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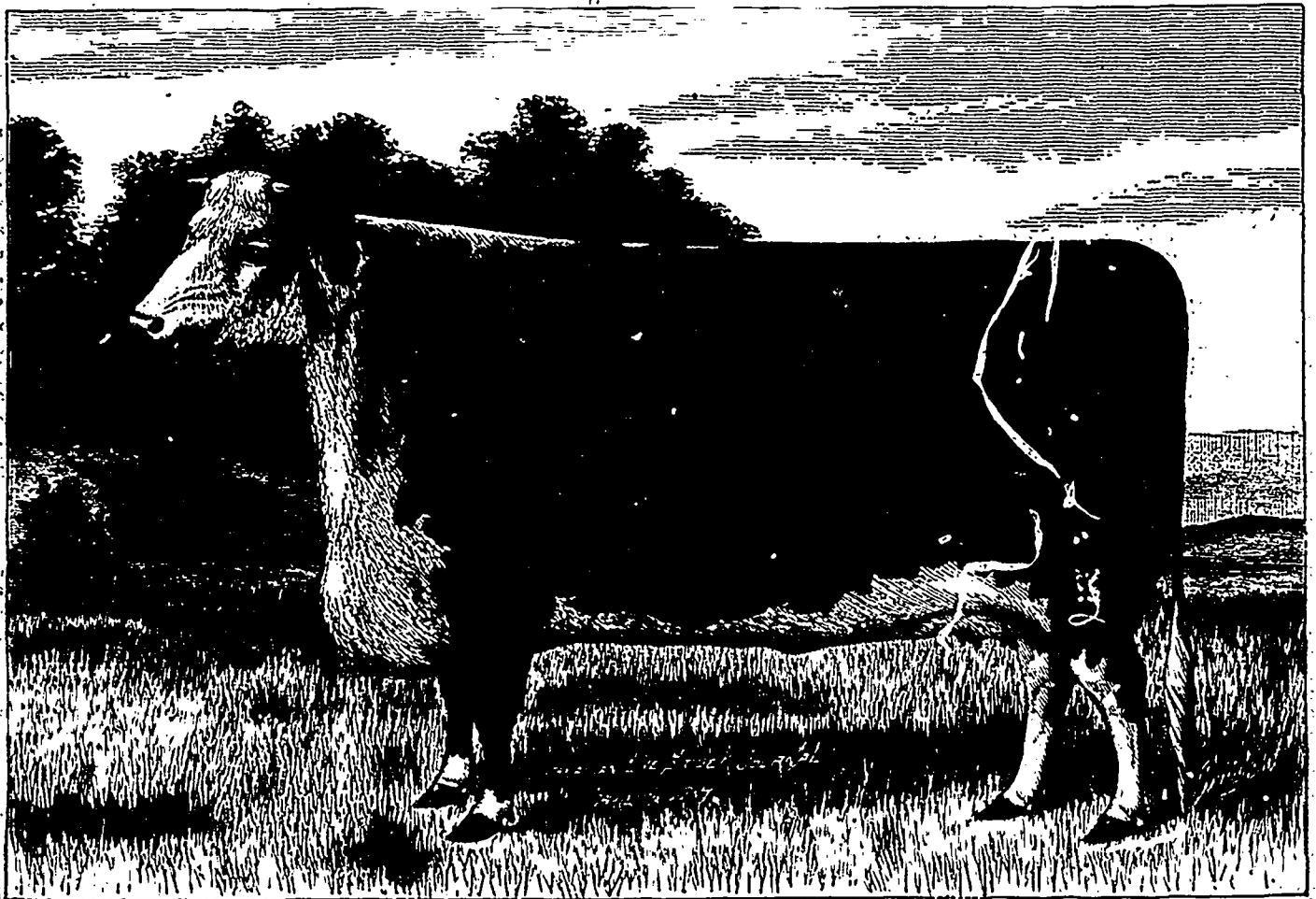
CANADIAN LIVE-STOCK JOURNAL.

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

VOL. II.

HAMILTON, CANADA, JULY, 1885.

No. 7



THE HEREFORD HEIFER DOWNTON PURITY.

Imported by and the property of Mr. R. H. Pope, Cookshire, Que.

Downton Purity.

This splendid specimen of a Hereford female was imported by her owner, Mr. R. H. Pope, of Cookshire, Quebec, along with a large number of notables in the same line in the summer of 1884. Like nearly all her companions at Eastview, she is a fine type of the breed, so much so that she would reflect credit on any herd.

It is almost amazing the tide of popularity which has been borne in during recent years in favor of this noble breed of fleshers, which for a time had been apparently left on the strand.

In Britain they brought prices that were considered extreme last year, and this season, though there has been diminution in prices, the demand is on the whole fair. In the United States they meet with ready sale, very many of the beautiful Herefords owned and bred in this country being eagerly sought for by western purchasers and at splendid prices.

A writer in one of our English contemporaries last year, in commenting on the high prices paid in Britain during the year for Herefords, remarked that "the Hereford men would do well to make hay

"while the sun was shining," but if we mistake not, the indications are that the Hereford horizon will be clear for some time.

They have pressed the Shorthorns at the Chicago Fat Stock Show for some years, and in the show-yards of England they have perplexed Shorthorn breeders not a little by cutting in severely on the prize-list. This year at Oxford they put the Shorthorns to the wall, the Earl of Coventry's aged bull Good Boy bearing away the palm from the Royal prize-winning Shorthorn, Self Esteem 2d, and his cow, Golden Treasure, out of Mr. Tudge's grand old cow Giantess, was victorious over Mr. Brierly's beautiful Shorthorn, Snowflake.

Our Engravings.

We have heard but one expression, and that is of unqualified approval, applied to the character of our live-stock engravings for several months past, by critics of every shade. Indeed, good judges not a few, are enthusiastic in their praises. They have received most favorable notice from some of the leading British agricultural journals. Some claim that they

quite equal the engravings of our American contemporaries, and if allowed to express an opinion, we would say that we are of the same mind. Whatever the degree of doubt that hangs over this point, there need be none as to their uniformly finished character. When our JOURNAL was first given an existence live-stock engravings in Canada were, with few exceptions, apparitions of which stockmen were afraid. To whom the advance is to be credited we leave the public to say.

Our artist is about to leave for Europe, and as there is no one of whom we have any knowledge in the country who can fill his place during his absence, we shall be able to furnish but one large live-stock engraving during the months of July and August.

Parties wishing engraving of this nature executed on his return will do well to communicate with us at an early day.

PARTIES remitting 50 cts. in registered letter will receive the JOURNAL to the end of the year, commencing with the June number.

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, 18c. per line, nonpareil (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, JULY, 1885.

MR. GEO. T. TURNER, of Turnbridge, England, seems to be convinced at last that Canada produces her own shipping cattle, at least we so interpret his silence. Would it not have been more the Englishman, however, had Mr. Turner frankly acknowledged that he had been mistaken, after having propagated so widely a statement utterly unfair and unjust to Canada? Where is the next man who wishes to prove that Canada gets all the best of her shipping cattle from the United States?

OUR correspondent, writing on the subject of "Renting Farmers" in June number of the JOURNAL, makes a capital point when he says, "No farmer should pay his rent, or any part of it, in the fall." It is a question with us as to whether landlord or tenant is the greater loser by such an arrangement. It precludes the possibility of fattening cattle, unless upon grass, and encourages, in fact necessitates, the stripping of the farm of the summer's produce as set forth in the article from which we quote. Fleecing the farm in this way is one of the besetting sins of very many of our land-owners, and therefore men who have any regard for the future of their farms should not give one particle of encouragement to the tenant to do likewise. It is the rule that farms rented for a succession of years and to different individuals soon become so impoverished as to be of comparatively little value, and the system of renting practised in the country is largely responsible, as a rented farm will of course always continue as productive as one tilled by the proprietor, when cultivated on the same principle.

A HALIFAX correspondent in another column speaks of providing "plenty of shade" for swine, as well as pure water. We are glad to see this plea put in behalf of swine, which, of all our domesticated animals suffer most in summer from the intolerable heat unless provided with the above requisites. We often read of the necessity of abundant shade being pro-

vided for our cattle and sheep, but seldom is its importance spoken of in connection with swine rearing. Swine feeding in a meadow or on a pasture will leave the open ground in a body when the sun attains a certain degree of heat, nor will they come back again from their siesta until the temperature is sufficiently lowered. If no suitable shade is provided they suffer very much as they try to burrow themselves in the dampness of the fence corners. The requisites for cooling them should be provided, at the least possible expenditure of exertion on their part. Happy is the man who has a running stream in which they can wallow, as in such a case they are always clean and presentable, and can drink pure water, which is important in swine-rearing, notwithstanding the abounding practice to the contrary. The shade furnished by a building is usually grateful to them.

THERE is a manly frankness in the latter portion of the "reply to breeder" by John Dryden, M. P. P., of Brooklin, which we do not weary reading and re-reading. After acknowledging the correctness of the statements of breeder in reference to imperfections in the records of the B. A. H. B., he says, "Any errors discovered in our record must be corrected; any frauds committed must be exposed. In this matter our maxim will be, hew to the line, let the chips fall where they may. We have adopted rules, and these must be carried out. A record of pedigrees can be of no value unless it be pure and correct. I had fondly hoped that the B. A. was correct, but it appears otherwise. It must, however, be made so, and fraud and deception punished as it deserves." It augurs well for the ultimate success of any association with one who speaks thus at the helm. In this age where controversial writers so often use "sham" for their paper, and "shoddy" for their ink, it is very refreshing to hear so true and unmistakable a ring from the shield of defence. One herd book for Canada and purged from all alloy of dross and error, that shall compel our neighbors to give it the homage of respect, is what we want.

ONE of our Canadian cattlemen when slightly pinched for want of cash, wrote to a party with whom he had dealings, "I am a beardless youth whose ambition to be a first-class stockman far exceeds his cash, but I am going to try again until I succeed." If our judgment is worth anything, the success of that young man is assured, if spared his vigor, as that sentence has the ring of gold and silver in its very echo. Ambition and effort are the stepping stones that lead with unfailing certainty to the upland plateau where individuals can look down upon their fellows. We would that that spirit were caught up by every farmer's son in the land. It would revolutionize our entire system of stock-raising. It would so elevate our country as to evoke the wonder of the on-looking nations, and it would greatly amaze ourselves. Every young man setting up a stock establishment of his own should have the above sentence inscribed above every stable door on the place, in characters that no misfortune or adversity can obliterate. The ambitious young man sees all the three motions of the earth, and with an eagle eye. He that is destitute of this sees no motion in it at all. He says it is the sky that moves. Trying "again and again" will take any ordinary young man over the Alps, where he can look down upon the fertile valleys of Italy.

PARTIES embarking in the fattening of cattle are wise if they remember that the question of profit and the degree of the same depend upon many little contingencies on the part of the feeders. Feeding heavy

cattle, or indeed any cattle, is an expensive business if they are not kept pushing ahead. The monthly statements of the weigh-scale should show a gain of at least two pounds per day when the cattle are on a heavy ration. If there are any periods of stagnation, they are attended with much loss. These may arise from feeding a little too much or not enough, by giving meal of unsuitable proportions of certain kinds of grain, by giving hay not adapted to its purpose, or even by allowing an undue amount of exercise, of which a very little may be an advantage. Irregularity in the hours of feeding will conduce to the same result, as will a careless, boisterous manner of pitching in their feed and working with them. A few degrees of temperature too low in winter or too high in summer may turn the scale adversely. Again, if the cattle are not of the right stamp they will soon eat their heads off. This more largely probably than any other cause accounts for the slim showing in the balance sheet of feeders not a few, or rather of men who try a dash at feeding. While under proper conditions feeding is one of the most profitable employments of the farm, it is the last business that should be engaged in by the slipshod farmer.

INDIVIDUALS forwarding communications for publication in the JOURNAL that reflect in any way upon the morality of others in the broad sense of the term, would more nearly meet our views by writing over their own signature. Just where to draw the line here would require a nice discrimination, and a more matured judgment than we are possessed of, but it does seem to us to be more like the British way when you give a man a thrust, to let him see who has done it. It would be an unwarrantable statement to say that this should always be done, as a public fraud may be sometimes righteously and effectively exposed without running the risk of consequences that might otherwise arise. Yet when it can be done consistently, it would be the wiser and more effective course to take. While a journalist should not publish every form of criticism that may be handed him, the interests of truth require him to publish not a little that may be offensive to some men, because it exposes their evil practices, and lays bare the iniquity of their designs. The wrath that is thus aroused falls largely upon the devoted head of the editor, which if writers generally would bear in mind, it would have a wholesome influence even on communications. We never indulged in the vain dream of getting very far through life without running against some person; but when these untoward circumstances can be avoided, it is well. Though we have a thorough contempt for the man who never had an enemy, it is unwise needlessly to multiply these.

WE heartily endorse the statement Mr. of G. Laidlaw, in the last number of the JOURNAL, in which he says, "I think we undertake to till too much of our farms. Smaller pieces better tilled, the rest in pasture, smaller and better stocks of cattle, better fed and more comfortably housed, would make agricultural life more enjoyable and much more profitable." Even stockmen sometimes make the mistake of ploughing too much in proportion to the amount of their available tillable land. The return of the land so tilled is the bait that lures in the direction indicated, without any regard to the increased cost of production. It should always be one great aim of the farmer to adopt that system of tillage which enables him to continuously increase the returns from every acre tilled. This can be done in an ever increasing ratio with the exception of some few seasons that may be more than ordinarily adverse,

by persevering in the practice of a proper system. It is just the number of bushels over the ordinary average that form the principal gains of the husbandman, and it therefore follows that the greater the excess of the returns over this standard, the larger his profits will be. It must be patent to every reflective observer that without keeping live-stock this cannot be accomplished unless manures, natural or artificial, are purchased. This may be done with a margin of profit near the towns and cities, but not in places remote. It would be a grand thing if the same amount of produce could be raised on three-fourths of the land that is now annually ploughed in the Dominion. Say that every farmer ploughed per year but 5 acres less in Ontario, this would effect a saving in the item of ploughing alone of \$3,000,000, reckoning \$2 as the hire of a team and \$1 as the wage of a man. This would be a large sum for the men of one calling to pay as the price not of indifference, but lack of thought, and we fear that the sum named is four times under the truth. Very many in the Province will doubtless continue to plough and sow as heretofore until they plough and sow no more; but, reader, you need not continue to do so. If you raise the same amount next year although you till five acres less, you will have saved sufficient to pay for your agricultural papers for several years.

The Herd Book Controversy.

This controversy is waxing somewhat warm, in which we are no way disappointed. When our views were first sought on the subject, we knew that we had heard the call of a tocsin to battle, but we felt at the same time that it was a necessary step. As we took up the pen to write the first sentence we felt that we were "taking a dog by the ears;" but now that we have done so, we shall try and resolutely hold on till our object is attained. We are fully conscious even now that our craft is out on a Niagara where a Captain Webb was drowned, but where the Maid of the Mist successfully ploughed the whirlpool. Long ago we heard the agitated voices of the waters, and the roaring of the rapid, but now that we are out upon them we shall stick to our craft till we reach the peaceful waters, if such are to be found on the churning, boiling stream.

The object is worthy of the effort. Captain Webb died bravely swimming after a bubble; the Maid of the Mist ploughed through the jaws of danger to escape the justice of the law. We seek the furtherance of a scheme that has a bearing more or less directly connected with the material welfare of every Shorthorn breeder in the land.

We are satisfied that one Shorthorn herd-book is sufficient for Canada, and therefore we urge amalgamation. A few in our midst, with the Americans, take the view that even one is too many, but with this view we are not in sympathy. We stay not here to give all the reasons, but may mention that it appears like taking too low a view of our national life, and that the Americans along with a vast amount of enterprise in the management of their herd-books, have shown in some respect what writers on moral philosophy would term selfishness more rank than the grasses of their virgin prairies. We believe that ninety-nine out of every one hundred breeders will agree with us when we say that one book is sufficient and preferable to two; but how many of each of the ninety-nine, we ask, are going to help us to attain the object?

We fully expected that some strong statements would be made, and that no little warmth of feeling would be shown on a subject wherein men but recently so widely differed in their view (and we think

they had ground for differing) that they decided to form two camps. This is not at all surprising, as stern winter always comes before the balmy spring time. The desolating blasts of December always precede the life-awakening breezes of May and June.

On an important question such as the present it is more than probable that much will be both written and said, and so it should be. When men take any action affecting them in their gregarious capacity, it is better that all the reasons should be known. But this should always be remembered, that there are two ways of saying strong things. One is cutting and slicing without any regard to the feelings of an antagonist, and the other the heavy blow that is dealt out by a strong hand tempered by the regretful thought that it is a necessity. In all controversial writing, men should ever remember that there is an immense difference between the conclusions of a powerful and consistent logic and the rankling sores produced by the poisoned arrows of personal attack. While the latter only kindles the embers of hate, and provokes retaliation, the former vanquishes so completely that the work needs not to be repeated.

We have only got as yet to the threshold of the undertaking. If the B. A. Shorthorn Breeders' Association appoint a committee, as we trust they will, to meet with that appointed by the council of the Agricultural and Arts Association, the work is only commenced. The grounds that will form the basis of amalgamation will form the real difficulty, and we trust that thoughtful representative men on both sides are viewing this feature of the matter with the microscope of reflection.

Which party shall hold the custodianship of the books? On what terms shall said party accept of the financial interest of the other? and what shall be the standard adopted in future? are vital questions, the discussion of which may lead men to wax warm in standing up for their convictions, where they may honestly differ. But of this we are assured, if the parties come together actuated by a patriotic desire to accomplish what will be for the general good, they will not meet in vain. The time perhaps has come for saying something as to the basis of amalgamation, and any suggestions in this direction, offered in a temperate spirit, will find a welcome in the columns of the JOURNAL.

We have tried to view the subject in its different bearings. We have thought over the probable consequences of success and failure. We are fully conscious that one wrong turn of the helm we are trying to guide may run the vessel on the hidden rocks; and shall we hesitate and falter now? Not for a moment. One Shorthorn herd-book for Canada is enough, and preferable to two, and though our effort should be altogether without success, with the Italian who said that still the world moved, though forced a moment before to say that it did not, we would still say that for Canada one Shorthorn herd-book is enough.

American Shire Horse Society.

This society has been duly organized and incorporated. The president is A. G. Danforth, Washington, Ill.; vice-president, Geo. E. Brown, Aurora, Ill.; treasurer, F. C. Warren, Fox Lake, Wis.; and secretary, Chas. Burgess, Winona, Ill.

The following rules of entry were adopted:

1. Shire stallions and mares hitherto imported from Great Britain, shall be admissible to record: provided, that in the case of any question being raised as to the eligibility of an animal, the question of admission shall be determined by the executive committee; and in case that the committee shall decide that such

animal, through false representation, has been improperly recognized as a Shire, such animal shall not be eligible to record.

2. Shire stallion or mare by sire and out of dam both recorded in American stud-book.

3. Shire stallion, having five top crosses, and Shire mare, having four top crosses, in each case by Shires recorded in the American stud-book.

4. Imported Shire stallion or mare recorded in the Shire stud-book of Great Britain.

5. Imported shire stallion or mare by sire, and out of dam both recorded in the Shire stud-book of Great Britain.

An animal accepted for registry is regarded as recorded.

Imported Shire stallion or mare will be admitted only upon the certificate of the secretary of the Shire Horse Society of Great Britain and Ireland, stating that rules 4 or 5 have been complied with.

The entrance fee is \$2 for members and \$5 for non-members. The charge for transfers is \$1 for the former, and \$2 for the latter. A certificate of transfer from buyer to seller should at the same time be presented.

It is desired further that the name of the breeder of each animal mentioned in the pedigree be given.

It was decided that the next annual meeting be held at Chicago during the holding of the next Fat Stock Show, and it is expected that a volume of the record will be issued annually.

Amongst our Friends.

"We derive from your JOURNAL many valuable facts. No farmer should be without it."—Wm. Lackner, Hawksville.

"Receive your JOURNAL every month, and appreciate it very much."—James Gibb, Brooksdale.

"We are very much pleased with the JOURNAL. Every number seems to be better than the preceding one."—James & P. McNaughen, Gourock.

"During the past year my boys and myself have been edified very much through reading your JOURNAL, although we are not yet able to purchase any of those thoroughbred cattle. Please continue your articles on farming. We anxiously await them."—Wm. Woods, Rothsay.

"After a year's trial of JOURNAL, would not want it for four dollars."—Jas. Hume, Arkell.

"Yours is the best stock journal I have ever read."—George Rattliff, Mitchell Square.

"Yours is the best paper I have ever yet seen for the farmer."—Wm. J. Marsh, London East.

"There are too many papers content with the mere shadow of honesty, but yours is not content without the embodied spirit acted out, and this alone will wear the tide of time. I admire the JOURNAL as a stock paper, but more so as an advocate of honor and honest principles of man in dealing with their fellow-men."—James Thomson, Mildmay.

"If the farmers would subscribe for THE JOURNAL and act on the advice given, it would be worth many times the cost to them."—Joseph Gilmore, Arthur.

Messrs. Robinson, of Rydal Bank Farm, say: "We take the STOCK JOURNAL and can warmly corroborate all that has been said: its praise and wish it every success."

Mr. George McKay, Owen Sound, writes: "I cannot do without your valuable paper even for a month. Any person wishing to know about stock cannot do better or learn more than by subscribing for the JOURNAL."

Mr. R. Railance, of Head Lake, Ont., writes: "I cannot send this (his subscription) without congratulating you on the able manner in which you are editing the JOURNAL, and the way in which you defend the rights of Canadian stock interests, as for example, the manner of dealing with Mr. Turner's letter, which ought to convince all who read it that you are doing a good work."

The Ontario Agricultural College— What Has It Accomplished?

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—In the March number of our LIVE-STOCK JOURNAL you gave us an elaborate article on Agricultural Education. You will not be surprised at an old foggy like me, who has been dosed for nearly fifty years with "educate the boys; teach them chemistry," etc., taking exception to some of your remarks, as I am completely nauseated with that sort of thing.

Mr. Editor, allow me a small place to ask the Professors of our Ontario School of Agriculture what they have done to check the increase of those insect pests which prey on our different grain and root crops? Also, what they have done to prevent and cure the various diseases our live-stock are subject to? Two years ago, at the above institution, 40 lambs were lost by tapeworm. They neither cured nor found out the cause. Tuberculosis decimated their herds. Their cows are aborting wholesale. They have experimented on feeding cattle, finding the result that it costs ten cents per pound and is sold at six cents per pound. Agricultural readers prefer to have *multum in parvo*.

W. C. SMITH.

Camp House Farm, Ont.

We very cheerfully make room for Mr. Smith's communication, not only on account of the high personal respect we have for the writer, but because it affords us a fitting opportunity of saying a word as to the real objects of a school of agriculture, which by very many are but imperfectly understood. We shall at the same time answer briefly the questions of the letter, which, by the way, are charges of inefficiency, at least by implication, and we trust that the Professors of the O. A. C. may in due time give an answer more full and complete.

We are sorry to see Mr. Smith state that he is "nauseated" with that cry, which practically means give the boys of the farm a scientific education. We should never allow ourselves to become tired of a good thing, much less of one of the best of material things that have ever been given the race—the advantages of a true education. The people who cease to educate their children must fall far behind in the struggle and agriculture forms no exception to the rule. We repeat here what we stated in substance in our article to which Mr. Smith refers, that the agriculturist possessing both the scientific and the practical knowledge of his work will soon distance the man who has but a knowledge of the practical, other things being equal.

It is quite possible that education may be false, or warped, or so imperfect that it may be more of a loss than a gain. True education consists in the drawing forth and training of the natural powers of mind, so that the possessor may be enabled to use these to better advantage in after life. If our agricultural college is doing this for our farmer's sons, it is doing for them a work the advantages of which cannot be easily estimated. If it is not doing this, then the professors are laboring in vain, and the country is sustaining at considerable outlay a more than useless appendage. If we took the latter view we would go further than Mr. Smith, we would say raze the college buildings to the very foundations, and give the farm into other hands; but we hold no such view, and are furthermore convinced that the work that our O. A. C. is doing for the country is not only one of immense magnitude, but one that is as yet in the A B C of its growth. If our college is not what it ought to be, let it be made so. Convince us that it has wrongs that require righting, and we shall be the first to cry out. Show us that it has sores that require probing, and we shall send the lance to the bone; for if there is one educational institution in the Province more than an-

other that we desire to see prosperous and thoroughly efficient, it is the O. A. C. We feel bound, therefore, to defend it from what we consider all unfair attack. And such we deem the charges of Mr. Smith, although we do not for a moment doubt the sincerity and good intentions of the writer.

If our definition of education as given above is correct (and we think it is), then it is the office of the professors as such to impart to the students a knowledge of ascertained facts in their respective departments, so far as ascertained, just as it is the duty of a common school teacher, or of a father in teaching his boy the practice of the farm. It would be just as fair to ask the common school teacher to first invent a more effective language and then teach it to his pupils as to ask the professors of the O. A. C. to make known to theirs, truths that lie encased in the ponderous chest of the undiscovered, for the lock of which no man has found a key. It would be no less fair to demand of the farmer to invent some better mode of picking up potatoes than with the hand, and to make this and kindred truths a part of the routine of home instruction. It is the professors' duty to impart not to discover, and for this purpose has the Government hired him. And if he does this properly he will lay before the average farm student far more useful truth than the latter can find room for in that great storehouse, the mind. The professor will of course endeavor to use much skill in his method of doing this. He will not try to cram his students with meat all minced. They must use the knife and fork themselves; those of them unwilling to do this are babes. The true teacher rather leads to the quarry and points out the metals, and helps to grind the tools, but the healthy students must strike the blows; or, to vary the figure, like a mother teaching her child to walk, the teacher will only do for the students what they cannot do for themselves, having first shown them the way; but it is out of the question to ask of him to impart truths that are yet in the embryo of the undiscovered.

We have, therefore, quite disposed of the references to "insect pests, tuberculosis, and abortion." We have no paid specialist in regard to the former of these at the college. England, even, is only beginning to look after her insect pests. Millions are spent annually in the attempted cure of consumption in the human family, and yet who has ever cured one case of it after a certain stage is reached. Similarly we regard tuberculosis. Some of the wealthiest men of great Britain would this very year give a large portion of what they own could even their proudest men of veterinary science give them a cure for abortion, other than the early and vigilant isolation of the animals infected.

As regards "tapeworm," the whole subject is fully treated of, so far as the College affections are concerned, in the ninth annual report, for the year 1883, pp. 196-198. There is no attempt to conceal anything in regard to the extent of the ravages of the disease or in reference to its dangerous character. On the other hand, the whole matter is fully laid before the public, and although F. W. Grensides, Esq., the Veterinary Professor for the College, and the older authority, Dr. Smith, of Toronto, were unable to prescribe an infallible antidote in common with the greatest lights in their profession in other lands, we must certainly concede to them the credit not only of tracing a correct diagnosis of the disease, but also of staying its ravages. By the adoption of a most effective course of treatment, which all the lambs of every flock should be made to undergo that has individuals affected, and which has been freely given to the Can-

adian public, they have earned the thanks of every sheep-owner in the country.

In an institution where all the principal breeds of live stock are represented, and gathered as they are from countries that have long been infected with diseases, some of them hereditary in their character, it would be strange indeed if disease did not occasionally crop out; but whereas tuberculosis and tapeworm gave trouble in 1883 and were uprooted by the arrival of 1884, we must grant that the College Veterinary Professor knows something about his business.

But the most inexcusable oversight in the statements of Mr. Smith is his faulting the College authorities for producing beef at a cost of ten cents per pound, which only realized when sold six cents per pound. It is extremely probable that the beef Mr. Smith sold for five and one-half cents per pound last spring cost him at least eight cents per pound for every pound laid on during last winter's feeding, and so with every other cattle feeder in Ontario. Beef cannot be made during the last winter of its production with an animal over two years, without the cost footing up from seven to ten cents per pound for every pound of live weight added by winter feeding. At least, it has not been so made. Suppose we buy a two-year bullock in September, weighing 1000 lbs., for which we give four cents per pound. We sell him in May at six cents per pound, when he weighs 1300 pounds. The 300 pounds additional gain has cost us more than \$18, the sum which we receive for this three hundred pounds, but we have in addition two cents of gain on each of the 1000 pounds which the steer weighed when purchased. Hence, instead of \$18, less the cost of the winter's keep, we get as against our outlay \$18 + \$20, the increased value put upon the weight of carcass as originally purchased. And this is just what Professor Brown means in the statements of the report, which represent every pound added to the weight during the fattening period, as costing ten cents, etc., per pound.

The old Sicilian, Archimedes, toiled long before he succeeded in discovering the law for the admeasurement of irregular solids. Seventeen modern centuries rolled away before vaccination was discovered as a preventive for the smallpox. Then why should our college, a purely teaching institution (unless so far as refers to the experimental departments of the farm), be expected to discover truth that has hitherto baffled the proudest genius of every land, before it is eleven years old? If a professional scientist discovers one truth in a lifetime, he has succeeded in binding around his brows the laurel of undying immortality, but very many of them have gone down to unknown graves without ever having won the wreath, so sparing is the goddess of discovery in the dispensing of her favors.

Nay, we cannot hold our peace when the subject of the higher education of our farmers is arraigned. And yet we do not really think that Mr. Smith really differs with us so much after all. We rather think that he writes more against the working of the college as it is, than against higher education as such; but that appears to us an unfortunate expression, in which he says he is "nauseated" with the cry, "educate the boys—teach them chemistry," etc., as young men who stand very much in need of light may entrench themselves behind this rampart.

The old pioneers, companions of Mr. Smith in the battle of wilderness life during the last half century, have done a noble work. Their skill in removing the giants of the forest has been wonderful; every stroke of the axe came down with the unerring certainty of the stones of the slingers of Majorca. Their lives speak of unremitting toil—one long day of labor.

They were an army of heroes, and when we think of the splendid legacy they left us, we can only say, peace be to their ashes. Every one of them is worthy of a record of grateful remembrance in the annals of their country. Those of them who still remain are worthy of double honor. Yet we should remember that since that work began full fifty years have come and gone, and since that time changes very wonderful have been introduced in all the sciences. The skill required in removing the forests of long ago, and in cropping lands enriched by the accumulation of ages, was something very different from that which is necessary to till successfully lands that are fenced, and to compete in the market with men who avail themselves of all the improvements of the times. Since those times a flood of light in agricultural matters has rushed in, so that old time method, however well adapted for their day, must make way for something better. Our sons must avail themselves of the advantages of this new light, whether they do so at Guelph or elsewhere, or they cannot keep abreast of the times.

Give our college time and there is no saying what may be accomplished even in the line of discovery. The youthful giant has scarce had time to emerge from the great deep of Canadian chaos that shrouds our higher education in agricultural matters, and to shake the waters from his dripping locks. It may be that the discoverer of the antidote to abortion is now in the class-room of the O. A. C. The young man is perhaps on his way who will smite tuberculosis hip and thigh, and so completely eradicate tape-worm that no place for it shall be found; but although her sons (some of whom at least are brilliant) should never shine in the sky of discovery, we have no right to arraign our college at any bar without a cause.

Early Maturity.

During the past one hundred years it is believed by competent authorities that the average duration of the lives of animals fed for the butcher in Britain has been cut down at least *one-half*. Or in other words, the stockman accomplishes in two years that which required four years a century ago. Thanks to the efforts of the advocates of early maturity for this grand achievement, more important it may be to Great Britain than the introduction of the spinning machine. The farmers of that island are groaning at present under the load of agricultural depression which is weighing them down, but what would they do if they had to feed two bullocks instead of one to accomplish certain results, as did their forefathers? Multiply the store cattle in Great Britain by the cost of keep in sustaining life for two years, and you have an approximate idea of the enormous saving to the country. In our own land we have not as yet attained, in the maturing of our cattle; we are perhaps half a century behind our brethren beyond the sea; we take three years to accomplish with our stock what an ordinary Briton accomplishes in two. Multiply the keep of all our store cattle by the cost of sustaining life for one year, and we have an approximation of the great loss to our cattlemen in this one item, a loss which in this young country we can ill afford to bear. Add to this the cost of providing shelter and attendance for one year, and we have a still nearer approximation.

If in Great Britain it is considered of the utmost importance to have butcher's cattle ready at two years old, or in the vicinity of two years, how much more important in this land of long winters where warm stables must be built and maintained.

The needle, however, points in the right direction.

We do in three years now what scarcely more than one decade hence required four, and the idea is becoming more and more popular every year.

We admit that there may be good grounds for varying the practice somewhat according to circumstances. In other words, one farmer may be so situated that he can hasten the process of maturity more rapidly than another. The man with large tracts of pasture land may afford to take a little more leisure in maturing his cattle than he who is confined to narrow limits, which necessitate a partial system of soiling. But it should ever be remembered that the mere cost of food in maintaining life alone for one year, is a very large sum, an item that cannot be ignored by the producer of fat cattle without paying a severe penalty.

There is assuredly a limit to this hastening process, but who shall tell us where it is? The line must be drawn somewhere, but where? As has been truly remarked by an English writer, "Cattle will never come into the world perfectly matured and developed as Minerva did." They must have a certain time to reach their profitable best, but the exact limit of this has not yet been ascertained.

It is a broad and interesting question that may well rivet the attention of minds of widest compass and large experience. When three pounds per day can be made the first year as easily as two the second, one would suppose that animals might be slaughtered most profitably at one year, but some allowance must be made here for maintenance of the dam the previous year, which may reduce the gain of the first year's advance to the level of that of the second year in value.

Professor Brown is at present experimenting as to the possibility of preparing shipping cattle at one year—that is, at a period somewhere short of two years, and we shall watch the trial with no little interest. If calves come in September and the two following months, we do not see why skillful feeders cannot get them ready by one year from the 1st of June. If the ordinary feeder realized the same results in one year more, it would be an immense advance on the present attainments in cattle rearing.

We have no means of ascertaining exactly the proportion of our shipping cattle that are sent away under three years, but observation and inquiry have convinced us that the larger half of our bullocks sent across the sea are over that age.

Somewhere we have met with the strange objection that high feeding tends to the laying on of fat to such an extent that the meat is rendered unwholesome, and therefore the hastening of animals to maturity should not be encouraged. When the buyers say to us that they do not prefer quickly matured cattle, and the consumers that they do not want to eat them, we shall deal with this utopian idea. In the meantime men who profess to be *teachers* of the people should refrain from writing such stuff. The average catu is so far down in this valley of low-attainment that he is sorely in need of all the help that every pen and tongue in agricultural circles can bring to him, with a view to lifting him up to a higher plane.

For the CANADIAN LIVE-STOCK JOURNAL.

Profitable Protection.

(Held over from May.)

In this patriotic and protective age, abounding with opportunity to awaken the weak and strengthen the strong, the average man who gets his living by digging it out of dirt, whether borrowed or owned by him in fee simple, although not yet deprived of the privilege to squirm and twist when trod upon, like his humble servant, the worm, seems to lack the assidu-

ity of purpose and methodical intelligence displayed by the silent subsoiler in reaching the light, and continues to grope in the dark for "a bonnie coo," "a guid bull," or "a fine brod soo."

The Ontario stock raiser is handicapped with a large portion of the population in the position of aliens. He might as well try to understand the heathen Chinese as attempt to hold converse with the agricultural "Canadian Francais"—and despite the praiseworthy efforts of private capital, Provincial aid and practical demonstration, the Province swarms with runts which keep their owners down to a similar social and financial condition. The township show has seen its best days. It may be useful as a bone of contention or flimsy flagstaff to some decayed or aspiring hamlet, but from a financial standpoint there is nothing in it to aid agriculture. It might meet with some antagonism, but it would be no innovation to apply a limited quantity of *genutine* N. P. to stock raising, correcting stagnation, and stimulating home consumption by imposing on every ram, boar and bull, owned or used, a tax sufficiently high to secure attention, collected at any time on demand, or at the same time as the tax on dogs; the funds derived from this source to be applied by municipal councils in granting premiums to pedigreed males of each of the above class of animals owned within the township or municipality.

To create a taste for something better than a scrub and train the eye of the juvenile agriculturist, a good plan would be to hang up in every rural school-house correct illustrations of the various breeds of pure-bred farm stock with a concise description of their respective points of merit. This principle might be profitably applied to other subjects pertaining to agriculture.

J. H.

Rodney, 23d May, 1885.

Our Nova Scotia Letter.

CHANGES IN THE SYSTEM OF AGRICULTURE, ETC.

(Too late for June.)

The late session of the Local Legislature has resulted in two changes in the legislation affecting the interests of the farmers in this Province. The more important is the abolition of the Board of Agriculture, which was composed of one representative elected by the agricultural societies in each of the agricultural districts of the Province, and one member of the Provincial Government. For this Board the present legislation substitutes the Government of the Province, which is hereafter to form the board or council, which will control and direct all governmental activity in the direction of the promotion of the farming interests of the Province.

The old board has succumbed to pressure of public opinion, which was unfavorable to it. This feeling is to some extent an unfair one. The Board has in the past done good service, and has been a valuable institution. It may have outlived its usefulness, but to its memory respect is due. The members did their work practically without compensation, and there can be no doubt that they were for the most part inspired with an unselfish devotion to the cause of agricultural improvement. The other change is in the mode of holding the exhibitions to which the Provincial grant of \$4,000 per annum is given. For the last three years the law directed that on alternate years a Provincial Exhibition should be held, and on the intervening years that an exhibition should be held in each of the six agricultural districts.

The latter are now done away with and in their stead county exhibitions are to be held in each of the

counties of the Province. This is likely to be an improvement. In the case of either District or Provincial shows, the great attendance, particularly of exhibitors, is from the vicinity. Even the more remote parts of the county in which such is held, do not derive nearly as much benefit as do those adjoining. Hence these county shows may be reasonably expected to have a much larger attendance, and a much greater number of exhibitors, than the larger ones. The feeling of emulation is much more likely to be aroused in a man when he finds himself beaten by his neighbor, and the conviction that he can accomplish what he sees done by others is readily reached when he knows that they are men whose circumstances are the same as his own.

The changes to which reference is here made, may or may not prove advantageous. The fact that these are made in compliance with the demands of the farmers is a very important one, which should not be overlooked. Our farmers are being aroused, and the first evidence of their new activity is the criticism of the established order of things. This activity is most valuable and most welcome to all who are interested in the advancement of the farming interests of these lower Provinces. Not unlikely the first result of such activity will be revolutionary. The established order of things may be disturbed, and the dignity of some persons invaded; injustice may be done; even pretentious knavery may rule for the moment, but the end must be advantageous.

The spring in these lower Provinces has been most suitable for the work of the field, and the weather in May has been very warm, more so, indeed, than in some parts of favored Ontario. Seeding has proceeded rapidly, and that work is in some localities completed. The Nova Scotian farmer and, I presume, the same is to some extent true of the New Brunswick farmer, is changing his practice. It used to be a maxim dear to his heart that he should produce some of everything that he required, and practically enough of wheat to supply his family with flour. Many farmers, in face of all discouragements, persevered in that course, and continued to sow wheat when the yield was not above five or six to one, and in many cases much less. The cheap flour of the past year has now convinced even the most stubborn that the lower Provinces, cannot compete with the west in the growth of wheat; and that it is not in their interest to attempt to do so. In fact all grain can be produced so cheaply in the west and transported, too, cheaply by rail and water, that it is seen to be more profitable to confine the crops to the more bulky forage which cannot be transported. The result is that farmers who, following the example of their fathers, had sowed wheat every year, are this year sowing a large part of their land with mixed oats and peas or vetches, and in some cases with wheat to be cut while green and made into fodder. This is a very important step in the right direction. The fellow to it we may hope to see taken soon, and then with two good steps forward the march onward to improvement will have fairly begun. I need not say that the fellow-step is the improvement of the stock. Now that the farmer has begun to produce the most profitable crop, it is only necessary that he should procure the animal which will consume it most profitably. It would be venturing on dangerous ground to say whether that animal is the Shorthorn or the Ayrshire, or the Holstein or the Jersey; but it is safe to say that any one of these is better than the ordinary ill bred and sometimes worse fed "common cow."

A great many farmers will not consider the matter of stock improvement in its proper light. They will not

have thoroughbreds because they are "too expensive," or "too tender," or "require too much care and good feed." They are in nearly all cases quite right. It would not suit the farmer to be a breeder of cattle. The business of breeding must be confined to a limited number, who will not all succeed. The cow for the farmer is the grade—the grade which costs him no more than the common cow, and which is of the kind to suit; and if the "tenderness" which is so much feared, does not appear, may be made so high a grade that it will become a thoroughbred, for all practical purposes. This great work requires for its accomplishment a supply of well-fed bulls and an enlightened system of feeding. The capital required is comparatively small, and in proportion to the results accomplished, really trifling, and a proper application of the facts is all that is required to induce the more enterprising of our farmers to set the example. The more the question of agricultural improvement is considered, the more do we see the necessity for improved stock.

M. R. L.

Pure-Breds at Montford, Shropshire, England.

A correspondent sends us the following facts in reference to this very successful stock-breeding establishment, which we know will interest quite a number of our readers. These in substance appeared in *Bell's Weekly Messenger* some time since:

Mr. Thomas Stephen Minton, the owner, has one of the best flocks of Shropshire sheep in England at the present day, or indeed in the world. The history of the "Montford Shropshires" extends back for upwards of a century, and it was here on the Lordship estate, Montford, near Shrewsbury, that the original Shropshire found a home. In addition to ewes of the "Mathews" blood, on which the flock was largely grounded, Mr. Minton has selected at various times a few choice ewes from Mr. T. Mansell, of Harrington, Messrs. Crane & Tanner, of Shrawardine; Mr. T. J. Mansell, of Madmaston; and also from his brother, Mr. J. W. Minton, of Forton, at his famous dispersion sale, remarkable for the extreme prices realized—notably the ram Lord Clive 742, sold at 160 guineas, and proved, notwithstanding, a cheap sire.

Though Mr. Minton was possessed of a flock of Shropshires for some years before the dispersion of the Montford flock, his purchases on that occasion seem to have stimulated him to greater efforts in improving his sheep; and well have his efforts been repaid, for few young men have been able to get into the first rank of breeders in comparatively so short a time.

The flock consists of 120 breeding ewes, to which have been added one of the finest lot of lambs that have ever appeared at this breeding establishment, and as all the world knows some of these have been very fine. The old eleven-year-old ewe, the dam of Lord Carlisle 153, the finest prize-shearling ram at the Carlisle Royal, is still hale and hearty. So general is the merit of the entire flock and so uniform, that singling out individuals of especial excellence would be a difficult task.

Mr. Minton has just lost the dam of Montford Hero 160, a sheep which secured first honors at the Royal shows of Derby and Reading, and which was let in 1881 to Messrs. Crane and Tanner, and Mr. T. Fenn for 205 guineas.

The rams used last year are Enterprise, a home-bred ram; Magician 1590; Montford Hero 160; Minton's Pride 858; Patriotic 1641, and the Druid, an array of famous animals such as cannot perhaps be found at any one breeding establishment in the United Kingdom. Enterprise is a sheep of great length, with a good head, and excellently woolled. He is by the 200 guinea ram The Patriot 1198, dam by Mr. Mansell's His Lordship 669, hired by Mr. Minton at 80 guineas, and the sire of Cumberland Hero 155, a prize winner at the Royal show, Carlisle, and purchased eventually by Captain Townsend, for 96 guineas. Magician 1590, a two-shear ram, is home-bred, by His Lordship 2d 670 (brother in blood to His Lordship 669), and out of Montford Hero's dam.

Montford Hero 160, is the only Shropshire ram which carried two first prizes at England's leading show. Minton's Pride 858, a ram of remarkable quality, was sired by the 80 guinea Marquis of Bath 822. He was hired in 1881 by Mr. J. Beach at 110 guineas, and let in 1882 to Messrs. Crane & Tanner to serve 30 ewes for the sum of 70 guineas. Patriotic 1641, hired in conjunction with Messrs. Crane & Tanner, is from The Patriot 1198, and the dam, County Member 452, bred by Mr. J. Coxon. He is the sire of Lord Mayor 146, a Royal winner at the International Show of 1879.

At the time of this writing (February last) there were some 35 ram lambs and 80 ewe lambs of the previous spring's breeding, and in addition a few older rams, some of which had been let the previous season at good prices, notably the commended ram at Shrewsbury Royal, by Minton's Pride 858, dam by Milton 843, the sire of Prince Regent 169, the first prize ram at Reading Royal Show, and let to Mr. Matthew Williams for 165 guineas. These lambs are all by some one or other of the following noted sires: Clive Mullum 1402, a son of the 160 guinea Lord Clive 742; Double L. B. 1440, by His Lordship 2d 670; Eaton Sultan 1455 by the Royal prize-winner, Young Sultan 117; Lord P. 1579, a son of The Patriot 1198; Minton's Pride 858; Montford Hero 160, and The Gentleman 1765, bred by Mr. A. R. Mansell, Broughton, and hired conjointly to serve 30 ewes at 50 guineas by Mr. T. S. Minton, Messrs. Crane & Tanner, and Mr. J. Harding.

Mr. Minton has from the first been unusually chary in the selection of stock rams, which goes far to account for his very great success as a breeder of Shropshires.

In addition to the sires already enumerated we may mention Conservative 435, which will long be remembered as one of the most successful and impressive of sires, being the progenitor of no less than six Royal winners, and Baron Plassy 218, a well-bred, shapely sire, hired at 65 guineas.

The general uniformity of character in all Shropshire flocks is a great result achieved, considering how much opinion differed some thirty years ago. It has no doubt been brought about largely by the breeders meeting annually at the great National Show, having thus opportunity of seeing the best specimens from representative flocks, and fixing the peculiar type and character to be aimed at. When Shropshire sheep breeders are able to pitch 875 specimens of the breed at one show, as they did at Shrewsbury, last year, presenting as a whole, a great family likeness, it speaks well for the great care bestowed by the breeders on these essentials in all true breeding "uniformity of type, form and character."

Mr. Minton has met with considerably more than the average success, as may be judged from his repeated victories in the show-yard, notably at the Royal shows at Carlisle, Derby and Reading, and by the very general support which he has received from contemporary breeders at his annual sales, the average for the last four years being as follows:

In 1881 Mr. Minton sold or let 33 rams at an average of £29 1s. 6d., the highest price being 205 guineas, the hiring fee of Montford Hero. Ninety ewes sold at an average of £6 18s. 3d., Sir Henry Allsop, Bart., giving as much as 30 guineas each for the best pen.

In 1882 the 33 rams at Montford were sold or let at an average of £28 3s., whilst the 75 ewes averaged £6 6s. 3d.

In 1883 the 35 rams made an average of £22 3s. 5d., and 50 ewes averaged no less than £9 13s. 9d.

In 1884 the averages were for rams £16 14s. 6d., and for ewes £3 19s., the falling off in the averages being due to the fact that no extreme prices were realized.

Mr. Minton has twice in very strong competition at the Royal shows won the first prize for shearling rams, second and reserve number for aged rams, and a third prize and two reserve numbers for shearling ewes, besides numerous commendations. It was from Mr. Minton's flock that Messrs. Lythall, Mansell & Co. selected at the sale in August last the splendid Shropshire ram for Mr. John Dryden, M.P.P., Brooklin, Ont., which was so universally admired in Canada, and which won every prize for which he competed.

The ewes are put to the ram early in September, so as to drop their lambs at the end of January or in February, the average crop being a lamb and a half or a little better to each ewe. The ewes at this period are kept on the second year's seed, or on a fresh pas-

ture, in which case they go faster to the ram. If any of the rams show inability to perform their work, a teaser is used, and the ewes as they come on are brought up to the ram. Should any of the ewes turn again several times, and the season get far advanced, a ram lamb is resorted to as a last resource, and generally with success.

The lamb's ears are all punched numerically for the purpose of keeping correct pedigrees, and when any of these are passed into the breeding flock, metallic numbers are used.

Only the choice of the ram lambs are kept for breeding purposes, the others being castrated at the age of six weeks or two months. The risk from castration at a more advanced age is considered to be greater. The lambs are usually shorn, as Mr. Minton considers they grow better, are freer from the fly, and do better on turnips in winter, as they do not carry so much dirt. They are usually weaned in May or June, divided into their respective classes, and have a small allowance of peas and linseed cake on aftermath seeds. The wethers are sold off by February, and usually weigh about 20 lbs. per quarter.

Mr. Minton's sale usually takes place in August, when he sells about 40 rams and 80 ewes, thus affording an excellent opportunity for buyers on both sides of the Atlantic for securing choice specimens of the breed.

In addition to the flock of Shropshires, Mr. Minton possesses a fine herd of Hereford cattle, a valuable stud of Shire horses, and a large herd of black Berkshire pigs, and so good is the all round character of his stock that the Royal Agricultural Society recently awarded a special prize to Mr. Minton for the exceptionally high character of his live stock.

The Hereford herd comprises about 100 head, of all ages and sexes, all of which are entered, or are eligible for the Hereford herd book. The bulls in service are Assistant 6788 (half brother to the renowned bull Archibald), bred by Mr. Aaron Rogers, by Osman Pasha 5489, and Launcelot 7772, by the 810 gs. bull The Grove 3rd. This bull was purchased at Mr. Philip Turner's memorable sale in the autumn of 1883 conjointly by Messrs. Crane and Tanner and Mr. Minton. Assistant 6788 has proved himself a wonderfully good sire and his two-year-old heifers are splendid specimens of the breed, very full of flesh, shapely, with abundance of hair, and well grown. England's Glory 5314, bred by Mr. W. B. Peren, of Compton House, by Chevalier 3746; Prizeman 4603 bred by Mr. Green, of Marlow; Vanquisher 5102, a bull also used in the herds of Mr. Green, of Marlow, Mr. J. Bowen-Jones, and Mr. J. Harding, bred by Mr. John Crane, by Vendome 4225, dam Empress, by The Colonel 4180; Early Purl 3084, bred by Mr. J. Harding, by Symmetry 2799, and tracing back on the dam's side to the late Mr. Knight's Cherry, were used previously to the two bulls alluded to, and left some good stock behind them. Many of the cows are exceptionally good; true to the characteristics of the breed, and in sound, healthy breeding condition.

The Shire horses, though not numerous, are excellent, and the fact that Enterprise of Cannock, the champion horse at London last spring, and sold for 1,000 gs. to Sir Henry Allsopp, Bart., was bred at Montford, is indicative of the class of horses which Mr. Minton is possessed of. The dam of this celebrated horse is still at Montford, looking as fresh and useful as ever, and heavy in foal to Mr. Shaw's horse, Adam 65. Mr. Minton has several mares in the Stud book, most of which are breeding to England's Boast 2770 or Adam 65.

The Berkshire pigs complete the live stock, and they are very good. They are all eligible for entry in the Berkshire Herd Book, and they number about 70 head, principally bred from the well-known stocks of Mr. C. H. Basset and Mr. Ashworth, the sire recently in use being Sambo, from Mr. Russell Swanwick's stock. The best are readily sold for breeding purposes, the remainder being fattened and sold for pork.

Shearing and Trimming Show Sheep.

This may be termed the shepherd's fine art. The sheep should be clipped as early as possible, but not before they can be shorn on the new wool. Blocking them out on the old wool is often done, but it must be remembered that any old wool left may disqualify a winner.

Begin by making a sheep stand in a perfectly natural position, letting it be held the while by an as-

sistant. Then proceed to cut into the wool at the tail head level with the back. Clip along the centre of the back, making it as level as possible, and not too bare. Then the point of the shears may be turned down the sides, commencing at the head, and working from head to tail gradually down to the belly, which last it is best to shear first, turning up the sheep for the purpose. The shearer must thoroughly understand the shape a perfect model of the breed he is dealing with should be, and, ever keeping his head and eye in concert, will make good or bad work according to his knowledge of the art.

Trimming is dressing or clipping from time to time of the already rough-shorn sheep. They may be trimmed once a fortnight up to the last, when they may get an extra or final trim a week or a day, according to the breed, before the shows. Before they are trimmed they should be washed, but too many washings are not advisable. Two washings are as much as are necessary, and for some breeds once is sufficient. Choose a bright forenoon for washing and then there is no fear of a chill. Soft soap, and water slightly tepid may be freely used, rinsing off with clean water. Three or four days should elapse between washing and trimming, so as to give the wool time to set. If trimmed too soon there is a danger of cutting holes in the fleece, which can never be taken out again without much hurt. The first trimming should only be to mark or cut out the block in rough shape. As the wool grows, opportunity is afforded to give the final mould and polish.

To be able to trim well, it is necessary to be a good judge of sheep; but the quickest and surest way of becoming a good judge is to practice trimming, and unless a man can trim, and understand trimming, he is not by any means fit to be a judge.

There are some very dexterous hands with the shears, and the art they can display is very fine. We have seen a ram bought at a public sale and handed over to one of these skillful operators to be trimmed; after which it was put back into the same sale-ring and sold the second time the same day at an advance of ten guineas.—S., in the *Agricultural Gazette*.

Defect in our Cattle Quarantine.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

SIR,—Reading through the report of the "select committee to inquire into the agricultural industries," I came across the answers of several gentlemen to questions put to them by the committee regarding the cattle quarantine at Quebec, and was much struck with their unanimity of opinion, both as to its present efficiency and the absolute importance of maintaining that efficiency. They one and all appeared to think the present is satisfactory; but it would be a matter of interest to know whether their conclusions are based upon hearsay, visits of cursory inspection, or upon practical experience in quarantine. If based upon the latter, they would have noticed a peculiar anomaly which they appear to have overlooked. Cattlemen tending stock are very properly not allowed to enter each others stables, nor to go down town, or outside quarantine with their working clothes on; but these two rules, as inviolable and unalterable as the laws of the Medes and Persians, are, it seems to me, effectually nullified by all changing their clothes and hanging them up in one little room. For instance, I have cattle diseased, it may be, in No. 1 stable; Mr. B. has cattle also diseased in No. 2 stable; Mr. C. has healthy cattle in No. 3 stable. I feed my cattle and hang up my working clothes; B. comes in and hangs up his near mine; C. comes up from Point Levi to feed his cattle, hangs up his town clothes near ours, and goes into his stable with clothes which have also been near ours. We can all have a chat in our working clothes in this room, perhaps a wrestle, and bring each other's clothes into close contact. But that is all right; but it is little short of sacrilege for me to go into B.'s or C.'s stable, or to go down town in my working clothes. If infection

can be carried in clothes, it seems to me that quarantine is little else than a mere farce. I should be loth, sir, to make such a sweeping statement, but I cannot clear my mind from that impression when I am made to understand that there is danger of me carrying disease if I enter another man's stable or do not change my clothes before going down town, while it is not dangerous for me to hang up my clothes in company with the vestments of the other cattle-men. If disease should happen to be in quarantine, and it is thought necessary to propagate it, here you have a very suitable hot-bed.

This may seem a small point; but, sir, it is one link in a chain. Our quarantine is the largest link in the chain which at present holds open the straining door of England's market to the Canadian producer; this link broken, that ponderous door will at once swing shut, and Canada will be placed upon the scheduled list, from which she alone is now exempt, which will enforce the necessity of slaughtering her cattle at port of entry instead of having her store steers sent directly into the interior of England to be fattened. Exporters know how much is here involved.

Our quarantine has the reputation of being one of the best on the continent, at an annual expense of some \$20,000, I believe. It remains for breeders, importers and exporters, to say whether our quarantine is to be an effective institution for the prevention of disease, or a useless absorber of the public funds for the spread of it; it is regarded by some of them as a useless incubus upon private enterprise. Let those who know say whether it is or not, and let practical men demand that it be given the substance of utility, rather than the shadow of reputation, and that before disease has ruined our stock, closed our markets and allowed cynical critics to cast into our teeth the truth that our former immunity from disease was due more to good luck than to good management.

CATTLEMAN.

If the fact is as stated by "Cattleman," and we fear it is, it is no doubt a weak point in that excellent institution. We would have been pleased had the above writer gone a little further and given us a remedy. Would he have separate wards in which each herdsman would keep his clothes, or one in each of the stables? The latter would appear to us to be the safer course. We have no doubt but that our Legislature is desirous of making the quarantine as perfect as possible, and the weakness referred to in the letter of "Cattleman" has, it may be, never occurred to the authorities. Anything relating to the prevention of the spread of disease in such a place cannot be remedied too soon.—ED.

British Polled Cattle.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

My attention has just been called to an article on British Polled cattle, in your May number, by R. C. Auld, late of Tillyfour, Scotland. Mr. Auld writes about Horned Galloways. He might just as well have added Polled Herefords and Black Shorthorns. Mr. Auld never saw such a rare quadruped. He never saw any one who did. That there were and are horned cattle in the district of Galloway is well known. When Mr. Auld says: "There were always these two distinct kinds in the north, on the other hand, in Galloway there has always been only one kind," he has either been misinformed or writes without having had any information on the subject. It is not a matter of history, as he alleges, that not very long ago the Galloway was a horned breed. On the contrary the Galloways are the oldest polled breed in Britain; I believe the oldest in Europe. Let Mr. Auld bring forward his proof to the contrary, which he says he has. I know that Aiton says there was a tradition that in olden times there were Galloways with horns. This has been copied by many writers who had no opportunity of examining the subject for themselves—even by Mr. Gillespie, of Mouswald; but when he examined the matter he found the mistake and writes: "They not only are now, but have been from time immemorial, polled or hornless." Prof. Low, of Edinburgh, in his valuable work on the domestic animals of Great Britain, mentions this report, and says: "Some earlier notices rather conduct to the conclusion that the absence of horns has been for a long period a distinctive characteristic of the race."

Then as to the origin of the Galloways, one writer says: "An allegation has never been made in any well informed quarter that the Galloway is not an original and distinct breed of cattle." This is quite true still Mr. Auld says: "They are descended from probably the most mixed race imaginable." But then, in saying it, he gets decidedly *mixed* himself. He moves the whole breed away down to the borders and gives them what he calls "an eternal crossing and re-crossing with the north of England breeds, then with Irish, with Shorthorns and with Highlanders." He then asks, "What were they like?" That would be hard to answer. None of that kind were ever known in Galloway, and it is my humble opinion that none ever existed anywhere except in Mr. Auld's mixed imagination. Very different were the Galloways. Going steadily year after year in thousands to the markets of the south in the 17th and 18th centuries; mentioned in the 16th as being celebrated for their excellent beef, dotting the Galloway hills and grazing among the marshes in the 13th. Black and comely even then. But why go back for centuries? We have the proof here with us, to-day. The Galloway carries it with him wherever he goes. No animal of any domestic breed is more potent than the Galloway. None has such fixity of type. This is being proved on the plains of Kansas and Texas—by the side of the canons of Colorado, among the rich pastures of Ontario, and on the broad pampas of South-America. Look at their get; compare the crosses from the Galloway with those sired by any Polled Aberdeen, and see the difference. The proof is there—proof that can not be gainsaid. No Galloway has any trace of horns or scurs, and you may travel for days and weeks among the herds of Galloway and look in vain for a scur. It is not so amongst the Polled Aberdeens, which any one may verify for himself by actual examination. The Polled Aberdeen-Angus are a noble breed, but they have to go behind the Galloways in several points; and just here is one of them. Mr. Auld sneers at the Galloways as "rustlers;" but last winter out west they "rustled" through where many of his favorites left their bones to bleach. This spring at public sale they "rustled" out ahead of the Polled Angus. At Dexter Park, Chicago, 21st April last, 41 Aberdeen-Angus averaged \$265.79, while at Kansas City, a few days before, 50 Galloways averaged \$287.10. Even such an one as Mr. R. C. Auld has to acknowledge that "the Galloways are such good cattle to graze." Yes, they are good to graze. They are *the* cattle for the plains. They are *the* cattle for the ranche. They can live and thrive and make beef where the Aberdeen-Angus would starve. And if they do not all shew their fat in the show-ring or put it all outside, giving the "mellow" touch, they put it where it is of more use, and on the block they give more good, wholesome, nourishing, eatable beef than many pampered Aberdeens.

D. MCCRAE.

Live Stock Notes from England.

(From our English Special Correspondent.)

The whole position of the trade in live-stock of every kind, from the most valuable of pedigree breeds down to the commonest "grade" beasts for immediate fattening, has been domineered by a sudden drop in the prices of meat, which was brought about last autumn. This was mainly caused by the steady introduction of cargo after cargo in quick succession of refrigerated mutton consigned from New Zealand and Australia, and which came on the top of the American supplies. The latter had gradually been absorbed without seriously diminishing prices to the British consumers, but the two together quite upset markets, especially as the last winter witnessed a continuation and even a deepening of the stagnation of manufactures and of general commerce. This depression threw thousands out of work and diminished seriously the purchasing power, in the towns, at the minute in which extra supplies were steadily pouring in, to markets already full. Both beef and mutton became quite a glut; and those who had, after the common practice, bought in store beasts and sheep, in the late autumn, to consume the root crops, found no small

difficulty in April and in May in selling out their purchases after they had eaten all the turnips, mangolts, and most of the hay grown on the farm, in the previous season, for the same money which they had cost to buy in lean in September or October. In plain words, the green crops of 1884 had to be nearly given away by the growers, who at the same time found the price of cereals range low, almost beyond all precedent. The prospect of a war with Russia gave, for a week or two, a fillip to the price of wheat; but the "scare" has passed away, and good samples of English cereals have again fallen back to the low level of 1844-45. It can scarcely be any matter for surprise that throughout the spring of 1885 the general characteristic of all sales of live-stock of every kind has been dullness, few bids and those at low figures.

There has scarcely been an exception to this rule. The ordinary markets for what may be termed (as distinct from full-blooded stock for breeders) commercial beasts—have been farther influenced unfavorably by the unusually cold spring. The grass has not come at the usual period, and but for the cheap rates at which oil-cakes and other foreign feeding stuffs have been selling, it is believed that many sheep and cattle would have been brought in 1885 to starvation point. Both were for several weeks almost unsaleable; for their owners had little to give them, except purchased food; and to buy this, money was especially scarce. The tendency of all stock, therefore, has been downward in value, from the opening of the season for pedigree sales with the great show of Shorthorn bulls at Birmingham, down to the end of May. England, Scotland and Ireland tell the same story. Where any means of comparison exist with last season (itself not a brisk one), it can be shown that cart-horses for stock purposes, have been selling at 40 per cent.; breeding cattle at 20 per cent., and sheep at 10 per cent. below the reduced rates of twelve months ago.

And yet so large is the accumulated wealth of this country, and so prone, even at the worst moment, are Englishmen not to despair of the commonwealth, that already the few warm days and kindly rains in early June have caused a slight reaction. The best sale by far has been that of cart-horses, this spring, held for Mr. Walter Gilbey's. This was a draft from the store of Shire-breeds kept at Elsenham, Essex. His (Mr. Gilbey's) sale in February, actually went off briskly, for there were but a few lots, and most of them good. Great hopes were created by such a beginning; but the fine show of Shire-breeds at the Islington Hall, a few weeks after, sufficiently established the fact that, though there might be buyers for the best colts and fillies, they were very few; for any little increase in the number to be sold at once depressed prices wofully. And the same proved to be true of Shorthorns. The Irish sales were lower than in 1884; and the recent auctions of the very choicest Bates cattle, at Hindlip and Rowfant (Sir H. Allsopp's and the late Sir Curtis Lampson's) could hardly be prevented from being turned into a mere scramble. For lots of Duchesses and Oxfords, the biddings did not so much fall as fail to appear. At Hindlip, especially, people seemed afraid to make an offer, and a few buyers from Canada and the United States had the very best of the cattle at their mercy. At the sale at Rowfant, a week afterwards, there was a visible rally. Prices did not, perhaps, improve very much; still, there was a price forthcoming, as soon as every animal entered the ring, and a feeling, already general, seems to be extending itself that "things have seen their worst," for any well-bred stock of a favorite breed. It has not been with Short-

horns only that trade has been difficult. The fine herd of Hereford cattle, sold at Leinthall went slowly and badly; and the few auctions of Aberdeen-Polled in 1885 must cruelly have disappointed the vendors. Jersey butter-cows have never in England met with the inflated prices which have been reported from America. Still it seems right to say that the auctions of these and of what may be termed general-purpose Shorthorns, have sustained old rates (*i.e.*, the rates of 1884), better than have any other sales of stock this spring. Writing in the second week in June, the opening of the season for summer exhibitions of agricultural stock has given us the most hopeful symptoms of the year. Devonshire, Oxfordshire, Essex and Bath and West of England (at Brighton) have already had their shows; and all have received no diminution of entries, and, when the weather has been at all fine, there has been no diminution in the attendance of visitors. This fact tells us that the means to bring out animals in high condition are not yet exhausted in England, nor is the interest taken in them by the public; nor has that public's pockets got so empty that it cannot find the means of enjoying a holiday. There are persons who decry the modern show system, and who deny that it has any beneficial influence upon agriculture. That the show system in England has been deplorably abused is quite certain. That the managers of the principal societies have shewn themselves comparatively indifferent to everything but the gate money, is an assertion for which too much evidence can be produced to allow it to be successfully gainsaid. Yet let this be put to the credit of agricultural exhibitions; in the very worst of times (and times cannot well ever be worse for the landed interests in Great Britain than they have been for the last six months or than they still on the surface appear to be), the agricultural exhibitions have at least served to keep up heart. They have brought into the front the very facts we want most of all to remember, that we have in England breeds of fine animals, so fine that it is impossible to see them without admiration and surprise; and that the number of persons who like to see them is an increasing number, and a body of folk whose appearance tells us they all are of comfortable, if not affluent, circumstances. If these facts be true, who can question that, with a revival of the great manufacturing trades, the trade in country produce will revive? For it is plain that what is keeping down the value of land to sell and farms to hire is not any distaste for country pursuits, but a temporary want of means to indulge in them.

G.

A Visit to Eastwood.

THE FARM.

Sixty years ago the county of Oxford was mainly settled by retired officers of the army and navy. They held high carnival and dissipated their capital in unproductive ventures: and few indeed are their representatives left in the county to-day. Among them none was better known than Admiral Vansittart. A fine old sea-dog the veteran was; and his bank-book being happily of most bloated proportions, he was able to carve out such a residence in the forest as few of his contemporaries were able to match. His son and successor lost his money and the property in lumbering speculations, and died of a broken heart. For many years the estate lay at the mercy of every vandal and pilferer who chose to invade it, and those who wanted a "stick" for building or other purposes merely dropped into the Vansittart property and took it. The mortgagee was in England, and his tenants never paid rent. The fences went for firewood, and rack and ruin set in. But meeting this mortgagee in

England, one day in 1867, Mr. T. C. Patteson, the present proprietor of the estate (in all 725 acres), made a bargain and took possession. After some years of leasing experience, not very different from those of his predecessor in the ownership, he found himself compelled either to occupy or abandon the place; and he chose the former, believing, as he told us, that the groundwork of a beautiful place was there; that order could be evolved out of chaos, and a home worthy of the old Admiral's intentions gradually made out of the debris and confusion reigning on all sides. The task was one requiring courage and determination.

We propose to show how Mr. Patteson has discharged it. A hurried survey served to convince him that about ten miles of new fencing and forty gates were needed at once. The bush still contained material for the job—pine, cedar, ash and hemlock—and the contract was forthwith given out; and after ten years' trial he gives the preference to the straight rail fence known in England as a Leicestershire "post and rails"; but carried to perfection, he says in Pennsylvania, where he obtained the machine for boring the posts. Of this there are between two and three miles surrounding the park and the fields adjacent to the residence. The entire boundary fence is of capped boards. As we said in a nasty note made last fall, the arable part of the farm is literally cut out of the forest and is a square lying with a belt of woods on all sides of it. Neither stumps nor stones nor sticks, nor rubbish of any kind is allowed to accumulate. It is the motto of the proprietor never to cross a field without doing some good in it. Armed with a sharp, heavy hoe, able to jerk out a stone, cut a burdock below the crown, clear the outlet of a tile drain, or distribute cattle droppings, the indefatigable owner is "all over the place," and the place responds, in the neatness and perfect tidiness of all its surroundings. The march of improvement is conducted on prudential principles; no rush to do everything at the same time, but something always in hand. We found some immense hemlock trees being chopped and stripped of their bark, the bark paying for the cutting and sawing of the trees. These are for a new barn to be erected before the haying of 1886, and for which the stones are being gathered by return teams passing the several points where stray boulders have been heaped. The sum of \$200 per annum is expended in tile draining, and those drains which we saw gave evidence of "drawing" full interest in the shape of what would otherwise be stagnant water. One of Rennie's patent ditchers, worked by four horses, is now in operation, and is expected to pay for itself in two years. Perhaps the most remarkable feature of the place is a drive a mile long, entirely constructed by the owner and his friends through a partly open, partly cleared bush, one hundred acres in extent, of maple, beech and second growth hemlock. The fallen branches and old stumps have all been carried back out of sight, and a carriage-drive trimmed with a heavy iron hedge-cutter which was got at Sheffield, and is warranted to go through a bough as thick as a man's arm, or lop a twig as light as a feather. The pasture in this hundred acres was going to waste when we saw it; but the herd of thoroughbreds and the sheep were to have access to it the next day. Here run the water-courses beneath the leafy branches much as they ran at creation's dawn, save that they have been bridged by the tireless graduate of Oxford in a beautifully rustic way, and entirely with his own hands. The bushy heads of the leathery-like moose-wood adorn the endless vistas, and the immense bodies of the patriarchal hemlocks of a former generation serve the purpose of

practicing young saddle-horses in hurdle-racing, and along with the endless forms of forest life that grow above them "lend infinite variety to the scene." Indeed, it is almost impossible to say too much of the sylvan beauties of this drive through the bush where the owner has busied himself for years with all the tricks of landscape gardening. Not that it must be forgotten how short a time Mr. Patteson spends on his property. He was editor of the *Mail* when his family first went to live at Eastwood, and has since been postmaster of Toronto. Never getting to the farm before Saturday evening, and always leaving it on Monday at noon, he cannot be said to neglect his official duties, as the brief visits just mentioned, with statutory holidays and his annual three weeks' vacation, are all the time he "puts in," where we may be sure he would always like to be. His description of opening a telegram last December from his foreman, which read, "Big barn a total loss—cause of fire unknown," is quite pathetic. Seldom a week passes but some casualty or loss has to be reported, and the life of a non-resident owner is not free from anxiety. He and his foreman exchange letters every day, and a perfect record of every man's work is kept in writing. A few days before we paid our visit the annual instalment of Shorthorn bulls for the Globe Cattle Company's ranch in Dakota had left Eastwood, 80 in number, which were received from all parts of the Province, and re-shipped without mishap of any kind. Thirty-five of these were fed and wintered at the farm, their feed and bedding all being cut, and the resultant "pile" goes on to the meadows, a better sort of stall feeding than fattening beef cattle for export, Mr. Patteson says, and till last year, when he began the collection of young bulls, he had always tied up steers, having been the first shipper of these to England on his own account via the Intercolonial Railway and Halifax; net result, £3 a head loss. Mr. Patteson has also been a large shipper of horses to the old country, and may be said to have inaugurated that branch of Canadian industry.

Racing, cricketing and shooting all come within his experience, and pictures and trophies of the sports he loves so much surround one in profusion all over his house. This is a square brick building in the middle of the property, substantially built and crammed as full as some museums with objects of interest to the visitor. Indeed, if a "smart" man allowed himself two or three days to see Mr. Patteson's property outside, he would require the same time to make an exhaustive inspection of the interior. Pictures in hundreds, including the whole racing family descended from Whalebone, which his little ten-year-old girl recited to us in their generations, pointing to each animal as she named it, with her parasol. The hall is furnished with old black oak cabinets, chairs and tables, which the owner's father got from a manor house in Hampshire, where Charles II. slept the night before he crossed to France. These relics are of almost priceless value, and the Jew picture dealers from London made things pretty hot for Mr. Patteson's representative at the sale at the old English homestead, which took place after his father's death. But the order had been cabled to "buy all the old oak furniture," and it was done accordingly. The walls of the hall are hung with cattle plates of the various breeds. Another room is devoted to horses. The dining-room walls are covered with Alken's sporting prints, Sir John Dean Paul's masterpieces, the old H. B. sketches, and a choice collection of valuable prints of Eclipse, Highflier, and many other famous horses jotted in our note-book, besides the portrait of the Durham white ox, live weight over

3,000 lbs., which served to advertise the Colling herd of cows, then known as Teeswaters. The mantle-pieces are all covered with old china and bronzes, and everywhere are evidences of the owner's expressed determination to make the place a home for his wife and children of which they may feel proud. It is not everybody that would have had the perseverance to get together so many curiosities. The whole house is hung with double windows and mosquito-bars in the sash; the walls are two feet thick, and the kitchen, laundry and offices are on a scale worthy of the traditions of the Vansittart family, who were great people in the county of Berkshire, where the present head of the family lives in his ancestral abbey on the Thames, in the historical village of Bray. All this, we gathered from the voluble talk of our host as we made the tour of the premises, and we made a mental note that the good lady who looked after this attractive home, must have a head upon her shoulders. It would be almost impossible to amplify with the space at our disposal all the notes we made, but we must touch on a few. At the farm house there is an echo which probably is unsurpassed for distinctness, for though there was a high wind blowing during our visit, its repetition of what was said to it was marvellous. On a chestnut tree opposite the hall door is a bright brass shield, which tells the story, in a Latin inscription, of the burial of the famous old thoroughbred brood mare Liberty, and other equine favorites, beneath its branches.

We saw the site of the original Vansittart house, which is said to have covered about an acre of ground, but which, unfortunately, fell a prey to the devouring flames long years ago, which led to the erection of the present dwelling.

The Vansittart estate extends to Eastwood, about a mile and a half to the southeast of the farmstead. The drive to the latter is therefore entirely through the estate, and is one of the most beautiful in any country. It is fringed with the most luxuriant forest trees, such as the county of Oxford alone can grow, each one of which is a widespread pyramid of living beauty, and of proportions so unique as to have drawn forth expressions of wonderment from even the non-poetical prime minister of Canada.

Nature has been very lavish with her gifts to this singularly favored highland of Blandford, embracing as it does within the limits of the farm almost every variety of soil, and hence the great variety of the crops which it will grow. Its rich valleys replenish the watercourses, and from some of its hills are dug gravel for the private roads. And as it lies 750 feet above the lake, the region is an object of the special care of the aqueous element which falls down freely upon it in summer when other portions of the country are parched with drought. The morning of our visit a heavy shower had fallen, which drew from earth and plant and tree those grateful odors which lead one to mourn over the sorrowful truth that cities with their dust and din and unwholesome uninspiring vapors are a necessity. We never weary in contemplating the upland glories that lend a grandeur to the surroundings of Hillburst, that is peculiarly its own. The vision of Point Cardinal with the majestic St. Lawrence in the foreground, the many voices of which are now making sadder requiem for the loss of the late lamented owner, at once a statesman, stockman, gentleman, and best of all; a man, is ever rising up before us. We often think of Eastview, which looks across the varied life, and scenes of many townships, but for richness of quiet beauty, with its multifarious forest features, we give the palm to the Vansittart estate. We have not found its equal in this

respect in the highlands of Fickering, nor amid the bold undulations of Wellington, nor in the fertile lands of German Waterloo. And we observe that Mr. Phipps, in his work on forestry, expresses the same opinion. O thou living wall of forest trees, who would not like to live long life within thy encircling bowers!

THE STOCK.

The herd of Shorthorns numbers about sixty-five, registered in the B. A. Herdbook, and Mr. Patteson annually compiles an interesting catalogue of his own. His first purchase was in 1874, when he got Ruby from his neighbor, Mr. Chambers, she being by Napier [1824] a son of Mr. Place's early importation, Lord Barrington 2d (13171). She was a massive, well finished cow, and her dam being by imported Wolviston (2025) out of the cow Ocean, calved at sea when her dam Melody was on the way to Bishop Fauquier's farm, near Woodstock—there was nothing to find fault with on the score of breeding. He went to another neighbor, Mr. Horner, of Princeton, for his bull, which was of Bow Park and Cochrane blood. From this modest beginning he soon launched into weightier undertakings. He attended a sale at Mr. James Cowan's, of Clochmoher, near Galt, and purchased largely of the Constance's Duke blood. This bull, bred by Senator Cochrane, was $\frac{7}{8}$ pure Duchess, and the beautifully cut heads and necks of many of Mr. Patteson's herd are traceable to this Bates' foundation, which has been liberally topped with Bates' blood procured of other eminent breeders. The two young bulls at present in service are Serapis, a son of Mr. Attrill's 6th Earl of Antrim, from Seraphina 6th, a Sanspareil cow, bred by Mr. Stone, and Connaught Ranger, the latter youngster being a terribly high-bred fellow of incestuous origin. He is by the imported bull Wild Eyes Connaught, from Fame III, she by imp. Wild Eyes Connaught, from Fragrance Filligree 2d, by imp. 2d Duke of Wootton (33760), from Fragrance Filligree by 8th Duke of Thorndale (33,741), from Oxford Fragrance by Royal Oxford (18,774), etc. Fame III was bought in Kentucky by Mr. Richard Gibson, and in his catalogue Mr. Patteson says he got her "on the chance of her throwing an inbred bull calf to the son of the costliest bull ever sold in the world, Duke of Connaught (33604), bought from Lord Dunmore by the Earl of Fitzhardinge for \$23,000, a sum which he fully cleared by outside services, when at the head of the Berkeley Castle herd." He is a red bull, 15 months old, of massive proportions, but not fed to please his owner, who complained that he was out of shape, having too much paunch and not enough on his back. We agree with this opinion, somewhat forcibly expressed to the foreman in our presence, and the workmen will probably make a note of it. Mr. Patteson pointed out a handsome red heifer named Galatea, by 6th Earl of Antrim out of Gunhilda, she by 8th Duke of Airdrie from a cow by Grand Duke of Cambridge from imp. Genevieve. This 20 months old heifer is a very solid animal, and many of the cows which we saw dotted about the pasture near the house can only be characterized by the same epithet. One cow he showed us which he said in shape and make was the image of the Durham white ox, while in color she threw back to the yellow red and white of Hubback. A charming red heifer, Aurora, with her first calf, especially struck our eye, and for neatness and finish she would be hard to beat. She is by Constance Duke, a son of Craig's pure Bates' bull, Duke of Elmhurst, out of Ora, by Constance's Duke, and has thus two crosses of the Constance family, whom she favors much in her appearance. But it would be an endless job to go

through the herd, as we stirred them up one after the other from their lairs in the rich green pasture. Mr. Patteson will supply his catalogue, which is really a little treatise on Bates' Shorthorns, to all enquirers. There were fifteen 2-year old heifers in the field next to the cows and calves, which latter run with their dams till they are weaned. The milch cows were in a field by themselves, and on the other side of the farm the owner took us to see about 40 head of steers and grades, remarking that a few years ago such a bunch of cattle would have been supposed to be a group of thoroughbreds, as indeed they looked to be. Two of the steers had been altered for smutty nose and are in the B. A. herdbook; and all the rest, excepting a "runt," kept as a foil and which came from nobody knows where, would have found a place in the herdbook in the old days. In addition to the two bulls at his own place Mr. Patteson keeps a bull, "Larry," bred by Mr. Carpenter, of Simcoe, at the lower farm, for the use of the villagers and people living along the Governor's Road. We had nearly omitted to say that in the park we noticed two high bred Jerseys, got from Mr. Snell, but they belong to Mrs. Patteson and her husband expresses the utmost contempt for them. They make a pretty picture though when framed, as we saw them in one of the vistas lying open to the view from the house verandah. But if Mr. Patteson is proud of his herd, it is in his flock of Shropshire sheep that his heart is really to be found. Taking a siesta under a noble maple clump in the park were 200 ewes and lambs, probably unsurpassed in this country; in the orchard are 40 yearling ewes, and in what is called the "hospital" paddock, a V shaped enclosure, coming from the barn to the foreman's window, were a dozen rams, representing new purchases and the overplus from last year's crop of ram lambs. The flock is improved from time to time by purchases from the best sources, and it is the owner's intention not to stop till he has at least 500 on the place. The first importation of ewes was made by Mr. Patteson in 1882, as stated in the catalogue, and he selected them mostly from the famous flock of Mr. Parry, in Worcestershire. The next year a still larger importation of ewes, bought from the flocks of Lord Chesham and Lord Willoughby de Broke. The Parry ewes were from rams bred by Mr. Beach, and with them had come a ram from the flock of Mr. Armitage, of Ross, Herefordshire. Before the arrival of this ram there had been used one bought of the Ontario Experimental Farm and got by the imported ram Nocks, from a ewe bred by H. R. H. the Prince of Wales. The property is eminently suited for sheep husbandry, the undulating nature of it being perhaps best conveyed to our readers by the assurance that though there is no high hill upon it, Mr. Patteson found great difficulty in providing his son with a level cricket patch of say 30 or 40 yards. Year by year the improvement made by the sheep on the natural grass pastures over which they roam is noticeable, and the land is less prone to turn up under the mid summer sun. "In verdure clad" was the general impression left on our mind after surveying the pastures, and allowing for the exceptionally propitious season we are satisfied that Mr. Patteson's system of top dressing and hard harrowing is the right one. "Feed the land and it will feed you." On the day of our visit the scraings of the cattle yard had been carted to a knoll in the park and harrowed in just before a deluge of rain fell, and though the sheep fight shy of it while the ground is newly stained, there will be a velvet carpet of sod on that knoll next September which will be one of their favorite feeding grounds. Mr. Patteson has also provided a pamphlet on Shrop-

shire sheep with details of his own flock, for gratuitous distribution. By this we learn that he has made several direct importations, and his purchases from the Brydges' estate, Mr. Hurd and Mr. Dalton McCarthy, are well known. In the second volume of Picturesque Canada, p. 500, after a long description of Admiral Vansittart's home, taken from Mrs. Jameison's "Winter Studies and Summer Rambles," the huge undertaking of the present proprietor to make the most of the natural beauties described by the talented authoress is curtly disposed of as follows: "The Admiral's demesne is now the residence of a famous breeder of race horses." We believe that it is many years since there was a thorough-bred hoof on the place, and certainly Admiral Vansittart and his sons bred many more than Mr. Patteson ever attempted to raise. Still, a man as fond of horses as the chairman of the Ontario Jockey Club is bound to have some celebrities to look at. In the so-called garden paddock was a 3-year old chestnut gelding 16.2. got by Master Morgan, from a daughter of old Rysdyck's Hambletonian. There was a Shire filly just a year old. There was a mare by combination, still the property of H. R. H. Princess Louise, and by her side a horse foal by Chicago Volunteer, and this we believe is getting as near having anything to do with trotters as Mr. Patteson has yet gone. The carriage pair which were at the station included a powerful bay mare 16.1. which should be running in a landau at Newport. A pair of 16.2. chestnuts took us away in the afternoon, which Mrs. Patteson thought it a very ordinary responsibility to drive back from Woodstock with the children and governess behind her. The farm horses all have size, pace and quality, and though they look thin after their spring campaign, they are hard and in good working order, of a pattern applicable to road work as well as to plough and harrow. And talking of road work reminds us of another kind of roadwork on which the proprietor made some peculiarly sarcastic remark. He had been ready to give a cheque to compound for his 28 days' statute labor, but his foreman had warned him that the men would be much disappointed "if they lost their annual holiday." The farce, he said, would be ludicrous, if the results were not so absolutely detrimental to the best interests of the residents. A reasonable road-rate, reasonably expended, would add to the value of every farm. Facilities for reaching the market town would be increased, and if the Local Legislature had any task more peculiar than another coming within their duty and jurisdiction, it was to abolish statute labor and turnpike roads, both of which were anachronisms which the country had outgrown.

Reply to Mr. Dryden re the B. A. S. Herd Book.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—The announcement of the fact that there are impure pedigrees registered in the B. A. H. B. has apparently been a sudden revelation to Mr. Dryden, and doubtless to many others of his association. But he clearly does not yet comprehend the extent of this unhappy (though avoidable) affair.

I should certainly have been foolish to accuse his association of fraudulent design had the pedigrees referred to been "cooked" by the presenter, though even in that case they would be far from blameless, as it is their duty to see that no "cooking" takes place. Would it not, I ask, have been a very easy matter to detect the errors in the case of "Prince Alfred"? But I assure Mr. Dryden that I know whereof I speak, nor have I spoken without first weighing every detail.

Mr. Dryden is inclined to believe that I am no breeder at all, on the ground that I do not know that the person presenting the pedigree "signs a solemn affirmation that it is correct." I am surprised that

he should think any one but a breeder capable of detecting what he, the first officer of the B. A. Association, has failed to discover. And much more surprised to learn that he does not know that there are scores of pedigrees registered in his H. B. that were neither signed nor presented by the breeder. Who, I ask Mr. Dryden, presented for registration pedigrees of animals bred by such departed breeders as Hon. A. Ferguson and Hon. Geo. Brown? Where does his association get those pedigrees, and why are they registered in their H. B.? Do they not copy them from the C. H. B., because the animals, without an acceptable number, have been used in pedigrees sent in for registration? With such pedigrees I class that of Prince Alfred, whose breeder could no doubt enlighten Mr. Dryden on this subject, as if I mistake not, he is still within communicating distance. That this pedigree has become, as it is through any other than fraudulent design, I should be happy to learn; such, however, is not likely to be the case, as I have, through mere accident, obtained information which clearly proves that it was altogether unnecessary for the presenter, if such there was, of Prince Alfred's pedigree to at all trouble himself about the "cooking" of it. This information is of such a character that I deem it unadvisable to submit it to the public.

But who, of the B. A. association, is to blame for this lamentable affair, it does not become me to say, even if I knew. I leave this discovery for Mr. Dryden, to whom it rightly belongs. I ask Mr. Dryden if the owners of such cattle, knowing them to be as they are, and those who allow them to be registered as they appear, are not defrauding the breeders of Canada, even the members of the B. A. association; and is it not foolishness to think that they would do so through other than selfish interests?

Mr. D. speaks of me injuring my neighbor "under the guise of an assumed name." Now, I must actually confess, sir, that I have been very thoughtless in this case, and especially so if my neighbor happens to possess a number of these "excellent pedigreed" cattle. Mr. D. would, I suppose, have me quietly inform such that I had, without their aid, discovered that their Shorthorns were but *grades*, and advise them to hurriedly dispose of them to some unsuspecting beginner, as it was my intention to "let the cat out of the bag" within a given time. If such is Mr. D.'s idea of injuring his neighbor, he had better again search his vocabulary for another batch of expressive and characterising words to heap upon "Breeder," as he certainly would, in such an event, deserve even more than he has been pleased to call him. I do not think it wrong for the B. A. to exist, nor do I think the breeders of Canada incapable of conducting a herd-book themselves, but I do think that hidden deception is infinitely more dangerous than honestly registered pedigrees of an even much lower standard. And where is the breeder who will not agree with me? Can Mr. D. point him out?

Mr. D. owns that the statements I made regarding the false pedigrees are correct. He could not well do otherwise. He is, however, very dissatisfied as to the manner in which I disclose the information. Had I quietly whispered those statements in his ear or given them to the public as the work of some inoffensive breeder, he would doubtless have considered me an excellent specimen of humanity. But such, I assure Mr. D., is not my way of doing business, or even of exposing fraud.

My object is neither to overthrow the "new" nor to build up the "old" herd book, but it is to see a herd book established in Canada that will be of a character that cannot be challenged. I had with Mr. D., and doubtless many others, fondly hoped that that happy time was fast dawning on our country, and that the Canadian Shorthorns would soon see a new and a brighter future than the past has been with them as regards registration standards. But we are evidently awakening to find those fond dreams but a sad delusion, and that Canada is again virtually without a Shorthorn herd book, certainly without one of which her breeders can at all feel proud.

But who have brought upon us this perplexing state of affairs? Was it not the breeders themselves? But are we to strongly condemn the first introducers of the Shorthorn into Canada, who, after the practice of their mother countrymen, adopted the four-cross standard? We certainly cannot praise them, though, after all, we must feel thankful that things are not, if possible, worse. It is not certain that the present breeders of Canada would have then done better; in fact, I must express myself of the opinion that they

would, judging them by what they are now doing, have done infinitely worse.

I ask the breeders of Canada, is it not really shameful that we do not, at this advanced age, possess a better, a more befitting herd book, than the trashy commodity it is our unhappy lot to own? How long, I ask, is this state of things to last? We have too much, yet too little, herd-book. Should not the Canadian breeders unite and form one good herd book, of which they can reasonably feel proud? It is really disgusting to think that we have had Shorthorns in Canada, and such, too, as have won the applause of the whole world, for more than half a century, and that to-day the Canadian breeders are without a fair herd book? It is true the odds are strongly against them, and that their task is no easy one to perform, but surely they can attain happier results than heretofore. We shall at least sincerely hope they may, and that, too, very shortly.

In conclusion, I must say, it is only for the good of the breeders of Canada that I enter upon this controversy. It is certainly high time that frauds, that were entered in the very first volume of the B. A. H. B. should be exposed. Delay in such case is most certainly unwise. The changes in the herd-book that have taken place within the last few years have had their beneficial effect on the Shorthorn mind, inasmuch as they have tended to make all breeders, more particular with regard to pedigree. It is quite clear that there is yet much room for reform.

I must also say that I admire the maxim which Mr. Dryden has taken for his guide in renovating the new H. B.; with such a guide he must certainly attain beneficial results. But it is to be hoped that he will not withhold them from the public.

With regard to the mistakes in the C. H. B., I may inform Mr. D. that I have long been aware of their existence. In fact any reader of the C. H. B. who is at all observing, can easily detect them, as they are not in the least under cover.

BREEDER:

Oxfords vs. Southdowns.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR: In the May number I notice an article over the signature of my friend, P. Arkell, under the above heading, which reminds me of the story of the Irishman who overloaded his gun and shot at the squirrel. He aims a shot at the Southdown men in quoting from Mr. Eckart. It very clearly proves one point in favor of the Southdowns—namely, the men who bred them realized the same price per head as the breeders of the Oxfords, which means more clear profit, as they would be raised on less feed. Had Mr. Eckart bought both lots by the pound and kept a correct account of the food consumed, his experiment might have been of some value, but buying by the head and selling by the pound, as an experiment, amounts to less than nothing, and should never be referred to again. If the Southdowns are so much smaller, as friend Arkell would make it appear, then Mr. Eckart must have paid a much higher price per pound for them than he did for the Oxfords (of course they would be worth more); but where the mistake was made was in selling in a market where they did not know but what Oxford Down mutton was just as good as Southdown, otherwise he would have realized more per pound for the Southdown; but the buyer made the profit instead of Mr. Eckart, and I think Mr. Arkell will have to make a stronger case before it will affect the opinions of Canadian breeders in favor of Oxfords.

He refers to the Southdown men "blowing" about champion prizes in England, etc., and that he would like to hear them "blow" about what they have done themselves. Well, we would say if he would take a little of that advice and apply it to his own side of the question, it would then come with better grace when given to the Southdown men. Of course I could have referred to the Provincial Show at Guelph, in 1883, when I showed my Southdowns for a flock prize against the best Oxfords in Ontario, and came off victorious; but, like friend Arkell, prefer telling what some one else has done.

In regard to not seeing the face of a Southdown at the Fat Stock show in Guelph, if Mr. Arkell had looked in Mr. Marsh's pen, he could have seen the face of one at least, and a prize winner at that. I did not see the face of one Oxford there. Did Mr. Arkell?

JOHN JACKSON.

Abingdon, May 22, 1885.

Seeking for Light.

Editors who are alive to a sense of duty can indeed be exceedingly helpful to the patrons of the paper which they direct. So, too, can the patrons be helpful to the editor and to each other. We cannot deny the fact that the truest satisfaction that one can enjoy arises from a sense of having been of some service to his fellowmen. If you don't believe this, just try it once.

The editor is oftentimes plied with questions, some of them exceedingly intricate, and of course it is his bounden duty to give all the information that he can concerning them at the earliest possible moment.

But editors are only men. The human mind can only grasp so much, beyond which it cannot go. If honest, they will confess that on many points they long for light themselves, which their patrons can furnish.

For the common good, then, as well as for our own satisfaction, we ask light on the following questions:

1. Elm lumber is often used for sheeting on roofs. In such cases it is put on green and seems to answer well. But suppose the shingles require renewing, how would it fare with the rails in re-shingling? Does any annoyance arise from the contraction of the elm boards that are put on while green? Would it be wise to use elm for roofing, in case the boards had to be renewed as well as the shingles when the former had decayed?

2. A circular has reached us speaking very highly of "Higgins' Eureka Fair Salt." Can any of our dairymen speak from experience of its merits?

3. Have the "Dorset Horned" or the "Welsh Mountain" sheep or the "Alderney" cattle ever been introduced into Canada, and by whom?

Breeding Draught Horses.

(Communicated.)

At a recent meeting of the Kingscote, England, Agricultural Association, Hon. E. Coke of Langford, Derby, read a very valuable paper. The following is an extract upon the general aspects of draught horse breeding, an industry which is receiving greatly increasing attention in Canada:

Mr. Coke says:—"I will begin with the mare. If you want to breed something that will pay, she must be sound and not past the prime of life. Old stallions will get good foals, but worn out mares are not to be depended upon. Not only should the mare be sound, but her sire and dam should have been sound also. It is most important that she should be well descended.

If I were asked to look at the mare or filly that you intended breeding from, I should first of all ascertain whether she has side bones. If they are there, for my part I should not care to trouble myself with any further examination, as I should say at once she is not a mare to breed from, but if she is clean I should then look at her fore feet, bearing the old maxim, "no foot no horse;" I should hope to find them rather large, well formed, and open at the heels—not flat, shelly, or contracted; I should like to see rather sloping pasterns, not short and upright. Rising upwards, the bone from fetlock to knee should be flat, with nice silky hair, big knees, and well-developed muscles in the arm, the shoulders well thrown back, although they need not be so oblique as is required in a riding horse.

Having done with the fore legs, I should turn my attention to the hind feet. These in the Shire horse are often too small. The Clydesdale horse beats us there; this being the result of careful breeding. I like to find good pasterns behind as well as before. Above the pasterns there should be a good flat bone, topped by a broad, flat, clean hock, and upwards a well-developed thigh, full of muscle.

Having given you my idea of what the understanding should be, I will not detain you with the less important part of the animal—namely, the body—further than to say I like a good middle. This you will not find unless the mare is what is called well ribbed up. I do not think the biggest mares breed the best foals. They can't be too broad, but they may be too high.

POINTS OF A STALLION.

We now come to the horse to which you intend to put your mare. I will not detain you by telling you what I should like to see in him. What I have said of the mare applies equally to the horse, only that he should be coarser and stronger, and the hair, although it should be silky, need not be so fine as that of the mare.

Having ascertained where your mare is faulty (for surely she won't be faultless—either short of bone, or the right sort of hair, not so good in her feet or pasterns as she should be, etc.), having made up your mind where you would like to see an improvement in her progeny, look out for a stallion who is particularly good where she is faulty, and do not mind going a few miles farther if by doing so you can find what you want, nor hesitate about paying an extra pound, the trouble and expense will pay you well. Mares come more than twenty miles to my horses, stay the night and return next day. But let me warn you, that all your extra trouble and expense will be of no avail unless the horse is well descended and is himself sound. I would rather use a horse with a good and sound pedigree, even if he is faulty in some of his points, than a more perfect-looking animal, although sound, which could not boast of sound parents and a good pedigree.

BREED HEAVY HORSES.

Before I am done with the sire and dam, let me strongly advise you to breed stock as weighty and massive as you can. Some of my friends have told me that, although they admire my horses very much, they think them too heavy for agricultural work. That may be so, and undoubtedly on many arable farms lighter horses would do the work equally well, if not better. Bear in mind, however, that you breed for the best market, and that the agricultural market is not the best. There is a great and increasing demand for horses of the heaviest type, not only in this country, but in America and the colonies. It is found that the docks at Liverpool and the streets of Manchester and other towns have become so crowded, that it is far more convenient to use one horse that can move several tons, than some two or three which take up so much more room. The same remark applies to New York and other seaport towns in America.

MANAGEMENT OF MARES AND FOALS.

We will now suppose the mare to be in foal on the above terms. Of course, she will do your work during the summer, autumn and winter fully as well or even better than if she were barren. When she is within six weeks of foaling, keep her out of the shafts as much as you can, and do not allow your waggoner to make her back heavy loads. Farmers in my country often work mares up to the day of their foaling. I do not agree with this practice. I think it far safer to put them out of work for at least a week before they are expected to foal. I would put them out in a pasture field near the steading by day, in order that they may get exercise, and at night keep them in loose boxes.

A loose box is better than a stall for a mare. She will rest better, and sometimes lie on one side and sometimes on the other, and this is better for the foal. When she shows wax, she must be constantly watched and in order to insure attention, it is not a bad plan to give the man in charge a small fee for a live foal. If not too early in the spring, the sooner the mare and foal are out for a few hours, the better. But keep them up if wet or cold east wind, for the foal is apt to gallop about, get hot, lie on the ground, and take cold.

After the first few days are over, and the above precautions have been taken, you may begin to feel that all is well, and, for my part, I prescribe nothing but a good pasture for mare and foal, although here I find myself differing from that high authority, Mr. F. Street, who, in his book on the "History of the Shire Horse," advises that a foal, when three or four weeks old, should be encouraged to eat a mixture of bran, griddled oats and linseed cake. I think this rather risky, it being dangerous to force at too early an age. I should not give the mare and foal anything until four or five weeks before weaning. You then will have two reasons for doing so; not only are you preparing the foal to do without the dam, but you are building up the latter for autumn and winter work. I am aware that it would not be always convenient for a farmer to dispense with the use of the mare entirely from foaling to weaning time, but I will

say the less the mare is used the better. When the foal is weaned, it should be put on a nice sweet pasture that has been saved purposely, and then feed it once a day with a mixture of two pounds boiled barley, two pounds bruised oats, and two pounds of chaff.

I do not care much about there being a shed in the field, as my experience is that young things rarely make use of it, but will lie on the bare ground in preference. Of course it is desirable that there should be good shelter, either a high hedge or a plantation, on the side from whence the cold wind blows. When summer comes again and there is grass enough, the extra keep may be discontinued, nor need you give the yearling anything during the ensuing winter unless the weather is very severe, in which case a little oats will be well bestowed.

The above suggestions as regards feeding after the first winter are only intended to apply to the geldings and fillies that you mean to keep and work. Should you intend to rear a stallion or show a filly, you should help them through the second winter, as they must be kept growing, but not forced. In the following spring, when they are two years old, they may be put to the horse, but not before the month of June. During the latter part of that summer they should be broken in and do a little light work. I would then turn them out for the winter, and they would require no extra keep until near foaling time, if in a low condition.

Management of Swine.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—I send you a photograph of a trough that I had made for feeding swine, and which works admirably. You will see that it is designed to keep the pigs out of the trough and to prevent them crowding upon one another as they will do when a number are allowed to eat together. It also keeps the food clean, and prevents them from slopping it about.

We do quite a large business in pigs. We winter over about thirty sows. They are of the Lillesmere, Poland China, Berkshire and Chester White breeds. This spring out of all our litters we did not lose more than five young pigs.

As soon as the pigs are weaned and the weather gets warm, we turn all our breeding sows out into a small pasture, where they have plenty of shade and pure water, and keep them there until they are again heavy with pig. During the time they are out we feed them very sparingly, not more than once a day.

A. S. HUNT.

Hospital for the Insane, }
Halifax, N. S. }

The success our correspondent speaks of is certainly extraordinary, and betokens very successful and thorough management. Indeed it is a marvellous result when we consider the large number of the sows. The feeding trough referred to may be made of three strong planks, the two of which form the sides sloping outward at the top. In front, or on the side on which the pigs feed, is spiked or bolted strong spars or uprights morticed into a scantling above, and suitably spaced so as to admit of the pig putting in the head only. The scantling is kept in place by uprights or braces extending from it at proper intervals to a fence in front of the trough, or the side of apartment of the pen occupying a similar position. The spaces of the ends of the trough are quite enclosed. Our thanks are due to our correspondent for adding this piece of very useful information to the general fund.—ED.

From Mount St. Patrick.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

The crops here promise a good return, and stock doing well; but our country is too rich, and consequently we are suffering for want of servants. Men we can get, and good ones, but women we cannot get at any wages.

I am confident that the STOCK JOURNAL will succeed from the stand it has taken, and by and by the farmers will see your advice with regard to it is correct, and will quit the old system.

Respectfully yours, M. O'CONNOR.

Goitre in Sheep.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—In this month's issue of your paper I notice an inquiry from a gentleman residing in Algoma, as to the cause of lambs having lumps in their throats. Although the cause you suggest as operating, or in your opinion as being likely to have an influence in the production of this condition, certainly may act as a predisposing one, yet it is not of itself sufficient to account for this disease, in a large majority of instances. I hope there is no cause for the timidity and reticence you express in your reply, about applying to the veterinary profession for aid in elucidating this or any other animal ailment, for fear of prying into any secrets of the profession. I hope the days of quackery are now so far past in veterinary science that every member devoting his time to its practice is willing to make anything public for the general good, if their opinion is only asked.

The lumps in the throat alluded to by this gentleman are an enlargement of a gland called the thyroid, and the disease is one not infrequently present in the human subject, as well as in all our domestic animals, and receives a variety of names, as goitre, bronchocele and Derbyshire-neck. In most adult animals very little harm results from the condition, but in young lambs I have both seen and read of it committing serious ravages, in the manner described in the communication from Algoma; that is, the enlargement is so great, which causes it to press up the windpipe to such an extent as to prevent the access of air into the lungs.

There is no doubt that the presence of lime in the water in inordinate quantities, is in the great majority of cases the cause, for the affection is particularly rampant where there is a magnesian-limestone formation, the various compounds of these minerals being present in solution in the drinking water. I notice that these sheep were not fed roots, consequently they would consume more water, and if I am correctly informed with regard to the composition of the earth there, there is a considerable amount of limestone entering into it.

If sheep were allowed rain water, and general attention given to their sanitary condition, there would be very few cases of this sort, dryness, a mixed diet, and exercise being the chief desiderata in the list of preventive measures.

Prevention is of much more importance than the treatment of this affection, for it is impossible to use any satisfactory method of cure on very young lambs; but where the patient has attained some strength, and can feed, a liberal application of iodine ointment on the enlargement after the wool has been cut short off from it, will generally reduce it.

In the horse we find this mode of treatment almost always accomplishes the reduction of this gland when enlarged. If the preventive measures suggested are not found effective, 10 grain doses of iodine may be given daily for a couple of weeks prior to lambing.

Yours respectfully,

F. C. GRENSIDE, V. S.

Agricultural College, Guelph, }
June 10, 1885. }

Pure-breds in Elgin.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—I had the pleasure of visiting our genial friend, Rock Bailey, of Union, on the 26th ult., and found him busy shearing his favorite Merinos. Mr. Bailey appeared in good health and spirits, and expected to clip one and a half tons of wool. His sheep were looking exceedingly well, rather better, I thought, than at any time when I had seen them on exhibition. I singled out a favorite two-year-old which showed both superior constitution and fleece. This ewe was afterwards shown on the market at St. Thomas—fleece 332 days' growth, and weighed 14 lbs., while the ewe would probably weigh 83 lbs. This was by no means the heaviest fleece taken, as we saw some that turned the scale at 17 lbs., and 17½ lbs. I understood Mr. Bailey to say that he had, old and young together, about 300 head of these sheep, and that his surplus stock goes chiefly to Mexico and Texas. Verily, a prophet hath no honor at home. But it seems just a little remarkable that the appreciating class should come long distances and from other countries. This is to some extent our own experience; we frequently ship to the Americans of our Southdowns. We believe that there is a much brighter

future in store for the Merino, even in Canada, than it has hitherto enjoyed.

We at the same time visited Joseph Wilson, of Port Stanley, and a neighbor of his, whose name we have forgotten, where are to be seen some excellent grade cattle. These men own a Bow Park bull sired by 4th Duke of Clarence, whose stock proves very satisfactory to them.

At Jahiel Yorke's we saw also a very good nucleus of a future herd of Shorthorns, though much of the stock in that section will bear a good deal of grading yet. There is a strong and growing feeling against that public nuisance, the "scrub bull" in Yarmouth. We have found the demand for Shorthorn bulls the most active the past season of any in our experience. But as the early bird gets the worm, so those who buy in time get a select animal. Many are even at this late date inquiring after bulls. Let me say to those desiring such, to look sharp this fall and early winter, and secure a choice animal, as only culls, as a rule, can be picked up at this late date.

Hurrah for the Scott Act in Middlesex!

E. J. YORKE.

Wardsville, 19th June, 1885.

Oxford County in the Month of June.

Our readers will be drawing the conclusion that we have a partiality for this county, owing to the frequency of our visits. In this surmise there is a measure of truth, as nature has certainly been lavish in her gifts to this beautiful county, which gives evidence of a soil of great fertility, even when the snows of winter are jealously hiding it, in the strong substantial dwellings that have been erected out of the produce of its fatness. The undulating character of the soil, swelling in almost every part like the big waves of the sea, and dotted with numerous shades of varied form; the running streams and babbling springs, and the rich grasses and flourishing grains of varying tinge, make it a land of enchantment at that season to which we refer in our heading.

We were only, however, fulfilling an engagement of many months standing, and fondly hope, during the years at hand, to visit every county in our magnificent Provinces possessed of a herd or flock of pure-breds, and also to visit every such herd and flock.

The principal part of Monday (June 15th) was spent in that land of historic romance and more than primal loveliness, the Vansittart estate, owned by Mr. T. C. Patteson, of Toronto, and referred to at greater length in another part of this issue. Our purpose next carried us in the direction of The Glen, the charming home of the

MESSRS. GREEN BROS.

of Innerkip. We knew we had reached its boundary on the river Thames, by the Shorthorns with their broad level backs and the Herefords with smooth silken coats that fed upon the virgin grasses. We had seen the Glen at its very worst, in raw, forbidding autumn days, and now that it looked its best, we felt that we must not pass without a more careful view.

The appearance of the pure-breds was in perfect keeping with the beauties of the place. Every one looks well, and they are indeed a fine lot, carrying plenty of flesh on evenly made, deep, strong, thick bodies. The crop of Shorthorn calves numbers eleven head, nine of which are females, and nearly all from the Earl of Mar (47815). The Hereford calves number four head, and noble specimens they are, as they grow and develop and develop and grow in the roomy box stalls of the new barn. Several of the calves would make show animals.

The Earl of Mar (47815) looks exceptionally well, and is in fine trim for work. Has done excellent service in the herd this year and like Rob Roy (45484), of the Experimental Farm, looks longer and more stylish than represented in our engraving of October JOURNAL of last year.

The Hereford stock bull Cronkhill 8th, which won the silver medal at Toronto last year, has done finely. His body is long and low and level and neat and prim. He is smooth and straight, and will be hard to beat this season in the show-ring. The imported Shire-stallion is leaving a good record.

THE MESSRS. SMITH BROS.,

of Westburn, Innerkip, commenced a Shorthorn herd in 1884, and they certainly have commenced wisely. It is wisdom to lay the foundation with animals that are only choice. They have six individuals, of which two are calves equally promising with their dams. Three of the herd were purchased from Green Bros., of The Glen, and the fourth, Canadian Duchess of Gloucester 14th, a portrait of which appeared in the December number (1884) of the JOURNAL, was bought from Messrs. W. Heron & Sons, Ashburn.

Enterprise (49553), —3304— has made grand growth since we saw him at The Glen last October. He is simply huge on the crops, very broad in the back, and strong throughout. The damaging feature is—somewhat too much of paunch, which may mend in time. He is a grand feeder and a good sire. Was bred by Mr. Duthie, of Collynie, and sired by Ventriloquist (44180), and imported by Messrs. Green Bros. when a one-year, in 1884. Ventriloquist was bred at Sutyton after Roan Countlet, and out of Victoria 4th, a well known prize-taker at the leading shows. Lapwing, a one-year, is a very pretty red—a model, as though chiseled. She was sired by the Earl of Mar (47815), and from the dam Lily, by Royal Barmpton (32996). Fraulein, a three-year light roan, got by Mr. Dryden's Baron Surmise (45933), has just produced a calf by Enterprise (49553).

The red bull calf from the Canadian Duchess of Gloucester 14th, by the Duke of Albany (44709), is full of promise, having an exceptionally good back. The dam is from 2d Prince of Springwood—228—, and Canadian Duchess of Gloucester 3d, by Sir Arthur—290—.

The grades at Westburn are very pretty, more so than are many pure-breds. Some of them are from a small, neat Shorthorn bull, Diadem, brought into the neighborhood some years ago. This new stock firm have just erected a strong, new stone house, and are evidently giving much attention to the care of the farm.

MR. DALZIEL, JR.,

of Chesterfield, whom we happily met at Westburn, told us that their Clyde stallions were doing fairly well, though the country is overfilled with stallions of every class. They have sold The Baker to John Graham, of Paris, Ont.

On Tuesday Mr. F. Green very kindly took us in charge. We found

MR. F. MALCOLM,

the enthusiastic bee-keeper, of Innerkip, busy amongst his bees, of which he had at that date sixty swarms. Mr. Malcolm commenced this business some three years ago by the purchase of two colonies. He brought them through the cellar last winter with the loss of but four swarms. This success in wintering is, so far as we know, without precedent last winter, and speaks of a knowledge of the art such as few bee-keepers seem to possess, judging them by this standard. Mr. Malcolm uses the Quimby hive and the honey-board invented by Mr. D. A. Jones, of Beeton, extracting only from the upper hive. The hives have a cushion of sawdust, which in spring and fall keeps them warm, and is also an advantage in summer. The comb used is made by Mr. Hall, of Woodstock.

Mr. Malcolm has given much attention to underdraining, and is warm in its praises; and is also favorably known by his ability in using the pen. He was one of the early promoters of the cheese industry, but has handed over that part of the business to his son, who tells us he keeps twenty dairy cows on 100 acres; feeds bran early in the season, even though grass is plentiful; then sowed peas and oats, followed by corn, and later peas and oats again. The average return per cow last year was \$48. Finds it advantageous to keep the cows always in good heart by liberal feeding.

MR. JAMES R. DAVIS,

of Woodstock, from which he resides four miles to the N. E., has a farm of 100 acres. Has given much attention to underdraining and finds that it is of immense advantage. His crops are truly magnificent and great care is used in uprooting all intruding weeds. The stock is highly graded. A beautiful red cow which won first at Woodstock for fat at Easter, will no doubt be heard from favorably when the Dominion Fat Stock Show is held again.

Canada Short-Horn Herd Book, Vol. IX.

By some oversight the notice of this volume was not inserted earlier. The bulls registered therein run from No. 11681—12580, and it contains a goodly number of cows.

The book contains a list of the imported animals registered therein, a list of *errata* and of the breeders and owners who have registered. There is an index of the bulls and cows and also a complete alphabetical list of all the cows recorded in the nine volumes. This must have entailed an enormous amount of work upon the secretary, and has certainly earned for Mr. Wade the gratitude of every student of pedigrees, and indeed of every breeder, as it is a labor voluntarily assumed.

There is also the new departure of numbering the cows as well as the bulls. It seems strange that this has not been done in the compiling of herd books of every breed, as it has been done in the case of some. We can see several advantages with no corresponding disadvantage.

Mr. Chas. Mills, secretary of the Illinois Board of Agriculture, speaks thus in regard to the book, in acknowledging the receipt thereof from the editor:—"All the prominent Short-horn breeders who have examined the same express themselves as well pleased with the plan of numbering the females. You are to be congratulated for having inaugurated the system of numbering cows of this breed. There will be a strong effort made to introduce the same improvement in the American Shorthorn Record."

The price of the volume is \$2.00.

Autumn Exhibition Prize Lists.

TORONTO INDUSTRIAL.

This exhibition will be held September 7th—19th. The prize list is as usual very full and complete. There are no less than 16 classes for horses, with prizes from \$50 and downward.

There are ten classes of cattle, with prizes varying from \$40 downward. Special prizes will also be offered for the West Highland and Sussex cattle, and a prize for the best milking cow, quantity and quality considered. We shall hope to see the different dairy breeds contending for this prize.

The prizes for the eight classes of sheep run from \$20 and under, and for five classes of pigs from \$15 and under. There will also be special prizes for Chester Whites and Jersey Reds.

The prizes for dairy products and dairy utensils are simply magnificent. Cheese and butter sold at this exhibition have always found ready sale on the spot.

For agricultural and horticultural products, the former full lists are at least fully sustained.

No charge is made for space in the large implement building, as in other years.

In the arts department the list is simply bewildering. One would almost conclude, on reading the prize list, that it gave a place to almost everything to be found in the country.

The apriary prize list is also very complete, extending not only to honey, but also to almost every form of apriary supplies now in use.

The grounds comprise 60 acres, and at this exhibition is to be found every convenience for the comfort of visitors.

Parties intending to exhibit should lose no time in sending in their entries and securing space early, as there will certainly be a crowded exhibit. Write for prize list to H. J. Hill, Manager and Secretary.

PRIZE LIST OF THE PROVINCIAL.

This exhibition is to be held in the city of London, September 7th-12th. The prizes for stock are handsome, ranging from \$40 and downwards for both horses and cattle. The Prince of Wales special prize, \$50, is to be given for the best heavy draught stallion of any breed or age.

In Shorthorns special prizes are offered for best four calves under one year, bred and owned by the exhibitor, for best herd of Durham cattle, consisting of one bull and four females. This herd can also compete with the Durham herd mentioned above.

A special prize of Ayrshire Herd-book and \$20 is given by Messrs. W. & M. Smith, Fairfield Plains, for best herd of Ayrshire cattle, consisting of one bull and four females of any age. The Herefords, Galloways, Aberdeen-Angus, and Jerseys and Holsteins come in for a special prize of \$25 each. There is also a special, a first and a second for best cow of any breed for milking purposes, having calved prior to 1st July, 1885, milking properties only to be considered.

In sheep the special given for best prize is a silver medal and with an additional one for those Canadian bred, except in the Merinos. Those Canadian bred may compete for the ordinary specials as well, and we do hope that our home breeders will make a good showing in the day of trial. The pen consists of one ram, two ewes, two shears and over, two shearing ewes, and two ewe lambs.

In the pig classes for Berkshires and Suffolks the Canadian bred may try their strength with those imported, in contest for best pen, which is to consist of one boar and three sows of any age.

The prizes in the Dairy department are liberal and full. A sweepstakes—gold medal—will be given for the best made and most perfect lots of cheese in any class that has taken a first prize. The prize list also embraces premiums to be given at the Fat Stock Show to be held at Woodstock, December 9th-11th. Parties intending to exhibit should write at once for list to W. Wade, Secretary, Toronto. See advertisement.

GREAT CENTRAL FAIR PRIZE LIST.

This exhibition, to be held in Hamilton, September 21st-25th, contains some 53 classes. The prizes for horses range from \$40 downward, although the average is not so high as those given at the Provincial. Yet the prize list is exceedingly creditable in the different departments. The list of specials is very handsome indeed, and reflects much credit on the citizens

of Hamilton and the surrounding country. The indications are in favor of a very successful show.

For prize list apply to Jonathan Davis, Secretary, Hamilton.

From Lambton County.

THE FOUR-CROSS STANDARD—SCRUB BULLS—STOCK NOTES, ETC.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—I have mailed you an old *Ontario Farmer*, in which you can see for yourself when the four-cross standard was adopted, and by whom the motion was brought forward. I cannot conceive how Mr. Christie could have been brought to look on such a standard with any degree of pleasure, as he had the finest of cattle. Four crosses would not suit him to own as thoroughbred. It was a bad move—injured many, and benefitted none.

The scrub business, so far as I can see, is doomed, and it remains with you to take the initiative in calling a meeting or issuing circulars to be signed by parties so disposed, for the purpose of urging our legislators to annihilate the last one of them, in all the older settled districts of Ontario at least.

As to your JOURNAL, I think it best to give praise, if deserved, to parties while they are alive and able to receive it, and not after they have departed this life, as is generally done, and on this assumption I will say that the high moral tone of the editorials should of itself recommend it to every farmer. The business part to stockmen is invaluable. At the same time I think it the greatest folly in people owning thoroughbred stock "that are not of the most noted strains," as the Duchesses, etc.

It seems to me nonsense having parties tell us about their calves coming. Our best breeders may be excused, but generally it is the poorest ones who make most noise. Others excuse themselves for making certain purchases. Do those people think the stock world cares whether they buy right or wrong? You must have a large amount of patience to attend to such notes, but you can check it off by-and-by, as I can see the beginning coming.

With regard to your heifer served by the scrub, she is injured for a period of years. Possibly the ill effects may work off by the time the fourth or fifth calf comes to hand, but a heifer's first calf determines in no small degree what the succeeding ones shall be. A very impressive sire may help to overcome this; but you will not have that security in the character of your stock that you would otherwise have had. I am really sorry for you. It is a disgrace to our country.

I can count 12 scrubs within a radius of four miles; some of them have not one drop of pure blood in them. Four or five of them are from my own Sheriff Hutton bull, and I think I will not allow him to serve a cow this year unless the owners agree to castrate every one of the males.

I think you got a good bull in Waterloo Warder. He will thicken the flanks of your cattle. There is too much Bates in this Canada of ours. If you were not such a busy man I would like to get his girth, length and weight from you.

Yours respectfully,

DONALD ALEXANDER.

In the *Ontario Farmer* kindly forwarded by Mr. Alexander, to whom our warm thanks are tendered, bearing date of December, 1871, is a summary of what transpired at a meeting of the Agricultural and Arts Association held on the 6th November of that year, as we understand it.

In reference to the herd book, "the Hon. David Christie suggested that animals of four crosses should be recognized as eligible to be entered in the herd book; that was done in England, and he did not think it would be well to adopt a higher standard here.

"After some further conversation, it was agreed that the latter should be referred to the committee for them to report on in the morning."

"The board met again at half-past nine on Monday morning.

"The chairman of the committee to whom was referred the question of the standard of eligibility for entry in the Canadian Herd Book, and the prefixing of stars in pedigrees which are not regular, reported that the committee recommended that the standard

recognized in England, viz: *The possession of at least four well established crosses by thoroughbred bulls*—be the standard for admission to the Canadian Herd Book. The committee could not recommend the admission of stars in cases of defective pedigrees, referred to in the second volume of the Canadian Herd Book.

"The report was adopted."

"As we understand it, this fatal motion was passed before the publishing of the second volume of the herd book, but after the material for it had been gathered, as at this same meeting we read in the reference from which we have already quoted: "Mr. Young said "that several inquiries had been put to him as to "when the herd book would be ready for publication. The secretary said that the book was ready "for the press at any minute, and only awaited the "sanction of the committee, which had not yet met "to consider the subject."

Waterloo Warder (47222) —1055—measures 7 ft. 9½ inches around the heart; 7 feet 10½ inches around the flanks, and 8 feet 9 inches around the paunch. The length of carcass is 7 feet; height at shoulder, 4 feet 8¼ inches, and at hip, 4 feet 7½ inches. His brisket is 17 inches from the ground. He weighs 2,150 lbs., although he has been worked too hard since his arrival at "Riverside." His present owner is so well pleased with the bull that, notwithstanding his high opinion of his former owner, Mr. Snell, he would be very loth to return him at the price paid.

The Farm.

THE English experimenter, Mr. Fry, is, it seems, going to revolutionize the system of curing ensilage. He has written a book on the subject of "Sweet ensilage," in which he gives substantial evidence as to the superiority of preserving ensilage in this form over the method usually practised, with minute instructions as to his system, which it seems is gaining ground both in Britain and the United States. According to his plan the grass or fodder is not put into the silo when in a wet state. It should be so far dried that when wrung in the hand no juices shall drop out. Good silage may in this way be made from fodder containing 75 per cent. of moisture, whereas cured hay has but 15 per cent. It seems fodder put into the silo in this state rapidly raises the temperature above 122 degrees F., where organisms cannot exist long in a state of life. The fermentation which is so marked in ensilage as usually made is due to the actions of these organisms when in life. By Mr. Fry's method life is destroyed, and wit' it of course that action which produces sour ensilage, which is of course very much superior to that which is made sweet.

WHERE hired help is to be relied on, one of the most serious sources of leakage on the farm is the losses that are ever recurring from breakages. The vexations arising from this source are more than pen can paint, and what is most annoying is the thought that ninety-nine out of every hundred of these are the result of carelessness, and so we believe it will continue to be until it becomes an article of agreement when hiring is done that the farm laborer shall bear a part of the loss resulting from breakages. As matters are now, the employer usually bears the whole loss, and if even fault is found with the wilful negligence of the workhand in reference to this matter, the employer is at once branded with being "mean." It would be a kindness to the workhand to have a clause, as stated above, inserted in the agreement, as it would certainly tend to teach him lessons of carefulness, and would in no small degree rivet his thoughts upon his work.

The amount paid out for breakages in one year is almost a ruinous sum on a large farm, and usually this is the lightest feature of the loss. The inconvenience that follows consequent upon every breakage is usually in the end a matter of greater moment than the repairing of the article. Farm laborers should certainly be taught to be more careful, and teaching through the medium of the pocket will assuredly be found very effective.

CO-OPERATIVE farming has been tried with marked success on Radbour Manor Farm, Southam, Warwickshire—a farm comprising some 356 acres of stiff, wet, cold clay land, five miles from a railway station and eleven miles from a market town. The former tenant, it is stated, ruined himself and the farm in a measure, now its productive capacity is largely on the increase, and it affords very fair remuneration to the association. The laborers, twelve in number, under the leadership of an able foreman, are guaranteed a certain amount of wages, they agreeing at the same time to pay a certain rental. The profits in the various departments are divided once a year. The writer states that "the three distinguishing features of associated farming are cleanliness, thrift and hope." Is there no room in this country, where labor is so scarce, and what is worse, so unreliable, for the introduction of co-operative work in some of its phases? Why would it not answer well to guarantee each laborer a certain amount of pay and a fixed proportion per centage of profits, if any? Any plan that will tend to interest the farm laborer in the success of the calling at which he labors should not lightly be thrown aside without careful consideration. Many of our farm laborers (not all by any means) have apparently less interest in the work they do than the plow they hold or the machine they drive.

MR. JOSHUA LEGGE, ex-President of the Council of the Ontario Agricultural and Arts Association, gave some sound advice to the farmers assembled at the Institute held at Kingston. He said: "The practical idea which I wish to impress upon your minds is, that you should, as farmers, with great responsibilities resting on you, neglect no opportunity of acquiring information, and avail yourselves, as far as possible, of every instrument and means of progress and improvement which offers." Try the farmer who takes no agricultural paper by this test, and he will be found wanting. The party who does take it and neglects to read it is not much better. The individual who seldom or never attends an agricultural fair must plead guilty at this bar, and the man who does go to see the innocents throwing at dolls is even on a lower plane. Farmers, great responsibilities are resting upon you. Show yourselves equal to the occasion. The success of your calling gauges the national wealth. You have not only to provide food and clothing for the nation, in the raw state at least, but the material as well for feeding the professions and governing the country. You owe to your country that the land shall increase in fertility, that the stock shall continually improve, and that your farms shall be well and carefully kept. You must not only provide ample school and church accommodation, but the men principally who shall do duty in these. These are grave responsibilities—men who do not make the most of their opportunities shall not be equal to them.

Who Should Purchase Artificial Fertilizers.

The number of farmers in Canada who can do so without the charge of inconsistency being brought against them is not very large. We do not wish to say

one word that would tend to discourage the manufacture of these, but it is quite possible for a tiller of the soil to expend large sums of money in purchasing artificial fertilizers, under the idea that it is in the line of enterprise, who is wholly neglecting to utilize manurial resources on his own farm. Nay, the farmer wants all the fertilizing resources that can be furnished him by the scientist, the manufacturer, and the miner. His should be the treasures of the enriching properties of earth and air and sea. The slaughter house should yield its quota, and the crusher of the gypsum quarry should grind both day and night.

Yet there is consistency in all things, and consistency rounds into perfect symmetry everything which it grips. It is inconsistent in any farmer to purchase artificial fertilizers whose available resources on the farm are not made the most of.

The answer to the question of our heading will be more easily ascertained by asking the converse of it, Who should not purchase artificial fertilizers?

The man who wastes the treasures of his barnyard should not. Streams of water in the springtime run away from nineteen barnyards out of twenty in this Canada of ours. Every rain that, falling down, awakens rested nature, but helps to bear away the tide of richness—a waste that is ever-recurring with a regularity unflinching as the seasons—a waste that is to no purpose, and a waste that is enormous. Where is the clever statistician who will give us the figures that represent this annual drain?—a drain that would pay our taxes, or that would go far toward educating our families. Who would fancy that these little streams, which are blackish by reason of their richness, stole away from apathetic farmers one million dollars annually? Do not shake the head incredulously. Who will take it upon himself to say that the average farmer does not lose ten dollars annually by neglecting to care properly for his barnyard manure? Here then we have a waste of two millions in Ontario alone, which is perhaps five times below the truth. It is surely the part of wisdom, then, for such an one to let artificial fertilizers alone, until that little stream is dried that is bleeding him like a leech.

It is another thing to show *how* it can best be dried. We shall be exceedingly obliged to our good friend, Dr. Hare, if he will tell us that; but dried it should be. The cistern in the barnyard will answer very well for those so situated that they can draw away the liquid treasures to the fields. Others in the meantime can use absorbents. Forest leaves and earth and straw are always at hand, unless in the immediate vicinity of lazy men, and can be made to do duty in the meantime.

The vigorous plying of energies wisely directed will enable the farmer to apply large quantities of manure when freshly made, that is now left to waste its richness on the desert air. It can be carted out to the fields in spring, scattered over ground that is sure to be grateful, and its volatile treasures securely locked by the furrows of the plough. Every shower that falls upon it henceforth converts it into grass and corn, instead of so scattering its richness that it cannot be gathered again.

The man who throws his wood ashes out into the back-yard, or even sells them to the ash-man, has no business buying fertilizers. When thus sold he gets in value about five cents per bushel for what is worth to him twenty-five cents when properly applied to the land. The effect of unleached ashes upon grass and wheat and other crops is remarkable. Apple trees show an especial gratitude for their application, and the fertility they impart is by no means ephemeral in its nature.

The wonderful productiveness of our virgin soils were due in great part to the ashes of the burned forests. No such crops are realized from the first harvests of our newly cleared lands now, as the timbers are utilized even to the gnarled crotches of the trees, being too valuable for the firebrand of the disforester. Logging, one of the most laborious of old-time labors, is scarcely known in connection with the modern clearing of lands.

Farmers who place no store upon their bones should buy no fertilizers. As a food adjunct for fowls they are invaluable. When ground they prove one of the finest of our manures. We cannot afford to allow them to block up the door way of the kennel, or to bleach upon the lawn. Where there are no proper facilities for grinding them, they can be prepared for use in conjunction with ashes, as recommended by Mr. McDonald, of Bayfield, N. S., in a former number of the JOURNAL, and practised by Mr. H. I. Hurd, of Oakwood, and many others.

The possessor of a muck swamp requiring open drainage, does not require artificial manures. Nature has been very kind in gathering together quantities so vast of the very essence of fertility, and fortunate is the possessor of one of these enriching mines. The labor of drawing to the highlands is considerable, and can only be done at certain seasons; but it is less costly than in expending large sums in purchasing what may be misapplied from lack of knowledge, and their production of no substantial returns. Then the draining of the swamp is well worthy of the effort. Its additional productiveness will go far to repay the labor, if indeed it does not repay it altogether.

The farmer who first makes a proper use of the manurial resources of which he is possessed, may consistently entertain the agent for artificial manures, but not till he has done all this. With the stores of his barn yard leaching away, his ashes left unapplied, his bones disfiguring his door-yard, or the muck of the swamp left to saturate the cold accumulated waters hostile to vegetation, he cannot afford to expend one dollar in the purchase of artificial manures.

How to Make Farming More Pleasant.

A very admirable address, as we regard it, was delivered by John Dryden, M. P. P., on the above subject not long since at the organization of the Mariposa farmers' club. We regret that our limited space will only allow of re-producing it in part.—ED.

IMPORTANCE OF CAPITAL IN FARMING.

Presuming, then, we have chosen our business as farmers, having a natural taste for it, there are yet many things outside of the labor that tend to make our life pleasant:

There is first the absolute necessity which exists to have sufficient capital properly to carry on our business. I believe, Mr. Chairman, no one thing is more retarding the progress of our farmers all over the country than a lack of sufficient capital. One sees it on every hand—farmers whose lives are harassed, perplexed, worried and annoyed, who are unable to do what evidently would give good returns simply because their means are too limited. Most of us have seen honest men, industrious, good men who have undertaken to commence farming with barely sufficient to purchase a team and a few cattle. They are obliged to ask credit for seed, implements, etc. They must run bills at the store, the blacksmith's and elsewhere. Now what is his position? He depends entirely upon his first crop for relief. If this fails his embarrassment begins. Money must be borrowed at a high rate of interest so as to put off the evil day. The chances are his position, on account of much interest only becomes worse and worse, until in despair and disgust he gives it up and returns to the position of a laboring man. Now we think much of this might be avoided had he waited until his capital was sufficient at any rate to carry him over the first year without recourse to the means of others. Our busi-

ness is peculiar. We must depend upon Providence for the sunshine and the rain, which, given at proper intervals, gives us abundant harvests. Now these are never exactly the same, and no one can tell at the beginning of the season what the result of his labors will be. Sometimes we must wait patiently over one or even two years before we get such a return as we might expect, and this notwithstanding all our exertions.

KEEP OUT OF DEBT.

Now, for the very reason that no one can definitely tell what the returns of the season may be, the farmer should never accumulate those debts at the country store and elsewhere. His prospects at the beginning may be ever so bright, yet we know there are so many things which may come between him and success and bring only disappointment and failure, after all that, he is certainly a foolish man who thus places himself at the mercy of another. The chances are he buys not merely what he needs, but much more than he actually requires. When pay-day comes the amount is invariably more than he expected; I venture to say it is never less, at all events. But if the farmer is induced to commence without capital, what can he do? There are expenses which must be incurred, and his only resource is to borrow where he can, and thus pursue his work as best he may and when he can. Still I am bound to say it is a most abominable and pernicious system, and is annually robbing our farmers of thousands of dollars of hard earned money which ought to be in their pockets instead of in the pockets of others. Some one asks what are we to do? We are farmers without capital and cannot leave our business. To those of us who find ourselves in this position I can only say we must endeavor to struggle on until our circumstances become better, and perhaps the best way to accomplish this is, for a time at least, to deny ourselves, and if possible keep from incurring more debt. But I should certainly advise a young man to work for some one who has capital until he has accumulated sufficient to warrant it rather than to commence prematurely. But there are other ways in which the use of some capital may tend to make our life more pleasant.

IMPORTANCE OF DRAINING.

It may properly be used in that much needed work, drainage. I know of nothing that would add more wealth to our farms in every part of the country than a proper attention to this. On almost every farm it is needed to a greater or less extent. I am sure that a farmer can take no pleasure in his business who cannot properly till his soil because it is filled with water, and who must wait until long after his neighbors have finished before he can sow his grain. He will constantly labor at a disadvantage, and his whole work will be unsatisfactory. But I find so much ignorance as to the effect of proper drainage. It is feared it will make the land too dry, when its effect would be the very opposite. Wet land cannot be worked when full of water, and when dried by the sun becomes so baked and hard it cannot be properly tilled then. Drainage obviates all this and gives a uniform moisture. Much may be accomplished by the farmer's own labor, but if his farm be large he will find profitable employment for some capital. Some lands might be expected to pay the cost of this expense in the first crop, but it would be unreasonable to expect it always. The time will come in this country when thousands of acres now lying waste and useless will, by a similar system to that adopted in England and Scotland, be reclaimed and made to produce ample returns.

LABOR-SAVING MACHINERY.

Again, if we would make our life as pleasant as it should be we must be able to procure whatever labor-saving machinery is needed properly to carry on the work. It is not so many years since almost all the farm work was done by hand. Some of our fathers still live, or at most have only lately passed away, whose entire stock of implements consisted of a three-cornered harrow or drag, a one-handled plough, a sickle, an ox-cart, and two sticks tied together with which to beat out the grain. These have now been replaced by machinery the most elaborate, and we are yearly astonished at what the inventive genius of man is producing to make our work easier and give better results. We sometimes think no improvement can now be made, but we have not seen the end yet. I confidently expect in a few years to see our grain cut and tied with perfect satisfaction by machinery. It is not that these machines merely save labor, but they enable us to do much more and much better work. He

is certainly a foolish man who insists on sowing his seed by hand or cutting his grass with a scythe, or raking with a hand-rake when all these may be so much better and more expeditiously performed by his horses. Labor is somewhat expensive in this country, so that while some capital is needed for the purchase of these, it will be found to be capital well expended.

(To be continued.)

Dry the Wheat Well Before Drawing.

We have just had some conversation with one of our millers, who has drawn our attention to the importance of uttering a note of warning in reference to this matter—a matter of prime importance to farmers as well as millers. He is not in favor of cutting over-early, as, in addition to the increased difficulty in curing, there is loss from shrinkage in weight. In this, of course, there is a happy medium.

It is not only a very expensive way of drying wheat, after threshing, but is also one that is attended with no little hazard. One day of bright sun in the shock will do far more to dry the wheat than half a dozen turnings in the barn after threshing.

If well shocked there is usually not much danger of serious loss in this magnificent climate of ours in harvest time, though it must be confessed the labor of shocking sheaves that will continue to stand erect is greatly increased by the self-binders. The farmer himself should be one of the shockers.

It is much better, where it can be done, to allow wheat to sweat in the mow rather than in the bin.

The Dairy.

At the dairy conference, held by the British Dairy Farmers' Association, at Nantwich, Mr. H. A. Howman read a valuable paper on "The Cost of the Production of Milk." Along with many other good things he said that "he had learned that advantage would be gained by getting rid of cows whenever their flow of milk begins to fall below a certain standard. Care must be taken to discard every cow that fell below a certain standard of daily yield." This necessitates frequent changes in a herd, but it is absolutely necessary where a fair degree of profit is to be looked for. The chief value of Mr. Howman's paper lies in the fact that it is mainly a resume of his own experience, and therefore is entirely free from those speculative statements that so often characterize the papers read by mere theorists.

THE extraordinary butter records that are being made by the famous little Jerseys in different places in America are being received with some measure of doubt on both sides of the Atlantic. It is to the interest of the owners of these animals, therefore, and indeed of all Jersey cattle, that these tests be conducted in a manner even more public. It is also in the interests of science that more light be given. It is therefore a step in the right direction, the recent offer of Dr. E. L. Sturtevant, Director of the State Experiment Station at Geneva, U. S., to send an expert free of expense to co-operate with the owners of these phenomenal cows, "who shall be present at the milking required for one churning, and who will personally collect samples for analysis, and make such notes as the interests of science demands." While it is true that the amounts of food fed and the kinds used have been freely published, it is equally true (at least we apprehend so) that the same cows in the hands of ordinary feeders would not produce similar results. Knowledge of so much value to the entire dairy world should be brought out in its every aspect, and stored away in the archives of stock lore for the benefit of mankind.

For the CANADIAN LIVE-STOCK JOURNAL.

Raising the Standard of the Dairy Cow.

The possibilities of the dairy cow as set forth in your article at the Stratford convention of dairymen was well worthy of the occasion, and about as timely as valuable. It needs comparisons of this kind to claim the attention of our farmers to the necessity of taking stock of results periodically in winter to know how accounts will balance. This cannot be too strongly impressed upon the dairyman, as the profit of the business must be based upon the possibilities of the dairy cow.

There is too much disposition on the part of the agriculturist in general to plow and sow and reap and mow without for a moment counting the cost, or realizing the full profit of results, and hence he often grumbles and is dissatisfied with results, not taking a business view of the case, but simply doing as his father did before him. The changes that have taken place in the general competition of the world in every branch of business is equally applicable to the agriculturist, and hence the necessity of falling into line and counting the cost of his production on severe business principles, and in no branch of his business is there a greater necessity for the application of this business rule than in the dairy, and as the cow is the starting point in affecting results, how important it is that he should know her possibilities. Too many attach the principal importance to the number of cows they keep, not noting the product of the individual cow, but relying upon numbers for the profit. This is altogether wrong, and until the dairyman tests every cow individually by that unerring test, the steelyard, he will never know the possibilities or the exact profit of the dairy cow.

This is a subject that requires to be prominently brought before the dairyman, and reiterated with all the force that is possible. If we look carefully among the dairy herds of the country we shall find that really good cows are the exception rather than the rule. This should not be, and if anything can be done to point out to the dairyman how to change this condition of things, an effort should be made to do so, and hence arises the importance that should be attached to such a paper as you, Mr. Editor, presented to our convention.

The dairyman must be taught to know that it is not in the number of cows he keeps that his profit is made, but in the quality of them. One cow takes up as much room as another, costs as much to keep on the average as another, but the net individual results may be and are very different. The object of the dairyman we suppose is to make money out of his business, and the cow is the capital, out of which this money he expects to get is to be made. Now the first question he should naturally ask himself is, What are the possibilities of my cows? What have I a right to expect from them? Do I get the amount that it is quite possible for me to realize? We fear that in too many instances he finds that his returns come very far short of the possibilities. Now how is he to remedy this state of things? We answer by thoroughly analyzing the returns from every individual cow, and by weeding out every one that does not come up to the possibilities he has a right to expect.

The cow is his machine, from which his profits are to be realized, and the intelligent and wide-awake farmer will have the best machine he can get, well knowing the difference in profit between a good and an inferior one, and why should not this same principle apply in its application to the cow, which is but a machine in a business point of view.

We would seriously call the attention of the dairy-

man to more closely analyze the possibilities of his herd, and satisfy himself that every individual cow is doing all that he has a right to expect, and when he finds a deficiency in the returns let him weed out the machine that is not doing its work satisfactorily, and supply its place with another, from which he has a hope if not a right to expect better results, and continue this process till he is quite satisfied that the possibilities of the dairy cow has been attained to its fullest extent.

C. E. CHADWICK.

Ingersoll, Ont.

For the CANADIAN LIVE-STOCK JOURNAL.

Cows for the Dairy.

Since it has long become an established fact that whoever undertakes the production of beef finds it wise economy to breed only beef producing animals, is it not also a fact that whoever engages in dairying will find it economy to select only such cows as are suited for the purpose, or is it better for the dairyman to adopt a sort of general purpose cow, middling well suited for both beef production and for the dairy, yet not particularly well adapted for either?

It is a well known fact that the tendency to convert the forming elements of food into fatty tissue, and the tendency to convert the same elements into cream, cannot exist in perfection in the same animal.

It may be that some farms are so situated and of such a nature that neither dairying nor the production of beef can be exclusively engaged in with a fair prospect of satisfactory results, but there are few farms on which stock-raising could not be profitably followed as one branch of a mixed husbandry. The question arises, Is it not advisable to breed with a view either to the one purpose or the other?

The object of this paper is to solicit some important information concerning this matter of business, and it is from a business point of view that it should be considered.

I am of opinion that the dairyman will be most successful who selects his cows by actual test, and weeds out all that do not come nearly up to the standard. In order to elucidate this it is necessary to make a calculation by figures.

Take for example a cow having all the points essential to a good milker, and having fed her a reasonable amount of proper food, you find that she produces annually say for convenience 5,000 lbs. of milk; counting milk at 1c. per lb., \$50 would be the net result. This continued for eight years and \$400 would be realized. On the other hand take a cow which is more inclined to lay on fat, and even if she is a larger cow, and consumes only the same quantity of food, but gives only 3,000 lbs. of milk per season, which at 1c. per lb. amounts to \$30, this continued for eight years would be only \$240, then what is the difference in value of the carcasses at eleven years of age? The former may be but a small cow, weighing 900 lbs., when fattened and worth only 3c. per lb., she would bring \$27. The latter may be a large cow weighing say 1,300 lbs., worth probably 4c. per lb., she would bring \$52, showing a balance in her favor of \$25. The difference, however, in their dairy product is \$160, deducting \$25, the difference in value of carcasses, leaves a net balance of \$135 in favor of the dairy cow.

This calculation can, of course, only be regarded as approximate, but it can easily be exemplified, which would in some degree prove the egregious error in common practice, that of breeding general purpose cows.

It has not been decided, and it is scarcely probable that it will now be decided, which of all the excellent

breeds of dairy cows is the best, or whether any particular breed is on the whole the most profitable. Inferior animals are to be found in every class, and the cheapness at which they are offered sometimes tempt the uninitiated. I knew of individuals whose experience with one or two inferior animals of a certain breed led them to condemn the whole. Again, the extraordinarily exaggerated accounts which we read of some individual cows, of another breed, is apt to lead some credulous persons to believe that it would be wise to invest even at the enormous prices mentioned.

The Jerseys and Guernseys have been long and truly celebrated for the richness of their milk, and some have been crammed so as to produce a large quantity, but is it not a fact that the great majority of them are small producers?

The Holsteins are justly celebrated as dairy cows, for they have long been bred in their own country with a view to that purpose, but have they generally so much more the faculty of assimilating food into butter or cheese than the best of our native cows?

Ayrshires also have for over 100 years been bred exclusively with a view to their milking qualities, and yet they are not perfection. I think, however, it is very doubtful whether any eighteen cows on this continent have ever realized as much value in dairy products as those at present comprising the dairy of Jas. Drummond, of Petite Cote, Montréal; but this does not settle the question which is the most profitable breed or whether any particular breed is more profitable than the breed common to the country.

I am quite certain there is no breed entirely uniform in this respect. I am also quite certain there is no cow of any breed that can produce a large amount of either butter or cheese, unless she consumes a large quantity of suitable food, notwithstanding all advertising to the contrary.

I also know some cows consume a very large quantity of food and give very small returns, consequently are not fit for the dairy business. This matter can only be decided by actual test, and as there are individuals of extraordinary merit in every breed, a test between an individual cow of each breed would be no better than no test. The test could only be made satisfactory by selecting say 10 or more cows of each breed and feeding each animal the same amount of food during the year. It seems to me that the Agricultural College is the only place affording the necessary facilities. It would be a very interesting experiment, and would benefit all, and might save much necessary expenditure, thereby adding to the usefulness of the institution. It is scarcely probable that more than one or two herds could be accommodated at the same time, and the whole test might occupy several years. The cost need be but trifling, as I presume the owners of such cows would lend them on condition of receiving a fair amount as the profits on the cow's product, in which case we would have the results of experiments under the same conditions.

D. NICOL.

Cataraqui.

Mary Anne of St. Lambert's Test.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

"Orison," in a late issue of the JOURNAL, attempts to throw discredit on the official test of Mary Anne of St. Lambert.

It is generally conceded that the more manly part of one whose utterances are directed with the object of impeaching the character of any one is to do so over his own signature, and not act the coward's part, as has "Orison," by attempting to conceal his identity under an anonymous name; and I think the impartial public will not attach much weight to his asserted convictions until he shows himself less a coward, and gives more data, over his proper signature,

for his assumed opinion, which may be valuable to him, but of little importance to the public.

Should "Orison" show more manhood and reveal his identity, I will answer him by requesting that when Mary Anne of St. Lambert is again fresh and in proper shape for a test, he come and conduct a 7 days test of her, provided he be a man in whom the public will place any credence. In the meantime I shall pay no further attention to men who stab in the dark, with some ulterior object, being satisfied that the agricultural and farming community of Ontario are sufficiently familiar with the well-known probity and sense of high honor possessed by Mr. Thomas Stock, of Waterdown, one of the testers who conducted Mary Anne's test, in which she made 36 lbs. 12 1/2 oz. in 7 days, and that as between his evidence and that of "Orison," the public will not long hesitate which is entitled to the most weight.

VALANCEY E. FULLER.

Oaklands, Hamilton, Ont.

The Test of Mary Anne.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—I observe that in the last number of your impartial and very highly valued JOURNAL "Orison" writes that he has some doubts as to the accuracy of the butter test of Mr. Fuller's Mary Anne of St. Lambert. I also am one of the incredulous; and, moreover, although I have heard the matter spoken of by very many, I have not yet conversed with one individual who has not expressed doubts as to the correctness of the record.

Now in justice to Mr. Fuller this accusation of inaccuracy should be removed from the minds of the people. This, however, cannot be done by a delegation from the American Jersey Cattle Club, or any other club or party directly interested. The suggestion that she should be tested at the Experimental Farm is a good one, and I am certain that under the supervision of Prof. Brown the test would be fair and unbiassed, and would be generally accepted as correct. She would, of course, be fed according to Mr. Fuller's instructions, for it cannot be supposed any man, on his own responsibility, would feed a small cow belonging to another fifty quarts of grain meal per day.

I have known a cow that produced 18 1/4 lbs. of good butter in seven days, being fed daily about 15 quarts of meal and bran mixed, at three meals, in addition to good pasture; but the owner refused to publish the results, fearing he would be discredited. This was a large cow of immense capacity; but experience had taught the owner that to feed a larger portion of rich meal would be at a great risk of injuring the animal's digestive organs. Yet we are informed that a small cow of 1,050 lbs. weight consumes daily when under test, thirty-five to fifty pounds of rich meal in addition to roots, cabbages and apples, while at clover pasture, and produces 37 lbs. of butter in seven days. If the latter part of the statement is reliable, one may easily believe the former part of it. But this extraordinary statement appears so incredible—that experienced dairymen will not be satisfied as to its correctness until it is decided by an impartial umpire.

This is a matter of great importance to the public, and should it turn out as represented, it would, as Mr. Fuller well knows, immensely enhance the value of his stock. But so long as he declines to have his cow tested thoroughly by disinterested parties, the general opinion that she would not stand the test must still prevail.

D. NICOL.

Cataraqui.

Poultry.

The Poultry Interest.

The Bureau of Industries for 1884 gives the number of turkeys in Ontario as 445,944. This is a good showing for a young Province like ours, and favorably impresses us with the interest taken in one of the most profitable branches of the live-stock industry. There is no branch of it that can be so universally adopted, nor is there any which brings in returns so quickly. Every possessor of even a hamlet may keep a few specimens of the feathered race. And this

brings in a supply of the most delicate and nourishing food, equally good, in most cases, in one form or another, for the most delicate invalid or the strongest laboring man.

How very much wiser is it to make fresh eggs a part of the diet of children rather than bacon more strongly impregnated with salt than the waters of the Dead Sea.

Then when meat is wanted, a delicacy for even invalids, is forthcoming in the shape of the plump, round bodies of vigorous, well feathered chickens.

But one dollar invested will usually give the breeder a start in fowls, which of course does not include the outlay for poultry house. Caring for them is excellent employment for children—very much ahead of the Tartar manner of life which they so much lead.

Wheat for Fowls.

In June issue of the JOURNAL "J. F." asks for information on the influence of wheat as a food on the fertility of eggs. Scientists tell us that wheat is the only grain that contains *all* the constituent parts of the egg, and that fowls fed on it alone should produce a greater quantity of eggs than when fed with any other grain. As to the feeding on wheat alone we are not prepared to say what the result might be, as no breeder of experience will, unless by way of experiment, confine his flocks to one kind of grain; but that wheat should form the principal food for breeding fowls as well as growing chicks, there is little doubt. In this we are supported by such breeders as Allan Bogue and Wm. McNeil, of London, the two largest exhibitors in Canada, as well as by all the breeders we ever had any conversation with on the subject, who claimed to know anything about it. There is no doubt that fowls may be made too fat on wheat for the production of healthy, fertilized eggs, but the fault lies in the bird being too fat, not in any chemical constituent of the grain. Corn is the most fattening of any grain for fowls, and is consequently the cause of infertility in eggs more than any other grain. During the past winter a gentleman boasted to us that he had a Dark Brahma under seven months old which weighed ten pounds, while our best hen only weighed 10½ lbs. We advised him to "let up" on the feed or he would have no chicks from her. However, he kept on with the corn, and the result was, not one-fourth of her eggs hatched. Now, unless J. F. fed his fowls enough to make them very fat, the wheat was not to blame. There are often cases of this kind, which seem almost beyond our comprehension. There are very often too many hens kept for the number of cocks. Twelve hens is enough for a vigorous cockerel, when they have unlimited range, and the number should be less if confined, and much less if the male bird is past two years old. We have one valuable old stock bird this year mated to only two hens. He is five years old, and we consider he is unfit for more. Rev. J. C. Quinn says, mate a cock one year old with hens two years old, and they will produce two-thirds cockerels. Last season we had such a mating, and had just one-fifth cockerels. This season from such a mating we have about three-fifths cockerels. We believe the general result would be in such a case a majority of males, but there are many exceptions.

Poultry keepers will do well to note carefully the various papers by Mr Gain in the JOURNAL, on the diseases of poultry and their cure, as they are valuable throughout. We feel like adding to his cholera cures Perry Davis's Pain Killer. We found a hen lately in the last stages of cholera, with death depicted on every lineament. We gave her one third tea-

spoonful pain-killer in two tablespoons of milk and sugar, three times first day, twice the second, and once a day for a few days after. She came through all right, much to our surprise. In cases of roup, if taken in time, we find a teaspoonful of castor oil sufficient to effect a cure. However, we do not claim to be an authority on roup, as the fowls we breed (Dark Brahmas) are not troubled with roup nearly as much as many other varieties.

Lambeth, Ont.

J. W. BARTLETT.

Feeding Wheat to Fowls.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—In answer to "J. F.," in June number, I beg to give my own experience. The only grain I fed to my hens the past winter was number one good clean wheat and oats mixed half and half, and had out of 7 eggs 6 chickens; 13 eggs, 12 chickens; 13 eggs, 10 chickens; 14 eggs, 11 chickens.

A. M.

Jordan Station, Ont.

The Apiary.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

The Management of Bees Two Thousand Years Ago.

FROM THE GEORGICS OF VIRGIL.

Introduction.—Station for bees—their enemies—their hives—activity in spring—in summer—swarming—preparing for battle—the fight—when the battle is lost and won—the better breed—how restrained from roving—poor land a mine of wealth—qualities, organization, order and providence of bees—new colonies formed—their perseverance—their loyalty—there is in bees a portion of the Divine mind—apostrophe to immortality—harvesting the honey—decayed bee families, how repaired—generation of bees—death of Virgil.

Until about a quarter of a century ago, when Darwin surprised the world with his wonderful theory of evolution, we should have had no hesitancy in saying that there had been no change or development in the structure or functions of the bee since the time of its creation, or at any rate since Virgil wrote his admirable poem on bee culture two thousand years ago. But since geologists profess to have shown that in the case of the larger animals, especially the horse, as shown by Prof. Marsh's collections of remains in Yale Museum, great changes have, in the course of ages, taken place in their structure and habits, we may well suspend our judgment, as to the truth of evolution, until the theory has been more fully investigated. If it be true as regards the higher animals, it is equally so as to the lower, though in the latter plan it may be more difficult or even impossible to prove it. We, therefore, content ourselves with saying generally that the nature or instinct of the bee, or its bodily structure, or its curious mechanical cells, are the same now as they ever were; there has been no visible change or development. But the best mode of *farming* the bee in each month of the year, as shown in the very interesting papers which have appeared in the JOURNAL, would indicate that, although there may be considerable divergence of opinion on the question of evolution among scientists, most people will agree that some change and some improvement at least have taken place in bee management since Virgil's time; and we think it may be interesting and perhaps instructive for our bee-farmers to compare Virgil's treatment of his bees with the treatment they receive from us at a distance of two thousand years.

Virgil was born in Mantua, Italy, sixty-nine years before the birth of Christ—a short time before any

part of the world was under the benign influence of the Christian religion—at a time when there were "lords many and gods many." He received a good and liberal education, and for some years was a practical farmer. During the civil wars he lost his farm, but at the close, at the solicitation of Mæcenas, the prime minister of Augustus, it was restored to him. Italy at this time was reduced to the greatest extremity, and Mæcenas, sensible of the great parts and unbounded knowledge of Virgil, set him about writing for the improvement of agriculture. It was thought to be the only means left to save Italy from utter ruin, and in which Virgil succeeded so well, that after his works on husbandry were published, Italy began to put on a new face, and everything went well. His rules for the improvement of husbandry were so just, and at the same time so general, that they not only suited the climate for which he wrote them, but have been found of such extensive use, that the greatest part of them are put in practice in most places of the world at the present day.

He wrote four books. 1. On the several kinds of tillage proper for each soil. 2. The different methods of raising trees. 3. The choice and breeding of all sorts of cattle, oxen, horses, etc. 4. On bees, which last I propose to lay before your numerous readers in a literal translation from the Latin, by an author who modestly withholds his name. The book containing it was published by Rivingtons, London, 1790.

One or two remarks may be made in correction of the antiquated ideas entertained by the ancients on the subject of bee-culture which Virgil adopted, and which, if he lived in our "enlightened age," he would no doubt be the first to disclaim. The account he gives of the generation of bees, for instance, is justly exploded by the philosophers of the present day. No animal is produced without the concurrence of the two sexes. But the doctrine of equivocal generation was so generally admitted by the ancients that it is no wonder the poet mentions it. The same opinion, we are told, was held both by Aristotle and Pliny. The moderns have been more happy in discovering the nature of these wonderful insects. The laboring bees are not of either sex. The drones have the male organ of generation, and the monarch is found to be of the female sex. The queen is wholly employed in the increase of the family, laying several thousand eggs every summer, from each of which is hatched a small white worm, which in due time changes either to a drone or a bee, and this misconception as to the generation of bees leads to another. It was the general opinion of antiquity that bees were produced from the putrid bodies of cattle, which, a learned critic says, seems to be confirmed from the story of Samson in the fourteenth chapter of Judges. The truth is, such carcasses are a proper receptacle for their young, and therefore the female parent chooses there to lay her eggs, that the warmth of the fermenting "juices" may help to hatch them. With these corrections, which it is necessary to bear in mind in reading Virgil's admirable poem, we proceed to lay it before the reader in a dress of plain but attractive prose.

"Next will I set forth the heavenly gift of aerial honey. Vouchsafe, Mæcenas, thy regard to this part, too, of my work. I'll sing a spectacle worthy of your admiration, though of things minute; the magnanimous leaders, the manners and employments, the tribes and battles of the whole race in order. Laborious essay on a mean subject! but not mean the praise; if the adverse deities permit any one to execute the task and Apollo invoked—hear.

"First, a seat and station must be sought for the bees, where neither winds may have access; for the winds hinder them from carrying home their food, nor

sleep and frisky kids may insult the flowers, or heifer, straying in the plain, spurn off the dews and bruise the rising herbs.

"And let the lizards with speckled, scaly backs, be far from the rich hives, and woodpeckers and other birds; and Frogne, whose breast is stained with her bloody hands. For they lay all things waste around, and in their mouths bear away the bees themselves, while on the wing, a sweet morsel for their merciless young. But let clear springs and pools edged with green moss be near, and a small rivulet swiftly running through the meads; and let a palm or stately wild-olive overshade the entrance; that when the new kings shall lead forth the first swarms in their own spring, and the youth sport it issuing from the hives, the neighboring bank may invite them to withdraw from the heat, and the tree, just in their way, may receive them in its leafy shelter. Into the midst of the neighboring water, whether it stagnates idle or purpling runs, throw willows across and huge stones, that they may rest upon frequent bridges, and spread their wings to the summer sun, if the imperious east wind has by chance dispersed those that lag behind or immersed them in the flood. Around these places let green cassia and far-smelling wild thyme, and store of strong-scented savory, flower; and let beds of violets drink an irriguous fountain.

"But as for your hives themselves, whether they be compacted of hollow bark or wove with limber osier, let them have their inlets narrow; for winter congeals the honey with its cold, and the heat melts and dissolves the same. Either force is equally dreaded by the bees. Nor is it in vain they smear with wax the minute vents in their houses and fill up the edges with fucus and flowers and preserve for those very uses, collected glue more clinging than birdlime or the pitch of Phrygian Ida. Often, too, if fame be true, they have cherished their families in cells dug underground, and have been found deep down in hollow pumice stones and the cavity of a rotten tree. But do thou, to keep them warm, daub their chinky chambers round with smooth mud and strew it thinly over with leaves. Nor suffer a yew (tree) near their lodges; nor burn in the fire the reddening crabs; nor trust them to a deep fen; or where a noisome smell of mud, or where hollow rocks re-echo to the impulsive sound, and the struck image of the voice rebounds.

For what remains when the golden sun has driven the winter underground and opened the heavens with summer light; they forthwith traverse the lawns and woods, crop the empurpled flowers, and lightly skim the surface of the streams. Hence, gladdened with I know not what agreeable sensation, they grow fond of their offspring and young breed. Hence they labor out with art new waxen cells and form the clammy honey. In consequence of this, when now you shall behold the swarm issued from their hives into the open air, swim through the serene summer sky, and the blackening cloud driven about by the wind, mark them well. They always seek the waters and leafy coverts. Here sprinkle the fragrant juices that are prescribed, bruised baum and the vulgar herb of honeywort. Awake the tinkling sounds, and beat the cymbals of mother Cybele around. They of themselves will settle on the medicated seats, they of themselves, after their manner, will retreat into the innermost chambers.

"But if they should go forth to battle—for often discord with huge commotion seizes two rival kings, you may from the beginning know long beforehand both the animosity of the populace and their hearts in trepidation for war. For that martial clang of hoarse brass rouses the ladders, and a voice is heard resembling the trumpet's broken sounds. Then in a hurry they assemble together, quiver with their wings, sharpen their stings with their beaks, fit their claws, crowd thick around their king and to his pavilion, and with loud hummings challenge the foe.

"As soon, therefore, as they find the vernal sky serene, and the fields of air open, forth they rush from their gates, they join battle, buzzing sounds arise in the sky above, mingled they cluster in a mighty round, and fall headlong. Hail rains not thicker from the air nor such quantities of acorns from the shaken oak. The kings themselves amidst the hosts, distinguished by their wings, exert mighty souls in little bodies, obstinately determined not to yield, till the dread victor has compelled either these or those to turn their backs in flight. These commotions of their minds, and this so mighty fray, quashed by the throw of a little dust will cease.

"But when you have recalled both leaders from the battle, put him to death that appears the baser, lest by idle prodigality he do hurt, and suffer the more valorous king to reign in the court without a rival. The one will glow with refulgent spots of gold; for there are two sorts; this is the better distinguished, both by his make, and conspicuous with glistening scales. The other is horribly deformed with sooth and ingloriously drags a large belly.

"As the kings are of two different figures, so are the bodies of their people. For the one looks hideously ugly, as when a parched traveler comes from a deep, dusty road, and spits the dirt out of his dry mouth. The others shine and sparkle with brightness, burnished with gold, and their bodies spangled with equal drops. This is the better breed. From these at the stated season of the year you shall press the luscious honey; yet not so luscious as pure, and fit to correct the harsher relish of the grape.

"But when the roving swarms fly about and sport in the air, disdain their hives, and leave their habitations cold, you shall restrain their unsettled minds from their vain play. Nor is there great difficulty to restrain them. Do you but clip the wings of their kings. Not one will dare, while they stay behind, to fly aloft, or pluck up the standard from the camp.

"Let gardens fragrant with saffron flowers invite them, and the protection of Hellespontiac Priapus, the averter of thieves and birds, with his willow scythe preserve them. Let him who makes such things his care bring thyme himself, and pines from the high mountains, to plant them far and wide about their hives. Let him wear his hands with the hard labor; set himself the fruitful plants in the ground, and water them with kingly showers."

(To be continued.)

Purchasing and Removing Bees.

J. L. Chris, Rodheim, Germany, in a work of two volumes, dated July, 1783, writes:

"The bee marks the location of her hive early in the spring, and if removed short distances away after that many will be lost. If removed four miles or over they will re-mark their location by flying about the hive four days, and always making a greater circle about it until far distant, thus obtaining their proper location. If other hives are near, and at first they should err, the scent, peculiar to each individual colony, would soon set them right. In purchasing he states: The colonies you intend to purchase should be rich as to numbers of bees and weight. The heaviest combs are worth nothing if they are not strong in bees and brood. Because the cells are mostly filled with honey, the queen can only find few cells in which she can rear brood early, and in consequence such heavy colonies do not swarm at all in the spring, or very late. Because of this, unscrupulous bee-keepers, having straw hives for sale, do wisest when they dispose of their lightest and heaviest colonies and keep those of medium weight for themselves." At the present day, with all our progress, we can give no sounder information than this German did over 100 years ago.

R. G. HOLTERMAN.

Horticultural.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

Lawn Making

The most essential elements of beauty about suburban homes are trees and lawns. In many of the American towns and cities the most striking and pleasing feature is the miles of lawn or emerald green stretching along the margins of the streets and avenues, and around the dwellings and public buildings, all kept in excellent condition.

With our neighbors across the St. Lawrence lawn-making has made wonderful progress within the last fifteen years. This is doubtless owing in part to the ease with which they can now be kept in order by the use of ingeniously improved hand and horse-mowers.

A great deal of skill is not required in making a lawn. Common sense will generally lead a person in the right direction in such a matter; yet inquiries regarding the most satisfactory methods are not in-

frequent, and it is for the benefit of some who may be intending to beautify their rural homes that I would offer a few suggestions.

In Canada we are liable to long continued droughts in summer time; hence the preparation of the ground is of the utmost importance. Almost every one knows that on a shallow surface soil on a hard subsoil of any kind the grass quickly suffers from even a short drought, therefore in order to ensure success, the first and most essential thing to be done is to get the ground ploughed or trenched to the depth of eighteen inches or more, and thoroughly manured with well-rotted barn-yard manure finely pulverized and spread evenly on the surface, and then worked into the soil with drag or cultivator until the surface is smooth and even; deep tillage and manuring is the foundation of success in lawn-making.

Where manure is scarce, a finely pulverized compost of swamp-muck mixed with superphosphate of lime and guano answers an excellent purpose. When the ground is of a sticky, clayey nature, a topdressing of some free soil is almost indispensable for a sure take of fine grass seed. As regards the kinds of grass best adapted for the purpose and the quantities to be sowed, experience of the best landscape gardeners in America has led to the conclusion that there is nothing equal to a mixture composed of 2 bushels Kentucky blue grass, 1½ bushels red top, and from 2 to 4 pounds of white clover for an acre; but on land of a dry gravelly nature the quantity of white clover should be increased because it stands the drought better than the grasses. All kinds of coarse grasses should be avoided, because they retard the growth of the finer kinds, which must eventually form the lawn. The grass seed being much lighter than the clover, there is difficulty in sowing the whole equally over the ground, therefore it is advisable to mix the whole with some loamy soil, just enough to make equal distribution quite easy. Soon after the seed is sown the ground should be rolled to prepare it for the mowing-machine, for when a thick, dense carpet is desired, the grass must be kept cut short from the first. There will certainly some annual weeds appear along with the grass; so as soon as there is anything to cut, the mower should be applied. The common practice of allowing the first crop of grass to grow until fit to cut for hay is most absurd, and should not be allowed.

Regarding the best time to sow for a lawn there has always been much difference of opinion. So much depends on circumstances and conditions that the question is likely to remain unsettled. If one knew exactly how the weather was to be throughout the season, the matter would be easily decided. I have, however, always found it advisable to get the ground thoroughly prepared during the summer season, and to sow the seed late in the fall, so that it will start early in spring; when so started, it generally endures the summer's drought, but if the sowing is deferred until spring, frequent rains sometimes prevent the proper condition of the soil until too late in the season. All lands that are on a wet bottom must be thoroughly underdrained before they are suitable for a lawn, because without drainage they are sure to produce coarse grasses that are indigenous to wet land, and they soon over-ride all the finer grasses which must compose the velvety lawn.

Terraces of every description, being unnatural, are discordant with true taste, and should be scrupulously avoided and universally denounced. I have seen hundreds of otherwise lovely landscapes rendered ridiculous by the erection of artificial terraces. A lawn never looks so well as when made to conform with the natural lay or slope of the ground.

D. NICOL.

Cataraqui.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

Fruit Prospects for 1885.

Apples, the staple fruit crop of the Province, do not promise well at present. However, if all goes well from this time forward, a fair crop may be gathered. Most orchardists have been busy during the past week spraying their orchards with Paris green, hoping to destroy the larva of the codling moth. I sprayed 500 nine-year-old trees in ten hours to destroy canker worm that is busy defoliating the trees, but a shower the following night washed off the poison, and the worms are there still. Will have it to do it over again. Consumers need not fear any bad effects from the use of Paris green on orchards; the first shower washes it all to the ground; besides, the small amount used would make it impossible for one person to get poison enough to do any injury, even if it was not washed off, and if said person were to eat a bushel of apples, skins and all, at once.

Cherries also promise a very poor yield, the poorest for many a year, both English and common cherries.

Pears bid fair to yield a medium crop.

Peaches also, in well kept orchards, should yield a very good crop, a paying crop, from present appearances. But there have been very few trees planted during the past few years, and many orchards are getting old or useless through neglect or disease, so that the acreage of bearing orchards is not as large compared to the demand for peaches as it was a few years ago. Prices will therefore be good, even if first-class orchards yield well. Besides, there are numerous canning and evaporating establishments in operation now that were not in existence at the time of the last heavy crop of peaches.

Grapes bid fair to produce a very large yield. Some of the tender varieties were injured somewhat by the winter, but as most of the grapes grown are Concord, and these came through unhurt, it will not affect the total yield very materially. Many have met with severe losses below the mountain this year with young vineyards. Most of the vines planted in 1884 have been frozen to death at the roots, the ground being bare during a portion of the cold weather in the winter. The same is true of large sections in the United States, along the south shore of Lake Erie; from Buffalo west nearly all young vineyards have been thus destroyed. The only ones that escaped were those sheltered so that the snow lay on the ground all winter. We lost very little here on the mountain, but they were touched a little in exposed places. It must be borne in mind that where young vines are killed, the surface roots of older vines are injured, and these vines are not capable of maturing a full crop, however much fruit may set. I have no doubt many vineyards will be overloaded this year. For that reason, and that the vines are thus enfeebled, they will be unfitted to stand another severe winter. The chief reason vines came through this very severe winter so well, as regards the tops is, that they bore a light crop last year, and consequently ripened up their wood in good shape.

Kittatiny blackberries were nearly altogether destroyed by the severe cold of last winter. The crop will be nil.

Red and black raspberries promise a good crop, as usual, though some varieties were badly injured, of which more in a future number.

Currants, same as above.

Gooseberries are immensely loaded. These and currants have been much infested with worms. Hellebore, however, effectually closes their voracious career.

Of strawberries it is useless to write, as consumers

will be enjoying this cheap and healthy fruit before the JOURNAL is issued. At present the show of blossoms is simply prodigious.

J. D. SMITH.

Winona, June 15, 1885.

The Home.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

My Love.

BY MRS. HANEY.

My love was a dove, a beautiful dove,
My love was my life and light.
I hid my heart in its folded wings,
And its folded wings were white.

I loved my love with a tender love,
It was all the world to me;
My heart, in its pure white resting place,
Was glad as a heart could be.

I left my love for a little while,
Not that I would, but must.
But I trusted my love, my beautiful dove,
With a full and perfect trust.

I sought my love, my pure white dove,
But found to my despair,
Its wings were trailing down in the damp
And many a stain was there.

I took up the crushed and drabbed wings,
And I wrung them out with my hand—
I had no other resting place,
So I built my hopes on the sand.

I go thro' life like a grieving child,
And my heart no more is light,
For the tarnished wings cannot comfort me,
Like the beautiful wings of white.

CAISTORVILLE, ONT.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

A New Experience.

SCENE—A long, low, sandy shore, on which the waves of the Atlantic Ocean are beating, now with gentle swell, now with resounding roar, Lat. 44° N., Long. 60° W.

Who by this slight description can name the spot meant? In sight are various wooden buildings; groups of people are scattered around—men, women and children, variously occupied, here a few sailors, there a group of children rolling over and over, down an almost precipitous bank of sand, now appearing, now disappearing; here are others wandering about gathering, yes it must be strawberries, for the month is July. Not far away is a lighthouse, and not quite so far distant, held fast in the embrace of the fatal sand, lies what was three days ago a noble steamship of 3,000 tons burthen, now disabled, crippled, gradually sinking deeper and deeper, with bow under water and stern raised high in air. How few of the passengers when they found their course so suddenly arrested, had any idea where they were, and when the announcement was made, that this long low shore visible where the fog lifted, with, far as the eye could reach, a wall of surf encompassing it, must be Sable Island, so dreaded by mariners, how little was the collective information that could be gathered, either as to the exact locality, or if there were any inhabitants, or if so, how they might be inclined to welcome us. The present writer could only recall a scrap of school history, that this was a spot where about three hundred years ago, fifty French convicts had been left, basely deserted in fact by their leader, and after seven years, twelve alone were found, dressed in skins of seals they had caught; also a dim recollection of animals having been landed here by Portuguese explorers to serve as food for those unfortunate enough to be shipwrecked. Indeed no one seemed to know this was a Government Station,

with two lighthouses, twenty men, boats, life-saving appliances, stores, food in plenty for any such emergency as this, and even through some minds had run the thought of wreckers ready to take the lives and property of passengers and crew. But here we were on this lonely spot, only visited by the Government steamer every two months; in suspense as to whether our open boat sent away to Halifax had succeeded in gaining the mainland, a hundred miles distant, or not. Here is no daily mail, no telegraph, school or church, no shriek of cars, no wagon "rattling on the stoney street", no gamins on the street corners; what a find for the wearied-out watering-place devotee, desiring something new. A few days ago the population of the Island was about forty, to-day it is two hundred. We must not forget beside these, in the normal condition of the Island, there are three hundred horses.

But a plan had been formed by some of us, of visiting again that part of the shore where three days ago a tragical scene had been enacted, and once more gazing on the once stout and staunch ship; but although apparently an easy enough thing to do, this proved not so easy of accomplishment for our peculiar situation. The Island, in shape resembling the new moon, is in some places only a mile wide, while in the centre, almost from end to end, is a salt water lake, in some places deep, in others shallow. All the shipwrecked party were on the north shore; about three miles west, on the south shore, and distant from it half a mile, was the old STATE OF VIRGINIA, or what remains of her; but to walk around by land would entail a journey of fifteen miles. An attempt had been made to go with the heavy wagons, drawn by Sable island horses, which had proved unsuccessful, but the next afternoon we did succeed in our effort. Four formed our party, thus made up. The fourth officer of the ship, a well made, ruddy, pleasant faced young fellow, a pale New Yorker seeking relaxation from business cares, a young widow also from that city, and the present writer, who need not be further described. We were joined when setting out by two others, a New York milliner who had been on her way to bring home the Paris and London fashions, and the stewardess of the ship. Our progress was not very rapid, as we were in a common fisherman's boat, clumsy and heavy, I, who had rather incautiously offered to help row, found it a very different thing from rowing the light pleasure skiffs we see on Ontario's blue waters, and I am afraid our pale New Yorker knew less of rowing than myself, and was besides physically unequal to the exertion, so that on the brawny muscles of our young sailor nearly everything depended. At last, we determined to land on the opposite shore, and walk to the scene of the wreck; But what was our dismay to find that our small boat had shared the fate of the steamer; we were stuck fast in the sand with only a few inches of water it is true, but distant from the shore, forty or fifty feet. What should we do? We certainly could not reach land without getting quite wet, but here our escorts took the matter into their own hands, taking off their shoes and stockings, proceeded to carry us to the shore. The wise man has said, there is nothing new under the sun, but here at last was a new experience. When our good natured sailor carried one safe to shore the rest of us breathed more freely, but when a rather stout lady fell to the share of the frail city invalid, I trembled as he seemed to totter, and felt relieved when I found my lighter weight would not depend on his efforts. Fancy for a moment the figure we cut; shall I ever forget our absurd position! The thought occurred, could some of my friends see me in this novel and undignified position, how would they raise hands of horror; so tell

it not Gath! To this day, so far, have they never been enlightened by me, and I know that the discreet readers of this may be relied upon to keep the tale an inviolable secret. But indeed I sometimes think, did I indeed ever thus figure, was it in some other state of existence that all this happened, or could this be really myself? But the shore was reached in safety, and as we walked along, ever nearing the scene of the wreck, what thoughts went through our minds. What horrible sight might the next moment be disclosed, should the sea give up its prey; would it be the laughing face of the prattling child, or the long fair curls of an idolized only daughter, or the sturdy little Swedish boy, or the mother with her two children, who had all been claimed by the "awful, pitiless, terrible sea," that we might see next? But we were spared such terrible sights. Two of our party had been in the life boat when, ah! shall we ever forget it, we who sat on the shore having safely passed that terrible surf, still less can they; no doubt those terrible moments must often come back to them, when dashed about, now sinking, now dragged on the boat, which was still bottom upward, and again submerged when she righted herself.

Here are traces of the ruin, barrels of flour, boxes of cheese, bales of hay, agricultural implements, etc.; here again are some of the cattle thrown overboard to lighten the steamer, some of them alive and well, others lying dead, here one yet alive with a broken leg waiting for some friendly hand to put it out of its misery. On and on we went, with our feet sinking in the soft sand, was this the very spot where we had landed? with the ground covered with eggs or young birds newly hatched out, brown spotted eggs of which some of us carried away a quantity, finding to our dismay they were perishable articles, as the shells were extremely brittle. I had walked on in advance, but was recalled by signs to return, while I was looking for the remains of the fire lit on the beach that day to warm those left till the return of the wagon; so after all our long walk, and attempt at rowing, our object was not attained. As we turned our backs on the good ship, soon by the force of winds and waves to be broken up, and covered in the shifting treacherous sand, occurred the thought—What tragic tales could these shores relate! Even now while I write comes a story in a letter from Mrs. McDonald, the wife of the superintendent of a barque, wrecked on the north bar; the captain's wife, four children, and nine seamen, washed off the raft, and only the captain and three men, after battling with the surf for a part of two days in terrible November weather, at last rescued by the Island life boat.

As we retraced our steps, visions dawned on us of our predicament, should our boat have drifted away, but to our relief the fastening was found intact, and again we were carried ingloriously, it must be confessed, in the same way as before. I still remember trying to hold out at arm's length, or at least so that they would not be crushed, the eggs gathered by myself and those of one of the rest who had some other treasure of shells, etc., and so entrusted them to me. Soon we were on the other side of the lake, near our temporary home, but alas! the eggs gathered and carried with such care, were here accidentally dropped on the ground and nearly all broken. A fitting reward no doubt for robbing the poor gulls. This was not all, for the three saved from this disaster, carefully strung and conveyed with tender care in a little basket on the life boat, and again on the government steamer thence in a cab to hotel, were at last left forgotten hanging in a wardrobe of the Halifax Hotel, no doubt to be thrown away as useless rubbish. How like much of the useless striving in greater things in the race of life, ineffectual attempts, no end gained, defeat—vain

longings and strivings after what often proves the unattainable, or at least the unattained. The remainder of the day was filled up with a visit to the remains of the old French gardens of three hundred years ago, and in the evening attending a concert given by the ship's crew, to which the passengers were invited, and for the first time since we had been on the island, returning, the stars shine overhead as if we were not on Sable Island, with its fogs and mist which so often hide sun and stars alike. Not soon shall be forgotten our aquatic and pedestrian expedition of that afternoon.

NIAGARA.

J. C.

Welcome Visitors

For the month these are:

Canadian Forests.—Forest trees, timber and forest products, by H. B. Small. This work contains much useful information relative to the extent of our forests, exports, timber limits, forest enemies, etc.

"Proceedings of the Annual Conventions of the Dairyman's Associations of Western and Eastern Ontario." This pamphlet of 156 pages, contains the addresses delivered at the conventions of their respective associations at their last annual meetings, along with the discussions thereon. Much that is highly valuable to dairymen was brought forward, and will well repay a careful perusal by all parties interested. The secretary, Mr. C. E. Chadwick, of Ingersoll, states in the preface that "the excellence of Canadian cheese is largely due to the advanced ideas demonstrated through these conventions, and no enterprising dairyman can afford to ignore this influence," every word of which we most heartily endorse.

The Guernsey Breeders' Journal. This bright little publication is "devoted to the advancement of the breeding of thoroughbred cattle, especially of the Guernsey breed." Its issue commenced with the year, and one of the many features is the publication of essays read at meetings of the Guernsey Breeders' Association. *The Guernsey Breeders' Journal* is published at Winchester, Pa., U. S. A., at \$1 per annum.

The *catalogue* of the Aberdeen-Angus herd owned by R. C. Auld, Portage Lake, Pinckney, Mich., U. S. A. This beautiful catalogue is at once historical, descriptive and illustrative. The introduction announces the recent addition of \$3,000 worth of the Polled cattle to the herd by importation. Some 20 head are now offered for sale. There is also the announcement of a forthcoming "original and exhaustive work on Polled cattle of all times and all climes," by the owner of the Pinckney herd. It will contain chapters on the modern breeds of Aberdeen-Angus, Galloways and Suffolk, although all matters of a controversial nature are to be excluded. The historical sketches cover much of the work of Mr. McCombie. Indeed the Pinckney herd is but a continuation of that which was formerly the pride of Tillyfour. The chapter on "The Blood Royal at the National in 1884" will be very serviceable for reference to admirers of this breed. The chief stock bull is Heir of the Shire, bred by Mr. Auld, by Knight of the Shire 1699, and the dam, Pride of Aberdeen 10th 3250, and traces back through a lineage the extent of which almost bewilders one to Queen and Panmure blood. The notes to the different pedigrees are also copious and exact. A portrait of the late W. McCombie, of Tillyfour, with his meditative Scottish face, constitutes the frontispiece. Illustrations of several champions of the breed also adorn its pages, but some of them, though accurate, perhaps, in delineation, are defective in finish.

Personal.

MR. J. G. SNELL is now in England purchasing Berkshire Pigs and Cotswold sheep for importation to our shores. He (Mr. Snell) has attended the Bath and West of England Show, held at Brighton, and also other leading shows, and writes that he is well pleased with the character of the cattle, sheep and pigs on exhibition. He will sail for home about the 20th July.

Mr. W. T. Benson, of Cardinal, as most of our readers have already noticed, is with us no more. Mr. Benson was prominent as a breeder of pure-bred and grade stock, formerly as a breeder of Shorthorns, but latterly giving his attention chiefly to Herefords. His death will cause quite a gap in the neighborhood, and indeed in the country, as he was largely engaged in various branches of business, and served his own county in the Dominion Parliament. We do not know at this writing what is to be done with the exceedingly beautiful home which he left at Point Cardinal.

Jottings.

AT Kinnaird Castle in Forfarshire, Lord Southesk is trying the experiment of crossing his West Highland herd with a Hereford bull.

WARBLES in cattle may be easily destroyed by applying a small quantity of mercurial ointment, by using McDougall's dip, tar, or acetic acid.

VOL. XVI. of the English Hereford Herdbook contains the pedigrees of 4000 females and 1300 bulls. Vol. V. of the Galloway Herdbook 727 cows and heifers and 414 bulls.

EXPERIMENTS made at Woburn, England, have made it clear that it is worse than useless to apply alone to grain crops such mineral manures as sulphate of potash, sulphate of soda, sulphate of magnesia, and superphosphate of lime.

IT is said that in Mexico sugar cane grows wild, and in the warmer zone may be planted in any month in the year. As labor is cheap it is confidently expected that there is a great future before that country as a producer of sugar.

WITHIN the last five years 400 head of pure-bred Ayrshire cattle have been sent to Sweden from Scotland. The last lot of 60 head sent over in April are intended for the Government and agricultural associations of that country.

IN the article, "Improved Stabling and Better Farming," in the June number of the JOURNAL, we introduced the writer as "G. Laidlaw, M. P. P.," mistaking him for Mr. Laidlaw, M. P. P., of Guelph. The writer of the article is farming on a gigantic scale at The Fort, Victoria Road, Ont.

DR. A. P. AITKEN, writing in the *North British Agriculturist* of May 6, gives the results of a test conducted by himself in applying bone meal ground (1) fine, (2) a medium degree of fineness, and (3) coarse. That finely ground gave quite the best results, even the third year after the application had been made.

PLEURO-PNEUMONIA is still doing its insidious work in Illinois, Missouri and others of the States. The most energetic efforts are being made by Commissioner Colman and his staff and also by the local authorities for stamping out the disease, and it is to be hoped these praiseworthy efforts may soon attain their object.

MESSRS. VINTON & CO., the proprietors of the *Agricultural Gazette and Live-Stock Journal*, 30 Hampstead Road, London, Eng., are about to publish a volume on the "History of Hereford Cattle." The work will be practical, will treat of the subject in an exhaustive manner, and will be handsomely illustrated.

IT has been computed that half a million tons of guano produced by bats are deposited in the Texas caves of Uvalde and Cibola. This is now being brought in to the market by the Texas Guano Company and promises to be no mean rival of Peruvian guano. The deposit in the caves varies in depth from six to twenty five feet.

MR. DUCKHAM, M. P., England, favors the use of a preparation of carbolic acid and lard in the proportion of 1 to 20, as a remedy for warbles. He also uses it in removing ring-worm, and thinks it preferable to mercurial ointment, on the ground that there is no danger arising from the animals licking it off as is the case with the ointment.

IN an Old Country exchange it is stated that "it must not be forgotten that sheep-washing makes thriftier lambs. It will invariably be noticed that the lambs thrive and grow better after the ewes have been washed than they do during any other month in the year." Does this experience chord with that of our Canadian shepherds?

MR. J. ENSOR, of Dorchester England, recently held a large sale of Dorset horn sheep, composing drafts from many of the principal breeders in Dorset and Somerset. The sale was considered a success. The rams sold for from 5½ gs. to 30gs., and the ewes from 48s. to 70s. each. How is it that the Dorset horn sheep have not found their way to Canada?

ONTARIO, last year, we gather from the report of the Bureau of Industries, gave an average of 24 bush. of fall wheat per acre, 20.2 bush. spring wheat, 27.3 bush. barley, and 38.5 bush. oats. The highest averages reported from the various states are: New York, 16.5 bush. fall wheat, Minnesota, 16.1 bush. spring wheat; Ohio, 26 bush. barley, and Minnesota, 37 bush. oats.

WE are pleased to notice that Messrs. Charles Lawrence & Son, of Buccleugh Stock Farm, Collingwood, are about erecting a 16-foot geared wind mill on their new barn. In addition to their very general usefulness, we believe that wind-mills, when they become more common, will have a very potent influence by way of keeping young men from turning their backs on what they term the drudgery of farm life.

THE *Sugar Beet*, published in Philadelphia, states that while but little progress has been made in Canada in the sugar beet industry, owing in part to discouraging accounts given by several local papers ignorant of the requirements of sugar beet cultivation, with plenty of capital the industry can and will be established. It compliments Professor E. A. Barnard on his unwearied efforts in combating these misrepresentations.

MR. WM. TEMPLER, of Jerseyville, speaks in the stock notes column of selling five fat cattle, two years old, that had been fattening but four months, which averaged nearly 2,300 lbs. each. Had they been fattened for a longer period they would easily have gone 2,400 lbs. each, a weight which suits the shippers well. What is to hinder every farmer from accomplishing the same, and thus saving the life-sustaining outlay for a whole year on every cattle beast thus fattened?

FOR the low price of \$7 a neat little churn, called the "Breakwater," can be procured of A. N. Christopher, of Ingersoll. When in Ingersoll recently we were much taken with the appearance of this churn, its lightness, and cheapness, and the oddity and yet simplicity of its construction. It is made of white wood, imported from Indiana. We know nothing as to its utility, other than the favor shown to it by those who tried it last year. It is claimed that churning can be done by it in from three to six minutes.

IN the *Farmer and the Chamber of Agriculture Journal*, London, we read, "It has been computed that in some districts over nine tons per acre of soil annually passes through the bodies of worms, and that practically the whole surface is renewed by them every few years. In addition to this action they take down with them portions of vegetable matter as dead leaves and the passages they construct act as drains, facilitate the passage of the air and open the grounds for the roots of plants." If Darwin has said to us some things about evolution that we may not deem pleasant, he has also given us much light in regard to these silent unwearying workers, that we may read with great interest.

THE Herefords of Mr. T. Myddleton, Beckjay, Eng., number from 50 to 60 breeding cows. On his 500 acre farm Mr. Myddleton keeps some 600 sheep and 30 horses. The foundation of the herd commenced with the century. Mr. Myddleton began his career as a breeder at Llynaven, Clun, about sixteen years ago. He removed to Beckjay in 1879. Mr. J. B. Green's Nobleman 2,652, Mr. T. Rea's Plato 4,895, Sir Thomas 2nd 2,778, Sultan 4,163, and Hildebrand 4,646, are the principal bulls used in the herd by the present owner. Young Starway 5,705 and Silver King 5,580, amongst the more recent sires, were bred at Beckjay. The most recent sires have been the prize-winning Regulus 4,076 and Horace 4th 5,388, and Horace 6th 5,027, both sons of the renowned Horace.

IN 1884 the number of cattle imported into Canada was 1607, sheep, 473, and swine, 15. Of these 929 were Herefords, 47 Polled Angus, 124 Shorthorns, 377 Holsteins, 63 Galloways, 17 West Highland, 16 Jerseys, 4 Guernseys, 7 Ayrshires, 2 Devons and 21 Sussex. Of the 473 head of sheep imported 312 were Shropshires, 19 Cotswolds, 65 Southdowns, 7 Hampshire Downs, 11 Oxford Downs, 12 Lincolns, 7 Leicesters, 37 West Highland and 3 Cheviots. A large lot of the Herefords imported went on to the Western States. The decrease in the numbers imported as compared with 1883 is attributed to a more modified demand for the Hereford and Polled Angus breeds and to prudential reasons, as the fear of importing disease.

IN the year 1867 the Herefords at Felhamp'on Court became the property of Mr. John Hill, the present owner. The herd now numbers 200 head. It comprises the Lord Berwick, Urwick, Turner, Marlew, Sheriff of Coxall, Monaghany, Horace, Sherlowe, Westmore and Benthall groups. The Lord Berwick or Cronkhill group is noted for its disposition to take on flesh, which is simply extraordinary. The stock bull Cronkhill VIII, now in service in the herd of Messrs. Green Bros., of the Glen, is of this family. The grand old bull Merry Monarch 5466 is still lord of the herd. He is ten years old. Cronkhill Monarch 6885 is also doing good service, and the rising bull Highland Laird 7015 has been on hire in the herd.

THE British Dairy Farmers' Association are offering prizes for dairy stock, to be judged on the farms of the owners. £50 are offered for the cows in any pure-bred Shorthorn herd, numbering not less than ten head, showing the best milk-producing properties, and a similar sum for the best herd of dairy cows any breed or cross, numbering not less than twenty animals, the property of a tenant farmer running not less than seventy five acres. The object of the prize offered in Class I is to give farmers an idea which are the best strains of milk-producing Shorthorns, so that bulls may be used of those strains in breeding dairy cows. The competitors must be prepared to furnish the judges with information regarding the breeding of the cows, kinds of feed, and method of feeding, and dairy records where the same have been reported. Some Englishmen seem to think that it is time to give due attention to the developing of the old-time milking qualities of the Shorthorn cow.

MODEL DAIRY AT THE TORONTO INDUSTRIAL EXHIBITION. The directors of the Industrial Exhibition Association of Toronto seem determined to bring before the people of this country all the improvements that are from time to time being made to advance the agricultural interests of the Dominion. They have decided to establish and operate in connection with their next exhibition, to be held at Toronto from the 7th to the 19th of September, a model dairy. It will be under the management and superintendence of Prof. Brown, of the Guelph Agricultural College, assisted by Prof. Barry, the well known scientist of cheese and butter-making. It is proposed to exhibit a centrifugal machine for separating the cream from three hundred pounds of milk per day, and making the same into butter. The milk from different breeds of cattle procured daily on the exhibition grounds will be exhibited in large glass tubes, so that visitors can see the quantity of cream given by each cow from an equal quantity of milk. Prof. Brown and Prof. Barry will be on hand at all times during the exhibition to furnish information to visitors and those interested in cheese and butter-making. The Dairy will be fitted with all the latest improvements of dairy utensils, and should prove of special interest to those interested in this department, and we can safely say that our farmers, even if they have to travel a long way to the Toronto Exhibition to see this department, will be amply repaid for their trouble and expense.

Transfers of Thoroughbred Stock.

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

CANADA SHORT-HORN HERD BOOK.

- b. Orpheus 16th [12939], by 4th Duke of Clarence [4988], (33597). Canada West Farm Stock Association, Ewer, Cameron and others, Port.
- b. Rob Roy [12940], by Lord Beaconsfield [10142], A. C. Pettitt, Grimsby; Beverly Book, Grimsby.
- b. Duke of Normandy [12941], by Prince of Wales [9168], Henry Menser, Elmwood; Henry Lippert, Neustadt.
- b. Sir John A. [12943], by Garfield [10964], Geo. Stewart, Valenticia; R. Suggitt, Casarea.
- b. Ringo Boy [12942], by Garfield [10964], Geo. Stewart, Valenticia; Wm. Stewart, Little Britain.
- f. Pride of Scugog [12923], by Garfield [10964], Geo. Stewart, Valenticia, Alex. Earle, Scugog.
- b. Halton Hero [12946], by Hanlan [8679], Robert Aikens, Knatchbull; H. W. Henders, Yelverton.

- b. Lord Haddo [12947], by Rose Duke [9276], Wm. Watson, Nassagaweya; Robert Aikens, Knatchbull.
- b. Darby [12948], by Lord Beaconsfield [10142], J. A. Pettitt, Grimsby; J. B. Carpenter, Simcoe.
- b. Champion of Louth [12949], by Baron Cambria [6602], Jas. R. R. Secord, Homer; Samuel Gladwell, St. Catharines.
- c. Duchess of Berlin [11802], by Eldredge Duke [7049], Rev. Alex. Campbell, Stonewall, Man.; Alex. Matheson, Stonewall.
- b. King John [12951], by the Grange Duke [10779], Mark Ashman, London; John Webb, Masonville.
- b. Blake [12952], by Earl of Lobo [11054], James Healey, Strathroy; Joseph Burns, Warwick.
- b. Sir John [12953], by Royal John [10443], James Healey, Strathroy; S. D. Burns, Warwick.
- b. Duke of Venice [12954], by General Grant [12453], E. H. Morgan, Starbridge Station, Que.; T. Mos. Hunter, Venice, Quebec.
- b. Earl Grey [12955], by Royal Duke [10438], John Hyslop, Brussels; John Johnston, Brussels.
- h. Lilly 3rd [14720], by Erin Chief [11021], Robert Henderson, Orangeville; Wm. Hawkins, Alton.
- c. Lilly 2nd [11567], by Prince Bloom [9129], Robert Henderson, Orangeville; Wm. Hawkins, Alton.
- b. Earl of Lambton [12956], by Victor Emanuel [11866], Noah Bricker, Roseville; Albert Duncan, Osborne.
- b. Oxford Duke 8th [12957], by Earl of Airdrie [5158], Alex. Robertson, Alton; James Hills, Hanover.
- b. Prince Royal [12958], by Lieutenant [7286], John B. Berg, Elmira; Henry Berg, Philipsburg.
- b. Duke of Marigold [12959], by Christopher [12534], George Keith, Toronto; Joseph Orr, Clarkson.
- b. Royal Buttersly [12963], by Nonsuch [7522], John Routledge, Hyde Park; John Burns, Westminster.
- f. Maud Languish [14735], by Harwich Duke [10059], B. S. Seaman, Blenheim; W. J. Devereux, Ridgetown.
- f. Annie Languish [14736], by Joe Languish [10103], B. S. Seaman, Blenheim; W. J. Devereux, Ridgetown.
- b. Lord Ashley [12959], by Commodore [9773], B. S. Seaman, Blenheim; Wm. Nichols, Blenheim.
- b. Halton Pride [12960], by Prairie King [10293], Henry Robinson, Omagh; Amos Kinder, Omagh.
- b. Sir Roger [12968], by Prairie King [10293], Henry Robinson, Omagh; Joseph Watson, Boyne.
- b. Dollar King [12972], by Prince of Goodness [10342], W. F. Nichols, Buttonville; Peter Boynton, Dollar.
- b. Delta Chief [12973], by Guelph Baron [7158], Alex. Acheson, Philipsville; J. E. Brown, Delta.
- b. General Garfield [12974], by High Sheriff 3rd [7189], Rowland B. Orr, Milton; J. S. Williams, Knowlton, Que.
- b. Prince of Bolton [12975], by Earl of Stafford [11432], C. W. Bancroft, Knowlton, Que.; J. F. Bryant, Millington, Que.
- c. Beauty [14751], by Lord Dufferin 3rd [5579], Henry Robinson, Omagh; John Wales, Omagh.
- b. Premature [12978], by Prairie King [10293], Henry Robinson, Omagh; John Miller, Hornby.
- c. Lady Huron [14755], by Crusade 2nd [8291], Wm. Barbour, Crosshill; Samuel Rannie, Zurich.
- b. General Gordon [12982], by Beaconsfield 4th [12832], James Carnochan, jr., Seaforth; John McKinley, Blake.
- b. John Collins [12981], by Beaconsfield 4th [12832], James Carnochan, jr., Seaforth; W. N. Johnston, Belgrave.
- b. Kenmore [12984], by Marquis of Lorne [8065], J. Hawken, V. S., Detroit, Michigan; H. G. Arnold, Maidstone Cross.
- b. Harlequin [12983], by Marquis of Lorne [8065], J. Hawken, V. S., Detroit, Michigan; H. G. Arnold, Maidstone Cross.
- b. Barmpton Champion 2nd [12985], by Young Ned of Rosedale [10657], J. S. Robson, Archibald, Man.; W. Bedford, Calf Mountain, Man.
- b. 5th Duke of Huntley [12986], by Lorne [7392], Hugh Gourlay, Huntly; Hiram Blackman, Huntly.
- b. British Crown [12991], by Sir Leonard [10500], (45613), Thos. McCullough, Eramosa; John Cole, Mitchell.
- b. Duke of Cumberland 2nd [12992], by Duke of Cumberland [9852], James McCutcheon, Sealey's Bay; J. C. Stafford, Lyndhurst.
- c. Daisy Duchess 3rd [14767], by Franklin Duke [9977], James McCutcheon, Sealey's Bay; J. C. Stafford, Lyndhurst.
- c. Lady Kate [14766], by Duke of Cumberland [9852], James McCutcheon, Sealey's Bay; J. C. Stafford, Lyndhurst.
- b. Duke of Chicopee [12995], by Manitoba [11661], Joseph Saunders, jr., Preston; J. S. Frain, Walker.
- b. Duke of Fairmount [12996], by 2nd Duke of Fairview [8398], D. Mackenzie, Hyde Park; John Bell, Crumlin.
- b. Village Major [12996], by Butterfly's Athelstane [4719], G. B. Bristow, Rob Roy; David Reid, Bogron.
- b. Drum Major [12999], by Sir Richard Booth [11358], G. B. Bristow, Rob Roy; Robert Hamill, Chatsworth.
- b. McNab [13002], by Statesman 1st [9420], (44096), S. C. Isaac, Baltimore; A. H. Rosevear, Cold Springs.
- b. Joe Smith [13001], by McNab [13002], A. H. Rosevear, Cold Springs; James H. Rosevear, Cobourg.
- b. Pride of Peel [13003], by Young Canada [12221], Robert Fasken, Elora; Rhodes Letson, Alma.
- b. Grey Duke [12993], by Torrington [10560], Andrew Gilmore, Huntington, Que.; S. McCarrige & Bros., Ormstown, Que.

SHORTHORNS, One-year-old bull and two two-dams registered. Will be sold cheap.

July-21

H. SORBY, GOUROCK, ONT.

Advertising Rates.

The rate for single insertion is 18c. per line, Nonpareil (24 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' Directories, 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.

BERKSHIRES. A lot of spring pigs, bred straight from the best imported stock.
H. SORBY, GOURCOCK, ONT.

FOR SALE.

A few BERKSHIRE PIGS, six weeks old, bred from registered ancestry, immediately descended from imported stock. Prices very reasonable.
THOS. SHAW, Woodburn P. O., Ont.

CALVES

will thrive better if a little **Thorley's Improved Horse and Cattle Food** is added to their regular daily allowance of feed. For sale in every town and village in the Dominion. Farmers, try it; but when you purchase, be sure it is Thorley's **Improved Cattle Food**, and that it has been manufactured in Hamilton, as other cheap preparations are often sold as this Food.

FOR SALE!

The 1-year Ayrshire Bull General Gordon
Color, white and dark red. Dam, Nelly Mars (1441); G. D., Julia Ma. (1594). Sire, the famous imported bull Stonelacey (1435). This fine specimen of the breed will be sold very reasonably. Apply to
E. WARE, Hamilton, Ont.

40th Provincial Exhibition

OF THE
Agriculture and Arts Association
OF ONTARIO,
TO BE HELD AT LONDON,
FROM THE
7th to the 12th September, 1885.

Entries must be made with the Secretary at Toronto, on or before the undermentioned dates, viz.,

Horses, Cattle, Sheep, Swine, Poultry, Agricultural Implements, on or before Saturday, August 17th.

Grain, Field Bots and other Farm Products, Machinery and Manufactures generally, on or before Saturday, Aug. 17th.

Horticultural Products, Ladies' Work, Fine Arts, etc., on or before Saturday, August 21th.

Prize Lists and Blank Forms for making the entries upon can be obtained from the Secretaries of all Agricultural Societies, Horticultural Societies and Mechanics' Institutes throughout the Province, from Geo. McBroom, of the Western Fair, London; or from

HENRY WADE, Secretary Agriculture and Arts Association, Toronto.

GEO. MOORE, President, Waterloo.

IF YOU HAVE

Farms to Sell, Farms to Rent,
Horses to Sell, Cattle to Sell,
Sheep to Sell, Swine to Sell,
Poultry to Sell, Fruit Trees to Sell

Machinery, Farm Implements, or any article which you wish to bring to the notice of the A. F. Farmers of Canada and United States, advertise in the JOURNAL. Write for rates and full particulars. Address,

THE STOCK JOURNAL COMP., 7, HAMILTON, ONTARIO.

Table of Contents.

	PAGE
STOCK DEPARTMENT:	
American Shire Horse Society.....	171
Amongst our Friends.....	171
Autumn Exhibition Prize Lists.....	181
A Visit to Eastwood.....	176
Breeding Draught Horses.....	179
British Polled Cattle.....	175
Canada Shorthorn Herd-Book, vol. 9.....	181
Defect in our Cattle Quarantine.....	175
Downton Poultry.....	169
Early Maturity.....	173
Editorial Notes.....	170
From Lambeth County.....	182
From Mount St. Patrick.....	180
Goutre in Sheep.....	180
Live-Stock Notes from England.....	176
Management of Swine.....	180
Our Engravings.....	169
Our Nova Scotia Letter.....	173
Oxford County in the Month of June.....	181
Oxfords vs. Southdowns.....	179
Profitable Protection.....	173
Pure-breds at Montford, Eng.....	174
Pure-breds in Elgin.....	180
Reply to Mr. Dryden.....	178
Seeking for Light.....	179
Shearing and Trimming Show Sheep.....	175
Stock Notes.....	191
The Herd-book Controversy.....	171
The Ontario Agricultural College.....	172
Transfers of Thoroughbred Stock.....	191
FARM DEPARTMENT:	
Dry the Wheat Well Before Using.....	184
Editorial Notes.....	183
How to Make Farming More Pleasant.....	183
Who Should Purchase Artificial Fertilizers.....	183
DAIRY DEPARTMENT:	
Cows for the Dairy.....	185
Editorial Notes.....	185
Mary Anne of St. Lambert's Test.....	185
Raising the Standard of the Dairy Cow.....	184
The Test of Mary Anne.....	185
POULTRY DEPARTMENT:	
Feeding Wheat to Fowls.....	186
The Poultry Interest.....	185
Wheat for Fowls.....	186
APIARY DEPARTMENT:	
Purchasing and Removing Bees.....	187
The Management of Bees 2000 Years Ago.....	186
HORTICULTURAL DEPARTMENT:	
Fruit Prospects for 1885.....	188
Lawn Making.....	187
HOME DEPARTMENT:	
A New Experience.....	188
My Love.....	188
MISCELLANEOUS:	
Advertisements.....	191-196
Lotings.....	189
Personal.....	189
Welcome Visitors.....	189

Stock Notes.

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

From Mr. R. Hunter, the new manager of Mr. J. J. Hill, St. Paul, Minnesota, we learn that the stock of the latter gentleman passed Boston quarantine in good shape and left on the 12th June for "Northoaks," their new home. Mr. Hill is purchasing some splendid animals for this herd, which is likely to become one of the best and largest of the many good and large live-stock establishments of the west.

The following table shows the comparative statement of our exports of live stock for the past eight years:

YEAR.	CATTLE.	SHEEP.	SWINE.
1877	6,940	9,509	430
1878	18,655	41,225	2,078
1879	25,009	81,332	5,385
1880	59,905	81,843	700
1881	45,535	62,404	—
1882	35,378	75,925	—
1883	55,625	114,352	—
1884	61,843	67,107	—

The extraordinary falling off in the export of sheep is owing in part to the opposition of Australia, and in part to the quality not being of that character which will enable us to hold the fort.

Shorthorns.

Mr. J. E. Yorke of Wardsville, has recently sold to John W. Munroe, Agatha's Duchesse page 538, B. A. H. B. This choice cow, which is in calf to Wild Eyes Gwynne—1528—gives Mr. Munroe a good start in Shorthorns, and we expect to see him make his mark in the Shorthorn world.

The pure-breds of Mr. Joseph Watson, Greenbank, Ont., are doing well. The Imp. stock bull Vice-President weighed 2150 lbs. at 13 months and 22 days. Minnie Moffatt, by Statesman, dropped, April 20, one of the most promising bull calves which Mr. Watson ever had. The young heifers are doing admirably.

At the sale of Col. Harris, Linwood, Kansas, held at Manhattan, Kansas on June 2nd, 30 animals sold for \$6,170, an average of \$208.50. The highest price \$400, was paid for a heifer calving June 5th, 1883. She was sold to D. B. Heath, Milford, Kansas, was red in color and of Mr. Cruikshank's Brawith Bud family.

AGRICULTURAL SOCIETIES.

WE have for sale a large cut (group of animals) suitable for posters for Agricultural Societies; also several large single cuts, suitable for the same purpose. Send for sample sheet—free.

THE STOCK JOURNAL CO., Hamilton, Ont.

CANADA'S GREAT INDUSTRIAL FAIR AND AGRICULTURAL EXPOSITION

1885

Will be held at the city of

TORONTO.

From September 7th to 19th.

\$25,000 IN PRIZES will be offered for Horses, Cattle, Sheep, Pigs, Poultry, Dairy and Agricultural Products, Manufacturers' and L. dl.-s' Work, etc., etc.

Live stock and Agricultural Products are only required to be on exhibition from 14th to 18th Sept.

SPECIAL ATTRACTIONS

is being prepared for this Exhibition. CHEAP FARES and EXCURSIONS ON ALL RAILWAYS. Copies of Price List and Entry Forms sent to any one on application, by post or otherwise, to the secretary at Toronto.

Entries Close Saturday, August 22nd.

JNO. J. WITHROW, President.
H. J. HILL, Manager and Secretary, TORONTO.

To Breeders and Agricultural Societies.

FOR SALE.

A FEW choice head of Thoroughbred Ayrshires, male and female, from the undersigned's celebrated stock, so much appreciated for its well-known milking properties, and which, as such, obtained, twice, the 1st prize at the Ottawa Dominion Exhibition; also the 1st prize for the best herd at Hochelag County Exhibition for 1884. For particulars apply to

JAMES DRUMMOND,
P. O. Cote, Montreal.

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 100 lbs. 12 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.

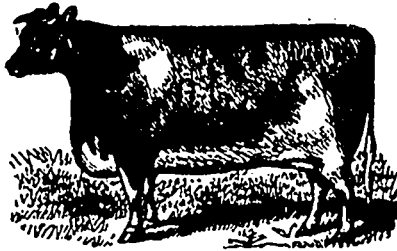
VALANCEY E. FULLER,
HAMILTON, ONT.

ONTARIO VETERINARY COLLEGE,
TEMPERANCE ST., TORONTO, CAN.

Patrons, Governor-General of Canada and Lieutenant Governor of Ontario. The most successful Veterinary Institution in America. All experienced teachers. Classes begin in October. Fees, \$50 per session. Apply to the Principal,

PROFESSOR SMITH, V.S. EDIN., TORONTO, CANADA.

JOSEPH REDMOND, Peterborough, Ont., Canada.



IMPORTER AND BREEDER OF

Shorthorn Cattle, Clydesdale Horses and Berkshire Swine. & My Shorthorn herd is composed of cattle imported from the celebrated herds of S. Campbell, W. Duthie and A. Crulshank, Aberdeenshire, Scotland. Three of my imported heifers received first, second, and third prizes, at two of the largest exhibitions in Scotland, in July, 1883. Three of which have calved since arriving in Canada. The bull I am using is one of the finest in the Dominion, and took first prize at the Toronto Exhibition, in 1883, was bred by J. & W. Watt, and is pronounced by competent judges to be a very fine animal. A choice lot of young Bulls and Heifers for sale at moderate prices. Young Bulls from 8 to 14 months old, weighing 1200 pounds. I prefer personal inspection. Stockmen are always welcome, and will be conveyed from G. T. J., and O. & Q. trains to and from my farm, four miles from Peterborough. ap 31

THE GLEN STOCK FARM, Innerkip, Oxford County, Ont.

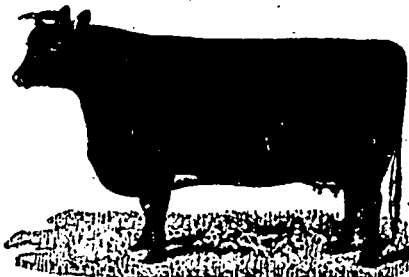


Shorthorn and Hereford Cattle.

ENGLISH SHIRE HORSES.

Our Shorthorn Herd is composed of cattle imported from the celebrated herds of W. Duthie, W. S. Marr and A. Crulshank, Aberdeenshire, Scotland. Imported Earl of Mar (47851), winner of the Gold Medal at the last Grand Dominion and 23rd Provincial Exhibition, heads the herd. Several young imported Bulls and Heifers for sale. Our Herefords are imported from the well known herds of J. Hill, Shropshire; W. Griffiths and H. Haywood, Herefordshire. This herd, headed by imported Cronkhill 5th, winner of the Silver Medal at the last Industrial Exhibition at Toronto. P. O. and Telegraph Office at Innerkip; Farm, one mile from Innerkip 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, Innerkip. oct.-y.

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



BREEDERS OF

SHORTHORNS & SHROPSHIRE Have one capital 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 Crulshank bull Vermilion (50557). Prices moderate. Terms easy.

PARTIES corresponding with advertisers are particularly requested to mention that they saw advertisement in this journal.

Stock Notes.

Messrs H. & J. Shand, of Port Dover, say to us: "Our Shorthorns are doing very well, and now number seven head. We have just purchased from the Bow Park herd, Brantford, Ont., the bull Waterloo Duke 10th, roan, calved 6th Oct., 1883, got by 4th Duke of Clarence (33597), dam Waterloo 37th, imp. He is just in good thriving condition, and weighs about 1700 lbs."

Messrs John Fothergill & Sons of Burlington, report the following sales of Shorthorns: To Mr. John Campbell, Owen Sound, one heifer; to Mr. James Steele, Lyndale Farm, Kincardine, one bull; to Mr. Sharran, Manitoba, one heifer; to Craven Brothers, Filmore County, Nebraska, U. S., one cow and bull calf; to W. Nasmyth, Holstein, two heifers. Their stock are doing well, and they have some choice young bulls for sale, sired by Prince James—95—.

From Mr. Wm. Templar, of Jerseyville, Ont., we learn that business with him is flourishing. He says, "I have a nice lot of calves, mostly heifers, from Earl Goodness 12th, also a fine c.c. from Duke of Oxford 8th. Have sold five fat cattle; they were two years old in March and April, and averaged nearly 1300 lbs. each and had only been fattening since Feb. 1st. The geared windmill which the Ontario Pump Co. put up for us last winter is doing good work, cutting feed, pumping, &c. We have found it a profitable investment."

W. G. Pettit, of Burlington, Ont., mentions the following sales of Shorthorns since last report: Bull calf, Champion, got by Prince James—95—, to Wm. Nasmyth, Holstein, Ont.; bull calf, Duke of Mara 4th, got by Prince James, to James Graham & Sons, of Ailsa Craig, Ont., (this young bull is likely to come out at the fall show—a hard one to beat); bull calf, Daisy Duke, by Prince James, to Charles Barr, Tweedside, Co. Wentworth (this young bull weighed 1,475 lbs., age 16 mos. and 12 days). Has but one Prince James bull, 13 mos. old, left for sale. To John Shannon, Souris, Manitoba, one high-bred Shorthorn grade heifer. The young Sheriff Hutton bull, The Premier, purchased from Mr. Arthur Johnston, of Greenwood, to head the herd, is growing well; also a nice lot of young calves from Prince James this year.

Sir Henry Allsop's famous herd of Bates Shorthorns was sold in May, by Mr. John Thornton. The total realized for 80 lots advertised in the catalogue was 9,106 gs., or an average of nearly 103 gs. The result as a whole was considered fair, but the contrast in the prices for the fashionables as compared with years ago was very striking. A Duchess cow which cost her owner 3,200 gs., sold for 400 gs., and an Oxford which cost 950 gs., sold for 47 gs. The advance however should be made for advance in age. The highest price paid, 660 gs., was given by T. Nelson & Sons, of Bow Park. This firm also secured Duchess 117, a seven year cow, at 430 gs., the three-year heifer Kirklevington Queen 5th, at 150 gs., the two-year heifer Cambridge Rose 10th at 200 gs., a two-year Oxford 29th at 191 gs., the one-year Worcester Rose at 170 gs., and the two-year bull Duke of Cumberland (49439) at 140 gs. Our veteran importer, S. Beattie, of Markham, also secured a number of fine animals. The Duchess tribe averaged £277 10s. 5d., for 15 animals; the Oxforas £120 5s. Waterloo £118 os. 5d., for 20 Red Roses £82 3s. 3d., the 84 cows and heifers averaged £124 3s. 11d., and the 19 bulls £89 12s. 2d.

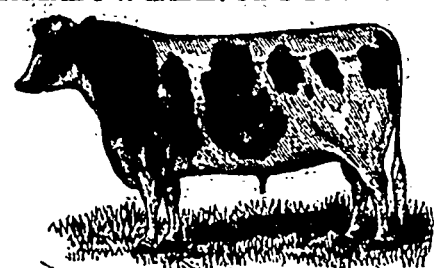
Mr. Wm. Linton, Aurora, Ont., writes under date of June 1st, "I landed at quarantine, Quebec, on the 14th ult., 10 head of Shorthorns, viz., 7 females and 3 bulls. All were bred at Sheriff Hutton, except one bull bred by Mr. Bruce, of Braithwaite Hall, and are (except one) of the Sowerby family, which has won such distinction at the leading shows of England during the last sixteen years; until last year they monopolized all but one of the first prizes at the Royal Show. The cow Sowerby was purchased from Mr. Booth at Warley, fifty years ago, by my father, and these are the first females of this family that have ever been brought to this continent to my knowledge, or that were ever disposed of except to the butchers, when too old to breed, at the Sheriff Hutton sale in 1879. My father held the family in so high esteem that he never would sell a female, refusing offers as high as 300 guineas. The bulls of this family are remarkable for size, excellence, long bodies on short legs, deep, wide chests, good neck veins, deep flank, good loins and well filled crops, grand masculine heads and horns, and are great girthers and great weighers. I see by the Gazette that Mr. J. J. Hill of St. Pauls, Minn., is now the happy owner of Goldfinder, by Sir Arthur Ingram (32400) of the Sowerby family. My purpose is to breed these heifers to Royal Both, of the Torr Bright family, which is the best bull I have ever seen on this side the Atlantic for breeding purposes."

Herefords.

The Ivingtonbury herd of Herefords is about being dispersed. This herd has been bred with the utmost care from selections made from the herds of Mr. Roberts, Mr. David Rodgers, The Rodd, and Mr. W. Child, Wigmore Grange, in 1862. Mr. Goode has used such bulls as Demetrius 2,494, Pompey 2,683, Albert 2,921, Cremore 5,279, Sir Henry 5,527, Remus 5,525, and Lord Ellenborough 7092. The present stock bull is Toro 7,313 a son of the famous Lord Wilton 4,740, and out of Cherry 4th, by the first prize Royal bull Alexander, 3,652. Many animals have been from time to time sold from this herd to Mr. Miller, Beecher, III., Hon. M. H. Cochrane, Compton, and Hon. J. H. Pope, Cookshire, Que. Messrs. Geo. Leigh & Co., Beecher III., and many others. The herd comprises some 74 head of breeding cattle, and in all 300 head of pedigree cattle.

At the dispersion sale of the Rowfant Herd, which had been selected and bred with much care by the late Sir Peter Lampton, by birth a Vermont, the bidding was more spirited and higher prices were paid than at the Handlip Hall sale. Eight animals of the Airdrie and Grand Duchess tribes brought an average of £385 9 7; three of the Oxforas, £177 19 7; seven of the Thorndale Rose and Wild Eyes, £64 16 0; fifteen of the Kirklevington, Waterloo and other tribes, £33 12 7. The average for thirty-one cows and heifers was £138 9 2 and for twelve bulls, £72 12 6. The average for the forty-three animals sold was £134 10 0. Mr. John Hope bought for T. Nelson & Sons, the owners of Bow Park, Duchess of Rowfant, red, for 500 gs.;

HOLLOWELL STOCK FARM



H. M. WILLIAMS, Proprietor, Importer and breeder of

THOROUGH-BRED HOLSTEIN CATTLE

The Largest Herd of Holsteins in Canada.

I have now over 40 head at my farm, and 9 bulls at Point Edward, which will be released April 12. My stock were all selected with great care, and with reference to both milk and butter producing qualities in their native country, by B. B. Lord & Son, of Sinclairville, N. Y., whose long experience and wonderful record animals that they have imported place them at the head of American importers. All stock for sale. No reserve.

oct.-6t. H. M. WILLIAMS, Picton, Ont.

AULTSVILLE

Premium Herd of Imported Holsteins.



'LORD BYRON'

Exhibited during the season of 1884 at the three leading Canadian fairs at Montreal, Toronto and Ottawa. Awarded 28 First Prizes (including Gold Medal, Diploma and 2 Silver Medals), six second and five third prizes. The largest as well as oldest established herd of Holsteins in the Dominion. Stock of both sexes and all ages for sale.

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A. C. HALLMAN & CO.,

Importers and Breeders of

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Our herd has been carefully selected from families of deep milkers, and with a view to secure only the best, and combining all the most essential qualities in the highest degree, of which this breed is famous. Symmetry of form, size and weight, a special object. Our motto: "Quality." Stock for sale. Visitors welcome. For particulars, address

A. C. HALLMAN & CO.,

de-y New Dundee P. O., Ont.

ESSEX STOCK FARM, WALKERVILLE, ONT., CAN.

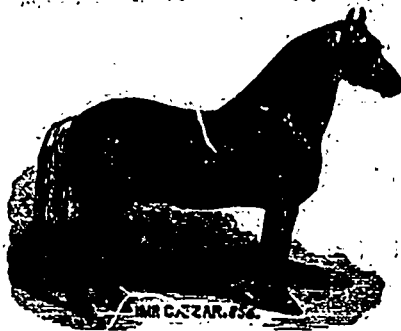
(Opposite Detroit, Mich.)

HIRAM WALKER & SON, Prop's. JOHN DIMON, Man. Importers and breeders of

Percheron and Roadster Horses,

Shorthorn, Polled-Angus and Jersey Cattle, Shropshire Downs Sheep, Berkshire and Suffolk Swine. Young stock for sale. All pedigrees guaranteed and stock warranted as represented.

GERMAN MILLS Importing and Breeding Establishment of



Percheron Horses and Shorthorn Cattle.

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

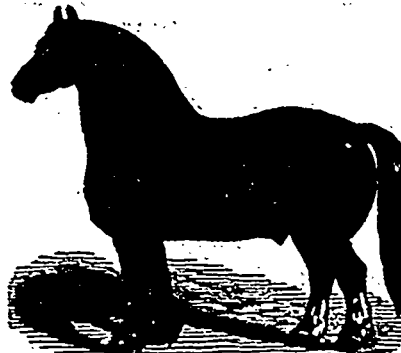
T. & A. B. SNIDER,
German Mills P.O., Waterloo County, Ontario.

ARTHUR JOHNSTON,
Greenwood, Ont., Can.



has for sale, at very low prices, six young registered imported Clydesdale Stallions and a number of imported Clydesdale mares, also imported and home-bred Shorthorn bulls and heifers. Stations—Claremont, on the C. P. R., and Pickering, on the G. T. R. Parties will be met at either station by notifying me. Come and see me. Send for catalogue.

FOR SALE.



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

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

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

STOCKMEN

fitting stock for the Fall Exhibitions will find the addition of

Thorley's Improved Cattle Food to their daily feed of much benefit. Be sure, however, you get the **Hamilton Thorley's**.

Stock Notes.

and her red and white cow calf for 200 gs., Colleen Celia 3rd, calved 1880, at 45 gs., and the three year cow, Thorndale Rose 23rd, at 300gs. Duchess of Rowfant is "a large, well-shaped, seven-year-old cow of good quality and wide rib." The young red bull calf of Thorndale Rose 23rd comes to W. Murray, of Chesterfield, Ont., at 58gs. Mr. J. Hill, of St. Pauls, Minnesota, also purchased a number, including the six-year-old cow Duchess of Leicester at 550gs., and Rowfant Thorndale Rose at 210gs.

Jerseys.

J. A. Desreux, owner of the Perry Farm herd, St. Marys, Jersey, informs us that a few head of his cattle are entered to be exhibited at the forthcoming Shows, to be held in England, viz: Royal Agricultural Society of England, Bath and West of England Society, Royal Counties Agricultural Society. The information reached us too late for June issue. On the 14th inst. at a show of the St. Peter's, St. Ouen's, and St. Marys Farmers clubs, held conjointly at St. Peter's, 8 head of the above herd were exhibited and won the following honours: 4 Sweepstakes in 4 different classes, where over 250 head of cattle were competing; 4 first prizes in 4 different classes; 2 first prizes "Gueon System" and 2 third prizes in the yearling and 2-year class.

Horses.

Mr. H. Hurd, who has just returned from the west, informs us that he has sold to Mr. W. C. Fleury of Belmont, Iowa, two additional Clydesdales, one a two-year filly, Canadian bred, and the other a stallion. The two stallions hitherto sold by Mr. Hurd to Mr. Fleury, Donald Dinnie and Brush Flag, are giving the utmost satisfaction, and are receiving a patronage that is very gratifying from the farmers in the neighborhood. Mr. Hurd's Clydes at Oakwood are all doing nicely, and give promise of a hopeful future for this Stock Establishment. Mr. Fleury is certainly deserving of credit for the spirit which he is showing in this branch of live-stock industry.

POULTRY.

DIMON CREEPERS. Originated by the subscriber. The only stock of the kind in the world. The *ne plus ultra* of all fowls. Eggs furnished for \$3 per setting. Cash to accompany all orders. Order now.

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FOR SALE.
LIGHT BRAHMA EGGS
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\$2 PER SETTING OF 13.
Plymouth Rock Eggs all booked that can be spared this season.
THOMAS SHAW, WOODBURN, ONT.



REV. J. C. QUINN,
Bathurst, N. B.,
Breeder of White and Brown
LEGHORNS.
Chickens for sale after 1st Sept. Brown Leghorns second to none in the Province.
Eggs in season, 13 for \$2.00.



DARK BRAHMAS
At the late Provincial poultry show at Guelph my stock again added to their previously won laurels, winning 4 prizes in five entries: very strong competition. My yards this season contain ten birds in all, six of which have won first prizes, three second prizes, and one never exhibited. My stock is certainly unsurpassed, and I do not think equalled in the Dominion. Eggs for hatching, \$3.00 per 13.

PLYMOUTH ROCKS.

I have a small yard of selected Plymouth Rocks, and can spare a few eggs at \$2 per 13.
I am also agent for the **NEW MODEL INCUBATOR**, a marvel of simplicity and economy. Price, 50 egg capacity, \$18; 100 egg, \$21.

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The Largest, and acknowledged to be the Best, English Live Stock Paper.

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TERMS—12 Months, to Foreign Countries, 25s. 6d. (\$5.50).
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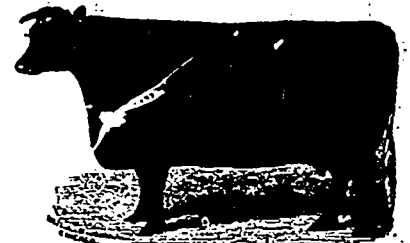


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Clydesdales, Shorthorns, Shropshires, Cotswolds and Berkshires.

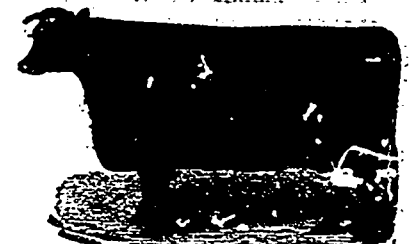


THE oldest and most extensive importing and breeding establishment in Canada, have on hand a very superior lot of Shorthorn heifers, two-year-old registered stallions, and Shropshire yearling rams and ewes. Stock of all kinds and both sexes for sale at auction. Our station is Claremont, C. P. R., 50 miles east of Toronto, where parties will be met at any time by notifying us. Prices low. Terms easy. Correspondence invited.

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To this herd belongs the honor of having in the highest average at public auction in 1883,

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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The undersigned has a number of very

CHOICE YOUNG HEREFORD BULLS

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EASTVIEW, COOKSHIRE, P. Q. mar-6t

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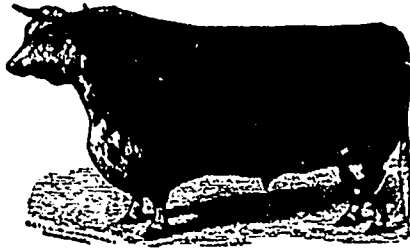
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Young bulls for sale very cheap.

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

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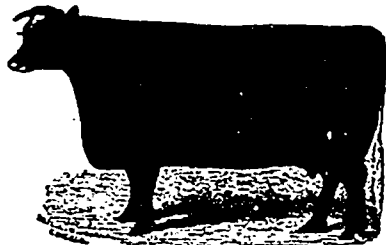


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Imported Cruickshank Bulls only have been used in the Herd for the last thirteen years. A number Choice Young Bulls now for sale, sired by the Prize Yearling Bull,

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The highly-bred Booth Bull, Lord Monrath — 2200 — is at the head of the herd. Lord Monrath was bred by Sir Hugh Aylmer, of West Dereham Abbey, St. Neots, Norfolk, Eng. The Mantilla, Lady Day, Roan Duchess and Princess strain.

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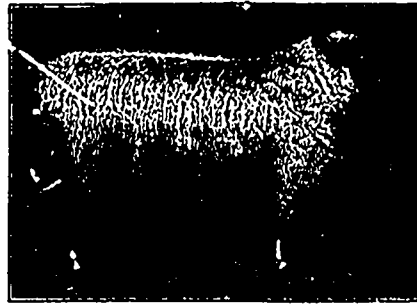
My herd consists chiefly of imported stock from the well known herds of Messrs. T. Myddleton, John Hill, E. Grassett, Thomas Fenn and Wm. Taylor. My cattle are sired by some of the best bulls in England, such as Captain Jacob, Commander, Falty Prince, Thoughtful, Auctioneer, Downton Boy, Royal 11th, and Experiment.

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GEARY BROS., PROPRIETORS.



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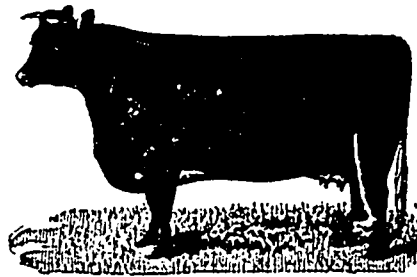
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Young Stock, Imported and Home-bred, for sale.

GEARY BROS., London, Ontario.

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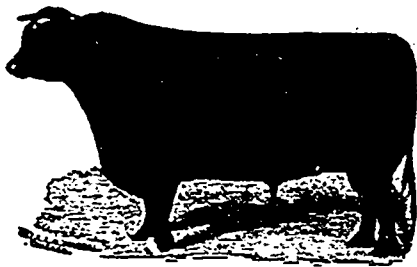
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Parties on business will be met at the Depot. For further information apply to

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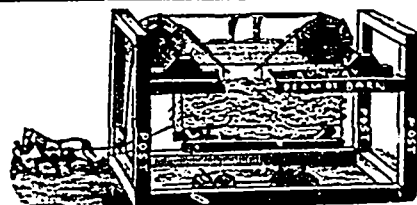


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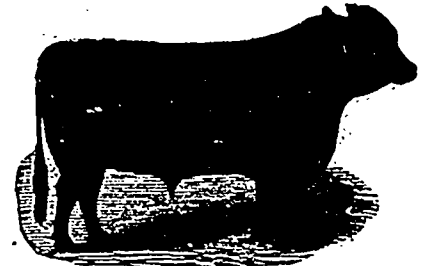
THIS labor-saving machine has proved a success for the past three years. The load with the rack can be elevated to any height required. Thousands are in use in various places. This machine has been awarded all first prizes and diplomas. Beware of infringement. The rack can be raised by a man as well as by horse-power. Any party wishing a load-lifter from different parts, who do not know the agent for that district, or any person wishing to buy a "right," will apply to the patentee,

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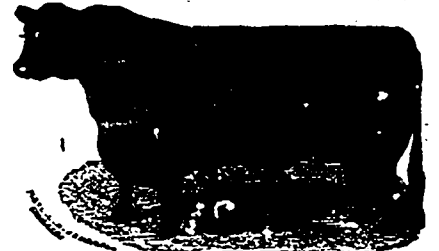
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Very superior young bulls and heifers always for sale at reasonable prices. Also a very choice lot of Shorthorn bull calves and yearlings, sired by our splendid stock bull Pretender, out of the Richmond Hill Champion cow Isabella III.

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Also Ohio Imp. Chester, English Yorkshire, Pure Chester White, Poland-China, White Lancashire and Jersey Red Swine. Also White-faced Black Spanish, White Leghorn and Plymouth Rock Fowl.

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LUMP ROCK SALT, selected especially for the use of Cattle. A natural salt, far superior and less wasteful than the manufactured bar salt. Try a piece in your pasture or stables. Price in bulk, \$10 per ton; in casks or barrels, 3c. per pound.

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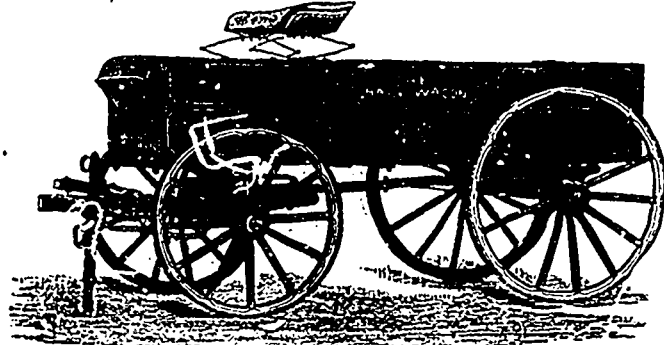
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BECAUSE IT IS THE LIGHTEST RUNNING WAGGON, MADE.

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SHEARLING OXFORD DOWN RAMS
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Oxford, Wild Eyes, Waterloo, Sally, Darlington and Princess families. Imported 5th Duke of Norfolk (44657) in service.

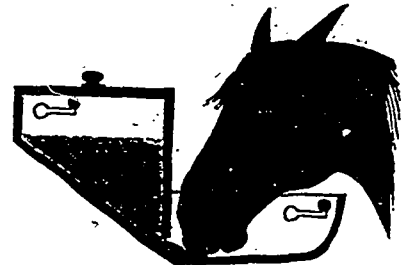
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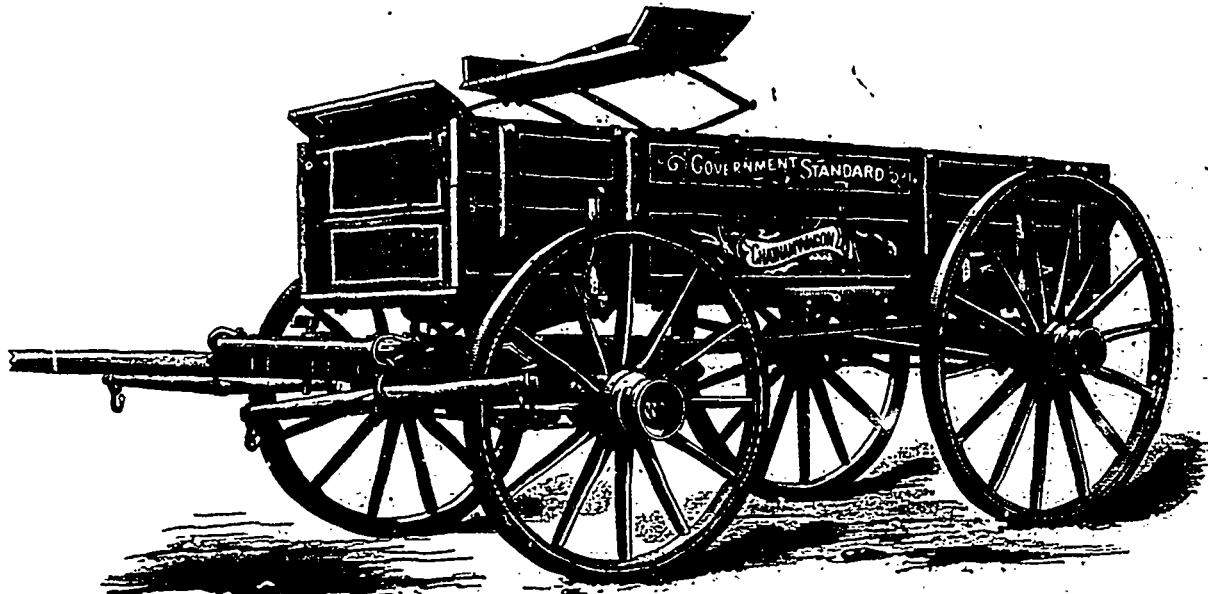
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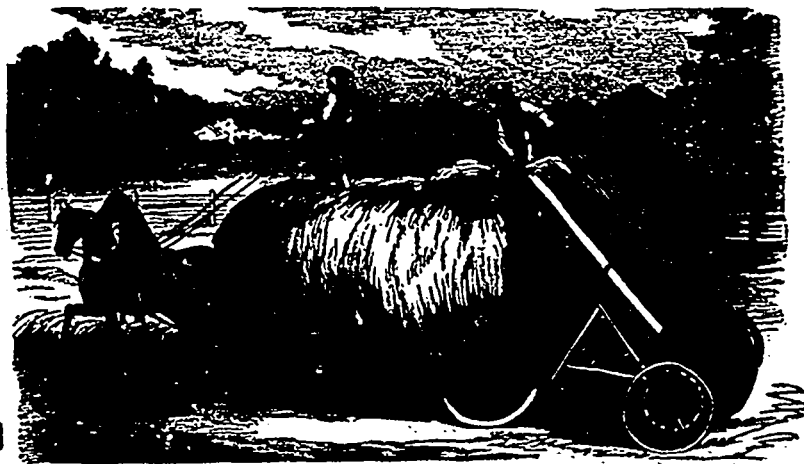
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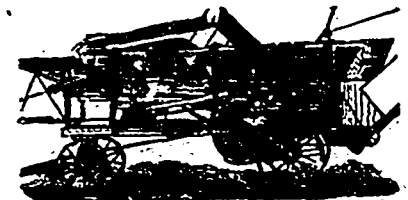
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