and Miss Fyfe of Keillor Lodge (vol. ix.), are well forward; and Bluebell 5th (vol. ix.), older and larger, has a grand, good make up, both in quantity and quality.

#### PRIZES WON.

The Messrs. Geary, though they have shown Aberdeen Angus Polls but two years, have come in for a fair share of the prizes. Of these we may mention a first for yearling bulls, for best three-year-old cow, and for one-year heifer and heifer calf, at the Toronto Industrial, 1883. The same year at the Provincial Fair, Guelph, they were awarded, in addition to the prizes named above, which were repeated, the silver medal for the best bull of any age, and the silver medal for the best herd. Indeed it may be said that at this fair they walked the course. Their famous steer, Black Prince, at Kansas City and Chicago Fat Stock shows, passed through a succession of sweepstakes victories, as noticed at the time, in the JOURNAL. And Abernethy, last year at the Chicago Fat Stock show showed himself a worthy scion of the great family which have carried laurels from Norwich, Leeds, Birmingham and the Smithfield fat stock shows, in many a hard fought fight. It is not known so widely as it should be that Abernethy of Ontario Experimental Farm moulding, and one of the famous trio in the feeding contest, won a sweepstakes at Kansas City last year for early maturity, and for cost of production, and one at Chicago against all breeds for best carcass. This firm have done great things also in showing Shrops and Lincolns.

#### THE ABERDEEN ANGUS POLLS AS MILKERS.

It is a common opinion that as milkers this breed of cows ranks low. In quantity this may be true, but in quantity and quality they can make a respectable showing, which is strikingly exemplified in the fact, that notwithstanding the fine calves raised by the Messrs. Geary, like the famous Laird of Sittyton, they have never used a nurse cow in the herd.

Again do ye hear it, ye Shorthorn and Hereford men?

In the month of February, 1884, nine of these cows calved within a few days of one another. The calves of seven out of the nine could not use all the milk for a number of weeks. For six weeks successively six gallons of milk were taken from the seven cows. This milk yielded from 13 to 15 per cent. of cream, and gave one pound of butter of a fine quality to 20 pounds of the milk. For the first six months no difficulty is found in pushing the calves on at the rate of 100 pounds per month, as we saw abundantly demonstrated at Keillor Lodge in the great bodied calves that had just been weaned, and that would weigh from 600 to 900 pounds each. Indeed, if the cotters of Angus and Aberdeen, who stipulate for milk from the famous "doddies" for household use, rear bairns that equal in thrift the calves that are

reared upon it at Bli Bro and Keillor Lodge, they are braw laddies truly.

#### EXPERIMENTS IN GRADING.

We look upon this feature of the work of the Messrs. Geary as exceedingly important. At Bli Bro they have some 42 dairy cows, which are all bred to Aberdeen Angus bulls. And at Keillor Lodge some 54 head all similarly bred. The 30 yearling heifers at an outlying farm at Hyde Park are exceedingly true to the Aberdeen-Angus Poll type, and not one of them is carrying horns. Of the splendid lot of one-year heifers that we saw in a 130 acre run at Keillor Lodge, there were no horns, and the colors were almost uniformly black with now and then one of that peculiar red which sometimes characterizes these cattle. They would average certainly 900 pounds in weight—about the weight of a few scrub steers coming three years old that we saw with one lot of the cattle, which had been purchased at a neighboring sale. One poor fellow of this age had become a little disabled and was stabled in quarters contiguous to the Aberdeen-Angus bull calves—strapping fellows that would outweigh him at nine months. We asked his weight on being told his age. Mr. Geary said he did not know it exactly, and at once instructed one of the feeders to carry him out in his arms and weigh him. We were so hurried that we could not wait for the figures. The *Farmers' Advocate* will please not fail to make a special note of this—which has so direct a bearing upon its favorite breed, the *scrubs*. In the same stable we saw a magnificent fellow, eight months old, the get of an Angus bull and a grade cow. One wishing a steer with a better top and bottom line, a body more trim and more in quality, is difficult to please. He is from a scrub cow with a dash of Shorthorn. He is stylish as a Bates Shorthorn and plump as a Devon, and weighs 825 pounds. This fellow will be exhibited, and we hope he will receive that notice of which he is deserving. The 36 grade calves that we saw at Keillor Lodge were remarkably true to type, though from a promiscuous lot of cows. A good Angus heifer, 16 months old, was suckling a calf three months old, and although carrying calf again, was in good condition and a fair size. For producing grade cattle for beefing purposes there can be no question as to the fitness of this breed, and we trust more will be done in this line by our Ontario farmers. The male grades find a ready sale amongst the ranchmen of the west.

#### THE CHEESE FACTORY.

This is situated at Bli Bro and has a capacity for the milk of 500 cows. This factory now averages 500 boxes a month weighing about 62 lbs. each. It is kept scrupulously clean, and gave evidence of management of a high order. The dairy cows in addition to pasture get a supplement of green feed—first of rye, then of mixed peas and oats, and later of the *mammoth sweet southern* corn, which they will eat up clean, and which produces milk abundantly. The seed of this variety can be got reasonably cheap, and we therefore desire to call the attention of our farmers to its use. The comparatively low price of cheese is inducing a very marked increased home consumption, which may have a salutary influence on the market in coming years.

Although the bovines of the Messrs. Geary now number nearly 400 head, numerically the largest herd we believe that is owned by one firm in Ontario, this number may be very materially increased with the clearing of the Bothwell lands which is going on at so rapid a rate, and the constant enrichment of both those at Bli Bro and Keillor Lodge. An idea of the magnitude of their interest in stock may be

obtained from the fact that in the years 1882, '83 and '84 they handled stock to the value of a quarter of a million of dollars. Their greatest difficulty in common with all land owners in the Province is to get help of a suitable class, although in this respect their experience is no more trying than that of others similarly situated. This we believe is the great hideous apparition that keeps so large a number of our men of means from engaging in the kindred operations of farming and stock-raising, as in Britain and in other countries of the old world. Where the door is so widely open, why is the country so destitute of farm foremen of the right class, and of laborers who, though they may not be able to command means, may command a conscience that will stand sentinel all day long while they are at the post of duty?

#### Our Nova Scotia Letter.

DEAR LIVE-STOCK JOURNAL.

Your monthly comes along regular, and we are glad to get it, and read all that is in it, look it over again, and give it away to some one that has not yet seen his way clear to subscribe for an agricultural paper. Thinking you might probably like to hear something from us fishermen farmers, I thought I would just drop you a line to let you know that Nova Scotia is still here. We are improving, sir, whether from the fact that your JOURNAL is getting pretty well scattered through the country and our farmers are seeing how well others are doing, and how much better they might do, is the cause deponent sayeth not, but there is an upward tendency amongst us, and I believe a wish to improve. Our hay crop is not up to the standard in quantity this year, the season being unusually dry, and our pastures have been burnt up in consequence; so much so in fact, that cattle without hand feed have had a pretty hard time to get through. Returns sought for by their owners. Straw will be light with us, but the grain that is heading out seems to be pretty full, and I think that the result per bushel will be fairly good. Potatoes are good, and if some of your Ontario readers saw my turnip field it would please them. They are looking fine, and on the whole we have no reason to complain for the year's yield so far, but have much to be thankful for instead.

You know in summer this is one of the finest climates to live in in the world. You Ontario folk can't imagine the pleasure of a stroll by the seaside (real sea); the bathing here is great. I often wonder more Ontario folk do not come down and visit us in the summer season. And then the fishing—salmon, codfish, trout, mackerel—is immense. Why, one can go out here in codfish or mackerel time and catch more fish in a day than he could eat in a year. Then we have coal mines, iron and gold mines, and lots of other things that interest the tourist.

I have sold quite a number of Jerseys this season. To Mr. James Pitblado, of Linden Farm, Truro, N. S., 6 cows and a bull; Col. Wm. Blair, Onslow, N. S., 6 cows; Geo. McCully, Esq., 2 cows; Dr. John McKay, 6 females; R. H. Edwards, 3 females and 1 male; Edward Blanchell, Esq., Truro, 2 heifers; E. A. McKay, Truro, 3 females; Mr. McCully, postmaster, Truro, 1 female; Isaac Longworth, of Lorndale Farm, Truro, 1 heifer and 1 bull; James Miller, 1 cow; Arthur F. Gurney, Esq., Onslow, 2 young cows; John McPherson Fisher Grant, Pictou Co., 1 cow, at prices ranging from \$400 to \$100. Who says now that it does not pay to advertise? The Jerseys take here as they do most everywhere, when tried. Of course I can understand why owners of other breeds work against them. That is all right,

but to the family that only keep one cow, they are hard to beat. And, as I remarked in one of my former letters, when once you own one you always want one afterwards. No other cow's milk seems to fill the bill.

FARMER JOHN.

New Glasgow, Nova Scotia,  
August 7, 1885.

### Mr. Auld vs. Galloways.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

Mr. Auld, in your August number, has given us two letters—one an old communication copied from the *London Live-Stock Journal*, signed "Verax," contains the following. "He (Mr. Auld) had put forward claims on behalf of the Aberdeen-Angus breed, which could not be sustained by recorded evidence." This is plain enough, and shows what Mr. Auld's own friends have to say about him as a writer on their favorite breed. Stronger language is needed to describe his assertions about the Galloways. He opens his own letter with an apology, blames the printer and his own unnecessary anger over a paragraph written by Mr. Kough, and which Mr. Auld says is of the "newest manufacture—brand new." Here it is as quoted by Mr. Auld: "When the breed (Aberdeen-Angus) was first established, which was some eighty or a hundred years ago, it was done by crossing

#### THE OLD GALLOWAY BREED

with a Shorthorn or a horned bull, and then judiciously selecting, so as to produce an ideal type in shape and color." This to my mind does not give a fair account of the origin of the Aberdeen-Angus. My opinion is, that for a much longer period there have been polled cattle in Angus. There may have been, and probably was, some judicious Shorthorn crossing, more especially among some families of the Polled Aberdeen; but whether this statement of Mr. Kough's be correct or not, it certainly is not new. Mr. Auld himself admits having previously heard it made in his hearing at a public sale. And Youatt (edition 1842, page 106), says, "Besides these (the Aberdeen shire native cattle—horned) there is a breed of polled cattle, said by some to be different from the Galloways, and to have existed from time immemorial; others, however, with greater reason, consider them as the Galloways introduced about thirty years ago," and somewhat changed by change of climate and soil. Professor Davidson, in "Domestic Animals of Great Britain," page 312, says of the Polled Angus breed: "This breed has a certain resemblance to the Galloways, and a mixture of blood seems to have taken place between them; but the cattle are less compact in form, and longer in their limbs than

#### THE TRUE GALLOWAYS,

and have not the depth of rib so characteristic of the latter breed. They have a freer though not a softer skin, and a less rough coat of hair than the Galloways. They are better treated when calves, and during the whole period of their growth, and though less uniform and confirmed in their character than the Galloways, owe more to art and careful culture." The same writer, page 316, says: "During the present century a variety has been established and widely extended, now generally termed the Polled Aberdeen-shire breed, in which the absence of horns may be ascribed in part to the introduction of the hornless cattle of other districts, but mainly to the breeding from animals of the native stock. This modern variety, however, scarcely even yet presents that uniformity of character which constitutes a true breed, although it is continually approaching to this condition. Into this district the Shorthorn breed has been introduced. It is cultivated by several breeders in the pure state, but more generally it is made to cross the native stock, by which means a present profit is obtained." W. C. L. Martin, editing "Youatt," (edition 1860, page 73), says, "The Angus polled cattle, like many other breeds, are exceedingly valuable in their own climate and on their own soil, but they do not answer the expectations of their purchasers when driven south. They yielded a good remunerating price, but they are not equal to

#### THEIR ANCESTORS THE GALLOWAYS

in quickness of feeding or fitness of grain. They attain a larger size but do not pay the grazier or butcher so well." Mr. Kough, therefore, if not ex-

rect, has others with him, and Mr. Auld's statement, that it is of the newest manufacture, is therefore not strictly correct.

The assertion that the late Earl of Selkirk declared that previous to about 1750 the Galloway was a horned breed, is new and strange to me. Had this been brought to my notice before the death of the late Earl, I would have written, asking him to contradict it, as being a mistake. Even were it true, it does not help Mr. Auld out of his dilemma. It would require a mythical Baron to corroborate Mr. Auld's assertion that "In Galloway there has always only been a 'very ugly horned breed.'"

Mr. Auld does not try to prove his former assertion that "the Galloway as it at present exists is descended from probably the most mixed race imaginable." Instead he gives a picture and a threat—and seeks to retire under cover of these. The picture is evidently taken in the primitive days. He says it is an exact copy of a prize Galloway at Lord Somerville's show in 1805. Who is this Lord Somerville? Where held he this Galloway show? Why should he set up in opposition to the Highland Society and squander his wealth on such poor pictures? The threat Mr. Auld makes is childish. If I provoke him he will do terrible things. Bosh! If Mr. Auld knows anything, let us have it, and the proofs. I believe the Galloways are a pure breed; that Mr. Auld's assertion to the contrary "can not be sustained by any recorded evidence." We want to get at the truths in this matter—the whole truth—established by facts—not wild assertion, such as any "crank" can make.

The statement Mr. Auld makes about "scurs" is an important one, and is quite new to me. If Mr. Auld is correct, the matter should be at once investigated—probed to the bottom. I will at once call the attention of the executive of the Galloway Association to the matter. He is very reckless, however, in saying, "All the authors I have consulted refer in large terms to the loose dangling horns of Galloways." In other portions of Mr. Auld's communications he refers to the following authors whom he has consulted, viz: Youatt, Allen, Parkinson, Coleman, McCombie, Marshall, Young, Culley, Lawrence, Henderson, etc. All these do not refer to Galloways having loose dangling horns. Mr. Auld's statement cannot be sustained.

It is not argument to misrepresent,—which Mr. Auld does when he tries to tell his readers that I have said the Galloways are the cattle to starve on the contrary the statement was that the Aberdeen-Angus would starve where the Galloways can live, thrive and make good, wholesome beef. For proof I refer Mr. Auld to the late Mr. McCombie's "Cattle and Cattle Breeders," 1869, page 18. I must resent the attack made on Rev. Mr. Gillespie. He misquotes that gentleman, and tells us "I" (Mr. Auld) know much more of the "ancient" history of the "polled" Galloway than Mr. Gillespie does, have consulted more writers on the subject than he knows of. Modest Mr. Auld! There must have been plenty of "auld" horns about Tillyfour in your young days.

D. MCCRAE.

### The Herd Book Question.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

SIR.—Since the query of "D. H." appeared in the April JOURNAL of 1884, regarding his heifer's pedigree, certainly much that was unknown to young breeders has been brought to light. And, sir, I fully believe that, with the extermination of scrubs, you have also a mission in bringing this apparently troublesome question to a satisfactory conclusion. From what has been written by Messrs. Dryden, "Breeder," and others, it is evident that neither of the herd books is up to its respective standard; but whether from mistake or design is not quite clear. This is a matter of very great importance to many of us throughout the Dominion who are investing some of our hard-earned dollars in Shorthorns. Though owning a few pure-bred cattle, I have not got the length of having either herd book to refer to, so that I would like Mr. Dryden to explain the following case, which I expect must have come under his observation. In the catalogue of cattle, entered for the first sale held in Toronto under the auspices of the B. A. Association, I noticed on page 4 the pedigree of Louise, tracing to the imported dam Lady Eden, got by Hudsworth, a bull without a number, next dam Fisher Roan (also imported), got by Maynard's Duke of Wellington, also unnumbered. On page 28 of same catalogue we

find another pedigree tracing to same dams. Those, I presume, are registered in the B. A. H. B. Now what I want to know is this, Were the imported dams anything but grades, or did crossing the Atlantic make them pure-bred? Here are two instances of descendants of old country grades (as it appears) being received by the B. A. H. B., and of course the C. H. B. would also register them. Does this not show the rule regarding the tracing to imported stock to be an absurdity? Is it not disloyal to Canadian breeding to reject a pedigree that might have a dozen straight crosses from, say, the best of pure bulls, because the dam away back was not imported, when such pedigrees as I refer to above would be received? In May JOURNAL, page 124, you, Mr. Editor, in reply to my former letter, express the opinion that "importers, through self-interest, if nothing more, seek a long pedigree," but you see such is not always the case.

There is another point regarding pedigrees of imported cattle, which I ask to be explained in your journal. We often see that a dam is got by the sons of a bull which is numbered. May not the son's dam be a common scrub for all that is known to the contrary? And yet either of the herd books will register a pedigree with such a cross if of an imported animal, but let a breeder try to get a like pedigree of a Canadian bred one with a cross of a Canadian bred bull—son of such and such a numbered one—even though all the other sites and the dam of a few generations back were imported; and I expect the officers of either associations would look at it in scorn. Many Canadians seem at the present time to be prejudiced against Canadian-bred animals, and in the show ring particularly have I noticed this. Some judges will give the preference to an imported animal, even when the Canadian opponent (bred perhaps from an imported sire and dam) may undoubtedly be the better one. It seems to me the B. A. Association's object is to place a premium on imported cattle, let the breeding be more or less defective.

I cannot see why the seven cross standard is not really higher and therefore better than that which only requires to have all sires and dams imported or trace to imported stock. Let the herd books be amalgamated with the seven cross standard, whether Canadian or imported, and let it be adhered to without fear or favor, and as far as possible without mistake, is in my opinion the best way out of the difficulty. POSA.

### Crops—Bank Barns—Scrubs.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—The stock in this section is doing remarkably well this season. The frequent showers that have fallen have kept the pastures fresh and green. There is now more feed in the fields than can be consumed by the stock of each farm, and should the weather continue thus for six weeks more, live stock will go into winter quarters in grand flesh. The soiling feed of western corn and oats, and peas that we had provided has not been used. Roots are very thrifty. The frequent rains have spoiled the crop of spring wheat, which when sown late has rusted badly, and is now being cut for feed while yet green, in this whole region, so there will be an extra sheaf for the cows this coming winter.

I am pleased to state that this section is being well provided with bank-barns. Within a radius of three miles no less than thirteen have been erected the present season, which means not only better accommodation for stock, but a saving as well of one-fourth of the food usually required. In a two mile range here there are thirteen barns, and nine of them have stone basements.

The greatest drawback this section has to contend with is the "scrub nuisance" of every kind. Stallions, bulls, rams and boars roam at large, and do an immense amount of damage to the country. Yet we believe still more is being done by those that are being kept for public use. I wish I had the same privilege as friend Yorke and kept a pound. Like the editor, I had our best heifer tested in this way by a neighbor who keeps a scrub "muley," kept of course for his own use, but he managed to break through the fences somehow. We don't like to quarrel with our neighbors, but somehow "old Adam" rises up within us, and we feel like resorting to fire-arms the next time our premises are visited by that "muley."

One man keeps a runt of a boar which digs under the fence and lets us in for December pigs. Another

(short of pasture) allows his half-bred Down ram to feed upon the highway. Breaking through the wires he adds another cross to our Leicesters.

A brother correspondent says, "agitate, agitate." That is right. There are some irons that take a great deal of blowing to get them hot, and the scrub nuisance is one of them, but hard work and lots of fire will dispose of them, and make room for more useful and better paying ones.

Parties here are severe critics of the breeders of thoroughbreds. Anyone who takes pains to enhance the value of his stock by purchasing or using thoroughbred sires, is a target for the jeers of those who are not so doing, at every bee and threshing. It is a pity that it is so, but any one who is determined to succeed must make up his mind to laugh it off. The time will come, and it is not far away, when the laugh will be the other way. R. A. BROWN.

Cherry Grove.

### The Herd Book Question, Abortion in Cows, Etc.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—I have been a reader of your valuable JOURNAL for over a year and a half, and must say that I like it exceedingly well. Its moral tone is such that the most conscientious can take no exception to it. It is invaluable to every stock-raiser who is aiming at raising the present standard, and must give a great impetus to those who are indifferent. In my humble opinion it would be more than a paying investment if its columns were read and the ideas and suggestions contained therein put into practice on every farm on the American continent that makes any pretensions to stock-raising.

I think you handle the herd book question about right. Your articles are forcible yet tempered with moderation. I am sorry to see that the herd books are in their present condition, and hope the matter will be soon settled, the books renovated and consolidated, and a new book formed of which Canadians may feel as proud as they may well be of their stock. I have often pointed Americans to the excellencies of Canadian horses and cattle; and not many weeks since I got into an argument on the subject with two Americans, who maintained that they had as good beef cattle in the United States as there were in the world. My answer was—"Gentlemen, you have good cattle, but it takes the Canadians to carry off the first honors at the leading fat-stock shows in your own country." That put the quietus on them, and there was no more said on the subject. It has been my ambition for years to commence a herd of Short-horns here, but, like the Canadian youth, my ambition to possess first-class stock exceeded my cash; and indifferently-bred or inferior individuals I do not want at any price; so I have contented myself thus far with grading up, as my facilities were good, without having to purchase full-blooded sires. We are all more or less selfish, and possibly my interest in the herd books savors of it; because I intend some day, not far hence, forming a nucleus for a herd of pure-breds, and had intended visiting Canada for that purpose; but in the present condition of the herd books I do not know that would be advisable, as I want to commence right, and wish animals that will be eligible to entry in the American herd books.

I have read Mr. Smith's article on the Ontario Agricultural College, in July number of your JOURNAL, and think it is somewhat severe, as it would convey a false impression when not explained, as in your criticism; for instance, the cattle feeding experiment. But what especially attracted my attention was "Cows aborting by wholesale." Now, I think my experience in this may be of some service. In the fall of 1883 my cows commenced aborting, and continued to do so for about a year, during which time I lost over fifty per cent. of the calves. I learned from persons who had had experience similar to mine that cows that aborted once were likely to do so three times in succession, which made me considerably discouraged; so I fattened and sold to the butcher all the cows that aborted except five heifers that were under two years old. They were too small to sell to the butcher, and I did not like to part with them, as they were the cream of several years' breeding; so I concluded to try them another year, and got them all with calf without trouble except one, which I sold for beef. I commenced reading everything I could get hold of on the subject, but got very little light. I liked the business and did not like to give it up, and could not

rest to see my best cows abort and afterwards go for 3 and 3½ cents per pound. About nine months ago, after much study and thought on the subject, I commenced treating them with what I thought might act as a preventative; since then I have lost but one calf from that cause, and that was about two weeks after I had commenced the treatment. The heifers that had aborted came in all right, and their calves are alive and doing well.

Two of my neighbors' herds within a mile of where I now write were similarly affected; the same remedy was tried with equally good results.

The gentleman whose name I send as a subscriber to the JOURNAL had a herd of 25 cows and lost about 23 of the calves by abortion before he adopted my treatment. Since then he has lost none. A farmer that lives about six miles northeast from here had a herd of 40 cows. He lost 20 calves before trying the treatment, 4 a short time after, and none since. It has been tried in several herds through this country during the past six months, and I have not heard of a single instance in which it has failed, after a few weeks' trial. Now I am no professional, but a common farmer, who is not above following the plough, or using the scythe or cradle, if need be; but I do believe I have discovered an unailing remedy or preventative for abortion among cows; and if any of the readers of your JOURNAL wish more light on the subject they can write me.

I would like to write something about Kansas climate, soil and crops, as I have been here now over 12 years and know whereof I speak; but do not know that it would be acceptable, and do not wish to be an intruder, fearing that this is too long already.

Respectfully yours,

R. HAROLD.

Marion, Kansas, Aug. 1, 1885.

### Scrub Bulls.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

SIR,—You will not be able to get legislation against the "scrub bull." His owner is governed by a conscientious theory of economy and does not intend to pay big figures for "fancy" bulls, nor take agricultural papers. Asking him to pay \$20 to \$50 a year for good sires to get good stock, when he barely manages to pull his scrub beasts, injured to cold and scant fare, through the winter, is an extravagance he deems preposterous, and is he altogether wrong? What is the use of high breeding without good feeding and stabling? Thoroughbreds become scrubs in the hands of thriftless farmers, or thrifty farmers, whose circumstances and premises preclude necessary food and warmth. You could not go up to a man's stable and say, "Castrate that bull; he is a scrub and you are seriously damaged by keeping him. You are not only keeping yourself poor, but the keeping of such beasts is keeping the country poor; therefore the Government Inspector says imperatively castrate him now or, I will." You may then credit the subject, and charge the Government with many hearty adjectives! Having a few thoroughbred Shorthorns, Jerseys, Southdowns and Berkshires, and being surrounded with seven scrub bulls, etc., I can sympathise with your rigorous onslaught on the "scrubs," but cannot agree with your proposed remedy.

Farmers would not, could not, brook interference with their systems of breeding or tillage, however expedient.

Some system of furnishing bulls by county or township municipalities ought to be arranged. Perhaps the grants to exhibitions by the Dominion or Provincial Governments would be more usefully applied as aids to help municipalities to buy bulls, than given as prize money. The great importers and breeders may now be safely left to the stimulus of their own ambitious enterprise and interests, and would probably be content with "honors" instead of coin. Prize money at municipal shows is much frittered away on minor objects, and if concentrated on pure bred bulls would achieve important results.

Breeders would have a more abundant recompense in the greatly extended market for municipal bulls. Thoroughbred bulls are cheap enough, yet too few are able or willing to buy them. Is there not \$50,000 or \$100,000 a year spent by all of our many Governments in adventures of infinitely less consequence than the general prosperity of the agriculturists than in supplementary grants to municipali-

ties to enable or encourage them to get thoroughbred bulls? Counties could secure each a few very high class animals, and townships might be content with lower priced animals of pure blood. The bulls could be stabled in the most eligible places, fixed rations agreed upon and charges only made to clear expenses. The owner would thus lose his motive for keeping a "scrub," and seeing is believing.

Yours faithfully,

G. LAIDLAW.  
The Fort, Victoria Road.

### Enquiries and Answers.

THE JERSEY HERD REGISTER.

In answer to an inquiry, we mention that there is no Canadian Jersey herd book for Ontario or Quebec. There is one in Nova Scotia. The Secretary of the American Jersey Cattle Club Herd Register is Mr. T. I. Hand, Washington Buildings, Broadway, N. Y. The A. J. C. C. Herd Register, is published in book form and new numbers about 17 volumes.

YOUNG LUCKS ALL.

In answer to the inquiry of L. W. Whitbeck, Paw Paw, Mich., in last number of the JOURNAL, we have received information to the effect that Mr. Joseph Vance, New Hamburg, Ont., sold the stallion and mare referred to in Mr. Whitbeck's letter to Bangs & Kram, Paw Paw, Mich. The following is his pedigree:

He was sired by Imperial Luck's All, bred by H. S. Robinson, Yorkshire, England; grandsire, Old Luck's All; great grandsire, Young Turk; he by Harpham Turk, which was sold for 60 guineas, and was considered one of the best Cleveland Bay stallions in England.

Young Turk's dam was by Old Tor, dam by Ambrose Stickney.

Harpham Turk was by Ruler Sam, Old Turk, Luxall's dam by Cardinal; granddam, Prince; great grand-dam, Askew's Forester.

Cardinal by Emulator, dam by King George.

Old Luck's All's dam by Foester Hero, grand dam by Old Leander.

Young Luck's All's dam Dairy, by imported Anglo-Saxon, traveled in Canada by rail and stood at \$100 for service, grand dam by Neptune, great grand dam, Yorkshire Maid. Young Luck's All was bred by R. Gofton, Berlin, Ont.

### The Farm.

THE farmer readers of the JOURNAL will please bear in mind that not only the comfort of the animals during the coming winter, but also the amount of the crops that shall be reaped next year, depend largely on the way in which the interval is spent, between this time and winter. There is no portion of the year so valuable. Those delightful days of mellow suns that so largely make up our lovely Canadian autumns, are apt to hulk us into a false notion regarding the distance of winter. Let us not be taken off our guard. With a few days given to the fairs, let us defer all visiting until the ground is bound like rocks. With the gradual lessening of the daylight, let our energies proportionately increase. The potatoes should be secured, the turnips go in in good time, and every furrow turned over that the daylight will allow us to turn before the winter comes, and where open furrows are needed they should be made with unailing certainty. Although the crop of 1885 is scarcely yet secured, that of 1886 is already on the way, and a deep sense of this has already taken possession of the progressive farmer, a feeling which he is in no way anxious to shake off. Early and late, through sunshine and shade, turn over the land for next season's crop, that the frost-king may pulverize it more effectually than can be done with the harrow. There is an indescribable charm about

farm life to those who keep abreast of their work, but when the work leads it is truly vexation of spirit. Fellow farmers, when you read these lines take stock of your autumn work, lay aside the JOURNAL till the evenings are longer, and up and at it.

WHEREVER we go throughout this splendid heritage, the Province of Ontario, we see traces of the lack of drainage that fill the mind with sadness. It is the exception, not the rule, to find an underdrained farm, or even one that is partially underdrained. Until this is done all attempts to permanently improve many of our finest soils will prove in a very great measure abortive. Grain will not grow on saturated land until the excess of moisture be removed; and if this is removed by evaporation the result is an encrusted soil, especially if of a clayey nature. Grasses will not thrive on a soaked soil unless such as are of a gross character, and the operations of tillage on such a soil are very greatly hindered. Indeed, on undrained lands the husbandman is almost completely at the mercy of the elements, which is not the case to a very great extent when the land is properly drained. The mightiest of all the material influences at work in aiding the advance of improvement in Canadian agriculture we believe to be underdraining. Young men of the farm, buy Waring's book on Drainage. Get all the information you can regarding Canadian practice, and commence the work at once.

In speaking of the importance of discipline in agricultural colleges the *National Live-Stock Journal* of Chicago wisely says: "Of all the education the students of our agricultural, as of any other colleges, can get, there is no single feature more important than that of discipline. The man who is not trained to habits of obedience to properly constituted authority is a useless citizen, however great his ability or extensive his attainments may be." The thought of our own Guelph College refused to be dislodged from the mind as we penned the above paragraph. Though in the main our students have been loyal to discipline, in every instance they have not been so. We trust that those who are will see the wisdom of doing everything in their power to uphold inviolate the dignity of law and order, without which all instruction will be imparted in vain. The young man who will not bridle himself sufficiently to submit to rightful authority with more than constrained submission gives evidence of a sadly deranged mind. It may seem a heroic thing to be looked upon as a leader in insubordination, but in the moments of reflection, if indeed such an animal can reflect, he must despise himself. The steady-going farmer plodding student may afford abundant merriment to the more advanced mischief-maker for his unreserved acquiescence in the regulations of such an institution; but if of the right stuff, he will be sufficiently brave not to turn to the right hand nor to the left, for the sneers of one whose sayings are lighter than thistle-down and far more pestiferous. The hard-working, obedient student always gets vengeance on the idler and the disobedient on examination day, and of the sweetest kind. The lad who fritters away the golden hours of college life will never attain to the position of a "citizen;" he will all his days be a *thing* in the community.

**National Stock-taking.**

The individual engaged in business does not usually consider himself safe without taking stock once a year. In this case he may know which way the current is setting; whether he is going forward or back-

ward, or, like the boatman in the whirlpool, is beating about in a sea of inextricable difficulty.

Many of the reasons that apply to the wisdom of stock-taking by the individual apply as fully to the adoption of such a course by the nation. We can readily conceive the immense import of any people knowing as to whether they as a nation are progressing or receding, and in which lines the avenues of progress or retrogression are to be found.

It is therefore true wisdom on the part of any Government to sustain in full sufficiency a bureau which shall collect all desirable information regarding the industries of the land, in which case the legislators of the nation may feel her pulse themselves, and those pursuing the various branches of industry may see how the land lies without using the spectacles of a seer. This great good work Mr. A. Blue, of Toronto, and his associates are doing for Ontario; and we only wonder that every farmer in the land is not found doing everything that lies within his power to assist these untiring workers in their endless toils. We have found the labors of this department of invaluable service in our own work, and we feel quite sure that all newspaper men are with us when speaking thus.

On the 3rd of August we, along with scores of others, received printed forms, asking a report of the probable yield of the grain crops, and on the 15th of August a carefully prepared printed summary of the answers is issued with a promptness that is very commendable indeed. From this summary we learn that the yield of fall wheat in the western sections is very good, that spring wheat is fairly good, that barley yields well, and that oats also are full of promise. Fall wheat, however, has been somewhat damaged by rain in harvesting; barley, too, is badly browned; and spring wheat will, without a doubt, give a less favorable summing up than that furnished by the report, owing to the extent to which it has been smitten with rust since the answers to the Bureau were forwarded.

Though damaged considerably in the gathering, the crops of 1885 are abundant, and there is every reason to be thankful for the fullness of bread and the plentifulness of the fodder that everywhere abounds.

The following table gives the statistics of our four principal cereals for the years 1885 and 1884, according to the returns made to the Bureau:

	Acres.	Bushels.	Bush. per acre.
Fall Wheat... { 1885	877,745	20,433,758	23.3
{ 1884	864,740	20,717,631	24.0
Spring Wheat { 1885	799,299	24,372,719	30.5
{ 1884	721,647	14,609,661	20.2
Barley..... { 1885	598,318	17,047,530	28.5
{ 1884	700,472	19,119,041	27.3
Oats..... { 1885	1,547,779	59,285,340	38.3
{ 1884	1,481,828	57,696,304	38.9

It should be borne in mind that the figures of the yield of crops for 1884 are the final result, while those for 1885 are estimates based on the present promise.

**Guano.**

The name Guano is a Spanish word, signifying dung, and it was originally applied in this country to denote the valuable deposit consisting chiefly of excrement and carcasses of sea-birds which roost and rest upon the Peruvian shores, and feed upon the fishes that abound in the warm waters of that district. The remains of these birds have remained undisturbed for thousands of years, and formed deposits which in four districts were more than 100 feet thick. The first sample that arrived in Europe was brought by Humboldt about the beginning of this century, but it was not until about the year 1840 that its great

value as a fertilizing agent was appreciated in the old world. From that time, and for more than thirty years thereafter, it was brought over in enormous quantities, so that the imports into the United Kingdom averaged about 200,000 tons per annum.

The first imports were of a highly nitrogenous kind, yielding as much as 15 per cent. of ammonia, and sometimes more. These were deposits obtained from the Chinch Islands, a region in which rain is almost unknown, and where the heat of the sun is so great as to rapidly dry up the material and preserve its soluble constituents from deterioration. These rich deposits were soon exhausted, and attention was then directed to other parts of the coast, where deposits were found whose soluble nitrogenous materials had been to a greater or less extent washed away by rain and the spray of the sea.

During the last decade a great deterioration has occurred in the quality of the guano imports—the highly nitrogenous deposits are now exhausted, and the genuine Peruvian guanos now imported do not yield more than about 5 per cent. of ammonia on an average. Corresponding with this decrease in ammonia, there is a decrease of soluble phosphates, but the total phosphates are very much increased, so as to average upwards of 45 per cent. On some parts of the coast where rain is abundant, the nitrogenous constituents of the guano are entirely washed away, and the result is what is called a phosphatic guano, containing from under 50 to over 70 per cent. of phosphate of lime; but these deposits are also fast disappearing. Owing to the large proportion of soluble constituents in the original guanos, they were very powerful manures. Their effect upon the crops to which they were applied was simply marvellous, and it was with some difficulty that farmers were able so to restrain their use as to prevent injury being done by too liberal application. Even during recent years, when the quality of the imports has so sadly deteriorated, a charm still lingers around the name of Peruvian guano, so that farmers are willing to pay a price for it which is much above its manurial value. The present imports of Peruvian guano, containing about 5 per cent. ammonia, and nearly 50 per cent. phosphate, are, nevertheless, excellent manures, and capable of being used with greater freedom and safety than the powerful guanos of former years.

DR. A. P. AITKIN IN THE "NORTH BRITISH AGRICULTURIST."

We would find room for the remainder of this paper, which speaks of various kinds of so-called guanos. In speaking of fish guano, Dr. Aitkin says that: "It consists of the dried offal of the fish-curing yards, or some other preparation of the dried substance of fish. Its phosphatic and nitrogenous matter are both insoluble, and it forms a very slow acting manure. It is unfortunate that owing to their oiliness and other causes they are slow to decompose in the soil, and are very disappointing in their results. Any manufacturer who would discover a method for quickening the action of fish manures would confer a boon on agriculture, for the utilizing of fish manures is the great means of restoring to the land the enormous amount of nitrogenous matter which is constantly being carried down from the land into the sea.

"There are many other manures sold under the name of guano that ought never to have had the name applied to them, and the sooner they are sold under legitimate names the better, for guano is a name which applies only to excrementitious substances which have passed through the digestive system of an animal."

### Winter Wheat Sowing.

By the time this article is read a large share of winter wheat will have been sown. A number, however, will still be in the midst of their work, and a limited number not yet commenced. We would caution the latter against sowing wheat too late. At the best this is hazardous, and the result is seldom satisfactory. It is a singular fact, but yet it is a fact, that late sown grain seldom yields like the early sown, even though there should be a fair proportion of straw. Will some scientist tell us why? It is certainly wiser therefore not to run the risk of failure when there is a prospect of being able to sow the same land early in the spring with other grain. A poor crop of any kind of grain is always a losing game, and a good crop is on the other hand a paying investment, though of a less merchantable variety. With poor crops the farmer cannot get on, while with good ones he can scarcely fail to get on. It follows, therefore, that every farmer should aim to grow good crops, whatever the extent of the acreage.

Though winter wheat is a staple of the country, it is latterly a more hazardous crop than some others, owing to the fight that it must maintain with winds and frosts, and this should be weighed when determining the extent of the area to be sown. We have been singularly blessed for two successive years with extraordinary yields, but this will not go on forever. We hope, therefore, that those who are not getting in their crop in good season will pause and consider. It may be asked what is the proper time to sow winter wheat. In our own experience we have had the best crops from grain sown between the 1st and 12th of September. That sown about the 10th has usually given the best satisfaction. When sown in the latter days of August and first days of September it seems to exhaust itself with autumn growth, if we may so speak, and next season sends up a stalk lacking perfect vigor. When the weather is very dry sowing should be deferred till at least the middle of September, as about the time of the autumn equinox there is likely to be rain.

Where winter wheat can be successfully grown, it is usually wise to sow a quantity, as it puts the work of sowing and harvesting over at seasonable times, but where spring wheat does well, the wisdom of sowing much winter wheat is doubtful. When the crop is uncertain it should not be sown. Getting a crop of winter wheat once in three or four years is on a par with planting peach trees, where in the struggle for existence they give a few inferior specimens once in five years. The kind of wheat sown should be gauged by the experience of localities. Around Hamilton, so far as we have been able to learn, Democrat is King.

### Manufacturers and Farmers.

Farmers have grumbled a good deal in the past because of the high prices they have been required to pay for machinery. They have been disposed to look upon the manufacturer as the Jews of old eyed the publican—unjustly extortionate. For this view there has been a partial justification, as in former years manufacturers were certainly prone to fatten upon the hard-earned money of the tiller of the soil. This is a historical fact which they themselves cannot deny. But this state of matters is becoming greatly modified. It is no uncommon occurrence to hear of the manufacturers of farm implements going to the wall, which, though it sometimes results from mismanagement, the lessened profits has also a good deal to do with it.

The manufacturer of farm implements is truly the farmers' friend, and therefore the relations between

them cannot be antagonistic if placed upon a right basis. If one wishes a piece of newly cleared ground crop cut with the cradle, he has first to ransack a neighborhood to find a grey-haired, old-time veteran to do the work, one who swung the cradle when a boy, and then to offer a premium on his labor to get the work done at all. And why this change? We answer, the manufacturer has brought it about by the abundance of the labor-saving machines that he has placed within the farmer's reach.

While the inventors of these machines have laid the farmers under lasting obligations, the manufacturer should come in for a share of the credit, as without the capital and the energy of the latter the fruit of the ingenuity of the former would not have availed. The manufacturer is therefore entitled to a reasonable premium on his enterprise, and though this is liberal the farmer should not be too ready to complain.

The comparatively high price of implements is more caused by circumstances which the manufacturer can not control, and which are the outgrowth of the practices of trade, now become almost universal, of putting wares upon the market through the medium of agents. This gigantic tree of nineteenth century growth overshadows every avenue of trade; it has bound the manufacturer with chains that he cannot break and placed every purchaser at its mercy.

Whether the rushing world will ever again do without travellers is a question. At all events this age abounds in them, and that manufacturer who ignores this fact is certain to be left behind in the race. Travellers at the present time are slowly becoming recognized as a necessary evil in the world, and perhaps the more philosophical way is to accept of the inevitable with the best possible grace. Although we cannot eradicate the imperturbable agent, we can regulate by charging him *full fare* for board and lodging, and in this way lessen that inherent fondness that so many have for acting the intermeddiate in the country.

But with or without agents the relations between farmers and the manufacturers of farm implements should be of the most harmonious nature, both being mutually dependent. It is to the farmer's interest to purchase the most effective implement that he can get for his work, and as we view it, it will ultimately be to the manufacturer's interest to give him that implement at a reasonable price (no matter what other manufacturers charge) in view of the greatly increased trade that must ultimately accrue.

Although manufacturers have been pelted with shot and shell for years past on the ground of what were deemed extortionate charges, in view of the towering and incalculable benefits they have conferred on the farmers, and through them on the nation, we certainly deem them fit subjects for at least one plea at the hands of a person whose duty it is to look after the best interests of the farmers.

### Intending Students for the Ontario Agricultural College.

The circular of the Ontario Agricultural College for 1885-86, containing the course of study for the term named and full particulars of intending students, is now before us, and we would fain embody the whole in this number of the JOURNAL, but of course cannot. Parties desiring this calendar, however, have only to write James Mills, Esq., the President, or Prof. Wm. Brown, when it will be forwarded at once.

The scholastic year commences on 1st October and ends on the 31st August, and is divided into two seasons, a winter and a summer one; and each season

into two terms. The time, then, is short for intending students to complete their preparations; and we do hope that our fellow-farmers in Ontario are becoming fully alive to the importance of their sons of promise availing themselves of the benefits of this institution.

The young men who do, other things being equal, will rise above their fellows, which is already becoming apparent. We could now point to a number of them who are prosecuting successfully one or other of the various branches of stock-keeping, and we venture the assertion that not one of them regrets the term of attendance given at this school. We know of a number of them who are now regular correspondents to leading farm journals, while this college has furnished an editor to the *Farmers' Advocate*, one of the leading farm papers of the land.

Young men of the farm, ye are doubtless busy, but the golden hours of youth fly fast, and the time will soon be forever gone, to each of you individually, when you can avail yourselves of the advantages of a better education to aid you in your life-work. Therefore be *decisive*, and if you can so arrange it, put in the coming winter at the farm.

Fathers of the farm, give your sons a chance. Not one of you but would love to see your boys climb up the Laurentian heights of Canadian attainment where they may become each a leader in the forward march. Then, we say, give them a chance, not to learn to labour (you have already taught them that), but to obtain that knowledge which will make their labor grandly effective.

Farmers of Ontario, this institution is your own. It is sustained for your advantage and for that of your sons, and at your own expense; therefore allow your sons to take a full course there, and thus equip themselves with all that science has placed within the reach of the inheritors of your calling. Fifty dollars and board, or \$100 at most will secure the performance of their home work; but these sums will never bring again the golden opportunities that are thus presented to a passing youth.

One gold and two silver medals are offered to competing students of the second year, and we shall expect that three young men who read this paper will go down and proudly bear these to their homes in 1887.

The net cost per year of board, washing and tuition (1) to an Ontario farmer's son, able and willing, with considerable experience in farm work, is \$50 to \$80. (2) To an Ontario student without any previous knowledge of farming, \$60 to \$90. (3) To non-residents, \$140 to \$160.

Candidates for admission must not be less than sixteen years of age, and must produce satisfactory certificates as to (1) moral character, (2) physical health and strength, and (3) their intention to follow agriculture or horticulture as an occupation.

The subjects of examination for matriculation are (a) reading, writing and dictation, (b) English grammar—parsing and analysis, (c) arithmetic—to end of simple proportion, and (d) the outlines of general geography and the geography of Canada.

The course of study for first year students includes agriculture, live-stock, inorganic chemistry, organic chemistry, veterinary anatomy, veterinary materia medica, zoology, botany, geology, English literature, English composition, book-keeping, arithmetic, mensuration. The course of the second year is proportionately more complex and advanced. Tell us not that the young man of the farm, with a properly constituted mind, can go over all this without receiving benefits that he will proudly cherish, for we

cannot believe it. It is not going to be demonstrated in this decade that schools are a delusion after so many centuries of trial.

The following practices amongst others are absolutely forbidden: Swearing, improper language, and gambling; the use of intoxicating liquors, cards, or firearms, and the use of tobacco while on detail, in or about the buildings, in any place except the smoking-room. And we have no doubt but that the professors endeavor to enforce those rules faithfully and conscientiously.

### Pasturing Meadows.

When there is abundance of rain in the early part of summer, the hay crop will usually be a good one under ordinary conditions, but if this period should be dry, meadows that were pastured close off in the fall will not give a large return even though the ground be in fair condition. Those not so pastured will be almost certain to give a fair yield, let the weather be what it may. If this be true, and both observation and experience have proved it so to us, then it follows that farmers have the amount of the return of the next year's hay crop very much in their own hands. When the aftermath is left to protect the grass in winter, its roots do not perish from the intensity of the cold, nor are they impaired in their vitality. Where these are injured by the frost, though not destroyed, the growth that follows is necessarily feeble. In spring the meadows thus treated shoot ahead at once, making a strong growth before dry weather sets in, while the ground is thus protected from the too strong rays of the sun, the growth already made continuing to act as a mulch, so that in land in fair heart a tolerably good yield is almost certain.

The short sighted policy of pasturing them very bare is an old-time custom that has been handed down to us by the pioneers of other days, whose lands were so rich that they usually got a crop under the most adverse conditions. It can only be pursued now by those who do not or will not reflect. Nature is like a boisterous boy, ready at any moment to resent an injury, but who can be taken captive any day when rightly treated.

Without the adoption of a partial system of soiling we admit that pasturage is a necessity, as otherwise the stock cannot be tided over that trying period from hay-cutting until winter. It is undoubtedly cheaper, however, to grow feed for a portion of the stock during those months and cut it for them. The sunshine in this land, with whole days of cloudless skies, is very powerful, which is against the growth of plants unprotected by a self-produced shade, hence the great difference usually between the growth of early and late sown spring grain. This, too, accounts in part, at least, for the immense yield of a soiling crop compared with a similar acreage that has been devoted to pasturage.

Those who pasture their meadows bare in autumn to enable them to sell their hay, are not deserving of much sympathy when they complain the following season there is a shortage in the hay crop. They themselves are in a great measure responsible. It would have been better had the hay been fed direct to the stock, and they kept off the meadows.

We do not pronounce absolutely against all pasturage of meadows. It may be necessary where the aftergrowth is exceedingly rank, and in many instances partial pasturing may not be detrimental if done early in the season; but pasturing bare at any time is certainly unwise, and particularly so at the approach of winter.

Pasturing new meadows is simply suicidal, and should in no case be practised. The treading of the ground after grain-cutting, when it is usually mellow, and the young plants in the early stages of their growth, means death to them, and then when winter comes they have no strength to fight successfully the battle with the elements.

To those who say they cannot help it, it is an absolute necessity, we answer, next year you can. When spring time comes again, sow or drill a nice patch of corn for fodder, not all at one time, but with an interval between the times of sowing. Cut this for your cattle when it is ready, and in this way next autumn you can give your meadows fair play. Where corn will not grow, peas and oats will, and they make an excellent green feed. If you object that too much labor is involved, then we can only add, go on as you are doing. It is a question for you to determine whether *one-half* more in the return of your hay crop or the labor involved in partial soiling is worth the most to you.

### The Toronto Industrial Fair.

The attendance last year was over 150,000, and already the appearances are that this number will be far exceeded at the coming Fair to be held at Toronto from the 9th to the 19th of September next, for which unusual preparations are being made. This Fair, after the great St. Louis Fair, ranks second to none in America, and its fame has spread to such an extent that delegates have been appointed to visit it this year from many of the large Fairs in the United States, even as far west as the State of Iowa. The entries and applications for space already made far exceed those of any previous year, and the managers are being put to their wits' end to know how to provide for them all. Cheap rates and excursions will be given on all railways, and our readers will not be disappointed if they make up their minds to pay Toronto a visit at the time of the Fair. The management invariably do all in their power to make visitors feel comfortable and at home, in which they have succeeded in past years in a remarkable degree.

The live-stock coming from the Maritime Provinces to the Provincial Exhibition at London will also be exhibited at Toronto, which will afford an excellent opportunity of judging as to the progress in this line that our brethren have made down by the sea.

The exhibition will be open every evening, and the 120 electric lights, with their mellow moonbeam glow, will turn the scene into a magic fairyland, rendered inexpressibly beautiful by the brilliancy of the fireworks.

The electric railway will this year connect with the street cars.

All interested in dairying should not fail to visit the model dairy in charge of Professors Brown and Barre, of the Experimental Farm, for which the directors are importing a centrifugal machine from Denmark, suitable for ten cows.

To see the beautiful Swiss cottage erected by Mr. Valancey E. Fuller, where the products of the famous Oaklands Jerseys will be sold, would alone repay a journey to Toronto.

It should be money well spent to visit this magnificent exhibition.

### Legislative Grant to Agricultural Institutes.

As stated in the circular issued by the Department of Agriculture for the Province of Ontario, "the success of these meetings was so marked, and the good results of them so obvious, that the Commissioner of Agriculture was led to consider what means could be

taken to encourage the formation of others and secure for all of them a character of permanency." With this object in view the Commissioner asked and obtained from the Legislature a grant of *twenty-five dollars* yearly to be given to one such Institute to be organized in each electoral district of the Province, upon the condition of an equal sum being granted by the County Council of the county within which the electoral district is situated.

The Legislative grant was also made subject to such regulations as the Commissioner might approve, and these regulations are as follows:

1. That each Institute shall be composed of not less than fifty members, who shall each pay a fee of not less than twenty-five cents annually.

2. That there shall be an Executive or Board of Management, consisting of a president, a vice-president, a secretary and five or more directors, and a majority of the Board shall be practical farmers.

3. That the Institute shall hold at least two meetings each year, in different parts of the electoral district, for the discussion of agricultural subjects.

The County Council may make such other regulations as a condition of their grant as they may deem advisable, but not so as to conflict with the foregoing.

The Commissioner has further stated that the Professors of the Agricultural College will be able to assist at twelve or fifteen Institutes in the month of January, and at others occasionally during the year, as their duties at the college may allow.

Now that the hurry of harvest is over we trust that our farmers in every electoral district of the Province will organize an Institute where these do not now exist, and officer them with the most capable men. The draft of constitution and by-laws suitable for governing the same was given in last issue of the JOURNAL.

It is well, too, that suitable talent be secured in good time to prepare papers for these Institutes, else there may be a dearth of these when most wanted. No man can go and prepare a paper that will live when he is dead without most patient thought, and this should be the character of the papers prepared for the consideration of our good common sense farmers.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

### Notes on a Rapidly Spreading Weed —Echium Vulgare.

BY J. HOYES PANTON, PROF. NAT. HIST., ONT. AG. COL.

*Order Boraginaceae.*—Few plants illustrate better the importance of knowing the scientific names than the common weed in many parts of Ontario, known to botanists as *Echium Vulgare*.

This plant is called by the following names in different parts of Canada and the United States:—Blue Thistle, Blue Weed, Blue Devils, Canada Thistle, Viper's Bugloss and Bishop's Weed. To Canadians it seems ridiculous to call it Canada Thistle, a plant belonging to an entirely different order (compositae), but it illustrates how little dependence can be placed on a common name. Yet when students are asked to learn the scientific name of a plant they are inclined to think it a waste of time and express great surprise that such names are not abandoned and the common ones persistently adhered to. There are other plant names which could be cited here to emphasize the propriety of learning as far as possible the botanical names by which plants are known the world over, and of paying less attention to names known only to township or school section.

In some cases I have found it extremely difficult to know what plant was referred to by a writer, for I found this common name was applied to [an entirely different plant in other parts of the province, and thus became quite misleading. But the moment the

technical name is given, a botanist understands at once what he is dealing with.

*Echium Vulgare* is readily known by its beautiful purple flowers arranged in clusters along a stem 2 to 3 feet high. The stem is covered with hair-like prickles, and more or less spotted with small black spots.

In early spring a circle of leaves spread on the ground appears without a central stem. Further on in the season a main stem arises. On this flowers appear about the end of June, soon after six other stems shoot out at the base of this, also soon covered by purple flower clusters.

In July the plant has reached full growth, and presents quite an appearance with its showy flowers. The intelligent farmer is not to be deceived by its beauty. It belongs to the low family (Burr), and if once allowed an introduction to his fields, becomes a formidable nuisance. This weed has such a foothold in Glengarry that many farms have depreciated in value through its presence. Having a large biennial top-root (carrot-like) it grows with great vigor and is exceedingly difficult to destroy. It has found a foothold on the roadsides around Guelph, and if not carefully watched will enter into possession of the neighboring fields.

The plant gives a large amount of ash in which the principle constituents are *silica* and *lime*, and by this may indicate something of the nature of soils upon which it thrives. I give the analysis of this weed below, and in closing would caution all readers of this note to exercise great watchfulness over its advent upon their farms, remembering that it is the member of a low family and bears a very bad character in the plant society, that if once allowed upon a farm it will be expelled with great difficulty.

#### ANALYSIS OF ECHIMUM VULGARE.

Percentage of ash from a fresh plant, 5.88.

Composition of the ash :

Silica.....	*47.91
Chlorine.....	2.42
Sulphuric oxide.....	2.23
Phosphoric oxide.....	2.78
Potash.....	16.65
Lime.....	*22.44
Magnesia.....	3.49
Soda.....	1.41
Alumina and Iron.....	.67
	100.00

### How to Make Farming More Pleasant.

BY J. DRYDEN, M.P.P. BROOKLIN.

(Concluded from August issue.)

#### DON'T UNDERTAKE TOO MUCH.

Don't undertake more than you can properly accomplish well and in time. I suggest this thought for those who are more youthful and of less experience. You have seen the man who, though ambitious, never stops to think how much he can do. Perhaps he undertakes to summer-fallow twenty acres when he cannot properly do more than ten. He commences a little late, gets half over the field when other work compels him to quit it. By the time he gets at it again, that which has been plowed should be plowed again, but he pushes on through the remainder—then by the time he can plow the second time he finds it in about the same condition as when he first commenced, and so it goes through the season. While he has desired to clean his ground he will find he has only cultivated the thistles and weeds. His labor is completely wasted and utterly thrown away. A little planning and forethought would easily avoid this difficulty.

#### HOME SURROUNDINGS.

I come now to our home surroundings. I know I tread here upon tender ground and encroach somewhat upon the sphere of our wives and daughters. Yet there is no reason why our homes should not be made attractive and pleasant. Why should we be obliged to go to the village or town to see tasteful and pleasant

homes. I would not advise in the matter anything very elaborate, but a few trees may easily be planted, a few flowers cultivated and thus give a little recreation in their care. But I must speak a word for our wives and daughters. I know farmers' wives whose position is little better than that of slaves or serfs. With them it is one continual round of toil—morning, noon and night, week in and week out—no cessation whatever. I do not think any farmer ought to demand it, and what is more I do not think he should allow it. If you are farming on a large scale I think it decidedly unwise to bring all the hands required into your own home? It will be more pleasant for them and certainly for you if some at least are allowed to live at their own homes and with their own families. But you say you cannot afford it. Have you ever counted the cost? Remember every pound of butter, every dozen of eggs, every sack of flour or bushel of potatoes or side of pork consumed by your men is so much cash, for it may be sold if desired. Let this be done and let a careful account be kept, and you will find you are paying not so much for the food consumed as for the labor required to prepare and serve it. Many have the foolish idea that what is grown on the farm costs nothing, but it does, and means simply money value.

#### A WORD FOR FARMERS' CLUBS.

Lastly,—Your business will become more pleasant if you consent to mingle among your brother farmers in the club or some kindred organization. You will find it a pleasure both to give and receive information and you will all be astonished at the suggestions you will receive from the experience and observation of others. There is no reason why we should not render every assistance to each other. All other classes join together for mutual benefit, and we may well follow their example. We have nothing to hide from one another; nothing to gain by keeping back information. I have no sympathy with the man who has some mystery by which he hopes to get ahead of his neighbor and who wisely shakes his head, refusing all information. If you are able to produce two or three bullocks much superior to your neighbors, don't you think you could sell them better if the drover could find two or three car loads in your neighborhood? Or if you can raise a few hundred bushels of superior wheat, don't you think you could sell it at much better advantage if your township were full of it? I am interested in the kind and quality of barley grown by my neighbors. For if mine be good and the rest inferior, mine is lost mingling with the others and I do not get its full value. Our business is different from the manufacturer, who may have some patent process of manufacture, and who shuts himself within a stone wall and writes over the door, "no admittance." Our experiments must be performed in open day, in the field, where every passer-by may see and copy if he choose. I invite you, therefore, to unite together and you will find in accordance with the old proverb, that as surely as "iron sharpeneth iron," so will the face and words of one farmer sharpen and stimulate his neighbor. No one can doubt that your business is the most independent. Your life is certainly more peaceful than that of most others. It is also conducive to the highest intelligence; more than that, it is conducive to the highest type of morality. All other classes are interested in your welfare. They depend entirely upon your prosperity. You have every encouragement in your business. Difficulties will beset you, but these may be overcome. I ask you to look on the bright side of your life and not on the dark side. You must labor, but let your labor be directed by an intelligent and educated mind. Take advantage of the numerous opportunities within your reach, and you will find, so far as your business can do it, your life will be increasingly satisfactory and pleasant.

### The Dairy.

SOME farmers find difficulty in realizing ten cents per pound on their butter in the summer season, while others can as easily obtain twenty cents per pound. Some growers of wool never get within a few cents per pound of the prices obtained by others, and while some sell their beef at two and one-half to three cents per pound, others as uniformly realize double that amount. The explanation lies in the fact that in the one instance the article produced is prime in quality while in the other it is inferior.

It follows therefore that *quantity* is only one object to be aimed at, for if one-half the quantity of a superior *quality* may be made to equal a certain quantity in value, we are shut up to the conclusion that quality is even a prior consideration to quantity, as quantity is more or less allied to increased labor in handling. The bearing of the above upon our stockmen is very clear. If one animal can be produced with a given outlay for feed, equal in value to two of a different stamp, it must be a prodigious mistake to be content to continue rearing the two instead of the one. Who are the farmers that must plead guilty here? Reader, are you one of them? If so, why?

THE low prices for dairy produce are likely to put something of a check upon the enthusiasm of our dairymen. It is not at all improbable that a number of those who have embarked in it may be disposed to draw off another season and commence another line of agriculture. Especially is this likely to be the case with those who have but recently taken up this branch. Veterans in the business know full well that like every other pursuit it has its full and ebb tides, and that although it is the evening time now with their calling, it will soon again be morning. Parties should hesitate before they cast aside a business so important with all its valuable machinery. The depression in dairying is no more proportionately than is that in the price of cereals. The only difference is that that in cereals came one year sooner. The wise course is rather to try and improve that most valuable machine, the dairy cow. Allowing the drop in prices of dairy goods to be one-third as compared with former years, and that these should continue so, if the average return obtained from the number of dairy cows can be increased one-third (and we feel sure it can), the deficiency in price is made up. But very low prices will not always rule. As surely as action is followed by reaction in mechanics, just so surely will better prices come again for the products of the dairy.

#### Koumiss.

An esteemed correspondent asks that we send him further information with reference to Koumiss: how it is made, its keeping qualities, etc.

Koumiss was first made by the Russians out of mare's milk, and is also known as "Russian wine." In Russia there are regular "Koumiss cures," some of them under direction of the government, and thither people from various countries resort for treatment by "Koumiss," in cases of defective nutrition, consumption, and wasting diseases. Koumiss is manufactured in England, the United States, and in Hamilton, Canada, out of cow's milk. Mare's milk has less caseine and more sugar than cows. By extracting through precipitating a portion of the caseine and adding milk sugar to cow's milk, the latter possesses the same properties as the former, and it is claimed it is much more nutritious and palatable than koumiss made out of mare's milk. In the manufacture of koumiss the milk undergoes fermentation, the milk-sugar is converted into lactic acid, carbonic acid, and alcohol—a considerable amount of lactic acid is also produced naturally in the process of making. The caseine, the most nutritious part of milk, but the most difficult to digest, becomes finally subdivided and is incapable of becoming coagulated: and the caseine in this state is already digested before it enters the stomach. When food is partaken of, lactic acid is necessary to the proper assimilation of such food; and as the milk in koumiss is already digested by the action of the lactic acid outside of the stomach, it is re-

lieved of the necessity of digesting and thereby is given a rest.

Dr. George L. Carrick, in his work on Koumiss, says: "When the caseine is first precipitated by lactic acid, whether produced by spontaneous coagulation of the milk, or as the result of more rapid artificial souring, milk becomes the most digestible of foods, the gastric juice in fact is simply relieved of part of its work, which work is performed for it in a more efficacious manner outside of the body by lactic acid."

It is claimed that where no other food, and not even frozen champagne, can be retained by the stomach, koumiss, when properly made and administered, can be partaken of readily. It is also stated that its use is most beneficial in cases of indigestion, dyspepsia, diabetes, infantum, cholera, consumption, and all wasting diseases—not by its power in itself to cure these, but by its being so readily assimilated and retained on the stomach, and its great nourishing and sustaining power. Its analysis is: New koumiss—alcohol 1.23 per cent.; fat, 0.52; sugar, 1.77; lactic acid, 0.63; caseine, 3.08; salt, 0.63; carbonic acid?; (whole quantity of solids, 7.67.) All the sugar is not changed at this time, but later on is changed into carbonic acid and alcohol. Old koumiss—alcohol, 3.23; fat, 1.01; carbonic acid, 1.86; sugar, 0.00; lactic acid, 2.92; caseine and salts, 1.21; (whole quantity of solids, 5.14).

It is sparkling; the cork flies readily from the bottle; it is very light, satisfying and pleasant to partake of. We understand it has an extensive sale in the United States. By reference to our advertising columns it will be seen that the Oaklands Jersey dairy of this city manufactures it, and have it for sale. We would suggest that our correspondent apply to them for their pamphlet on "Koumiss, what is it? What does it accomplish?" Its keeping qualities enables it to be shipped a considerable distance in cool weather or packed in ice or damp sawdust.

**Official Tester For American Jersey Cattle Club.**

We notice that at the last meeting of the Board of Directors of the American Jersey Cattle Club an official Test Department was inaugurated, and an official Tester appointed in the person of Major Henry E. Alvord, Principal of the Houghton Experimental Farm. Major Alvord is especially qualified to fill the position. He is not only a practical dairyman and agriculturist, but he is a scientist of wide reputation. Formerly one of the professors of the Mass. Agricultural College, he undertook the charge of the Houghton Farm when its affairs were not in the best of shape, and he has it at the present time in most excellent condition. Many of our readers will recognize his name as author in Sheldon's Work on Dairying, of the chapters on Dairying, Cheese, etc., in America and Canada. In so high esteem was he held that unsolicited his name was brought prominently forward in many leading stock journals as a suitable man for the position of Commissioner of Agriculture of the United States. The A. J. C. C. seem determined to control as far as they can the tests of the Jersey cow, and to bring them to a uniformity in mode of handling, feeding, etc. The appointment of a gentleman commanding public confidence to the degree enjoyed by Major Alvord seems to us to be a step in the right direction.

"Am very much pleased with your JOURNAL. Your articles are interesting and I find most profitable. No stock-raiser who wishes to be up to the times should be without your JOURNAL."—S. S. Hunt, Hospital for the Insane, Halifax, N. S.

**A New Departure.**

The proprietors of the justly celebrated Oakland Jersey Dairy seem ever on the alert to supply the public with all the requisites in their line. They are now erecting on the Toronto exhibition grounds a most picturesque and unique building as a branch of their Toronto business during the Exhibition, which will be completed by the opening day. The building itself is in the shape of a Swiss cottage, a novelty in itself, and it will be ornamented by paintings of an artistic and picturesque character. We present the readers of the JOURNAL with a diagram of the building in this issue.

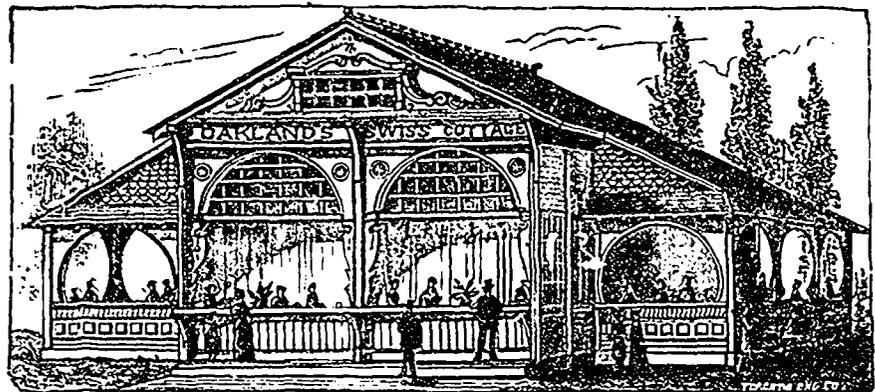
The front part of the Cottage will, as their advertisement states, be devoted to supplying the thirsty with the great effervescing milk preparation, "Oakland Koumiss," also their sparkling "Champagne Milk," recently invented by them, Jersey milk, buttermilk, while the balance of the Cottage and its shady verandahs will be devoted to the celebrated Oaklands Jersey ice cream, prepared at the hands of their New York professional ice cream maker, from the Jersey cream of the Oakland herd. This portion of the Cottage and its surrounding verandahs is capable of seating 50 people. The floors are to be concreted; the interior will be lined with natural wood

from another statement to the effect that, as many as 2,700 separate tests have been made during six months.

Professor Brown has given the following as his estimate of the agencies that govern the production of milk:

	Quantity per cent.	Quality per cent.	Quantity and Quality combined.
1. Breed.....	20	45	32.5
2. Food.....	30	20	25
3. Individual merit.....	15	10	12.5
4. Management.....	15	8	12
5. Time after calving.....	12.5	12	12.5
6. Age of Animal.....	7.5	5	7.5
	100.	100	100.

The contrast between three young cows of the Ayrshire, Holstein, and Jersey breeds, has been going on since February, and will no doubt be watched with great eagerness by all interested in these breeds. They were freshly calved and are in calf again near the same dates, and the conditions are therefore very similar. The mean average of daily milk given for the months of February, March and April, was 20 lbs., 22 lbs., and 18 lbs. respectively, and for May and June 15 lbs., 21 lbs., and 22 lbs. The cream per cent. (deep setting at 40°) was during the former term 12.81, 11.68, and 18.52; and during the latter 14.7, 8.8, and 14.2. The butter from 100 lbs. of



OAKLAND'S SWISS COTTAGE.

and varnished. The proprietors express their determination to make it, in convenience of serving, in the serving itself, in neatness and order, and in the qualities of their products, reflect credit on the Oaklands Jersey Dairy, and the reputation they have achieved in these lines already is a guarantee that the entire establishment will supply a long felt want.

**The Advance Report of the Experimental Farm.**

The diagram on the first cover of this timely pamphlet, showing the "size of butter globules in milk of twelve breeds of cattle," is indicative of the useful work that is being done in the dairy interest at the Experimental Farm this season. The breeds are the Aberdeen Poll, Jersey, Ontario Grade, Holstein, Shorthorn, Galloway, Devon, Ayrshire, Shorthorn Grade, Guernsey, Quebec Grade, and Hereford.

In the introduction Prof. Brown, in his usual original way, says: "It stands as a remarkable fact in the agricultural history of nations, that whatever be their position—in age or civilization—whatever their wealth or resources of any other kind—if troubles arise in the growing of crops from causes within or without themselves—climatic, disease, or competition causes, then recourse is had to the dairy." Some extent of the magnitude of the work which is now being done in connection with this one dairy test that is going on at present will be gleaned

cream was 37½ lbs., 30¾ lbs., and 43½ lbs.; and 49.3 lbs., 31 lbs., and 61 lbs. The cheese curd from 100 lbs. of milk, less 10 per cent., was 13½ lbs., 10½ lbs., and 14 lbs.; and 15.7 lbs., 12.3 lbs. and 17.3 lbs. It is thus apparent that "the Ayrshire increased very prominently in cream, butter and cheese properties from winter to summer . . . though the milk quality was reduced. . . . The Holstein decreased in cream from 11.68 to 8.8, and yet held almost exactly to butter yield. . . . The Jersey not only gave four per cent. less cream proportion in summer, but she actually gave 18 lbs. more butter in summer from the 100 lbs. of cream, and 30 lbs. more from her cream than the Holstein did!—facts all through that point to the necessity of further inquiry as to the animals, food and seasons."

Our experiment determined that during four of the winter months ensilage as opposed to turnips, produced less milk, more cream and more butter, and gave more of an increase in the weight of the cows. Another proved that the deep setting of milk at 40° in winter gave nearly twice the per centage of cream over that at 60°—and also a very material advantage in summer.

Deep setting at 40° in winter as compared with centrifugal separation, stood as 15.1 to 13.1, and 16.2 to 11, in summer, a fact of no small importance.

From a test made in rearing calves on skim-milk with the adjuncts at first of oatmeal, linseed meal,

and molasses, and after a time of hay, bran and roots, the following facts are gleaned: "That an average calf of 72 pounds at birth, getting two gallons of skim-milk per day—the average of an Ontario cow by factory records—with varieties of other food as named, and kept on such for ten months, will consume in value \$11.82. This is charging half the price of full milk for the skim. . . . At the end of that period the average calf weighed 376 lbs., a daily rate of fully 2 lbs., not including birth weight."

Other chapters dwell upon the food cost of producing dairy products; milk from permanent pastures; abortion among cows in relation to milk production; butter from milk and cream of different breeds, winter and summer; possibilities of the centrifugal separator, in addition to various other and exceedingly important subjects, for which we have no space at present, but which we hope to dwell upon at another time.

The report is but a fresh testimony to the unwearied diligence of Prof. Brown in those fields of research and experiment in the avenues of farming on its scientific side, which have as yet been so little trodden, and where, therefore, so rich a harvest is yet to be gathered.

Every person at all interested in dairying should have a copy of this report, and would be not only much interested, but also profited by giving it a careful perusal.

## Poultry.

FOR THE CANADIAN LIVE-STOCK JOURNAL

### Poultry Notes.

BY J. W. BARTLETT, LAMBETH, ONT.

In the August issue of the JOURNAL Mr. Gain alludes to the general failure this season in hatching and raising chicks. As far as our own experience goes we have lost more eggs and more chicks this season than in all our previous attempts, extending over some eleven years. The fact of failure being general would lead us to suppose that it was due to some atmospheric cause or epidemic; but when we find occasional exceptions where unusual success has been attained, we feel disposed to attribute each individual failure to some individual cause. For instance, our hens were too fat by far, which we only fully realized when a weazel killed one, and it was broiled for the dog; and when this occurs in a case like ours, where the hens are handled every day or two, it might occur much more easily when they are seldom or never handled.

Owing to the excessive cold weather of last winter we fed much more corn than usual, and the fact that corn was cheap made it still easier to over-feed, which occurs much more frequently when corn is fed than any other grain. The temptation to give them just a little more because the weather is cold came so very often, that we now believe we fed much too heavily. So, to summarize, our failure was due (we think) to over-feeding, and, as we have said, it is much easier to do so with corn than with any other grain. We have before noticed that when corn was cheap and plentiful we have heard much about failure in hatching, also in raising chicks; and no doubt both are due to one cause. As the chick during the later stages of incubation, derives its nourishment from the egg, it is not strange that the same cause should effect the death of some before hatching and some after. We only speak of our own individual case, and do not attribute the failure of others to the same cause; but we believe that we might safely, in many cases, do so. Owing to the unusual cold of last

winter the fowls were kept in close confinement by many, which is also a fertile source of trouble in hatching as well as rearing.

We should be pleased to hear the experience of others in this matter, as in that way only can we avoid falling into these errors.

### Raising Poultry—Commencing.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR: I am a boy fourteen years of age, but I have read a great deal in your LIVE STOCK JOURNAL and other agricultural papers and books about thoroughbred stock, and take a great interest in it. I would like to start with poultry and work my way up to pigs and sheep. Having seen your essay on keeping boys on the farm, I thought you might give me some information about how I could best obtain a start in poultry, and the means to carry it on. Any suggestions you may see fit to give will be thankfully received.

St. George, Ont.

Our young friend should first visit one or two of our leading fairs and note well the different breeds, reading at the same time what may be gleaned in regard to their comparative qualities. Having decided which breed to keep, purchase a trio from some reliable breeder and have them pure and good specimens. It is by no means necessary that they be show birds. At the same time visit the poultry houses of some of our most successful breeders, and get a good house ready. It need not be an expensive one. Mr. Gain has described one in the June number of the JOURNAL for 1884. A building of less dimensions will of course answer, and an apartment of some other building may do to begin with.

A large number should not be purchased at first, as we have to learn many things by experience in spite of all that we may read and plan from the labors of others, and oftentimes the success of first efforts is not encouraging. But where a boy is of the right stuff, he will not be discouraged.

We favor commencing with pure breeds from the fact that they will sell much better than others for breeding and will bring as much when not sold for this purpose. The same may be said of their eggs. We shall be pleased to hear as to the results of the effort of our young friend.

### Poultry Raising.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—I was pleased to read in your last issue two very concise and sensible letters in the interest of poultry. The remarks of J. W. Bartlett on chicks are just right. And Mr. Gain says truly that vermin "Harass their victims to the verge of death." Verily some of the fowl houses in this land are anything but "home, sweet home." It is astonishing that such an important item as poultry raising should be so neglected by all classes in this country. How much the farmer's wife might add to her pocket money by careful attention to, say, a hundred fowls? I do not say there is money in scrub stock; there is not; and I am one who has proved it. Say that a farmer buys a trio of thoroughbred fowls for his wife to make a start this fall; the progeny of these, next fall, with anything like management, will give her an excellent start in the business with good stock, of course being careful to get good general purpose fowls, such as Plymouth Rock, Langshan or Light Brahmas and Wyandottes, so that the carcasses of the crows, being plump and tender, would fetch the highest market price. If either Plymouth Rocks or Langshans were the chosen fowl, the pullets, if raised early, will be laying in the fall; and that farmer's wife would have a nice little sum to spend at the end of the season, in the little etceteras that go to make up a woman's shopping bill.

If any woman will take one-half the care of poultry (in feeding for best results, ensuring for herself plenty of eggs and poultry for market), half, yes, less care than that, that she does to make good butter, I

venture to say there will be a great difference of profit in favor of poultry. I know lots of fowls are kept by farmers and others; but how? Sometime since I was visiting at a farm, and one morning went to see them feed the stock. They fed and watered the horses, cows and pigs; the sheep were grazing in a lovely meadow near to a nice cool spring. Seeing a number of fowls about getting nothing, I said, "You have forgotten to feed the hens," "Oh, the blatherin, dirty things, they get plenty without feeding them," said the girl I spoke to. Now no doubt they may have picked up a living just then, as it was summer, but in fall and winter how would they fare? If they are cold and ill fed, they will not lay in winter when eggs are worth selling, and thus it is so many come to the conclusion that hens do not pay. It seems to me that poultry raising is exactly adapted to be a lucrative business for women. The gentle movements of a woman do not frighten them like the bustling, business ways of a man; and the patience that enables her to care for a little, helpless infant, is one of the greatest elements of success in raising and caring for poultry, and the attention to little things so necessary in the home, which is an attribute of woman's nature, ensures her success in a calling where it is all important to give close attention to details. I firmly believe it will be one of the coming pursuits for woman. Another great thing in its favor is, that a first-class beginning can be made with very little outlay. A sitting or two of eggs can be purchased for a few dollars, if the money at command is too little to buy birds; but the process is slower.

One word I will say in conclusion, get good stock. It may seem that the eggs or birds are dear, but those who purchase the stock have no idea of the trouble, time, thought, patient and intelligent observation and care, that have been bestowed on his stock by the breeder, so as to insure satisfactory results both to himself and customers. Trusting you will continue to give some attention to this branch of farm and home industry, of so much importance, and that I have not trespassed too much on your valuable space, I am, yours respectfully, W. C. G. P.

### Wheat as Fowl Feed.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

SIR,—I kept over nearly 100 hens, a dozen turkeys, geese and ducks, intending to raise a large number of their young this season. Last winter and into spring the lot were fed on wheat, some meat and roots, and we have not a single chicken, gosling or duckling. The turkeys were bred from so-called wild ones from Chatham district, and before the snow left they took to the woods and have been probably killed by foxes. Lime, dust boxes and water were abundantly supplied in a very large warm building. For some, to us, unknown reason, wheat of itself seem: to kill the germinating power of the egg. No doubt mixed food is the remedy. G. LAIDLAW.

The Fort, Victoria Road.

### The Apiary.

THE article in last issue on "Modus Operandi of Curing Foul Brood," was by mistake credited to D. A. Jones of Brantford, instead of D. A. Jones, of Beeton. Our readers will please notice that though Brantford has a G. B. Jones, he is in no way connected with D. A. Jones, of Beeton.

### Wintering Bees.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

MR. EDITOR,—Although a bee-keeper of only three or four years experience, I have been very successful in wintering my bees. And being invited to give my ideas and method, for the JOURNAL, I will do so as briefly as possible. The wintering problem among bee-keepers is an absorbing theme, inasmuch as success or failure depends upon it. A great many experiments have been tried by experts, and yet no method has been found entirely successful for a series of years.

The causes of trouble are so various, and combine in so many forms, that it is not likely we will ever be able to winter bees with that certainty that we do other kinds of stock. Still I believe some methods

are better on the average than others, and the best we can do is to find them out and follow them.

Not having tried several plans that are adopted by many, I will not attempt to describe them, but confine myself to that known as *cellar wintering*, the method I follow, and which I believe has given the best results. The time to commence to winter is in the summer, just after the honey season is over. At that time there should be a reasonable certainty that all colonies have queens. If the bees are lively in their actions, carrying in more or less pollen, it would be better to let them alone, as damage might be done by opening hives at this particular time, in causing robbing, or perhaps killing a queen. But if the bees are dead and listless, it would be better to look for eggs in the centre of the brood nest. If none are found, exchange one of their combs for one having eggs from the best queen in the apiary. The operations should be done very rapidly, or else under a tent to prevent robbing.

The next thing, early in September, should be to ascertain if all have sufficient food to carry them through the winter. I decide this generally by weighing. If there is not enough, a syrup made from the best granulated sugar should be fed, so that each colony will have 25 lbs. of food at the time they are put in the cellar about the middle of November, or when it is thought fine days on which they might fly, are over.

When I say that cellar wintering has proved the most successful, I do not mean any kind of a cellar. I know a man that last fall put his bees in a cellar under a new house, in which no one lived through the winter, and they all died. In fact there is more risk in an unsuitable cellar than on the summer stands. My own is under my dwelling house, and is in a dry, porous soil, with a concrete floor. A stone wall separates it from a cellar in which a heater is used for heating the upper rooms. In this stone wall is an opening at the bottom and another at the top, to admit of a circulation of air from the department containing the heater. These openings may be closed if the heat in the bee cellar requires it. The doors into this cellar are, one from the outside, where the bees are carried in and out, and is protected by triple doors, one at the top of the stairs and two at the bottom. Another between the bee-cellar and the heater-cellar, with double doors. There is also a stove pipe in connection with a chimney, the end reaching within three inches of the floor to carry off cold air, if required. The bees are corded up in this about the time above mentioned, with simply the cotton cloth on top, and the entrance fully open. I prefer the back end of the hive a little higher than the front, to facilitate the carrying out of dead bees. A thermometer is kept about the centre between top and bottom. My object is to keep the temperature about 45° through the first half of winter, and gradually running up to 50° in the latter half, keeping as free from sudden changes as possible. If the weather is very cold and the thermometer dropping, I utilize the heat from the heater department through the openings before mentioned. By this means I have been able the last two winters (the only time I have used this cellar), to bring out my bees in excellent condition, brood and young bees being very common when set out in April.

I before stated that wintering commenced in the summer, so I believe it ends there. Many experience the most severe losses in the spring by what is called *spring dwindling*. It would be hard to say how many circumstances combine to cause this, but the chief undoubtedly are, impaired health by cold and dampness combined (dampness itself will not injure if the temperature is kept high), unfavorable weather, unwholesome food, and want of sufficient protection. When several of those causes work together, death is almost sure to result; and even if it does not, if the colony is left in a weak condition, no profit can be expected, as many have experienced the present year. Fortunately several of those causes of trouble are largely under the bee-keeper's control. Cellars can be made where the bees will be dry and warm. They can be protected in the spring much better than they generally are.

It should be understood that bees need heat to hatch, just as well as chickens. If the colony is not very strong, and the weather is unfavorable, it cannot produce heat sufficient to allow breeding to go on fast enough to supply young bees to take the place of the old, that are dying off very fast: the result is death.

To prevent this dwindling it is generally recommended to close the entrance blocks very close, and

that is all right so far, but there is a more important point than the entrance, and that is the *top* of the hive. It is a well-known natural law, that hot air tends to rise. Now, if there is the least opening above the cluster, the hot air leaks out, and of course its place is supplied at the entrance. It does not matter how small that entrance is; if it is open at all heat cannot be maintained in the hive, and breeding cannot go on. After the honey season is over the bees will hermetically seal the top of their house to prevent the escape of hot air. But some bee-keepers, through ignorance, destroy all this by tearing up the cloth cover late in the fall, when the damage cannot be remedied. Under such circumstances need any one wonder why bees die.

If a colony is weak in the spring it should be opened up and put on as few combs as the bees can cover; but that contraction of space will be of no value if the hot air can escape from the cluster.

In conclusion, I would say that those who think it will not pay to put things in the very best shape, who cannot afford to give the necessary attention to the many little things daily occurring, had better not keep bees.

F. MALCOLM.

Innerkip, August 14, 1885.

### Horticultural.

THROUGH some unaccountable oversight our respected correspondent, B. Gott, of Arkona, was not credited, as was his due, with being the author of the interesting paper in last issue on "A Woman's Help in Horticulture."

FOR THE CANADIAN LIVE-STOCK JOURNAL.

#### Has the Potato Disease Disappeared?

For several years past we have seen very little of the potato disease, and last year I was not aware that any of its effects were observable in this part of the country. Indeed it now seems that the dreadful scourge, which at one time threatened to annihilate the potato, has gradually disappeared.

It is now over forty years since it first made its appearance, and I am not aware that any scientist has yet been able to propound a satisfactory diagnosis of the disease, and although innumerable supposed remedies were recommended and applied, it is doubtful whether any one of them was ever generally accepted as being in any degree effectual.

Ever since the Colorado bug assumed such a destructive aspect, the attention of the agriculturist has been almost entirely withdrawn from the old mysterious disease, and diverted towards the more easily discerned, but not less destructive pest, the potato bug.

I have with many others long inclined to the belief that luxuriant growth of the potato, promoted by moist warm weather in July, favored the disease, consequently in such a season as this, we would be more likely to have a severe visitation of the old plague, and if it does not soon make its appearance we may reasonably flatter ourselves that it has taken its final departure.

I do not pretend to know whether the regular applications of "Paris green" and other arsenical poisons may have been the means of exterminating the disease, but I think it is quite probable that these applications may have had a beneficial effect, and quite possibly may be a complete remedy, so that after all it may be that the bug has inadvertently proved to us a blessing instead of a curse.

What do you think about it? D. NICOL.

It is rather a singular fact that for many years past we have not been visited with the potato disease to any very serious extent, and all the more so as our seasons of late in many sections have partaken of a

more than ordinarily moist character. Where the disease has appeared it has been somewhat sectional, so that it could not be looked upon in the true term as being a national visitation. The appearance of the vines this year is, however, ominous, and we entertain grave fears that the deadly work will show itself again. In many instances the vines have blighted, even in the case of late and robust varieties. If such is not the case, and we most profoundly desire that so it may be, we may pretty safely conclude that Mr. Nicol is correct in his surmise that the dreaded scourge "has taken its final departure."—ED.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

#### Fruit Culture.

BY M. PETITT, WINONA.

(First Paper.)

##### THE DUTY OF GROWING FRUIT.

Fruit growing for market is comparatively a new industry in our Province. Fifty years ago the greater portion of it was a forest; our pioneers became grain growers through necessity; the children of this grain growing people have followed the footsteps of their fathers, consequently many of the farms of this fertile country are not only robbed of their fertility, but are almost destitute of fruit of any kind.

I have often heard intelligent and prosperous farmers acknowledge that they paid but little attention to fruit growing, as farm laborers were so exacting during the season of growth in their wages and in other ways, that they did not feel it prudent to engage in the work. I cannot but think that the true reason is that they do not properly estimate its value, nor do they properly appreciate its influence on the welfare and enjoyment of the family.

We never hear a farmer offer the above as an excuse for not growing wheat and other cereals. What we desire to grow we usually find a way to do it.

For what purpose does the farmer engage in his calling? Is it not for the purpose of providing a comfortable and healthful subsistence for himself and family? He desires that his children shall be well developed, healthful, happy, and sound in mind and body. Are the products of the fruit-field then of any less importance than those of the grain field?

Notice the time when fruits appear in the early part of the season, when the blood is thick and impure from the excessive use of carbons during the winter, when special aid is required to promote digestion. We are of the opinion that, if the farming community would cultivate and eat more early summer fruits and less salt pork, they would not be charged as they now frequently are with being chronic grumblers. We would hear less complaining about the drought, rust, rot, blight, mildew, and a thousand and one insect enemies and diseases.

We hold that every farmer owes it to himself and to his family to supply his table with all the desirable and wholesome luxuries which the farm under ordinary cultivation is capable of producing. Failing to do this he fails in the discharge of his whole duty, and cannot reasonably expect his children to grow up contented with their lot. Children brought up on a farm do not possess many privileges enjoyed by those brought up in the city, and should be provided by way of compensation with others, which the farm is capable of affording.

The children of the farmer visiting the city behold displayed most temptingly in the front of every fruiterer's shop almost every species of rich, ripe fruit. They know that these are grown on soil similar to that owned by their fathers, and if contin-

ually deprived of these luxuries, what wonder that they grow discontented.

None of the products of the soil are more enjoyed by children than fruit, and there is no portion of the homestead farm that is longer remembered or more fondly cherished than the old orchard and fruit garden. I pity the farmer's son who grows to manhood's estate with no such cherished spot to chain to the parental home.

(To be continued)

## The Home.

### The Little Quakeress.

Brown-eyed Ruth, the Quaker's daughter,  
In her dress of simple grey  
Walked beside her quiet grandpa  
Mid the garden flowers of May.

Beds of tulips bright and golden,  
Hyacinths of every shade,  
Pansies, like sweet childish faces  
Looking up to greet the maid

How they revelled in the sunshine,  
While mid clumps of violets blue,  
Filling all the air with fragrance,  
Glistened still the morning dew

Then outspoke the little maiden,  
Looking at her dress of grey,  
"Grandpa, can thee tell the reason,  
Why God made the flowers so gay,

"While we wear the quiet colours  
That thee knows we never meet,  
E'en in clover or the daisies  
That we trample under feet?

"Seems to me a Quaker garden  
Should not grow such colors bright."  
Roguously the brown eyes twinkled,  
While her grandpa laughed outright.

"True it is, my little daughter,  
Flowers wear not the Quaker grey;  
But they neither toil nor labor  
For their beautiful array.

"Feeling neither pride nor envy,  
Among their sister flowers, thee knows,  
Well content to be a daisy,  
Or a tall and queenly rose.

"Keeping still the same old fashions,  
Of their grandmothers of yore;  
Else how should we know the flowers,  
If each spring new tints they bore?"

"Even so the Quaker maiden  
Should be all content to-day,  
As a tulip or a pansy,  
In her dress of simple grey."

Once again the brown eyes twinkled:  
"Grandpa, thee is always right:  
So thee sees, by thy own showing,  
Some may dress in colors bright.

"Those whom thee calls worldly people  
In their purple and their gold,  
Are no gayer than these pansies,  
Or their grandmothers of old

"Yet thee knows I am contented  
With this quiet life of ours,  
Still, for all, I'm glad, dear grandpa,  
That there are no Quaker flowers.

—The Record.

### The Tree on the Stone.

The tree was a beautiful beech. It grew in a forest even more beautiful on an incline to the east on "Houghton lodge," in the township of Russell, in our loved Ontario. It grew on the top of a huge stone where a little earth sediment had gathered, which had formed a seed bed for the beech and which had fallen there years ago. It was now grown far upward and its roots had pushed far downward, till now reaching the visible portion of the stone, they had become so firmly moored in their underground home that a giant could not force them to unloose their hold.

A poor starting place, we thought, for a little forest tree, as we called the attention of our companion to the perch whereon the seed had felt the first stirrings of life. But there was no mistaking it; the little beechen tree had now an individuality all its

own, and was pushing bravely ahead amid the big trees which looked down patronizingly upon their little brother.

Courageously had the little beech done its work. Its struggle for a footing in life and the recognition of its treehood was now overpast, and upward and onward it will now raise its head, till it shall measure stature with the trees that grow around it.

Many are the lessons we thought, as we lingered around the beech that it might teach young life in its various phases.

We thought there was a lesson for the struggling youth who hungered for a start on the royal road that leads to the gateway of useful knowledge. Poverty-pinched and with none to sympathize with that unuttered longing for a key that will unlock the rich treasures of learning that he knows are sealed in the volume of the writer, he feels the case is hopeless. But it is not hopeless. The beech-nut that fell upon that sediment, with the impenetrable stone for its bed, was in a situation at once hopeless and forlorn, but warm suns and friendly showers gave it a start, and now it is a tree. Let the attempt be made and some friendly eye and kindly heart will give sufficient help to enable the young learner to get a start and position in the race for distinction. Though little recognition be given at the first, it will come in time. The big trees let in but little sunlight, but they let in some, and now the tree will soon push its way to the level of the forest crown. Every day that it lives the journey to the goal will become more easy.

Here is a lesson, we thought, to the young heart that is sorely troubled with the struggle for a price of bread to keep together body and soul. It may be that a parent has been cut down or a guardian removed, and the hard fight of life has to be faced at the age when most boys should be playing with young kittens, with hearts as lightsome and unconcerned. Like the beech tree which cruel fate had given a bed of stone and thus kept it aloof from the friendly earth on which the other beech nuts had fallen, as they look around them hunger-pinched and poorly clad, and borne away from the nourishing influence of a home, their young hearts are ready to sink within them. But the beech tree grew and prevailed, and so may they. True, it is a struggle, but this struggle will not always last. The beech tree grew in spite of the difficulties of the situation and prevailed, and although but a youthful tree that a little lad cannot yet climb, its struggle is past. Face the struggle bravely, little lad, and you too shall prevail. Every day of life you live will make it easier.

Thanks, my beechen friend, for this further lesson. Divine grace finds lodgement in hearts that are harder than the stone which kept the nut aloof from earth. It finds but a gram of congenial soil in the stony cell, and soon there are evidences of life. Like the roots of that beech tree, that in their loving embrace encircle that cold stone, rewarding good for evil, the rootlets of that germ of grace encircle the strong heart, and give form and shape to the tree of future character, till it becomes a thing of beauty, more beautiful by far than the form of our little beechen friend. The rootlets of the tree but encircle the stone and forage for food in the earth beneath it, but thus it is not with the rootlets of that germ of grace. They penetrate the heart of stone itself, forcing it asunder in a thousand avenues by the power of their growth, and through a changing influence mightier than human, transform it into nourishing soil. Despair not, ye who labor as sowers of the seed. The heart may appear but flint, but there may be there some sediment of grace which will give life to what may prove a mighty

tree of usefulness, which will grow tall and fair amongst the graceful trees of character. A hundred nuts may have fallen around this stone with everything to favor germination, and yet they perished, while that which fell upon the stone is now a flourishing tree. A hundred seeds may lodge in fairer soil and spring up full of promise, while the one that falls upon the heart of stone may flourish through eternity.

Thoughts of the inscrutable ways of Providence spring up within us as we gaze upon this tree. Why did this nut fall upon a bed so barren and a hundred of its fellows upon the friendly earth? Why did they with all their opportunity die and perish amid blank oblivion and yet this beech nut grow into a handsome tree? Why is it that the seed that falls in hearts that are stirred by a mightier than human power are allowed to pine and die, and other seed that falls on hearts almost unbroken grows with a vigor that amazes the onlooker as he beholds the gradual but wonderful transformation. Oh thou inscrutable Being, whose "way is in the sea; whose path is in the great waters, and whose footsteps are not known," thy children shall await with patience the full answers to those questions, till that day shall come when the book of thy Providence shall be opened in their father's house, and read from its pages, with Thou Thyself as interpreter.

Farewell, thou little beechen friend, we may never see thee again, for on the journey of this life the road but leads us onward. It is not to be retraced. But thanks, warm thanks, for the lessons that thou hast taught us; we wish thee well. Do thou continue to grow and become a famous tree, and long after thou hast fallen and mouldered again to earth, may we remember thee, and, with others yet unborn, the lessons thou hast given.

### Welcome Visitors.

For the month these are:

Prize list of the P. E. Island Exhibition to be held at Charlottetown on October 7th and 8th. There is a goodly sum offered in prizes. From the amounts offered in prizes on turnips we would judge that this island of the sea is a favorite ground for them. Mr. A. McNeill, Charlottetown, is the secretary.

Prize list of the Midland Central Fair, to be held at Kingston September 29, 30, and October 1st and 2nd. \$6,000 are offered as premiums, and the list is very full and complete. A. Shaw, Kingston, is the secretary.

Prize list of the Great Northern Exhibition to be held at Collingwood on September 29 and 30, and October 1st and 2nd. The Great Northern Exhibition Company lost their buildings last June by fire, but already from their ashes larger and better ones have arisen. The efforts of the management in the face of an ordeal so trying are surely worthy of great praise. Mr. Charles Lawrence is president and Mr. T. J. Crawford secretary, both of Collingwood.

The prize list of the West Elgin Agricultural Societies' Show, to be held at Wallacetown, Oct. 6th and 7th, 1885; \$2,000 offered in premiums. D. Campbell, Wallacetown.

The prize list of the Unionville Fair, to be held in Unionville, September 16th, 17th and 18th. Bethnell Loverin, P. O. Box 57, Farmersville.

The Report of the Department of Agriculture, Statistics and Health of the Province of Manitoba for 1883. This ponderous volume contains a great deal of useful information relating to everything indeed that one would care to know about the Province. The labor of gathering the information contained in this volume must have been immense, and we suppose it may be obtained from the department, Winnipeg. Catalogue of Mr. James Glennie's sale of Shropshire sheep to take place in Guelph on Friday, September 4th, immediately after the close of the sale at the Agricultural College—50 superb rams, ewes ram lambs and ewe lambs to be sold.

Annual price list of seed wheat and mixed grasses, offered by Mr. Wm. Rennie, corner Adelaide and Jarvis streets, Toronto. The list embraces a large number of varieties, old and new.

**Alma Ladies' College, St. Thomas, Ont.**

This College had an average attendance of 112 during 1884-5. It has a faculty of 18 teachers in literature, music, fine arts and commercial training. The buildings and furnishings are the finest for the purpose in Canada. Rates low. Reopens Sept. 10, 1885. For Announcement, address Principal Austin, B. D.

**Jottings.**

THE wheat crop in the United States is only 300,000,000 bushels, as against 500,000,000 bushels last year.

At the dispersion Jersey sale of Mr. G. A. Fuller, of the Rookery, Dorking, England, 22 cows averaged £30 5s., 3 bulls 22 15s.

ITALY at the present time possesses 4,783,232 head of cattle. The principal breed is the "Podolian," which are longhorned and usually gray or white in color.

Mr. Robt. Campbell, of Strathclair, Man., has a fine herd of 75 head of West Highland Cattle, which are fighting bravely and successfully the battle of the winters of that northern prairie climate.

RECENT experiment in Great Britain has demonstrated that in cattle a 14 lb. stone of live-stock weight is equal to an 8 lb. stone of dressed weight. They must, however, be well fattened to preserve this ratio.

A pretty Ayrshire prize cow Gurta 4th (1181), bred by Mr. Thos. Guy, of Oshawa, formed a very pretty picture in the Chicago Breeders' Gazette of August 20th. She is now owned by Messrs. Coldren & Lee, Iowa City, Ia.

At the Glasgow Show, held in June, three of the yearling colts prize-winners were sired by Lord Erskine 1,744. As a sire of yearling fillies Macgregor 1,487 stands first, and Belted Knight 1,395 stands high as a sire of two-year fillies.

THE first annual exhibition of the Eastern Township Agricultural Association will take place on the 6th, 7th and 8th October, at Sherbrooke, Que. By sending a portion of their exhibit to this fair, Ontario stockmen would undoubtedly become better known in Quebec.

At the dispersion sale of Jerseys formerly the property of the late Mr. John Cardus, Southampton, England, 72 head averaged something over £46. Effie Deans and Elaine, two of the daughters of Dairy King 211, ran into the three figures. The purchaser was Mr. H. A. Brassey.

WE want a good, active canvasser at every county and district fair this season to take subscriptions for the CANADIAN LIVE-STOCK JOURNAL. We offer such favorable terms that energetic agents can make a handsome salary. Write at once for full particulars to Stock Journal Co., Hamilton, Ont.

At the dispersion sale of the noted flock of South-downs owned by Lord Walsingham, of Merton Hall, Walton, Eng., 540 sheep averaged £6. Mr. Warren, of Hoosack Falls, U. S. A., paid 155 gs. for a shearing ram, and Mr. Ellis, of Guildford, 105 gs. for another. 81 rams averaged £17 10s. and 160 young ewes 5 gs.

WE are glad to learn that Mr. James Bellwood, Woodburn, has an immense crop of hay laid up for future use. His barns are more than comfortably filled, and large quantities are stacked. He thinks the crop has given some 400 or 500 load. His 100 cattle and more will not nearly eat their way through this the coming winter.

THE rearing of buffalos is being introduced upon some of the western ranches. One company is said to be paying \$50 a head for young buffalo calves. When we consider the high prices that are paid for good robes and the brisk demand there is for the meat, it is just possible that this may yet become a business of considerable magnitude.

ENGLAND is at last moving in the matter of a herd-book for pigs. The volume recently issued is called "The Herd-book of the National Pig Breeders' Association." It embraces 106 pages and contains the pedigrees of 274 pigs. The breeds registered are the Berkshires, Blacks, Large Whites, Middle Whites, Small Whites and Tamworths.

FROM the Dublin Farmers' Gazette we learn that rabbit farming is becoming or likely to become an established industry in Great Britain. They are kept in hutches for about six weeks and in six weeks more are ready for market. The hutch is an enclosure with a galvanized wire netting for the floor which is moved to a fresh plot of grass three times a day.

It is estimated that some 1400 silos are now in operation in Great Britain. This is a striking comment on their success in that country. This is the measure that we said months ago would demonstrate to the world the practicability of saving fodder by this process. In the face of the above statement we need have but little doubt as to what the British farmer thinks of the utility of the silo.

THE largest sale of Clydesdales from one stud to one purchaser was made not long since by Mr. David Riddell, Blackhall, Paisley, and Kilmarnock, Dumbartonshire, to Messrs. E. Bennett & Sons, Topeka, Kansas. The horses sold numbered 42 head, of which 36 were stallions. We take the above as an indication that Clydesdales are not waning in popularity in the Western prairie country.

THE Booth herd of West Durham Abbey, belonging to Mr. Hugh Aylmer, of Stokeferry, Norfolk, numbers 69 cows and heifers. In 1883, 73 head were sold from this herd at an average of £70, on account of the farms being overcrowded. The families now represented are the Bliss and Fame of Warlaby origin, the Chalks from Killerby, the Flowers and Goldens of Aylesby, and the Maids, an old Yorkshire tribe.

At the first show of the Royal Agricultural Society of England, held at Oxford in 1839, the prize money paid for Shorthorns was £85; Herefords, £80; Devons, £80; and for all other breeds £25, summing up £26 for cattle. At the recent show at Preston the prize money paid for Shorthorns was £425; Herefords, £370; Devons, £135; and the total paid for cattle £1,970. The prizes given for horses in the two years respectively were £60 and £1,455; for sheep £230 and £965, and for pigs £25 against £360.

At the Highland Agricultural Society's Show, held at Aberdeen in the latter part of July, the entries of cattle were 385; horses, 223; sheep, 423; swine, 11; poultry, 252; dairy produce, 40; and implements 1849. The Shorthorns were fairly represented and the Aberdeen-Angus Polls were out in strong force. The Galloways shown are praised for their excellence. Mr. Handley's English prize-winner, Self-esteem 2d, was closely pressed by Hiawatha, an inbred descendant of the 400 guinea prize bull Rosario (35,315), the sire of our Experimental Farm Rob Roy (45484). Hiawatha has been purchased since by Mr. Handley.

A Desirable Trip.—Mr. Hill, manager of the Industrial Exhibition Association of Toronto, is arranging for a select excursion party to visit the Expositions at Cincinnati and Louisville, and the wonderful Mammoth Caves of Kentucky; also the great St. Louis Fair with the Veiled Prophets' procession, and illumination of the city at that time; and also taking in Chicago en route. The party will leave Toronto about the 5th of October and will be about a week on the trip. A sleeping car will be taken all the way, in which the party will sleep and travel by night and view the sights by day. If any of our readers would like to take in this trip we have no doubt Mr. Hill would be glad to have them join the party, and if written to would send them full information.

OF the 61,092 herd of cattle which left our shores last year for Britain 638 head were thrown overboard, 116 were landed dead, and 22 had to be slaughtered at the place of landing, owing to injuries received during the voyage. Of the 61,382 head of sheep 1,170 were thrown overboard, 59 were landed dead, and 211 had to be slaughtered immediately. Of the 138,661 head of cattle sent to Britain from the United States and 39,317 head of sheep, 1,570 cattle and 857 sheep were thrown overboard, 57 cattle and 49 sheep were landed dead, and 37 cattle and 49 sheep were so much injured that they had to be slaughtered at once on landing. No less than 4,856 animals from the two countries were thrown overboard during the year, 381 were landed dead, and 370 so injured that immediate slaughter was necessary.

At the Royal Agricultural Society's Show at Preston, H. R. H. the Prince of Wales paid a well-merited compliment to Sir Charles Tupper for the manner in which Canadian interests were represented there at an exceedingly attractive and interesting stand. Since he assumed the direction of affairs in Europe, Sir C. Tupper has immensely improved the position of the Dominion, its trade and finances in England and on the continent, and the way in which Canadian interests are being furthered, by advertisements both direct and indirect, has attracted the attention and admiration of all who have a knowledge of such matters, thus proving the wisdom of appointing a representative of such high capacity to this important position. In Canada itself they have a Minister of Agriculture, who exercises no inconsiderable influence over the welfare of the country.—London Live-Stock Journal.

"J. R. R.," in the North British Agriculturist of 29th July, gives a resume of the history of the Holker herd of Shorthorns since its rise in 1851 to the present time. The writer states, "It is now matter of Shorthorn history, that the Oxfords at Holker had their rise from two cows—Oxford 15th, purchased by Mr. Drewry at Tortworth in 1853 for 200 gs., a daughter of Mr. Bates' 4th Duke of York (10167) and Lady Oxford 5th, purchased at Havering Park in 1867 for 600 gs." For the descendants of these two cows alone no less than £47,853 has been realized since that date in addition to those still in the possession of the Duke of Devonshire. Since 1851 the public and private sales of the Holker herd amount to £92,933 12s. 6d. Deducting the sum of £21,449 19s. 2d. for purchases during that time leaves £71,483 1 s. 4d. as the reward of the owner for his feed and labor. This is certainly a very remarkable showing. The highest average realized at a public sale of the herd was in 1878, when Shorthorns were in their palmiest days. At this sale 18 cows and heifers averaged £794 11s. 2d. and 12 bulls and bull calves £458 7s. 9d.

MR. Henry Haywood's herd of Hereford cattle at Blakemere, England, have long been famous, and it would have been strange had it been otherwise, as his father was also a distinguished breeder of the white faces, and also an uncle. The picture of an Hereford ox adorns the hall of Blakemere House, bred by the father and uncle, S. & C. Haywood, of Clifton-on-Fene, which won the first prize at the Smithfield show in 1816. Mr. H. Haywood has bred Herefords since 1853, the progenitors of his stock being chiefly received from Mr. Weyman, of Stocktonbury. The bulls used were Woodman 2d 1,459, Preston 2,688, Cholstry 1,818, and Frugality 1,997, the latter the son of the renowned Horace 3,877. More recently, Truro 5677, and Perty 5,495 by Horace, have been the stock-getters of the herd, which is now headed by Honeywood 8,741 by Truro and Mohican 8,719 by Franklin. The herd usually consists of 25 to 30 breeding females, which are of good size, symmetrical and of nice character and quality. Belinda from the dam Brunette 2d, and the one-year heifer Wanton, from White Ear 3d, were sold last winter to the Hon. M. H. Cochrane, of Coughton, Canada.

PROFESSOR W. A. HENRY, of the Agricultural Experiment Station, Madison, Wis., has been conducting an experiment in calf-feeding during the past winter which tends to show the value of skim milk when properly fed to calves. The six calves comprised in the test gained on an average over 12 lbs. per week during the 21 weeks of its continuance. Along with the milk, which they received three times a day, they were given oats, bran, oil meal, hay and ensilage, but the main supplement consisted of oats. They received each from 6 to 12 quarts of skim milk daily, taken from the Cooley creamer, and warmed to 98 degrees Fahrenheit. Scouring was checked by the use of lime water, a tablespoonful being given at each feed when the calves were young. 24 cents per 100 lbs. were realized for the skim milk fed. Professor Henry gives the following recipe for making the lime water: Put a lump of lime the size of a hen's egg into a jug of water and shake. Keep the jug tightly corked at all times, and when the water is clear it is ready for use. When scouring occurs, the amount of milk should be reduced. Over-feeding, not feeding enough, irregularity and feeding cold milk, the Professor mentions as the principal causes of scouring. The oats were fed unground and the calves taught to eat them by putting a small quantity in the mouth after they had drunk the milk, when about three weeks old.

**Transfers of Thoroughbred Stock.**

The following sales have been reported up to Aug. 20, the name of the seller in each instance preceding that of the purchaser:

- CANADA SHORT-HORN HERD BOOK.
- b. General Gordon (13079), by Jupiter (8766), Johnson Harrison, Milton; John Bowes, Milton.
  - b. Yarmouth Hero (13080), by Duke Springfield (11874), M. Gilbert, St. Thomas; Asa Round, Sparta.
  - b. Marquis of Elmwood (13081), by Bejoche (13082), T. D. Hodgins, London; Samuel Grigg, Brandon, Man.
  - b. Duke of Rock Lake (13087), by Punch (11269), M. Smith, Clearwater, Man; Peter McLaren, Clearwater, Man.
  - f. Bessie Belle (14867), by Osborne (11491), John Douglas, Tara; John Airth, North Bruce.
  - b. Waterloo Chief (13095), by Waterloo Yorker (10292), John Snell's Sons, Edmonton; F. Martindale, York.
  - f. Faith (14873), by K. C. B. 2d (14362), Thos. Teasdale, Concord, John Snell's Sons, Edmonton.
  - b. Otter (13101), by Comet (11630), W. E. Smith, Grovesend; Lot Saxton, Vienna.
  - b. Duke of Argyle (13107), by Red Duke (10980), Wm. Douglas, Evelyn; Alex. McMillen, Cobble Hill.
  - b. Kilrush (13108), by Bonnie Scotland (11754), E. D. Morton, Barrie; Jas. Smith, Edgar.

- b. Captain Bruce [13118], by Royal Bampton [11967], D. Drucker, St. Jacobs; H. Stafford, Queen Hill.
- f. Lucinda [14895], by General Garfield [9998], J. B. Carpenter, Simcoe; A. Hemsted, Simcoe.
- b. Simon [13161], by Abe [6560], J. B. Carpenter, Simcoe; E. W. Fares, Port Colborne.
- f. Rose Mary [14896], by The Barrie Duke [7941], Wm. Davis, Hillsdale, and Johnson, Sunnidale.
- b. Hillsdale Chief [13191], by Breastplate [8164], John Johnston, Hillsdale; John Rowat, Hillsdale.
- b. Hector [13195], by Prince Alfred [11775], Robt. Brown, Cranbrook; Alex. Aikens, Monckton.
- b. Landgrave [13126], by Prince Alfred [11775], Robt. Brown, Cranbrook; Wm. Hall, Ethel.
- b. Commander [13127], by Prince Alfred [11775], Robt. Brown, Cranbrook; E. Henry, Newry.
- b. Gladiator [13129], by Prince Alfred [11775], Robt. Brown, Cranbrook; E. Oliver, Bluevale.
- f. Robena [14914], by Prince Alfred [11775], Robt. Brown, Cranbrook; Jos. Smith, Brussels.
- f. Marchioness [14915], by Prince Alfred [11775], Robt. Brown, Cranbrook; Richard McKee, Leadbury.
- b. Sir John [13131], by Sir Henry [10487], Thos. Brown, Allanburgh; D. D. Chrysler, Allanburgh.
- f. Lady Florence [14902], by Hobart Pacha [7101], A. T. Kelly, —; Thos. E. Kershaw, Holstein.
- b. Senator [13122], by Bampton Senator [6596], Ed. Jeffs, Bond Head; Thos. E. Kershaw, Holstein.

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Stock Notes.

Read the change in advertisement of Messrs. Green Bros., of Innerkip, Ont., on page 249.

F. A. Fleming, Weston, Ont., has imported a number of Herefords this season. See advt. page 247.

Stockmen wishing cattle condiments should read advertisement of Thorley Horse and Cattle Food Co., on page 248.

See advt. on another page of F. W. Stone, Guelph. Cotswolds, Southdowns, Herefords and Shorthorns for sale.

W. H. McNish, Lyn, Ont., has just imported from England some Berkshire prize-winners at the Royal Show. See advt.

Persons desirous of purchasing choice stock should read the new advertisements of H. H. Spencer, W. G. Pettit, R. Collicott & Sons, Wm. Whitelaw, J. & W. Watt and F. J. Ramsay.

Shorthorns.

The combination sale of Messrs. Cowan and Patteson—Shorthorns and Shropshires—is fixed to take place at Galt on Tuesday, 13th October. Full particulars will be advertised in our next issue, and catalogues will shortly be obtainable at this office. See advt. on page 247.

Messrs. T. & A. B. Snider, of German Mills, Ont., mention that their herd of Shorthorns will be in fine condition for the shows this fall. They have sold the young Strathallan bull to Mr. Henry Groff, Elmira. He is from the show cow Rose of Strathallan 2nd, and is the making of a grand bull. They have also sold the young bull Lord Napier to Thomas Chisholm, Halton Co., a fine animal from the Matchless family. Another, Bampton Duke, has gone to James Knox, Chesterfield, Oxford Co. Their yearling heifer Roan Beauty went to Jacob Eby, Elkhart, Indiana.

Stockmen visiting Spring Hill Farm, owned by Richard Rivers & Son, near Walkerton, say their cattle are looking remarkably well this season, especially eleven very fine yearlings, mostly heifers, and this season's crop of calves—chiefly bulls—all sired by the Duke of Hamilton—773—. The Duke is a bull of great substance and fine symmetry, and an excellent feeder. He is also keeping up the record of his ancestors well in prize taking. The firm reports ewes and lambs, both Leicester and Southdowns, doing well, as the farm is admirably adapted to both stock raising and grain growing. Roots are far advanced and have every appearance of being a good crop in that section.

Mr. H. H. Spencer, of Brooklin, mentions: "As you are usually well supplied with stock notes I will try and be brief. My Shorthorns of the Campbell and Cruikshank families are doing remarkably well, every cow and heifer turning out true breeders that has been bred as yet. Of this summer's sales all my Shropshire yearlings rams but one, which is very choice, are sold. In Southdowns all the rams are gone but one Shearling, which is a very fine well woolled sheep weighing nearly 200 lbs. Have sold all my fall Berkshire pigs and a number of the spring litters have been sold to parties in this neighborhood for breeding purposes. One very choice young boar was purchased by Mr. Fairweather, of New Brunswick, who speaks of him in very high terms. I think the demand for choice Berkshires will be good this fall."

Mr. Wm. Linton, Aurora, Ont., writes: "I landed my Shorthorns on the 4th instant. They are in a lean, unvarnished condition, having been out on grass all last winter, day and night, consequently they are in a good sound breeding condition. The enclosed clipping from the Country Gentleman (which is given below) needs no further comment from me further than what I have previously stated, that it is no chance result, but evolved by the patient skill of many years' experience and close observation."

EDITOR COUNTRY GENTLEMAN.—In the Shorthorn classes at the Royal of England there were 120 entries. The general consensus of opinion was that these were scarcely up to the average, though there were many animals of undoubted merit. In bulls calved in 1880 and 1881, the competition lay between Mr. Chapman's Earl of Oxford, the Brighton prize-winner, and Mr. Handley's Self Esteem 2d. The latter has been a most successful winner, and on this occasion many preferred him to the former, but the judges thought otherwise, and confirmed the Brighton award. He is a ponderous animal, and of a good all round stamp, but a little defective in his middle parts, while Self Esteem 2d, which received the 2d prize, is very good there. The class for Shorthorn bulls calved in 1882 was weak, a handsome roan, Mr. Thompson's Royal Benedict, winning. Following these came the two-year-olds, which were a grand class of 17. Here the well-known Royal Ingram 50374, also a Brighton winner, won, and with great credit. He is a very fine white and red, a son of Sir Arthur Ingram 37400, out of Harmony, by Sir Arthur Windsor, and is very rich in appearance. To the ordinary prize was added the \$125 award as the best Shorthorn bull in the show, thus securing the blue ribbon of 1885. Another good bull was second, in Mr. Rusdall's Lord Salisbury, a nice roan which has done a lot of winning. Yearling bulls were a big class of 25. The winner was found in the Duke of Northumberland's Hopewell, a son of Sir Arthur Irwin 44010, beating Mr. Handley's Golden Treasure, which won in the yearling class at Brighton. The latter has had a very successful career so far, but was beaten this time. His plain hindquarters being against him. Golden Treasure is by Sir Arthur Ingram. Ingledwood Belle is by Beau Benedict. The Duke of Devonshire's Bares Baron Oxford 18th, was third, and a pleasing roan, son of Self Esteem was reserve.

Advertising Rates.

The rate for single insertion is 18c. per line, Nonpareil (lines make one inch); for three insertions, 15c. per line each insertion; for six insertions, 12c. per line each insertion; for one year, 10c. per line each insertion. Cards in Breeders' Directory, not more than five lines, \$1 per line per annum. Copy for advertisement should reach us before the 25th of each month (earlier if possible). If later, it may be in time for insertion, but often too late for proper classification. Advertisers not known at office will remit cash in advance. Further information will be given if desired.

STOCK FOR SALE.

FOR SALE.—PURE-BRED DURHAM BULL, three years old—good pedigree. For particulars address, sep-11. IBAAC TEMPLAR, Copetown, Ont.

COTSWOLDS 10 shearing Rams, 20 ram lambs, a few shearing ewes, ewe lambs and aged ewes. All bred straight from imported stock. sept-11 O. SNELL, Edmonton, Ont.

FOR SALE.—Berkshire Boars and Sows of different ages, also three Shorthorn Bulls. All the above stock have choice pedigrees, and will be sold at reasonable prices. Address, J. E. BRETHOUR, sep-11 BURFORD, ONT.

SHORTHORNS Bull calves, heifer calves, young cows and heifers in calf to Waterloo Warrier and Royal Irwin. Prices moderate. sep-11 J. C. SNELL, Edmonton, Ont.

SHORTHORN BULLS FOR SALE.

Good animals and good pedigrees. Also several Shropshire Rams, all bred from imported stock. Prices very reasonable. sept-11 JOHN T. DICKSON, Seaforth, Ont.

FOR SALE.

CLYDESDALE FILLIES. Two registered imported fillies, two years old. J. G. SNELL & BRO., Edmonton, Ont. sep-11 Brampton Station.

SHORTHORNS FOR SALE.

4 young bulls and 6 heifers, also Southdown rams—1 aged, imported, and several shearlings and lambs. Send for catalogue. sept-11 EDWARD JEFFS, Bond Head, Ont.

BERKSHIRES.

I have a nice lot of young boars and sows, from 2 to 5 months old, got by first class imported boars and from recorded sows. sep-11 J. C. SNELL, Edmonton, Ont.

FOR SALE!

The 1-year Ayrshire Bull General Gordon

Color, white and dark red. Dam, Nelly Mars [1541]; G. D., Julia Mars [1394]. Sire, the famous imported bull Stoncalsey [1435]. This fine specimen of the breed will be sold very reasonably. Apply to

sep-11 E. WARE, Hamilton, Ont.

FOR SALE.



A few choice yearling Shorthorn and high-grade heifers and Durham bull calves with first-class pedigrees, sired by Duke of Hamilton—773—. Likewise Leicester and Southdown ram lambs.

RICHARD RIVERS & SON, Springhill Farm, WALKERTON, ONT.

FOR SALE.

A RESERVED Shropshire Shearling Ram, a first-prize winner as a lamb in 1884. A number of choice Ram Lambs, all got by imported York Royal, all extra well woolled; also a number of choice Breeding Ewes, 3 and 4 years old, mostly imported in 1882, all having raised lambs this summer, and will be sold cheap. Also one choice Southdown Shearling Ram, extra well woolled, with a number of very fine Berkshire Boars and Sows of 1885, all got by Dorset Prince (313) and Royal Oxford by imp. Royal Marquis 4327. Apply to

H. H. SPENCER, Brooklin, Ont.

RUPTURE



EASE, SECURITY AND DURABILITY.

The "TUCKER" Truss conveys a Natural, Inward and Upward Pressure, giving Permanent Relief without galling or chafing—never shifts, most perfect retainer. Thousands are worn in Canada, and endorsed by our best surgeons. If you want Comfort and Safety try it. (Sent by mail) Illustrated Pamphlet free. Address, TOMS & CO., DRUGGISTS, No Body Spring, 274 Yonge St., TORONTO.

**Just Imported and For Sale.**

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

THOMAS R. SMITH,  
New Hamburg, Ont.

**SHORTHORN CATTLE**

**Shropshire and Leicester Sheep.**

**FOR SALE**

A few young Shorthorns of both sexes, also a number of Leicester and Shropshire shearling rams and ram lambs, also a few females. The Shropshires are from imported ewes, got by the imported rams at the Agricultural College.

WILLIAM WHITELAW,  
sept-21

GUELPH, Aug. 24th, 1885.

**FOR SALE!**

5 Shorthorn Bull Calves, 6 months to one year old.

4 young Shorthorn Cows.

4 Shorthorn Heifer Calves, about one year.

14 Shropshire Down Ram Lambs.

14 Shropshire Down Ewe Lambs.

All sired by the imported Shropshire Down ram Moniford, selected by Mr. Mansell and myself, and out of imported ewes, got by a Minton ram.

R. COLLACOTT & SONS, Tyrone, Ont.  
Bowmanville Station, G. T. R. sept-11

**MORETON LODGE, GUELPH, ONTARIO.**

**40 COTSWOLD RAMS**  
**60 SOUTHDOWN RAMS**

for sale, also a number of choice EWES, both Cotswold and Southdown

**14 SHORTHORN BULLS**  
**15 HEREFORD BULLS**

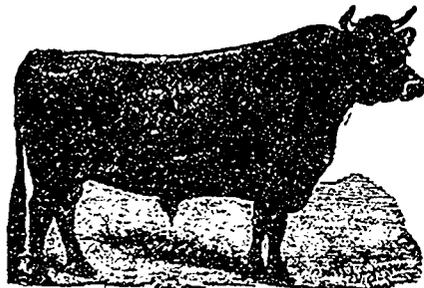
12 to 20 months old.

The MORETON LODGE HERDS and FLOCKS will compare favorably in regard to breeding and individual excellence with any on this continent.

F. W. STONE, Guelph, Canada.

**Oaklands "Jersey" Stock Farm**

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



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

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

VALANCEY E. FULLER,  
HAMILTON, ONT.

**Alma Ladies' College**

ST. THOMAS, ONT.

The Finest Buildings and Furnishings for the purpose in Canada. Full Staff of the Best Teachers in Literature, Music, Fine Arts and Commercial Science.

For 50-page announcement, address  
PRINCIPAL AUSTIN, B. D.  
RE-OPENS SEPT. 10th. sept-21

**Stock Notes.**

**Herefords.**

F. A. Fleming, of The Park, Weston, Ont., writes us the following: "During the last few months my herd of Herefords has increased considerably, eight of my cows having dropped fine calves six heifers and two bulls, by my imported bulls Corporal 475 and Earl Downton 12,797. My last year's imported prize yearling, Lady Fenn, dropped a very nice heifer calf this morning. I hear regularly from quarantine at Quebec, and am glad to say all my Lenthall Herefords are doing well, four of them being in calf to Lord Wilton. My Royal prize-winner, Miss Bloody, has not yet arrived. I purpose taking some of my Herefords to the Provincial and Toronto Industrial Exhibitions this September, and I shall be glad to have any of the readers of the JOURNAL, who are interested in Herefords, inspect my herd."

**Ayrshires.**

The Rev. James C. Quinn, of Bathurst village, New Brunswick, is taking up work in the Northwest, and is therefore disposing of the Ayrshires he has loved so well. The papers of his own Province credit Mr. Quinn not only with the faithful performance of his duties as a minister, but also with the introduction of much good pure-bred stock into the neighborhood. Our good wishes follow Mr. Quinn, and we shall be pleased indeed to hear from him in the future in his new field as in the past. From the same source we learn of the following sales of Ayrshires made by Mr. Quinn: Ayrshire cow (three years old), Tibbie, No. 274 N. B. H. B., to Dr. Freeman, Newcastle, Miramichi. Ayrshire (yearling) heifer, Rosa Bonheur, No. 330, N. B. H. B., to Messrs. R. A. & J. Stewart, Bathurst. Ayrshire bull calf, Lansdowne, (sire Sir Herbert, No. 1270, A. & C. A. H. B., to John Nicol, Esq., Dumfries settlement, Bathurst.

**Horses.**

Mr. W. C. Smith, of New Hamburg, writes: "Allow me to ask your numerous readers in the County of Waterloo, Ont., (through the columns of the LIVE-STOCK JOURNAL) if they can give me the pedigree of a stud horse called Neptune, color black. He was brought from Lower Canada about thirty years ago, and traveled through Berlin."

We are pleased to notice that Mr. T. R. Smith, of Hamburg, Ont., has just got home with five Cleveland Bay colts, two and three years old. Three of them are fillies and two stallions. They were bred near Rosebury Topping, Yorkshire, Eng., and are a very promising lot, which will no doubt make their mark in the show rings this fall.

Messrs. J. & W. Watt, Salem, mentions: "Our stock are all doing well, as fine a lot of calves as ever we had. The young stallions we imported last year have given us great satisfaction, and are bred right. Lord Aberdeen 3776, was got by Grand Turk 1148; dam, Gip, by Donald Dennis 237, etc., etc. The other one, Bravery, 3458, was sired by Strathleven, 1530; dam, Beauty, by Prince of Wales 637, etc., etc. In these busy times, when work is the order of the day, we always find time to read the JOURNAL, being sure to find something fresh in it."

Messrs. John Miller & Sons, Brougham, report: "Our importations for this year include nine Clydesdale colts and two fillies, seven Short-horn bulls and nine Shropshire sheep. The Clydesdales comprise four yearling colts and one horse foal sired by Lord Derby (485), two yearling colts by Prince Albert Victor (617), one colt and one filly by Logie the Laird (2237), and one colt and filly by General Niel (1143). Amongst those by Lord Derby, we have a full brother to Strathbogie (4043), the winner of the first at Toronto and Kingston in 1882 as a yearling. We then sold him to R. A. Rowe of Freedom, Ill., in whose possession he won last year the first as a three-year-old, and first with five of his get, in a class of seventeen entries at Mendota, Ill. We have also the half brother to Comyn Macgregor (3535), sired by Lord Derby (485), and out of same mare, that has been shown seven times in this part in the last two years and has won seven red tickets, four first prizes and three sweepstakes. We have three half brothers to other horses which we have before imported and that have done well in this country. We think them the best lot we have ever bought. The bulls are also very fine and consist of the first choice from Messrs. Cruikshank and Campbell's herds. The sheep consist of one shearling ram, one ram lamb, two two-shear ewes, and five shearling ewes. They are very choice and will be seen at Toronto, but may not arrive in time for London. Our stock at home is doing fine, and are in good condition notwithstanding the dry pasture. Our yearling heifers are a grand lot, and the bull calves of this year are worthy of positions at the heads of good herds. Our two-year-old Clyde stallions have done well and the two yearlings by Hoydston Boy (111) are worthy half brothers of the best sire in Scotland at the present time, viz. Lord Erskine (1744), by Boydston Boy (111). Our sheep have summered well and we have a very superior lot of yearling rams and ewes for our customers this fall."

**Sheep and Pigs.**

Mr. Wilson Seris, Wellington, Prince Edward Co., Ont., has just invested in a pair of Red Jersey swine, purchased of John H. Collins, Morristown, N. J.

J. G. Snell, Edmonton, Ont., arrived home from England the 11th of August, with importations of stock, bringing 26 Berkshire pigs and two Clydesdale fillies. All the stock came through in good order. See advt.

Mr. Henry Arkell, Farnham Farm, Arkell, has recently made the following sales: To Mr. W. D. Privett, Greensburg, Ind., 12 Cotswold sheep, for a fair figure, consisting of one four-year-old, from imported ram, and two two-year-olds from imported sire and dam; five yearling rams, two two-year-old ewes, two yearling ewes, and a ewe lamb, also from imported stock. The imported ram Major weighed 340 lbs., two-year-old ram Colonel, 247 lbs.; Duke of Wellington, 300 lbs.; yearling ram Duke of Arkell, 280 lbs. The rest averaged from 220 to 270 lbs. Mr. Privett has purchased all his show sheep from Mr. Arkell for the last five years. He exhibits them at twelve fairs in the United States, the leading ones being St. Louis, Indiana State Fair, Toledo, Ohio, and Illinois State Fair. He claims to have won in four years \$2,000 in premiums at the various fairs with sheep alone.

Mr. John Jackson, of Woodside, Abingdon, writes: "While we expect the low price of all other kinds of farm produce to affect that of live stock, farmers seem more than ever inclined to take advantage of the present favorable opportunity to improve their stock at a moderate cost, and there certainly never was greater necessity or a more favorable opportunity for doing so than the present. Our sales for the month have been: 1 Southdown shearling ram to J. A. Jackson, Caistor; 1 shearling ewe, 1 ram lamb and 2 ewe lambs to A. Telfer, Paris; 1 Berks/ire boar pig to Thomas McCormick, Iroquois." We heartily endorse what Mr. Jackson has said in the remark which has reference to the favorableness of the time for investing in a superior class of live-stock, as the prices at present cannot be said to be too high. We may add that it was to us a very great pleasure to look at Mr. Jackson's magnificent flock of Southdowns which numbers some 88 head, as we did but a few evenings since. This number includes four aged imported rams, four shearling and 18 ram lambs, of which a goodly number are in the market. The lambs especially were a beautiful lot.

**Messrs. Cowan and Patteson**

—WILL HOLD A—

**COMBINATION SALE**

OF HIGH-BRED

**SHORTHORNS**

—AND—

**SHROPSHIRE SHEEP**

At Clochmohr, Galt,

—ON—

**TUESDAY, OCT. 13.**

Cows, Bulls, Heifers and Calves of the best beef and milking strains. All registered in B. A. Herd-book.

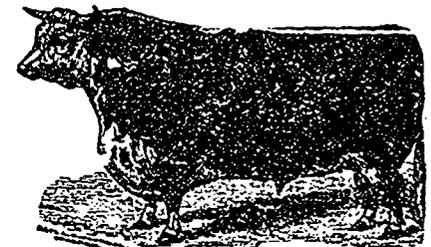
THE SHROPSHIRE DOWNS will be chiefly of Lord Chesham's prize winning blood. Rams and Ewes.

**TERMS, CASH**

or approved notes at six months.

Catalogues from J. L. COWAN, Galt,  
T. C. PATESON, Toronto,  
or G. T. STRICKLAND,  
AUCTIONEER, Galt.

**The Park Herd of Herefords,**



MY herd of Herefords having increased by the addition of twenty-one females by importation and breeding since April I intend to dispose of a few of them. I have also a few young bulls for sale. All my Herefords are registered in the American Hereford Record, which is the best proof as to pedigree. Shropshire Sheep from imported stock for sale. Correspondence and inspection invited.

Half a mile from C. P. R. and G. T. R. Stations.  
my-y **F. A. FLEMING, Weston, Ont.**

**TORONTO EXHIBITION.**

**OAKLANDS SWISS COTTAGE.**

WE ARE HAVING ERECTED ON THE TORONTO Exhibition Grounds a Swiss Cottage, for the sale, during the Exhibition, of

**OAKLANDS KOUMISS**

The most nutritious, pleasant and health-giving milk production in the world.

**Champagne Milk**

An effervescent, light, sparkling and agreeable beverage.

**JERSEY ICE CREAM**

Made from the cream of our own herd by our New York professional ice cream maker. The most superior ice cream in the markets of Canada.

**PURE JERSEY MILK, JERSEY BUTTERMILK.**

ALL THE PRODUCTS OF OUR MANUFACTURE.

**OAKLANDS JERSEY DAIRY,**

Of 131 Yonge Street, Toronto, and Hamilton.

The Ontario Experimental Farm

**PUBLIC SALE**

OF LIVE STOCK,

Friday, 4th Sept., 1885.

A large number and variety of cattle and sheep from the new importations, consisting principally of two bulls and three Shorthorn heifers; two bulls and two Hereford heifers; five bulls and three Aberdeen-Poll heifers; two bulls and one Holstein heifer; two bulls and three Ayrshire heifers; one bull and two Jersey heifers; and three Guernsey heifers; along with five fat exhibition steers of Shorthorn, Hereford and Aberdeen-Poll crosses, averaging 2,000 lbs.; a number of Cotswold, Leicester, Highland, Cheviot, Oxford, Shrops., Hamp. and South-down rams and ewes; twelve fat shearling wethers, averaging 20 lbs.; and Berks. and Essex pigs.

**NO RESERVE WHATEVER AND EASY TERMS.**

Purchases at this sale can be entered for the Provincial, at London, and the Toronto Industrial Exhibition.

Any animal bought to be retained for breeding in the Province of Ontario, will be delivered free on conditions named in catalogue.

SEND FOR CATALOGUE.

GUELPH, ONTARIO.

WM. BROWN. Aug-21

**EASTERN TOWNSHIPS' Agricultural Association.**

**FIRST ANNUAL EXHIBITION**

of the above association will be held AT SHERBROOKE, QUE., On 6th, 7th & 8th October.

\$4,500.00 IN PREMIUMS.

COMPETITION OPEN TO THE WORLD. ENTRIES CLOSE 25th SEPTEMBER.

**REDUCED RAILWAY FARES**

From all points.

As this will be undoubtedly the largest exhibition ever held in the Eastern Townships, it will afford breeders and manufacturers an unequalled opportunity to exhibit.

For prize lists and any other information, address,

ROBERT H. TYLEE, Sec.-Treas., SHERBROOKE, P. Q. Sherbrooke, 24th Aug., '85.

**J. & W. B. WATT,**

Breeders and Importers of

CLYDESDALE HORSES, SHORTHORN CATTLE, SOUTH-DOWN SHEEP, and BERKSHIRE PIGS

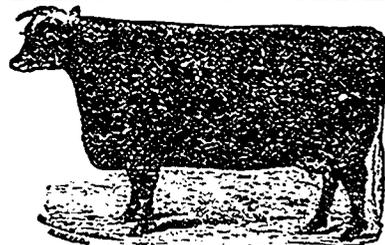
The herd numbers of many of our best strains, including several of the winners of the Elkington Shield of 1883. The Clarkston, Lord Lansdowne and Barnington Herds, the most successful and stock bulls in Canada, at head of herd.

STOCK FOR SALE.

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

**W. G. PETTIT,**

BURLINGTON, ONT., CANADA.

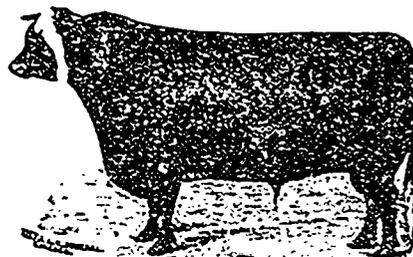


**BREEDER OF SHORTHORN CATTLE.**

PRINCE JAMES—95—, the noted show bull that took 1st prize and silver medal at the Industrial Exhibition, Toronto, for the last three years, has been used on my herd for the last four years. Seven choice young bulls, from seven to sixteen months old, for sale at moderate prices. Also several cows in calf to Prince James, and some choice heifers, got by Prince James.

sep-31 BURLINGTON STATION, G. W. R.

**RUGBY FARM.**



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

—BREEDER OF—

Shorthorn Cattle and Berkshire Hogs.

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

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

**OAKLANDS**

**KOUMISS**

An Effervescent Drink, manufactured out of

**Pure Jersey Milk**

Without the use of any acid whatever, by the

**OAKLANDS JERSEY DAIRY.**

It is retained and assimilated by the stomach when all other acids and fluids are rejected.

It is most highly recommended by the medical faculty of Europe and the United States as the best known remedy for

DYSPEPSIA,

INDIGESTION AND

CONSUMPTION.

IT IS INVALUABLE TO CONVALESCENTS.

"KOUMISS, when properly prepared, is the most reliable instrument ever placed in the hands of physicians."—Dr. E. L. BAUSU, New York.

"It is especially valuable where Cod Liver Oil cannot be digested and milk disagrees."—Prof. E. L. KATZ, Specialist New York.

After the use of KOUMISS, however, for several days or weeks the furred tongue generally becomes clean, first on its edges and then on its whole surface; the appetite is sensibly increased; the food ceases to lie heavily on the stomach."—Dr. GEO. L. CARBUCK, ex-President of the St. Petersburg Physicians' Society.

In 1870, the Minister of War for Russia had a regular Koumiss establishment opened at Samara, on the river Volga, for sick soldiers. Dr. Kozloff, Director-General of the medical staff of the Russian army, furnished a statement of the number of patients treated for several years. In six years the following patients were treated:

	Number Treated.	Number Cured.
Chronic Pulmonary Catarrh,	550	352
Chronic Pneumonia,	204	50
Tuberculosis,	64	11
Anaemia,	122	85
Pleurisy,	33	17
Chronic Gastric Catarrh,	33	32

Total number of cases treated, 993; of these 551 were cured, 314 improved; in 123 cases there was no change or falling off or even. 886 of these patients suffered from affection of the lungs or respiratory tracts. In 660 cases the correct weight was taken, and the average gain at the end of the cure was 84 lbs. each. But few drank of the Koumiss for more than six weeks.

For sale in HAMILTON,

WM. SOMERVILLE & CO.,

No. 8 Hughson Street North.

Outside of Hamilton,

OAKLANDS JERSEY DAIRY,

Aug-61

HAMILTON.

**FARMS FOR SALE.**

A CHOICE list of Fruit, Grain, Stock and Dairy Farms, and other properties (with thirty provincial and county maps) in new issue of "Canadian Land Advertiser" Price, 25c. but money returned to buyers of land advertised in list. W. J. FENTON & Co., 50 Adelaide St. East, Toronto.

**SMITH & SMITH,**

Estate, Financial and General Agents.

Fruit, Stock and Grain Farms bought, sold and exchanged Money to loan. Insurance effected. Teachers and others can make money during leisure time by writing us. Manufacturers and publishers wishing their goods introduced through the country will do well to correspond with us.

sept-21

14 King Street West, Toronto.

**THE GLEN STOCK FARM,**  
Innertip, Oxford County, Ont.



Scotch Shorthorns, Herefords, English Shire Horses.

Several grand heifers and bull calves, by imported Earl of Mar (47851), winner of Gold Medal at the last Grand Dominion and 39th Provincial Show, out of imported cows; also some very fine Hereford heifers and bull calves, by imported bulls out of imported cows. Cronkhill 8th, our imported Hereford stock bull, was winner of Silver Medal for best Hereford bull of any age, at the last Industrial Exhibition at Toronto.

P. O. and Telegraph Office at Innertip; Farm, one mile from Innertip Station, on the C. P. R. (Ont. Division), and a short distance from Woodstock Station, on the Canada Pacific and Grand Trunk Railroads.

STOCKMEN ALWAYS WELCOME.

**GREEN BROS.,**

The Glen, Innertip.

oct-y.

**MESSRS. J. & P. HUNTER, ALMA, ONT.,**



Importers and Breeders of

**SHORTHORN CATTLE,**  
Clydesdale Horses and Shropshire Down Sheep. A good selection of bulls and bull calves for sale.

STOCK FOR SALE.

TERMS REASONABLE.

**Shorthorns and Shropshire Sheep**

Bred and Imported by



**JOHN DRYDEN, M. P. P.,**  
BROOKLIN, ONT.

Imported Cruickshank Bulls only have been used in the Herd for the last thirteen years. A number Choice Young Bulls now for sale, sired by the Prize Yearling Bull,

**LORD GLAMIS (48192).**

**EASTVIEW HERD.**

The undersigned has a number of very

**CHOICE YOUNG  
HEREFORD BULLS**

sired by the noted bulls Down ton Grand Duke, Downton Hero and Auctioneer,

WHICH HE OFFERS FOR SALE.

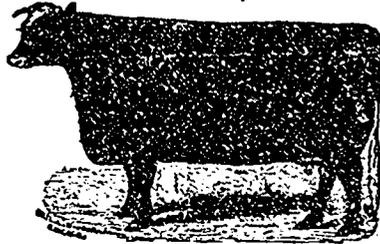
**J. H. POPE.**

EASTVIEW, COOKSHIRE, P. Q.

mar-6t

Bates Shorthorns.

**THE BELVOIR HERD.**



To this herd belongs the honor of having made the highest average at public auction in 1853,

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

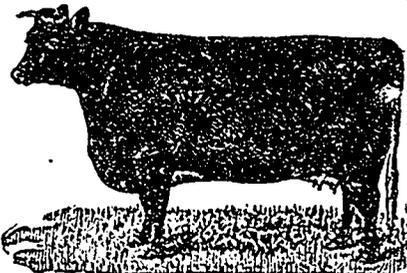
The Proprietor intends to fully keep up this high standard, and invites all interested to call and see for themselves. Prices to suit all. Young Bulls will be sold for less than they can be got elsewhere, of similar breeding and merit.

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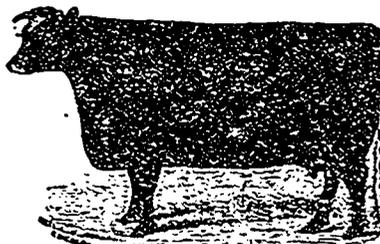
Parties on business will be met at the Depot For further information apply to

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Clydesdales, Shorthorns, Shropshires, Cotswolds and Berkshires.



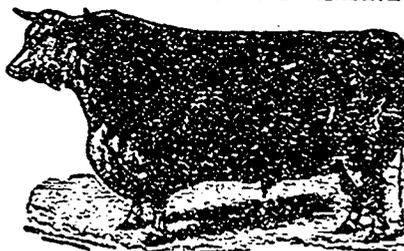
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Selected with great care from the celebrated herds in England.

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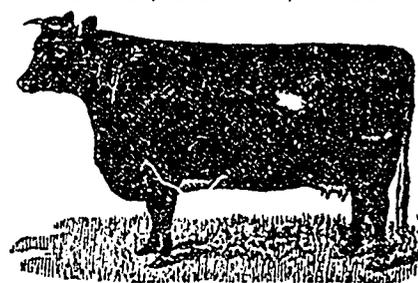
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An imported Hampshire Down Ram and an imported Shropshire Down Ram for sale at about one-sixth their cost.

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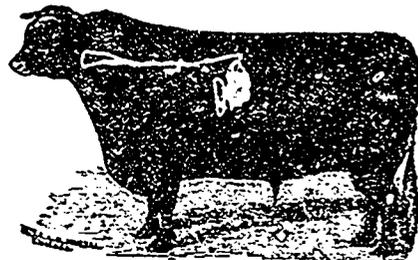
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Have one of our yearling bull still for sale, a red, of Dec., 1883, from imported sire and dam, first at the late Co. Middlesex Spring Show, also a very choice lot of heifers, now in calf to the imported Cruickshank bull Vermilion (60567). Prices moderate. Terms easy.

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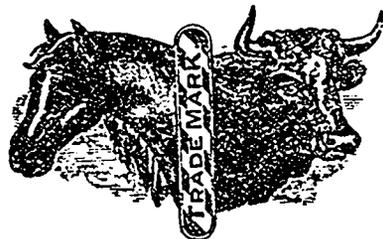


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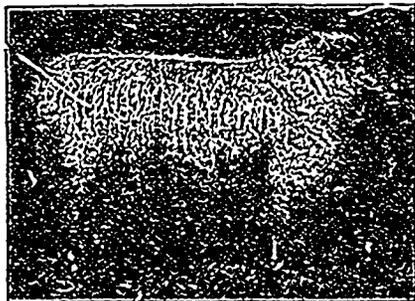
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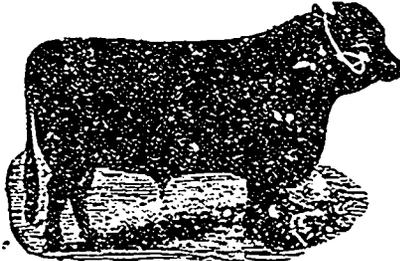
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**WE OFFER FOR SALE**

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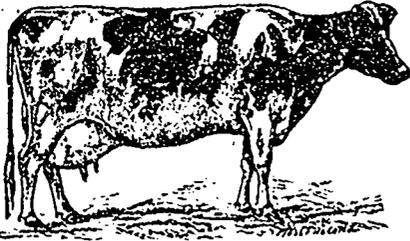
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The Average Records of a Herd are the True Test of its Merit. The following Milk and Butter Records have all been made by animals now in our Herd:

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Five Cows have averaged over 10,000 lbs. in a year. Ten Cows have averaged over 18,000 lbs. in a year.

We know of about 30 cows that have made yearly records exceeding 16,000 lbs. and 14 of them are now in our Herd and have averaged over 17,500 lbs.

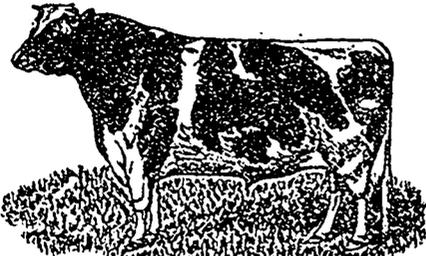
Twenty-five have averaged over 16,000 lbs. a year. Sixty-three, the entire number in the Herd that have made yearly records, including fourteen 3-year-olds and twenty-one 2-year-olds, have averaged 12,785 lbs. 5 ozs. in a year.

### BUTTER RECORDS.

Five cows have averaged 20 lbs. 7 ozs. in a week. Nine cows have averaged 19 lbs. 4 ozs. in a week. Fifteen cows have averaged 17 lbs. 6 ozs. in a week. Six 3-year-olds have averaged 14 lbs. 3 ozs. in a week. Eleven 3-year-olds (the entire number tested) have averaged 13 lbs. 2 ozs. in a week. Six 2-year-olds have averaged 12 lbs. 1 1/2 ozs. in a week. Fifteen two-year-olds (entire number tested) have averaged 10 lbs. 8 3/10 ozs. in a week. The entire original imported Netherland Family of six cows (two being but 3 years old) have averaged 17 1/2 lbs. in a week. This is the herd from which to get foundation stock. Prices low for quality of stock.

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## THOROUGH-BRED HOLSTEIN CATTLE

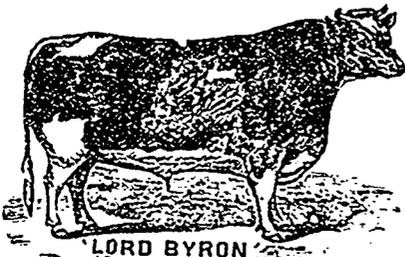
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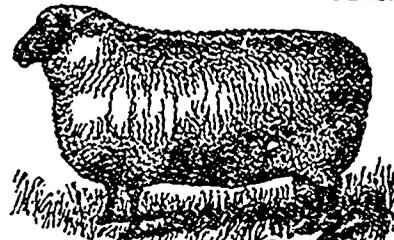
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and Ram Lambs, good ones; also some very choice young

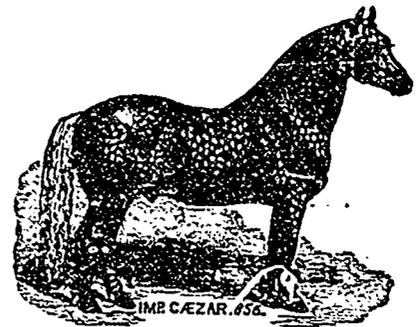
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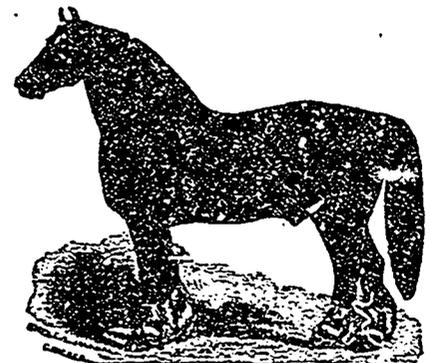
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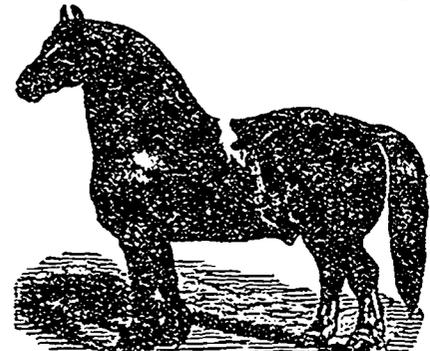
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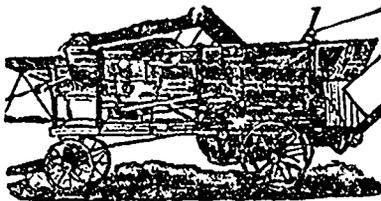
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